



**Management's Discussion & Analysis of
Financial Condition and Results of Operations**

Quarter Ended December 31, 2020

Management's Discussion & Analysis of Financial Condition and Results of Operations

The following discussion highlights significant factors influencing results of operations and changes in financial position of Liberty Mutual Holding Company Inc., the parent corporation of the Liberty Mutual Insurance group of entities (the "Company" or "LMHC"), for the three and twelve months ended December 31, 2020 and 2019. This Management's Discussion & Analysis of Financial Condition and Results of Operations ("MD&A") should be read in conjunction with the Company's December 31, 2020 Audited Consolidated Financial Statements located on the Company's Investor Relations website at www.libertymutualgroup.com/investors. The Company's discussions related to net income are presented in conformity with U.S. generally accepted accounting principles ("GAAP") on an after-tax basis. All other discussions are presented on a pre-tax GAAP basis, unless otherwise noted. Further, the Company notes that it may make material information regarding the Company available to the public, from time to time, via the Company's Investor Relations website at www.libertymutualgroup.com/investors (or any successor site).

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Cautionary Statement Regarding Forward Looking Statements

This report contains forward looking statements that are intended to enhance the reader's ability to assess the Company's future financial and business performance. Forward looking statements include, but are not limited to, statements that represent the Company's beliefs concerning future operations, strategies, financial results or other developments, and contain words and phrases such as "may," "expects," "should," "believes," "anticipates," "estimates," "intends" or similar expressions. Because these forward-looking statements are based on estimates and assumptions that are subject to significant business, economic and competitive uncertainties, many of which are beyond the Company's control or are subject to change, actual results could be materially different.

Some of the factors that could cause actual results to differ include, but are not limited to the following: the occurrence of catastrophic events (including terrorist acts, civil unrest, hurricanes, hail, tornados, tsunamis, earthquakes, floods, snowfall and winter conditions); inadequacy of loss reserves; adverse developments involving asbestos, environmental or toxic tort claims and litigation; adverse developments in the cost, availability or ability to collect reinsurance; disruptions to the Company's relationships with its independent agents and brokers; financial disruption or a prolonged economic downturn; prolonged epidemic or pandemic in countries in which we operate; the performance of the Company's investment portfolios; a rise in interest rates; risks inherent in the Company's alternative investments in private limited partnerships ("LP"), limited liability companies ("LLC"), commercial mortgages and direct investments in natural resources; difficulty in valuing certain of the Company's investments; subjectivity in the determination of the amount of impairments taken on the Company's investments; unfavorable outcomes from litigation and other legal proceedings, including the effects of emerging claim and coverage issues and investigations by state and federal authorities; the Company's exposure to credit risk in certain of its business operations; the Company's inability to obtain price increases or maintain market share due to competition or otherwise; inadequacy of the Company's pricing models; changes to insurance laws and regulations; changes in the amount of statutory capital that the Company must hold to maintain its financial strength and credit ratings; regulatory restrictions on the Company's ability to change its methods of marketing and underwriting in certain areas; assessments for guaranty funds and mandatory pooling arrangements; a downgrade in the Company's claims-paying and financial strength ratings; the ability of the Company's subsidiaries to pay dividends to the Company; inflation, including inflation in medical costs and automobile and home repair costs; the cyclicity of the property and casualty insurance industry; political, legal, operational and other risks faced by the Company's international business; potentially high severity losses involving the Company's surety products; loss or significant restriction on the Company's ability to use credit scoring in the pricing and underwriting of personal lines policies; inadequacy of the Company's controls to ensure compliance with legal and regulatory standards; changes in federal or state tax laws; risks arising out of the Company's securities lending program; the Company's utilization of information technology systems and its implementation of technology innovations; difficulties with technology or data security; insufficiency of the Company's business continuity plan in the event of a disaster; the Company's ability to successfully integrate operations, personnel and technology from its acquisitions; insufficiency of the Company's enterprise risk management models and modeling techniques; the Company's ability to identify and accurately assess complex and emerging risks, and changing climate conditions. The Company's forward-looking statements speak only as of the date of this report or as of the date they are made and should be regarded solely as the Company's current plans, estimates and beliefs. For a detailed discussion of these and other cautionary statements, visit the Company's Investor Relations website at www.libertymutualgroup.com/investors. The Company undertakes no obligation to update these forward-looking statements.

The United Kingdom's withdrawal from the European Union occurred on January 31, 2020. That date also marks the beginning of a transition period during which the United Kingdom will remain in the EU's customs union and single market but will negotiate with the European Union regarding the terms of the future UK-EU relationship. The withdrawal could have a negative impact on economic conditions in the United Kingdom and could result in unintended consequences in other countries as well. The Company acknowledges that there are risks and uncertainties associated with the United Kingdom's withdrawal from the European Union and has developed a course of action related to the withdrawal but will continue to monitor the negotiations as they develop.

In December 2019, a novel coronavirus commonly referred to as "COVID-19" surfaced in Wuhan, China. The outbreak has since spread to other countries, including the United States, and efforts to contain the spread of this coronavirus have intensified and are ongoing. The outbreak and any preventative or protective actions that governments, other third parties or we may take in respect of the coronavirus may result in a continued period of

business disruption and reduced operations. The extent to which the coronavirus impacts our future results will depend on developments which are highly uncertain and cannot be predicted, including litigation developments, legislative or regulatory actions and intervention, the length and severity of the coronavirus (including of second waves) and the actions of government actors to contain the coronavirus or treat its impact, among others. Possible effects on our business and operations include: disruptions to business operations resulting from working from home or from closures of our corporate or sales offices and the offices of our agents and brokers and quarantines of employees, customers, agents, brokers and suppliers in areas affected by the outbreak; disruptions to business operations resulting from travel restrictions and reduced consumer spending on new homes or new automobiles which could reduce demand for insurance; disruptions to business operations resulting from our customers having lower payrolls and revenues which could have an impact on insurance revenue; increased claims related to trade credit, general liability, workers compensation, and event cancellation coverage, among others; executive or legislative mandates or court decisions expanding property insurance policy coverage to cover business interruptions resulting from COVID-19 notwithstanding any exclusions set forth in such policies or conditions precedent generally required for liability under such policies; and disruption of the financial markets resulting in reductions in the value of our investment portfolio. A significant rise in the number of COVID-19 infections, infections in a wide range of countries and regions, or a prolongation of the outbreak, could create an adverse economic effect on the Company.

Furthermore, as a consequence of the COVID-19 stay at home orders in effect throughout much of the United States and abroad, policyholders are driving fewer miles than normal. Accordingly, on April 7, 2020, the Company announced its Personal Auto Customer Relief Refund (“PACRR”) plan which gives personal auto insurance customers a 15% refund on two months of their annual 2020 premium. On April 23, 2020, the Company launched its Liberty Mutual Businessowners Policy (“BOP”) Refund for small commercial customers issuing a 15% refund of two months of premium for all BOP policies. In addition, late fee charges were automatically stopped and cancellations due to non-payment were temporarily paused for both personal auto and home customers from March 23 through June 15, 2020. The Company will work with individual customers to extend payment dates if needed and provide personalized support on an ad hoc basis. All personal auto policy coverages were expanded to cover customers who use their personal vehicles to deliver food and medicine even though some of our standard personal auto policies typically exclude such coverage. This additional protection remained in effect for all personal auto policies in all states for losses occurring from March 16 to June 1, 2020 and reported by July 1, 2020. The aggregate payments made under the PACRR and BOP customer support programs was approximately \$305 million.

EXECUTIVE SUMMARY

The following highlights do not address all of the matters covered in the other sections of Management's Discussion & Analysis of Financial Condition and Results of Operations or contain all of the information that may be important to the investing public. This summary should be read in conjunction with the other sections of Management's Discussion & Analysis of Financial Condition and Results of Operations and the Company's 2020 Audited Consolidated Financial Statements.

Consolidated Results of Operations

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	Revised 2019 ²	Change	2020	Revised 2019 ²	Change
Net written premium	\$10,095	\$9,751	3.5%	\$40,624	\$39,814	2.0%
Pre-tax operating (loss) income before partnerships, LLC and other equity method income	(33)	(419)	(92.1)	187	572	(67.3)
Partnerships, LLC and other equity method income	494	145	NM	711	701	1.4
Net realized gains	415	50	NM	790	443	78.3
Unit linked life insurance	(51)	(34)	50.0	(30)	(123)	(75.6)
Ironshore Inc. ("Ironshore") acquisition & integration costs	(2)	(12)	(83.3)	(18)	(28)	(35.7)
Restructuring costs	(596)	(64)	NM	(626)	(70)	NM
Loss on extinguishment of debt	-	-	-	-	(49)	(100.0)
Discontinued operations, net of tax	2	-	NM	(17)	(50)	(66.0)
Consolidated net income (loss)	162	(300)	NM	760	1,038	(26.8)
Less: Net income attributable to non-controlling interest	-	1	(100.0)	2	1	100.0
Net income (loss) attributable to LMHC	162	(301)	NM	758	1,037	(26.9)
Net income (loss) attributable to LMHC excluding unrealized impact ¹	23	(384)	NM	671	761	(11.8)
Cash flow provided by continuing operations	\$1,542	\$438	NM	\$6,448	\$3,477	85.4%

¹ Excludes unrealized gains on equity securities, unit linked life insurance, and the corresponding tax impact.

² 2019 amounts were restated due to a pension accounting policy change, which is described further in Critical Accounting Estimates.
NM = Not Meaningful

	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change (Points)	2020	2019	Change (Points)
Combined ratio before catastrophes ¹ , COVID-19 ² , net incurred losses attributable to prior years ³ , and current accident year re-estimation ⁴	92.8%	97.3%	(4.5)	91.6%	95.4%	(3.8)
Combined ratio ⁵	101.9%	106.7%	(4.8)	101.8%	101.7%	0.1

1 Catastrophes are defined as a natural catastrophe, civil unrest, or terror event exceeding \$25 million in estimated ultimate losses, net of reinsurance, and before taxes. Catastrophe losses, where applicable, include the impact of accelerated earned catastrophe premiums and earned reinstatement premiums.

2 Includes Global Risk Solutions estimated loss activity directly related to COVID-19.

3 Net incurred losses attributable to prior years is defined as incurred losses attributable to prior years (including prior year losses related to catastrophes, prior year catastrophe reinstatement premium, and prior year commission expense) including earned premium attributable to prior years.

4 Re-estimation of the current accident year loss reserves for the nine months ended September 30, 2020 and September 30, 2019.

5 The combined ratio, expressed as a percentage, is a measure of underwriting profitability. This measure should only be used in conjunction with, and not in lieu of, underwriting income and may not be comparable to other performance measures used by the Company's competitors. The combined ratio is computed as the sum of the following property and casualty ratios: the ratio of claims and claim adjustment expense less managed care income to earned premium; the ratio of insurance operating costs plus amortization of deferred policy acquisition costs less third-party administration income and fee income (primarily related to the Company's involuntary market servicing carrier operations) and installment charges to earned premium; and the ratio of policyholder dividends to earned premium. Provisions for uncollectible premium and reinsurance are not included in the combined ratio unless related to an asbestos and environmental commutation and certain other run off. Restructuring and Ironshore acquisition and integration costs are not included in the combined ratio.

\$ in Millions	As of December 31,	As of December 31,	Change
	2020	Revised 2019 ²	
Short-term debt ¹	\$330	\$-	NM
Long-term debt	8,497	8,200	3.6%
Total debt	\$8,827	\$8,200	7.6
Unassigned equity	\$25,708	\$24,950	3.0%
Accumulated other comprehensive loss	218	(1,359)	NM
Non-controlling interest	31	28	10.7
Total equity	\$25,957	\$23,619	9.9%

1 Short-term debt is the current maturity of the 5.00% Notes, due June 1, 2021.

2 2019 amounts were restated due to a pension accounting policy change, which is described further in Critical Accounting Estimates.
NM = Not Meaningful

Subsequent Events

On January 27, 2021, Liberty Mutual Group Inc. ("LMGI") issued \$800 million of 4.300% Series E Junior Subordinated Notes due 2061 (the "Notes"). Interest on the Notes is payable February 1 and August 1 of each year commencing on August 1, 2021 and the Notes may be redeemed in whole or in part on February 1, 2026 or on any Interest Payment Date thereafter, at a redemption price equal to their principal amount plus accrued and unpaid interest. The Notes mature February 1, 2061.

Management has assessed material subsequent events through February 23, 2021, the date the financial statements were available to be issued.

CONSOLIDATED RESULTS OF OPERATIONS

The Company has identified consolidated pre-tax operating income (“PTOI”), and PTOI before partnerships, LLC and other equity method income as non-GAAP financial measures. PTOI is defined by the Company as pre-tax income excluding net realized gains (losses), unit linked life insurance, loss on extinguishment of debt, discontinued operations, integration, other acquisition and restructuring related costs and cumulative effects of changes in accounting principles. PTOI before partnerships, LLC and other equity method income is defined as PTOI excluding LP and LLC results recognized on the equity method and revenue and expenses from direct investments in natural resources. PTOI before partnerships, LLC and other equity method income and PTOI are considered by the Company to be appropriate indicators of underwriting and operating results and are consistent with the way the Company internally evaluates performance. Net realized gains and partnerships, LLC and other equity method investment results are significantly impacted by both discretionary and economic factors and are not necessarily indicative of operating results, and the timing and amount of integration, other acquisition and restructuring related costs and the extinguishment of debt are not connected to the management of the insurance and underwriting aspects of the Company’s business. Income taxes are impacted by permanent differences. References to Net Written Premium (“NWP”) represent the amount of premium recorded for policies issued during a fiscal period including audits, retrospectively rated premium related to loss sensitive policies, and assumed premium, less ceded premium. Assumed and ceded reinsurance premiums include premium adjustments for reinstatement of coverage when a loss has used some portion of the reinsurance provided, generally under catastrophe treaties (“reinstatement premium”), and changes in estimated premium. In addition, the majority of workers compensation premium is adjusted to the “booked as billed” method through the Corporate and Other segment. The Company believes that NWP is a performance measure useful to investors as it generally reflects current trends in the Company’s sale of its insurance products.

The Company’s discussions related to net income are presented on an after-tax GAAP basis. All other discussions are presented on a pre-tax GAAP basis, unless otherwise noted.

The Company has offered eligible employees an early retirement option. The Company calculated the cost of irrevocable acceptances of this special termination benefit to be \$577 million, which was recognized in the fourth quarter and is reflected in restructuring costs in the Consolidated Statements of Income.

On July 19, 2020, the Company entered into an agreement with an investment firm, whereby both parties contributed various energy assets into a new joint venture vehicle. The Company contributed its entire interest in Liberty Energy, LLC to the joint venture in exchange for a minority interest in the new entity (“Liberty Energy, LLC transaction”). A \$231 million impairment and subsequent gain of \$26 million upon finalizing the sale are reflected in the Consolidated Statements of Income.

In connection with the reduction in automobile claims as a consequence of the COVID-19 stay at home orders in effect throughout much of the United States and abroad, the Company made aggregate premium refund payments under the PACRR and BOP customer support programs of approximately \$305 million.

On May 7, 2020, LMGI issued \$500 million of Senior Notes due 2060 (the “2060 Notes”) and LMGI exchanged \$246 million par value of 2060 Notes for \$28 million of its 7.00% Senior Notes due 2034, \$30 million of its 6.50% Senior Notes due 2035, \$20 million of its 6.50% Senior Notes due 2042, \$50 million of its 4.85% Senior Notes due 2044 and \$118 million of its 4.50% Senior Notes due 2049 (all such series of Senior Notes subject to the exchange offer, the “Target Notes”). Interest is payable semi-annually at a fixed rate of 3.95%. The exchanged notes are fully fungible with the 2060 Notes. The 2060 Notes mature on May 15, 2060.

Concurrently with the 2060 Notes exchange offer, LMGI completed a tender offer for the Target Notes with investors not eligible to participate in the 2020 Exchange Offer for an aggregate cash consideration of \$2 million, including accrued and unpaid interest, for the tender of \$1 million of its 6.500% Senior Notes due 2035 and a nominal amount of its 6.500% Senior Notes due 2042.

On December 24, 2019, the Company’s subsidiary, Liberty UK and Europe Holdings Limited (“UKH”), entered into an agreement to sell its entire 99.99% interest in its Russian insurance affiliate, Liberty Insurance (JSC), to PJSC Sovcombank. The transaction closed on February 6, 2020.

On November 5, 2019, the Company 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 Global Retail Markets U.S. Business Lines and Global Risk Solutions National Insurance workers compensation liabilities, commercial auto liability and general liability excluding umbrella and warranty. This agreement is defined as the NICO Casualty Reinsurance Transaction. The first layer of the contract attaches at \$300 million below applicable held reserves at inception of \$8.341 billion of combined aggregate reserves. The second layer of the contract provides adverse development coverage for \$1.000 billion above a retention equal to \$8.741 billion. The contract includes a sublimit of \$100 million 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 million of existing undiscounted liabilities, paid NICO total consideration of \$462 million and recorded a pre-tax loss of \$173 million. This contract is accounted for on a retroactive basis. See the Reinsurance section for additional detail.

On October 2, 2019, the Company completed the acquisition of the business and operations of Nationale Borg, Nationale Borg Reinsurance, and AmTrust Insurance Spain. The transaction is not material to the Company.

On September 27, 2019, LMGI exchanged \$1.25 billion par value of Senior Notes due 2050 (the “2050 Notes”) for \$78 million of its 7.00% Senior Notes due 2034, \$170 million of its 6.50% Senior Notes due 2035, \$480 million of its 6.50% Senior Notes due 2042, \$436 million of its 4.85% Senior Notes due 2044, \$67 million of its 7.80% Junior Subordinated Notes due 2087 (the “2087 Notes”) and \$17 million of its 10.75% Junior Subordinated Notes due 2088. LMGI paid an aggregate of \$411 million cash consideration, including accrued and unpaid interest, for the existing notes accepted for exchange. Interest on the 2050 Notes is payable semi-annually at a fixed rate of 3.951%. The 2050 Notes mature on October 15, 2050.

On August 23, 2019, the Company completed the sale of the Venezuelan business, Seguros Caracas de Liberty Mutual, which was previously deconsolidated in 2015.

During the second quarter of 2019, the Company completed a number of debt transactions, including the issuance of a new hybrid security, redemption of the Junior Subordinated notes due 2067, and completion of a tender offer for the 2087 Notes which was financed by cash along with a senior note issuance. These transactions are described further in “Liquidity and Capital Resources”.

On May 31, 2019, the Company completed the acquisition of the U.S. Surety business (“Insko Dico”) of AmTrust Financial Services, Inc.

On March 14, 2019, the Company concluded a strategic review of certain operations and reached an agreement to sell its investment in Pembroke Managing Agency Ltd., Visionary Underwriting Agency Ltd., Ironshore Europe Designated Activity Company, and Ironshore Corporate Capital 3 Ltd. (“certain international Ironshore entities”) to Hamilton Insurance Group. The transaction closed on August 20, 2019.

On January 28, 2019, LMGI exchanged \$1 billion par value of Senior Notes due 2029 (the “2029 Notes”) for \$270 million of its 5.00% Notes due 2021, \$277 million of its 4.95% Notes due 2022 and \$453 million of its 4.25% Notes due 2023. LMGI paid an aggregate of \$40 million cash consideration, including accrued and unpaid interest, for the existing notes accepted for exchange. Interest on the 2029 Notes is payable semi-annually at a fixed rate of 4.569%. The 2029 Notes mature on February 1, 2029.

On May 1, 2018, the Company completed the sale of Liberty Life Assurance Company of Boston (“LLAC”), which provides group disability, group life, individual life and annuity products, to Lincoln Financial Group. In connection with the Company’s May 2018 sale of LLAC to Lincoln Financial Group, the Company agreed, pursuant to the master transaction agreement, to indemnify Protective Life Corporation and Protective Life Insurance Company (together with certain of their respective affiliates, “Protective”), Lincoln and other parties against certain liabilities. In late 2018, Protective initiated informal discussions with the Company regarding potential indemnification claims (the “Initial Claims”) and in 2019 the Company began an investigation and evaluation of such Initial Claims. This investigation is ongoing. On April 30, 2019, Protective delivered to the Company a formal demand for indemnification related to the Initial Claims and in addition, demands for indemnification including matters unrelated to the Initial Claims (the “New Claims”). Based on the Company’s investigation to date of the claims generally, the Company has accrued a reserve of \$52 million, net of tax, year to date December 31, 2019, presented in discontinued

operations in the Consolidated Statements of Income, which is primarily related to the Initial Claims, and may be adjusted up or down as the Company's investigation of all claims continues. The Company intends to vigorously defend all claims. During 2020, the Company booked an additional \$17 million, net of tax, presented in discontinued operations in the Consolidated Statements of Income to reflect a final closing balance sheet settlement related to the sale of LLAC.

At this time, if the Initial Claims and all of the New Claims are ultimately determined to have merit and if the monetary value of those claims were equal to the amount alleged to be due, the aggregate potential liability represented by the claims would not have a material adverse effect on the financial condition of the Company, although such aggregate potential liability may be material relative to the Company's results of operations for a single reporting period, depending on the facts and circumstances at such time.

The Company's two businesses are as follows:

- Global Retail Markets combines the Company's local expertise in growth markets outside the U.S. with strong and scalable U.S. capabilities in order to take advantage of opportunities to grow its business globally. Global Retail Markets is organized into the following segments: U.S., West, East, and Reinsurance.
- Global Risk Solutions offers a wide array of property, casualty, specialty and reinsurance products distributed through brokers and independent agents globally. In Q1 2020, Global Risk Solutions combined National Insurance (NI) and North America Specialty (NAS) to form a single North America segment. This includes admitted and non-admitted property and casualty in North America. Global Risk Solutions is organized into the following market segments: Liberty Specialty Markets, North America, Global Surety, and Other Global Risk Solutions.

Overview – Consolidated

Consolidated NWP by significant line of business was as follows:

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
Private passenger automobile	\$3,395	\$3,357	1.1%	\$13,869	\$13,933	(0.5%)
Homeowners	1,665	1,547	7.6	6,800	6,435	5.7
Global Risk Solutions specialty insurance ¹	1,000	1,007	(0.7)	3,458	3,294	5.0
Global Risk Solutions reinsurance	444	332	33.7	2,204	1,827	20.6
Commercial multiple-peril	505	527	(4.2)	2,175	2,292	(5.1)
Global Risk Solutions casualty ²	582	550	5.8	1,990	1,913	4.0
Commercial automobile	514	541	(5.0)	1,908	2,159	(11.6)
Workers compensation	432	499	(13.4)	1,833	2,138	(14.3)
Commercial property	419	407	2.9	1,568	1,472	6.5
Surety	259	263	(1.5)	1,133	1,033	9.7
Global Retail Markets general liability	211	200	5.5	887	857	3.5
Global Risk Solutions other reinsurance	203	(30)	NM	877	271	NM
Global Risk Solutions inland marine	142	141	0.7	563	561	0.4
Corporate reinsurance ³	(9)	3	NM	(130)	(30)	NM
Other ⁴	333	407	(18.2)	1,489	1,659	(10.2)
Total NWP	\$10,095	\$9,751	3.5%	\$40,624	\$39,814	2.0%

1 Global Risk Solutions specialty insurance includes marine, energy, construction, aviation, warranty and indemnity, directors and officers, errors and omissions, trade credit, contingent lines and other.

2 Global Risk Solutions casualty primarily includes general liability, excess & umbrella and environmental lines of business.

3 NWP associated with internal reinsurance assumed into Corporate, net of corporate external placements.

4 Primarily includes NWP from allied lines, domestic inland marine, internal reinsurance, and life and health reported within Global Retail Markets.

NM = Not Meaningful

NWP for the three months ended December 31, 2020 was \$10.095 billion, an increase of \$344 million over the same period in 2019.

Significant changes by major line of business for the three months ended December 31, 2020 include:

- Private passenger automobile NWP increased \$38 million. The increase reflects the impact of strong new business production and retention in U.S. personal lines and the weakening of the U.S. dollar versus the euro as compared to average rates in 2019, partially offset by the negative impact of foreign exchange due to the strengthening of the U.S. dollar primarily versus the Brazilian real as compared to average rates in 2019, unfavorable results in the West region particularly in the Andes and Western Europe markets, and decreases in the East region due to the sale of Russia.
- Homeowners NWP increased \$118 million. The increase reflects strong personal property results in the U.S. driven by an increase in new business production and higher retention.
- Global Risk Solutions reinsurance NWP increased \$112 million. The increase reflects favorable rate and higher new business premium.

- Workers compensation NWP decreased \$67 million. The decrease reflects unfavorable results in Global Retail Markets U.S. business lines due to re-underwriting efforts as well as lower premium due to COVID-19 and the related economic impacts.
- Global Risk Solutions other reinsurance NWP increased \$233 million. The increase reflects the net impact of ceded reinsurance program changes.

NWP for the twelve months ended December 31, 2020 was \$40.624 billion, an increase of \$810 million over the same period in 2019.

Significant changes by major line of business for the twelve months ended December 31, 2020 include:

- Private passenger automobile NWP decreased \$64 million. The decrease reflects unfavorable results in the West region and the impact of auto premium refunds in U.S. personal lines in response to COVID-19 and the related economic impacts and unfavorable foreign exchange due to the strengthening of the U.S. dollar primarily versus the Brazilian real as compared to the average rates in 2019. These were partially offset by strong new business and higher retention in U.S. personal lines.
- Homeowners NWP increased \$365 million. The increase reflects strong personal property results in Global Retail Markets U.S. driven by an increase in new business production and higher retention as well as strong property results in the Western Europe Market, particularly in Spain.
- Global Risk Solutions specialty insurance NWP increased \$164 million. The increase reflects favorable rate and higher new business premium, partially offset by lower premium from the disposal of certain international Ironshore entities.
- Global Risk Solutions reinsurance NWP increased \$377 million. The increase reflects higher new business premium and positive rate.
- Commercial multiple-peril NWP decreased \$117 million. The decrease reflects unfavorable results driven by COVID-19 and the related economic impacts.
- Commercial automobile NWP decreased \$251 million. The decrease reflects unfavorable results driven by COVID-19 and the related economic impacts and re-underwriting efforts in Global Retail Markets.
- Workers compensation NWP decreased \$305 million. The decrease reflects unfavorable results driven by COVID-19 and the related economic impacts, re-underwriting efforts in Global Retail Markets and the sale of the workers compensation business in Colombia in the fourth quarter of 2019.
- Commercial property NWP increased \$96 million. The increase reflects positive rate, partially offset by ceded reinsurance program structure changes.
- Surety NWP increased \$100 million. The increase reflects higher new business premium primarily due to the AmTrust acquisition which closed post first quarter of 2019.
- Global Risk Solutions other reinsurance NWP increased \$606 million. The increase reflects the net impact of ceded reinsurance program changes.
- Corporate reinsurance NWP decreased \$100 million. The decrease reflects additional ceded premium related to new property catastrophe placements and higher net premium on existing treaties.

More detailed explanations of the changes in NWP by line of business are included in the related discussion of financial results for each segment.

Consolidated NWP by business was as follows:

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
Global Retail Markets	\$6,673	\$6,682	(0.1%)	\$27,401	\$27,756	(1.3%)
Global Risk Solutions	3,429	3,076	11.5	13,346	12,063	10.6
Corporate and Other	(7)	(7)	-	(123)	(5)	NM
Total NWP	\$10,095	\$9,751	3.5%	\$40,624	\$39,814	2.0%
Foreign exchange effect on growth			(0.1)			(0.7)
NWP growth excluding foreign exchange ¹			3.6%			2.7%

¹ Determined by assuming constant foreign exchange rates between periods.
NM = Not Meaningful

Consolidated NWP by geographic distribution channels was as follows:

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
U.S.	\$8,028	\$7,812	2.8%	\$32,349	\$31,241	3.5%
International excluding foreign exchange ¹	2,079	1,939	7.2	8,546	8,573	(0.3)
Foreign exchange ¹	(12)	-	NM	(271)	-	NM
Total NWP	\$10,095	\$9,751	3.5%	\$40,624	\$39,814	2.0%

¹ Determined by assuming constant foreign exchange rates between periods.
NM = Not Meaningful

For a more complete description of the Company's business operations, products and distribution channels, and other material information, please visit the Company's Investor Relations web site at www.libertymutualgroup.com/investors.

Results of Operations – Consolidated

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	Revised 2019 ⁸	Change	2020	Revised 2019 ⁸	Change
Revenues	\$11,796	\$10,933	7.9%	\$43,796	\$43,228	1.3%
PTOI before catastrophes, COVID-19, net incurred losses attributable to prior years, current accident year re-estimation and partnerships, LLC and other equity method income	\$897	\$512	75.2%	\$4,187	\$2,959	41.5%
Catastrophes ¹	(359)	(280)	28.2	(2,523)	(1,481)	70.4
COVID-19 ²	(115)	-	NM	(680)	-	NM
Net incurred losses attributable to prior years:						
- Asbestos and environmental ³	(211)	(275)	(23.3)	(209)	(278)	(24.8)
- All other ⁴	(442)	(280)	57.9	(588)	(628)	(6.4)
Current accident year re-estimation ⁵	197	(96)	NM	-	-	-
Pre-tax operating (loss) income before partnerships, LLC and other equity method income	(33)	(419)	(92.1)	187	572	(67.3)
Partnerships, LLC and other equity method income ⁶	494	145	NM	711	701	1.4
Pre-tax operating income (loss)	461	(274)	NM	898	1,273	(29.5)
Net realized gains	415	50	NM	790	443	78.3
Unit linked life insurance	(51)	(34)	50.0	(30)	(123)	(75.6)
Ironshore acquisition & integration costs	(2)	(12)	(83.3)	(18)	(28)	(35.7)
Restructuring costs	(596)	(64)	NM	(626)	(70)	NM
Loss on extinguishment of debt	-	-	-	-	(49)	(100.0)
Pre-tax income (loss)	227	(334)	NM	1,014	1,446	(29.9)
Income tax expense (benefit)	67	(34)	NM	237	358	(33.8)
Consolidated net income (loss) from continuing operations	160	(300)	NM	777	1,088	(28.6)
Discontinued operations, net of tax	2	-	NM	(17)	(50)	(66.0)
Consolidated net income (loss)	162	(300)	NM	760	1,038	(26.8)
Less: Net income attributable to non-controlling interest	-	1	(100.0)	2	1	100.0
Net income (loss) attributable to LMHC	162	(301)	NM	758	1,037	(26.9)
Net income (loss) attributable to LMHC excluding unrealized impact ⁷	23	(384)	NM	671	761	(11.8)
Cash flow provided by continuing operations	\$1,542	\$438	NM	\$6,448	\$3,477	85.4%

1 Catastrophes are defined as a natural catastrophe, civil unrest, or terror event exceeding \$25 million in estimated ultimate losses, net of reinsurance, and before taxes. Catastrophe losses, where applicable, include the impact of accelerated earned catastrophe premiums and earned reinstatement premiums.

2 Includes Global Risk Solutions estimated loss activity directly related to COVID-19.

3 Asbestos and environmental is gross of the related adverse development reinsurance (the “NICO Reinsurance Transaction”, which is described further in Reinsurance).

4 Net of earned premium and reinstatement premium attributable to prior years of \$83 million and \$301 million for the three and twelve months ended December 31, 2020, and \$29 million and \$24 million for the same periods in 2019.

5 Re-estimation of the current accident year loss reserves for the nine months ended September 30, 2020 and September 30, 2019.

6 Partnerships, LLC and other equity method income includes LP, LLC and other equity method income within net investment income in the accompanying Consolidated Statements of Income and revenue and expenses from direct investments in natural resources.

7 Excludes unrealized gains on equity securities, unit linked life insurance, and the corresponding tax impact.

8 2019 amounts were restated due to a pension accounting policy change, which is described further in Critical Accounting Estimates.
NM = Not Meaningful

Partnerships, LLC and Other Equity Method Income	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
LP, LLC and other equity method income ¹	\$518	\$123	NM	\$843	\$675	24.9%
Direct investment in natural resources revenues ²	19	104	(81.7%)	142	453	(68.7)
Direct investment in natural resources expenses ³	(43)	(82)	(47.6)	(274)	(427)	(35.8)
Partnerships, LLC and other equity method income	\$494	\$145	NM	\$711	\$701	1.4%

1 Included within net investment income in the accompanying Consolidated Statements of Income.

2 Included within fee & other revenues in the accompanying Consolidated Statements of Income.

3 Included within operating costs and expenses in the accompanying Consolidated Statements of Income.

NM = Not Meaningful

Net Investment Income	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2020	2019	2020	2019
Taxable interest income	\$437	\$454	\$1,744	\$1,832
Tax-exempt interest income	39	46	158	180
Dividends	14	18	35	67
LP, LLC and other equity method income	518	123	843	675
Commercial mortgage loans	23	21	86	83
Other investment income	(3)	3	5	9
Gross investment income	1,028	665	2,871	2,846
Investment expenses ¹	(75)	(68)	(277)	(254)
Total net investment income	\$953	\$597	\$2,594	\$2,592

1 Fees paid to external managers are included within the components of gross investment income.

Net Realized Gains (Losses)	Sales & Settlements	Impairments	Unrealized Gains	Total
Three Months Ended December 31, 2020:				
Fixed maturities	\$169	(\$3)	\$-	\$166
Equities	11	-	205	216
Derivatives	41	-	9	50
Other	(19)	(6)	8	(17)
Total	\$202	(\$9)	\$222	\$415
Three Months Ended December 31, 2019:				
Fixed maturities	\$68	(\$5)	\$-	\$63
Equities	25	-	112	137
Derivatives	(8)	-	37	29
Other	(89)	(93)	3	(179)
Total	(\$4)	(\$98)	\$152	\$50

Net Realized Gains (Losses) \$ in Millions	Sales & Settlements	Impairments	Unrealized Gains (Losses)	Total
Twelve Months Ended December 31, 2020:				
Fixed maturities	\$1,039	(\$46)	\$-	\$993
Equities	10	-	123	133
Derivatives	(8)	-	(6)	(14)
Other	(72)	(261)	11	(322)
Total	\$969	(\$307)	\$128	\$790
Twelve Months Ended December 31, 2019:				
Fixed maturities	\$404	(\$10)	\$-	\$394
Equities	48	-	451	499
Derivatives	(115)	-	16	(99)
Other	(134)	(219)	2	(351)
Total	\$203	(\$229)	\$469	\$443

Unrealized Gains (Losses) Related to Equity Securities ¹ \$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
Net gains recognized during the period on equity securities	\$213	\$115	85.2%	\$134	\$453	(70.4%)
Less: Net (losses) gains recognized during the period on equity securities sold during the period	(4)	(11)	(63.3)	(30)	110	NM
Unrealized gains (losses) recognized during the reporting period on equity securities still held at the reporting date	\$217	\$126	72.2%	\$164	\$343	(52.2%)

¹ Includes equities and equity like securities classified as other.
NM = Not Meaningful

Fourth Quarter Results:

Pre-tax operating loss before partnerships, LLC and other equity method income for the three months ended December 31, 2020 was \$33 million, a decrease of \$386 million from the same period in 2019. Pre-tax operating income before catastrophes, COVID-19, net incurred losses attributable to prior years, current accident year re-estimation, and partnerships, LLC and other equity method income was \$897 million, an increase of \$385 million over the same period in 2019. The increase reflects favorable current accident year and non-catastrophe losses driven by lower frequency due to lower vehicle miles traveled in Global Retail Markets and lower large loss activity in Global Risk Solutions and the profit margin on higher earned premium, partially offset by increased insurance operating expenses driven by an increase in variable expenses and advertising spend in Global Retail Markets. Including the impact of catastrophes, net incurred losses attributable to prior years, COVID-19 and current accident year re-estimation, the decrease in pre-tax operating loss primarily reflects the drivers previously mentioned, and favorable current accident year re-estimation in 2020 primarily due to favorability in U.S. auto liability recognized in the fourth quarter, but related to lower frequency trends throughout the year, partially offset by the impact of COVID-19 related losses, unfavorable catastrophe losses, and higher net incurred losses attributable to prior years driven by strengthening on casualty lines of business, including those subject to the NICO Casualty Reinsurance Transaction.

Partnerships, LLC, and other equity method income, including operating income from direct investments in natural resources, for the three months ended December 31, 2020 was \$494 million, an increase of \$349 million over the same period in 2019. The increase reflects favorable valuations across the LP, LLC, and other equity method investments as a result of improving market conditions, primarily driven by private capital and energy investments. The increase is partially offset by less favorable valuations and distributions on certain investments, primarily in metals and mining investments.

Revenues for the three months ended December 31, 2020 were \$11.796 billion, an increase of \$863 million over the same period in 2019. The major components of revenues are net premium earned, net investment income, net realized gains, and fee and other revenues.

Net premium earned for the three months ended December 31, 2020 was \$10.209 billion, an increase of \$235 million over the same period in 2019. The increase primarily reflects the premium earned associated with the changes in NWP previously discussed.

Net investment income for the three months ended December 31, 2020 was \$953 million, an increase of \$356 million over the same period in 2019. The increase reflects favorable valuations across the LP, LLC, and other equity method investments, primarily driven by private capital and energy investments. The increase is partially offset by lower earned yield in 2020 as compared to the same period in 2019.

Net realized gains for the three months ended December 31, 2020 were \$415 million, an increase of \$365 million over the same period in 2019. The net realized gains in the current quarter were primarily driven by a \$205 million net change in equity unrealized gains, \$169 million of net gains on fixed maturity sales, and a \$50 million net gain on derivatives. The prior period was impacted by a \$112 million net change in equity unrealized gains and \$68 million of net gains on fixed maturity sales. This was partially offset by \$105 million of foreign currency charges from the sale of various foreign entities and \$98 million of impairment charges primarily related to intangible assets.

Fee and other revenues for the three months ended December 31, 2020 were \$219 million, a decrease of \$93 million from the same period in 2019. The decrease primarily reflects lower natural resource revenues due to the Liberty Energy, LLC transaction.

Claims, benefits and expenses for the three months ended December 31, 2020 were \$10.920 billion, a decrease of \$237 million from the same period in 2019. The decrease reflects favorable current accident year and non-catastrophe losses, partially offset by the impact of COVID-19 related losses, higher incurred losses attributable to prior years and increased current year catastrophe losses as previously described.

Income tax expense (benefit) on continuing operations for the three months ended December 31, 2020 was \$67 million, versus (\$34) million for the same period in 2019. The Company's effective tax rate on continuing operations for the three months ended December 31, 2020 was 30% compared to 10% for the same period in 2019. The Company reported an income tax expense on pre-tax income for the three months ended December 31, 2020, compared to an income tax benefit on a pre-tax loss for the three months ended December 31, 2019. 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.

Discontinued operations, net of tax, for the three months ended December 31, 2020 were \$2 million versus zero for the same period in 2019. The change was driven by a final closing balance sheet settlement related to the sale of LLAC.

Net income (loss) attributable to LMHC for the three months ended December 31, 2020 was \$162 million versus (\$301) million for the same period in 2019.

Cash flow provided by continuing operations for the three months ended December 31, 2020 was \$1.542 billion, an increase of \$1.104 billion over the same period in 2019. The increase reflects favorable paid loss activity and premium collections in Global Retail Markets, consideration paid as part of the NICO Casualty Reinsurance Transaction in Corporate in 2019 that did not recur, and favorable underwriting expenses paid.

Year-to-date Results:

Pre-tax operating income before partnerships, LLC and other equity method income for the twelve months ended December 31, 2020 was \$187 million, a decrease of \$385 million from the same period in 2019. Pre-tax operating income before catastrophes, COVID-19, net incurred losses attributable to prior years, and partnerships, LLC and other equity method income was \$4.187 billion, an increase of \$1.228 billion over the same period in 2019. The increase reflects favorable current accident year and non-catastrophe losses driven by lower frequency due to lower

vehicle miles traveled in Global Retail Markets and lower large loss activity in Global Risk Solutions and the profit margin on higher earned premium in Global Risk Solutions, partially offset by higher insurance operating expenses due to increased technology investments, commissions, and advertising spend. Including the impact of catastrophes, COVID-19 and net incurred losses attributable to prior years, the decrease in pre-tax operating income reflects higher catastrophe losses and the impact of COVID-19 related losses, partially offset by lower net incurred losses attributable to prior years driven by strengthening on casualty lines of business, including those subject to the NICO Casualty Reinsurance Transaction.

Partnerships, LLC, and other equity method income, including operating income from direct investments in natural resources, for the twelve months ended December 31, 2020 was \$711 million, an increase of \$10 million over the same period in 2019. The increase reflects favorable valuations across the LP, LLC, and other equity method investments as a result of improving market conditions, primarily driven by private capital investments. The increase is offset by less favorable valuations and distributions on certain investments, primarily in energy and metals and mining investments.

Revenues for the twelve months ended December 31, 2020 were \$43.796 billion, an increase of \$568 million over the same period in 2019. The major components of revenues are net premium earned, net investment income, net realized gains, and fee and other revenues.

Net premium earned for the twelve months ended December 31, 2020 was \$39.491 billion, an increase of \$527 million over the same period in 2019. The increase primarily reflects the premium earned associated with the changes in NWP previously discussed.

Net investment income for the twelve months ended December 31, 2020 was \$2.594 billion, an increase of \$2 million over the same period in 2019. The increase reflects favorable valuations across the LP, LLC, and other equity method investments, primarily driven by private capital investments. The increase was partially offset by lower earned yield in 2020 as compared to the same period in 2019.

Net realized gains for the twelve months ended December 31, 2020 were \$790 million, an increase of \$347 million over the same period in 2019. The net realized gains in the current period were primarily driven by \$1.039 billion of net gains on fixed maturity sales and a \$123 million net change in equity unrealized gains, partially offset by a \$205 million net loss on the Liberty Energy, LLC transaction and \$70 million of net losses in metals and mining. The prior period was impacted by a \$451 million net change in equity unrealized gains and \$404 million of net gains on fixed maturity sales. This was partially offset by \$229 million of impairment charges primarily related to corporate real estate, natural resources, and intangible assets and \$105 million of foreign currency charges from the sale of various foreign entities.

Fee and other revenues for the twelve months ended December 31, 2020 were \$921 million, a decrease of \$308 million from the same period in 2019. The decrease primarily reflects lower natural resource revenues due to the Liberty Energy, LLC transaction.

Claims, benefits and expenses for the twelve months ended December 31, 2020 were \$42.108 billion, an increase of \$596 million over the same period in 2019. The increase reflects higher current year catastrophe losses, the impact of COVID-19 related losses, and higher insurance operating expenses driven by increased technology investments, commissions, and advertising spend. This is partially offset by favorable current accident year and non-catastrophe losses, lower net incurred losses attributable to prior years driven by strengthening in 2019 that did not recur at the same level, and lower natural resource expenses due to the Liberty Energy, LLC transaction.

Income tax expense on continuing operations for the twelve months ended December 31, 2020 was \$237 million, a decrease of \$121 million from the same period in 2019. The Company's effective tax rate on continuing operations for the twelve months ended December 31, 2020 was 23%, compared to 25% for the same period in 2019. The decrease in the effective tax rate on continuing operations from 2019 to 2020 was primarily driven by the impact of non-U.S. operations. 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.

Discontinued operations, net of tax, for the twelve months ended December 31, 2020 were \$17 million, a decrease of \$33 million from the same period in 2019. The decrease reflects a final closing balance sheet settlement in 2020 versus recognizing an additional expense in 2019, both related to the sale of LLAC.

Net income attributable to LMHC for the twelve months ended December 31, 2020 was \$758 million, a decrease of \$279 million from the same period in 2019.

Cash flow provided by continuing operations for the twelve months ended December 31, 2020 was \$6.448 billion, an increase of \$2.971 billion over the same period in 2019. The increase reflects favorable paid loss activity in Global Risk Solutions and Global Retail Markets, favorable premium collections in Global Risk Solutions, PG&E collections on subrogation, consideration paid as part of the NICO Casualty Reinsurance Transaction in Corporate in 2019 that did not recur and lower taxes paid. The increases were partially offset by unfavorable investment results.

CONSOLIDATED	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change (Points)	2020	2019	Change (Points)
Combined ratio before catastrophes, COVID-19, net incurred losses attributable to prior years and current accident year re-estimation						
Claims and claim adjustment expense ratio	62.6%	68.4%	(5.8)	61.9%	66.6%	(4.7)
Underwriting expense ratio	30.2	28.9	1.3	29.7	28.8	0.9
Subtotal	92.8	97.3	(4.5)	91.6	95.4	(3.8)
Catastrophes ¹	3.5	2.8	0.7	6.4	3.8	2.6
COVID-19 ²	1.1	-	1.1	1.7	-	1.7
Net incurred losses attributable to prior years:						
- Asbestos and environmental	2.1	2.8	(0.7)	0.6	0.9	(0.3)
- All other ³	4.3	2.8	1.5	1.5	1.6	(0.1)
Current accident year re-estimation ⁴	(1.9)	1.0	(2.9)	-	-	-
Total combined ratio ⁵	101.9%	106.7%	(4.8)	101.8%	101.7%	0.1

1 Catastrophes are defined as a natural catastrophe, civil unrest, or terror event exceeding \$25 million in estimated ultimate losses, net of reinsurance, and before taxes. Catastrophe losses, where applicable, include the impact of accelerated earned catastrophe premiums and earned reinstatement premiums.

2 Includes Global Risk Solutions estimated loss activity directly related to COVID-19.

3 Net of earned premium and reinstatement premium attributable to prior years.

4 Re-estimation of the current accident year loss reserves for the nine months ended September 30, 2020 and September 30, 2019.

5 The combined ratio, expressed as a percentage, is a measure of underwriting profitability. This measure should only be used in conjunction with, and not in lieu of, underwriting income and may not be comparable to other performance measures used by the Company's competitors. The combined ratio is computed as the sum of the following property and casualty ratios: the ratio of claims and claim adjustment expense less managed care income to earned premium; the ratio of insurance operating costs plus amortization of deferred policy acquisition costs less third-party administration income and fee income (primarily related to the Company's involuntary market servicing carrier operations) and installment charges to earned premium; and the ratio of policyholder dividends to earned premium. Provisions for uncollectible premium and reinsurance are not included in the combined ratio unless related to an asbestos and environmental commutation and certain other run off. Restructuring and Ironshore acquisition and integration costs are not included in the combined ratio.

Fourth Quarter Results:

The consolidated combined ratio before catastrophes, COVID-19, net incurred losses attributable to prior years and current accident year re-estimation for the three months ended December 31, 2020 was 92.8%, a decrease of 4.5 points from the same period in 2019. The decrease was primarily driven by a decrease in the claims and claim adjustment expense ratio due to lower current accident year and non-catastrophe losses, partially offset by an increase in the underwriting expense ratio driven by increased variable expenses and advertising spend in Global Retail Markets and increased employee-related costs driven by a one-time benefit in 2019 that did not recur.

Including the impact of catastrophes, COVID-19, net incurred losses attributable to prior years and current accident year re-estimation, the total combined ratio for the three months ended December 31, 2020 was 101.9%, a decrease of 4.8 points from the same period in 2019. The decrease was driven by the changes mentioned previously and current accident year re-estimation driven by favorable U.S. auto liability in Global Retail Markets, partially offset by the impact of COVID-19 related losses, higher current year catastrophe losses, and higher net incurred losses attributable to prior years.

Year-to-date Results:

The consolidated combined ratio before catastrophes, COVID-19 and net incurred losses attributable to prior years for the twelve months ended December 31, 2020 was 91.6%, a decrease of 3.8 points from the same period in 2019. The decrease was primarily driven by a decrease in the claims and claim adjustment expense ratio due to lower current accident year and non-catastrophe losses. The increase in the underwriting expense ratio reflects higher technology investments, higher commission expenses, increased advertising spend, and increased employee-related costs driven by a one-time benefit in 2019 that did not recur, partially offset by higher earned premium in Global Risk Solutions.

Including the impact of catastrophes, COVID-19 and net incurred losses attributable to prior years, the total combined ratio for the twelve months ended December 31, 2020 was 101.8%, an increase of 0.1 points over the same period in 2019. The increase was driven by higher current year catastrophe losses and the impact of COVID-19 related losses, partially offset by the decreases to the combined ratio mentioned previously and lower net incurred losses attributable to prior years driven by strengthening in 2019 that did not recur at the same level.

GLOBAL RETAIL MARKETS

Overview – Global Retail Markets

Global Retail Markets combines the Company’s local expertise in growth markets outside the U.S. with strong and scalable U.S. capabilities to take advantage of opportunities to grow its business globally. Global Retail Markets is comprised of four segments: U.S., West, East, and Reinsurance.

U.S. consists of Personal Lines and Business Lines. U.S. Personal Lines sells automobile, homeowners and other types of property and casualty insurance coverage to individuals in the United States. These products are distributed through approximately 1,900 licensed employee sales representatives, 880 licensed telesales counselors, independent agents, third-party producers, the Internet, and sponsored affinity groups. U.S. Business Lines serves small commercial customers through an operating model that combines local underwriting, market knowledge and service with the scale advantages of a national company.

West sells property and casualty, health and life insurance products and services to individuals and businesses in Brazil, Colombia, Chile, Ecuador, Spain, Portugal, and Ireland. Private passenger automobile insurance is the single largest line of business.

East sells property and casualty, health and life insurance products and services to individuals and businesses in Thailand, Singapore, Hong Kong, Vietnam, Malaysia, India, and China. Private passenger automobile insurance is the single largest line of business.

Global Retail Markets Reinsurance consists of certain internal reinsurance programs.

On January 1, 2018, Ireland, Portugal, and Spain combined to create the Western Europe Market.

On August 23, 2019, the Company completed the sale of its Venezuela operations. The Company previously deconsolidated the Venezuela operations as of September 30, 2015 due to restrictive exchange control regulations significantly impacting control of the operations.

On December 24, 2019, UKH entered into an agreement to sell its entire 99.99% interest in its Russian insurance affiliate, Liberty Insurance (JSC) to PJSC Sovcombank. The transaction closed on February 6, 2020.

On January 1, 2020, Hong Kong, Singapore, Thailand, and Vietnam combined to create the Asia Market.

On April 2, 2020, Chile, Colombia, and Ecuador combined to create the Andes Market.

Global Retail Markets NWP by market segment was as follows:

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
U.S.	\$5,695	\$5,560	2.4%	\$23,655	\$23,509	0.6%
West	674	772	(12.7)	2,542	2,972	(14.5)
East	300	335	(10.4)	1,181	1,230	(4.0)
Global Retail Markets Reinsurance	4	15	(73.3)	23	45	(48.9)
Total NWP	\$6,673	\$6,682	(0.1%)	\$27,401	\$27,756	(1.3%)
Foreign exchange effect on growth			(0.6)			(1.0)
NWP growth excluding foreign exchange ¹			0.5%			(0.3%)

¹ Determined by assuming constant foreign exchange rates between periods.

Global Retail Markets NWP by line of business was as follows:

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
Private passenger automobile	\$3,395	\$3,357	1.1%	\$13,869	\$13,933	(0.5%)
Homeowners	1,665	1,547	7.6	6,800	6,435	5.7
Commercial multiple-peril	457	485	(5.8)	1,936	2,058	(5.9)
Commercial automobile	340	377	(9.8)	1,310	1,534	(14.6)
General liability	211	200	5.5	887	857	3.5
Workers compensation	126	160	(21.3)	605	764	(20.8)
Commercial property	145	140	3.6	491	481	2.1
Life and health	82	90	(8.9)	387	390	(0.8)
Other ¹	252	326	(22.7)	1,116	1,304	(14.4)
Total NWP	\$6,673	\$6,682	(0.1%)	\$27,401	\$27,756	(1.3%)

¹ Premium related to internal reinsurance and other personal and commercial lines including personal accident, bonds, small and medium enterprise, and marine and cargo lines of business.

Fourth Quarter Results:

NWP for the three months ended December 31, 2020 was \$6.673 billion, a decrease of \$9 million from the same period in 2019. The decrease was due to results in commercial auto, commercial multiple-peril, and workers compensation driven by underwriting actions on historically unprofitable segments within U.S. business lines. Adding to the decrease was the negative impact of foreign exchange in the West region due to the strengthening of the U.S. dollar primarily versus the Brazilian real, partially offset by the weakening of the U.S. dollar versus the euro as compared to average rates in 2019. Furthermore, the decrease was driven by private passenger auto results in the West region, particularly in the Andes and Western Europe markets, and in the East region due to the sale of Russia. These decreases were partially offset by strong new business production and higher retention in personal property and private passenger auto results in the U.S.

Year-to-date Results:

NWP for the twelve months ended December 31, 2020 was \$27.401 billion, a decrease of \$355 million from the same period in 2019. The decrease was driven by commercial automobile, workers compensation, and commercial multiple peril due to the economic impacts of COVID-19, underwriting actions implemented on historically unprofitable segments within U.S. business lines, and the sale of our workers compensation business in Colombia in the fourth quarter of 2019. Additionally, the economic impacts of COVID-19 drove unfavorable private passenger auto results in the West region, particularly in the Andes and Western Europe Markets. Adding to the decrease were the negative impacts of foreign exchange due to the strengthening of the U.S. dollar primarily versus the Brazilian real as compared to average rates in 2019. These decreases were partially offset by strong new business production and higher retention in personal property and private passenger auto results in U.S. (offsetting the premium refunds distributed earlier in the year) and strong property results in the Western Europe Market, particularly in Spain.

Results of Operations – Global Retail Markets

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
Revenues	\$7,379	\$7,201	2.5%	\$28,471	\$28,678	(0.7%)
PTOI before catastrophes, net incurred losses attributable to prior years and current accident year re-estimation	\$747	\$642	16.4%	\$3,507	\$2,691	30.3%
Catastrophes ¹	(286)	(165)	73.3	(2,100)	(1,200)	75.0
Net incurred losses attributable to prior years	157	(26)	NM	132	48	175.0
Current accident year re-estimation ²	197	(38)	NM	-	-	-
Pre-tax operating income	\$815	\$413	97.3%	\$1,539	\$1,539	-

1 Catastrophes are defined as a natural catastrophe, civil unrest, or terror event exceeding \$25 million in estimated ultimate losses, net of reinsurance, and before taxes. Catastrophe losses, where applicable, include the impact of accelerated earned catastrophe premiums and earned reinstatement premiums.

2 Re-estimation of the current accident year loss reserves for the nine months ended September 30, 2020 and September 30, 2019.
NM = Not Meaningful

Fourth Quarter Results:

Pre-tax operating income before catastrophes, net incurred losses attributable to prior years and current accident year re-estimation was \$747 million, an increase of \$105 million over the same period in 2019. The increase was primarily driven by lower non-catastrophe auto losses in the U.S. primarily due to lower frequency driven by lower vehicle miles traveled and in the West region particularly in the Western Europe market. Adding to the increase was profit margin on higher earned premium primarily due to strong topline results in U.S. personal lines. This was partially offset by U.S. personal property non-catastrophe losses, as well as higher insurance operating expenses, due to an increase in variable expenses and advertising spend, and loss adjustment expenses. Including the impact of catastrophes, net incurred losses attributable to prior years and current accident year re-estimation, pre-tax operating income was \$815 million, an increase of \$402 million over the same period in 2019. The increase was primarily driven by current accident year re-estimation in 2020 due to favorability in U.S. auto liability recognized in the fourth quarter, but related to lower frequency trends throughout the year. Adding to the increase were the net impact of prior year catastrophe and non-catastrophe U.S. reserve movements, and the net favorability of the drivers mentioned above. This was partially offset by higher current year catastrophe losses due to an increase in severity and frequency compared to prior year.

Revenues for the three months ended December 31, 2020 were \$7.379 billion, an increase of \$178 million over the same period in 2019. The increase was primarily driven by a realized loss that did not recur due to the 2019 sale of UKH's Russian insurance affiliate, Liberty Insurance (JSC), and higher earned premium due to strong topline results in U.S. personal lines. This was partially offset by lower earned premium in U.S. business lines and the West region.

Claims, benefits and expenses for the three months ended December 31, 2020 were \$6.513 billion, a decrease of \$345 million from the same period in 2019. The decrease was driven by lower non-catastrophe auto losses in the U.S. primarily due to current year favorability in U.S. auto liability due to lower frequency driven by lower vehicle miles traveled, and in the West region particularly in the Western Europe market. Adding to the decrease was the net impact of prior year catastrophe and non-catastrophe U.S. reserve movements. This was partially offset by higher current year catastrophe losses due to an increase in severity and frequency compared to prior year, as well as higher insurance operating expenses, due to an increase in variable expenses and advertising spend, and loss adjustment expenses.

Year-to-date Results:

Pre-tax operating income before catastrophes and net incurred losses attributable to prior years was \$3.507 billion, an increase of \$816 million over the same period in 2019. The increase was primarily driven by lower non-catastrophe auto losses due to lower frequency driven by lower vehicle miles traveled and lower loss adjustment expenses. This was partially offset by higher insurance operating expenses due to an increase in variable expenses and advertising

spend, lower earned premium due to topline shortfall in the West region and U.S. business lines, and unfavorable credit losses on premium receivables from payment forbearance programs. Including the impact of catastrophes and net incurred losses attributable to prior years, pre-tax operating income was \$1.539 billion, no change from the same period in 2019. This was primarily driven by higher current year catastrophe losses due to an increase in severity and frequency compared to prior year, offset by the net impact of prior year catastrophe and non-catastrophe U.S. reserve movements and the net favorability of the drivers mentioned above.

Revenues for the twelve months ended December 31, 2020 were \$28.471 billion, a decrease of \$207 million from the same period in 2019. The decrease was primarily driven by lower earned premium due to topline shortfall in the West region and U.S. business lines, and a decline in unrealized and realized gains due to market valuation changes on unit linked life insurance where the policyholder bears the investment risk. This was partially offset by a realized loss that did not recur due to the 2019 sale of UKH's Russian insurance affiliate, Liberty Insurance (JSC).

Claims, benefits and expenses for the twelve months ended December 31, 2020 were \$26.926 billion, a decrease of \$208 million from the same period in 2019. The decrease was primarily driven by lower non-catastrophe auto losses due to lower frequency driven by lower vehicle miles traveled, the net impact of prior year catastrophe and non-catastrophe U.S. reserve movements, and lower loss adjustment expenses. This was partially offset by higher current year catastrophe losses due to an increase in severity and frequency compared to prior year and higher insurance operating expenses due to an increase in variable expenses and advertising spend.

	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change (Points)	2020	2019	Change (Points)
GLOBAL RETAIL MARKETS						
Combined ratio before catastrophes, net incurred losses attributable to prior years and current accident year re-estimation						
Claims and claim adjustment expense ratio	62.2%	64.5%	(2.3)	60.2%	64.5%	(4.3)
Underwriting expense ratio	30.1	29.0	1.1	29.4	28.4	1.0
Subtotal	92.3	93.5	(1.2)	89.6	92.9	(3.3)
Catastrophes ¹	4.1	2.4	1.7	7.8	4.4	3.4
Net incurred losses attributable to prior years	(2.2)	0.4	(2.6)	(0.5)	(0.2)	(0.3)
Current accident year re-estimation ²	(2.8)	0.5	(3.3)	-	-	-
Total combined ratio	91.4%	96.8%	(5.4)	96.9%	97.1%	(0.2)

1 Catastrophes are defined as a natural catastrophe, civil unrest, or terror event exceeding \$25 million in estimated ultimate losses, net of reinsurance, and before taxes. Catastrophe losses, where applicable, include the impact of accelerated earned catastrophe premiums and earned reinstatement premiums.

2 Re-estimation of the current accident year loss reserves for the nine months ended September 30, 2020 and September 30, 2019.

Fourth Quarter Results:

The Global Retail Markets combined ratio before catastrophes, net incurred losses attributable to prior years and current accident year re-estimation for the three months ended December 31, 2020 was 92.3%, a decrease of 1.2 points from the same period in 2019. The decrease was primarily driven by a decrease in the claims and claim adjustment expense ratio due to lower non-catastrophe auto losses in the U.S. primarily due to lower frequency driven by lower vehicle miles traveled, and in the West region particularly in the Western Europe market. This was partially offset by U.S. personal property non-catastrophe losses and loss adjustment expenses. The decrease in the claims and claim adjustment expense ratio was partially offset by an increase in the underwriting expense ratio driven by higher insurance operating expenses due to an increase in variable expenses and advertising spend.

Including the impact of catastrophes, net incurred losses attributable to prior years and current accident year re-estimation the total combined ratio for the three months ended December 31, 2020 was 91.4%, a decrease of 5.4 points

from the same period in 2019. The decrease is driven by current accident year re-estimation in 2020 due to favorability in U.S. auto liability recognized in the fourth quarter but related to lower frequency trends throughout the year. Adding to the decrease were the net impact of prior year catastrophe and non-catastrophe U.S. reserve movements and the net favorability from the drivers mentioned above. This was partially offset by higher current year catastrophe losses due to an increase in severity and frequency compared to prior year.

Year-to-date Results:

The Global Retail Markets combined ratio before catastrophes and net incurred losses attributable to prior years for the twelve months ended December 31, 2020 was 89.6%, a decrease of 3.3 points from the same period in 2019. The decrease was primarily driven by a decrease in the claims and claim adjustment expense ratio due to lower non-catastrophe auto losses due to lower frequency driven by lower vehicle miles traveled and lower loss adjustment expenses. This was partially offset by an increase in the underwriting expense ratio, primarily driven by higher insurance operating expenses due to an increase in variable expenses and advertising spend, and lower earned premium due to topline shortfall in the West region and U.S. business lines.

Including the impact of catastrophes and net incurred losses attributable to prior years, the total combined ratio for the twelve months ended December 31, 2020 was 96.9%, a decrease of 0.2 points from the same period in 2019. The decrease was driven by the net impact of prior year catastrophe and non-catastrophe reserve movements in the U.S. and the net favorability from the drivers mentioned above, partially offset by higher current year catastrophe losses due to an increase in severity and frequency compared to prior year.

GLOBAL RISK SOLUTIONS

Overview – Global Risk Solutions

Global Risk Solutions (“GRS”) offers a wide array of property, casualty, specialty and reinsurance products and services distributed through brokers and independent agents globally. The segments for Global Risk Solutions are as follows:

- Liberty Specialty Markets (“LSM”) – Includes most Global Risk Solutions business outside of North America along with global reinsurance.
- North America (“NA”) – In Q1 2020, GRS combined National Insurance (NI) and North America Specialty (NAS) to form a single North America segment. This includes admitted and non-admitted property and casualty in North America.
- Global Surety – A global leader providing surety guarantees to businesses ranging from multinational to local in most industry segments.
- Other Global Risk Solutions primarily consists of internal reinsurance programs, Ironshore international entities and a large global inland marine program.

On May 31, 2019, the Company completed the acquisition of Inco Dico of AmTrust Financial Services, Inc. The acquisition of the international surety and credit reinsurance operations of AmTrust Financial Services, Inc. closed on October 2, 2019.

On August 20, 2019, GRS disposed of certain international Ironshore entities.

Global Risk Solutions NWP by market segment was as follows:

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
North America	\$1,534	\$1,555	(1.4%)	\$5,588	\$5,366	4.1%
Liberty Specialty Markets	1,299	1,139	14.0	5,089	4,533	12.3
Global Surety	241	246	(2.0)	1,083	981	10.4
Other Global Risk Solutions	355	136	161.0	1,586	1,183	34.1
Total NWP	\$3,429	\$3,076	11.5%	\$13,346	\$12,063	10.6%
Foreign exchange effect on growth			0.9			0.1
NWP growth excluding foreign exchange ¹			10.6%			10.5%

¹ Determined by assuming constant foreign exchange rates between periods.

Global Risk Solutions NWP by line of business was as follows:

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
Specialty insurance ¹	\$1,000	\$1,007	(0.7%)	\$3,458	\$3,294	5.0%
Reinsurance	444	332	33.7	2,204	1,827	20.6
Casualty ²	582	550	5.8	1,990	1,913	4.0
Workers compensation	306	348	(12.1)	1,218	1,342	(9.2)
Surety	256	255	0.4	1,122	1,005	11.6
Commercial property	274	267	2.6	1,077	991	8.7
Other reinsurance	203	(30)	NM	877	271	NM
Commercial automobile	174	164	6.1	598	625	(4.3)
Inland marine ³	142	141	0.7	563	561	0.4
Commercial multiple-peril	48	42	14.3	239	234	2.1
Total NWP	\$3,429	\$3,076	11.5%	\$13,346	\$12,063	10.6%

1 Includes marine, energy, construction, aviation, warranty and indemnity, directors and officers, errors and omissions, trade credit, contingent lines and other.

2 Primarily includes general liability, excess & umbrella and environmental lines of business.

3 Includes handset protection coverage for lost or damaged wireless devices

NM = Not Meaningful

Fourth Quarter Results:

NWP for the three months ended December 31, 2020 was \$3.429 billion, an increase of \$353 million over the same period in 2019.

The increase was driven by:

- Renewal rate increases across all lines of business, totaling 21% including the impact of changing terms and conditions resulting in higher renewed premium despite a lower renewal retention rate due to underwriting actions taken;
- Higher new business premium;
- Favorable LSM ultimate premium adjustments; and
- Ceded reinsurance program structure changes

Partially offset by:

- Lower premium due to the economic environment, primarily within workers compensation and general liability; and
- Non-renewal due to re-underwriting of business

Additionally, internal reinsurance changes in 2020 created offsetting differences amongst segments and lines.

Year-to-date Results:

NWP for the twelve months ended December 31, 2020 was \$13.346 billion, an increase of \$1.283 billion over the same period in 2019.

The increase was driven by:

- Renewal rate increases across nearly all lines of business, totaling 15% including the impact of changing terms and conditions resulting in higher renewed premium despite a lower renewal retention rate due to underwriting actions taken;
- AmTrust acquisitions which closed post first quarter of 2019;
- Higher new business premium;

- Favorable LSM ultimate premium adjustments; and
- Ceded reinsurance program structure changes

Partially offset by:

- Lower premium due to the economic environment, primarily within commercial auto, workers compensation, general liability and reinsurance;
- Non-renewal of certain program business; and
- Lower premium in specialty insurance, commercial property and casualty due to the disposal of certain international Ironshore entities.

Results of Operations – Global Risk Solutions

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
Revenues	\$3,593	\$3,307	8.6%	\$13,791	\$12,840	7.4%
PTOI before catastrophes, COVID-19, current accident year re-estimation, and net incurred losses attributable to prior years	\$397	\$5	NM	\$1,418	\$710	99.7%
Catastrophes ¹	(73)	(137)	(46.7)	(423)	(303)	39.6
COVID-19 ²	(115)	-	NM	(680)	-	NM
Net incurred losses attributable to prior years ³	(212)	(167)	26.9	(315)	(543)	(42.0)
Current accident year re-estimation ⁴	-	(58)	(100.0)	-	-	-
Pre-tax operating (loss) income	(\$3)	(\$357)	(99.2%)	-	(\$136)	(100.0%)

1 Catastrophes are defined as a natural catastrophe, civil unrest, or terror event exceeding \$25 million in estimated ultimate losses, net of reinsurance, and before taxes. Catastrophe losses, where applicable, include the impact of accelerated earned catastrophe premiums and earned reinstatement premiums.

2 Includes estimated loss activity directly related to COVID-19.

3 Net of earned premium and reinstatement premium attributable to prior years of \$83 million and \$301 million for the three and twelve months ended December 31, 2020, and \$29 million and \$24 million for the same periods in 2019.

4 Re-estimation of the current accident year loss reserves for the nine months ended September 30, 2019.
NM = Not Meaningful

Fourth Quarter Results:

Pre-tax operating loss for the three months ended December 31, 2020 was \$3 million, a decrease in loss of \$354 million from the same period in 2019. Pre-tax operating income before catastrophes, COVID-19, net incurred losses attributable to prior years and current accident year re-estimation for the three months ended December 31, 2020 was \$397 million, an increase of \$392 million over the same period in 2019. The increase reflects an improved current accident year loss ratio due to underwriting actions and rate increases, lower large loss activity, profit margin on higher earned premium and lower credit loss provisions on policyholder receivables. Including the impact of catastrophes, COVID-19, net incurred losses attributable to prior years and current accident year re-estimation, the decrease in pre-tax operating loss was due to the drivers mentioned above, lower catastrophe losses, and resetting of the current accident year to a higher baseline based on prior year loss indications primarily within liability lines in 2019 that did not recur, partially offset by the impact of \$115 million of COVID-19 related losses (primarily due to workers compensation) and higher incurred losses attributable to prior years.

Revenues for the three months ended December 31, 2020 were \$3.593 billion, an increase of \$286 million over the same period in 2019. The increase primarily reflects premium earned associated with the changes in NWP previously discussed as well as favorable net investment income.

Claims, benefits and expenses for the three months ended December 31, 2020 were \$3.599 billion, a decrease of \$129 million from the same period in 2019. The decrease reflects the impact of the favorable current accident year loss

activity described above partially offset by attritional losses due to growth, the impact of COVID-19, and higher incurred losses attributable to prior years.

Year-to-date Results:

Pre-tax operating income (loss) for the twelve months ended December 31, 2020 was zero, versus (\$136) million for the same period in 2019. Pre-tax operating income before catastrophes, COVID-19 and net incurred losses attributable to prior years for the twelve months ended December 31, 2020 was \$1.418 billion, an increase of \$708 million over the same period in 2019. The increase reflects favorable current accident year loss ratio due to underwriting actions and rate increases, lower large loss activity, profit margin on higher earned premium and higher net investment income, partially offset by higher expenses associated with growth and an unfavorable foreign exchange impact of \$38 million. Including the impact of catastrophes, COVID-19 and net incurred losses attributable to prior years, the change reflects the drivers mentioned above and lower net incurred losses attributable to prior years driven by strengthening in 2019 that did not recur at the same level. This is partially offset by the impact of \$680 million of COVID-19 related losses, of which approximately 40% related to event cancellation products with the remaining balance dispersed across a number of lines of business, and higher catastrophe losses.

Revenues for the twelve months ended December 31, 2020 were \$13.791 billion, an increase of \$951 million over the same period in 2019. The increase primarily reflects premium earned associated with the changes in NWP previously discussed as well as favorable net investment income.

Claims, benefits and expenses for the twelve months ended December 31, 2020 were \$13.803 billion, an increase of \$740 million over the same period in 2019. The increase reflects the net impact of loss activity described above and attritional losses associated with growth. Additionally, expenses increased over the prior year due to higher technology investments and the AmTrust acquisitions mentioned previously, as well as higher acquisition costs due to growth.

	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change (Points)	2020	2019	Change (Points)
GLOBAL RISK SOLUTIONS						
Combined ratio before catastrophes, COVID-19, current accident year re-estimation, and net incurred losses attributable to prior years						
Claims and claim adjustment expense ratio	64.7%	75.2%	(10.5)	65.2%	70.3%	(5.1)
Underwriting expense ratio	29.1	30.8	(1.7)	30.1	30.7	(0.6)
Dividend ratio	0.1	0.1	-	0.1	0.1	-
Subtotal	93.9	106.1	(12.2)	95.4	101.1	(5.7)
Catastrophes ¹	2.3	4.6	(2.3)	3.5	2.6	0.9
COVID-19 ²	3.6	-	3.6	5.6	-	5.6
Net incurred losses attributable to prior years ³	6.5	5.3	1.2	2.4	4.8	(2.4)
Current accident year re-estimation ⁴	-	1.9	(1.9)	-	-	-
Total combined ratio	106.3%	117.9%	(11.6)	106.9%	108.5%	(1.6)

1 Catastrophes are defined as a natural catastrophe, civil unrest, or terror event exceeding \$25 million in estimated ultimate losses, net of reinsurance, and before taxes. Catastrophe losses, where applicable, include the impact of accelerated earned catastrophe premiums and earned reinstatement premiums.

2 Includes estimated loss activity directly related to COVID-19.

3 Net of earned premium and reinstatement premium attributable to prior years.

4 Re-estimation of the current accident year loss reserves for the nine months ended September 30, 2019.

Fourth Quarter Results:

The Global Risk Solutions combined ratio before catastrophes, COVID-19, net incurred losses attributable to prior years and current accident year re-estimation for the three months ended December 31, 2020 was 93.9%, a decrease of 12.2 points from the same period in 2019. The decrease in the claims and claim adjustment expense ratio was primarily driven by lower current year loss activity (including favorable large loss activity) and rate increases. The decrease in the underwriting expense ratio was primarily driven by higher earned premium.

Including the impact of catastrophes, COVID-19, net incurred losses attributable to prior years and current accident year re-estimation, the total combined ratio for the three months ended December 31, 2020 was 106.3%, a decrease of 11.6 points from the same period in 2019. The change was driven by the decreases to the combined ratio mentioned above and lower current year catastrophe losses partially offset by the impact of COVID-19 losses and higher net incurred losses attributable to prior years.

Year-to-date Results:

The Global Risk Solutions combined ratio before catastrophes, COVID-19 and net incurred losses attributable to prior years for the twelve months ended December 31, 2020 was 95.4%, a decrease of 5.7 points from the same period in 2019. The decrease in the claims and claim adjustment expense ratio was primarily driven by lower current year loss activity (including favorable large loss activity) and rate increases. The decrease in the underwriting expense ratio was primarily driven by higher earned premium partially offset by higher technology investments, acquisition costs and the AmTrust acquisitions mentioned previously.

Including the impact of catastrophes, COVID-19 and net incurred losses attributable to prior years, the total combined ratio for the twelve months ended December 31, 2020 was 106.9%, a decrease of 1.6 points from the prior year. The decrease reflects the improvement noted above and lower prior year incurred losses, partially offset by higher catastrophe losses and the impact of COVID-19 losses.

CORPORATE AND OTHER

Overview – Corporate and Other

Corporate and Other includes the following significant items:

- Certain internal discontinued operations, which comprises: the run-off of certain commercial lines business, the run-off of the California workers compensation business of Golden Eagle Insurance Corporation and certain distribution channels related to Prudential Property and Casualty Insurance Company, Prudential General Insurance Company and Prudential Commercial Insurance Company (together, “PruPac”) and Liberty Re annuity business.
- Cessions related to certain retroactive reinsurance agreements, including the NICO Reinsurance Transaction and NICO Casualty Reinsurance Transaction, which are described further in “Reinsurance”.
- Effective January 1, 2015, Corporate began assuming certain pre-2014 voluntary and involuntary workers compensation claims from the businesses. The covered business materially aligns with the workers compensation business covered by the retroactive reinsurance agreement defined as the NICO Reinsurance Transaction, which is described further in “Reinsurance”.
- Effective January 1, 2019, Corporate began assuming certain U.S. workers compensation, commercial auto, and general liability claims from the businesses. The covered business materially aligns with the casualty business covered by the retroactive reinsurance agreement defined as the NICO Casualty Reinsurance Transaction, which is described further in “Reinsurance,” with two notable differences: 1) the internal treaty attaches at held reserves at inception and does not include a loss corridor, and 2) the internal treaty includes umbrella claims related to Business Lines within Global Retail Markets.
- Effective September 30, 2020, Corporate began assuming certain pre-2018 construction defect liabilities from Global Risk Solutions.
- Reserve changes on certain other casualty and property lines of business.
- Interest expense on the Company’s outstanding debt.
- Certain risks of its businesses that the Company reinsures as part of its risk management program and pre-2019 risks on U.S. homeowners business covered by externally ceded homeowners’ quota share reinsurance treaties.
- The Company reports its written premium on workers compensation contracts on the "booked as billed" method. The businesses report workers compensation written premium on the "booked at inception" method. Corporate and Other results reflect the difference between these two methods.
- Costs associated with certain long-term compensation plans and other corporate costs not fully allocated to the businesses.
- Property and casualty operations’ investment income is allocated to the businesses based on planned ordinary investment income returns by investment category. The difference between allocated net investment income and actual net investment income is included in Corporate and Other.
- Investment-related realized gains (losses) and real estate impairments.
- Income related to LP, LLC and other equity method investments.
- Fee and other revenues include revenues from certain non-insurance subsidiaries, including Liberty Energy, Liberty Metals and Mining and Liberty Mutual Agriculture and Timber. These subsidiaries generate revenue from the production and sale of oil, gas, and other natural resources and related LP, LLC and other equity method investments. On July 19, 2020, the Company entered into an agreement with an investment firm, whereby both parties contributed various energy assets into a new joint venture vehicle. The Company contributed its entire

interest in Liberty Energy, LLC to the joint venture in exchange for a minority interest in the new entity. A \$231 million impairment and subsequent gain of \$26 million upon finalizing the sale are reflected in the Consolidated Statements of Income.

- The results of LLAC presented as discontinued operations to the extent there have been adjustments since the 2018 sale.

Corporate and Other NWP by line of business was as follows:

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019	Change	2020	2019	Change
Reinsurance, net	(\$9)	\$3	NM	(\$130)	(\$30)	NM
Workers compensation ¹	-	(9)	(100.0%)	10	32	(68.8%)
Other	2	(1)	NM	(3)	(7)	(57.1)
Total NWP	(\$7)	(\$7)	-%	(\$123)	(\$5)	NM

¹ Booked as billed adjustment.
NM = Not Meaningful

Fourth Quarter Results:

NWP for the three months ended December 31, 2020 was (\$7) million, no change from the same period in 2019. Despite no net change, there were offsetting drivers when comparing to the same period in 2019. Lower written premium due to an assumed premium adjustment on an internal property catastrophe excess of loss contract was offset by an increase in the book as billed adjustment and other immaterial changes.

Year-to-date Results:

NWP for the twelve months ended December 31, 2020 was (\$123) million, a decrease of \$118 million from the same period in 2019. The decrease is driven by additional ceded premium related to new property catastrophe placements, higher net premium on existing treaties, and a decrease in the booked as billed adjustment.

Results of Operations – Corporate and Other

\$ in Millions	Three Months Ended December 31,			Twelve Months Ended December 31,		
	2020	2019 ⁵	Change	2020	2019 ⁵	Change
Revenues	\$824	\$425	93.9%	\$1,534	\$1,710	(10.3%)
Pre-tax operating loss before catastrophes, net incurred losses attributable to prior years, and partnerships, LLC and other equity method income	(\$247)	(\$135)	83.0	(\$738)	(\$442)	67.0
Catastrophes ¹	-	22	(100.0)	-	22	(100.0)
Net incurred losses attributable to prior years:						
-Asbestos and environmental ²	(211)	(275)	(23.3)	(209)	(278)	(24.8)
-All other ^{2,3}	(387)	(87)	NM	(405)	(133)	NM
Pre-tax operating loss before partnerships, LLC and other equity method income	(\$845)	(\$475)	77.9	(\$1,352)	(\$831)	62.7
Partnerships, LLC and other equity method income ⁴	494	145	NM	711	701	1.4
Pre-tax operating loss	(\$351)	(\$330)	6.4%	(\$641)	(\$130)	NM

1 Catastrophes are defined as a natural catastrophe or terror event exceeding \$25 million in estimated ultimate losses, net of reinsurance, and before taxes. Catastrophe losses, where applicable, include the impact of accelerated earned catastrophe premiums and earned reinstatement premiums.

2 Asbestos and environmental is gross of the NICO Reinsurance Transaction, which is described further in “Reinsurance”.

3 Net of earned premium attributable to prior years of zero for the three and twelve months ended December 31, 2020 and 2019.

4 Partnerships, LLC and other equity method income includes LP, LLC and other equity method income within net investment income in the accompanying Consolidated Statements of Income and revenue and expenses from the production and sale of oil and gas.

5 2019 amounts were restated due to a pension accounting policy change, which is described further in Critical Accounting Estimates.

NM = Not Meaningful

Fourth Quarter Results:

Pre-tax operating loss for the three months ended December 31, 2020 was \$351 million, an increase of \$21 million over the same period in 2019. Pre-tax operating loss before catastrophes, net incurred losses attributable to prior years, and partnerships, LLC and other equity method income was \$247 million, an increase of \$112 million over the same period in 2019. The increase in loss reflects lower net investment income excluding partnerships, LLC and other equity method income and increased employee-related costs driven by a one-time benefit in 2019 that did not recur. Including the impact of catastrophes, net incurred losses attributable to prior years, and partnerships, LLC and other equity method income, the increase in pre-tax operating loss is due to higher incurred losses attributable to prior years, specifically due to internally assumed casualty lines and strengthening on casualty run-off reserves. The increase in loss was partially offset by higher partnership, LLC and other equity method income.

Revenues for the three months ended December 31, 2020 were \$824 million, an increase of \$399 million over the same period in 2019. The major components of revenues are net premium earned, net investment income (including LP, LLC and other equity method investments), net realized gains, and fee and other revenues.

Net premium earned for the three months ended December 31, 2020 was (\$41) million, a decrease of \$35 million from the same period in 2019. The decrease primarily reflects the reinsurance earnings impact of new property catastrophe placements and an assumed premium adjustment on an internal property catastrophe excess of loss contract.

Net investment income for the three months ended December 31, 2020 was \$467 million, an increase of \$341 million over the same period in 2019. The increase reflects favorable valuations across the LP, LLC, and other equity method investments, primarily driven by private capital and energy investments. The increase is partially offset by lower earned yield in 2020 as compared to the same period in 2019.

Net realized gains for the three months ended December 31, 2020 were \$367 million, an increase of \$183 million over the same period in 2019. The net realized gains in the current quarter were primarily driven by a \$162 million net change in equity unrealized gains, \$169 million of net gains on fixed maturity sales, and \$50 million of net gains on derivatives. The prior period was impacted by an \$80 million net change in equity unrealized gains and \$68 million of net gains on fixed maturity sales.

Fee and other revenues for the three months ended December 31, 2020 were \$31 million, a decrease of \$90 million from the same period in 2019. The change was primarily driven by lower natural resource revenues due to the Liberty Energy, LLC transaction.

Claims, benefits and expenses for the three months ended December 31, 2020 were \$808 million, an increase of \$237 million over the same period in 2019. The increase primarily reflects higher incurred losses attributable to prior years, specifically due to internally assumed casualty lines and strengthening on casualty run-off reserves and increased employee-related costs. The increase was partially offset by lower natural resource expenses due to the Liberty Energy, LLC transaction.

Year-to-date Results:

Pre-tax operating loss for the twelve months ended December 31, 2020 was \$641 million, an increase of \$511 million over the same period in 2019. Pre-tax operating loss before catastrophes, net incurred losses attributable to prior years, and partnerships, LLC and other equity method income was \$738 million, an increase of \$296 million over the same period in 2019. The increase in loss reflects lower net investment income excluding partnerships, LLC and other equity method income and increased employee-related costs. Including the impact of catastrophes, net incurred losses attributable to prior years, and partnerships, LLC and other equity method income, the increase in pre-tax operating loss primarily reflects higher incurred losses attributable to prior years, specifically due to internally assumed casualty lines and strengthening on casualty run-off reserves.

Revenues for the twelve months ended December 31, 2020 were \$1.534 billion, a decrease of \$176 million from the same period in 2019. The major components of revenues are net premium earned, net investment income (including LP, LLC and other equity method investments), net realized gains, and fee and other revenues.

Net premium earned for the twelve months ended December 31, 2020 was (\$106) million, a decrease of \$66 million from the same period in 2019. The decrease primarily reflects the reinsurance earnings impact of new property catastrophe placements.

Net investment income for the twelve months ended December 31, 2020 was \$640 million, a decrease of \$79 million from the same period in 2019. The decrease reflects lower earned yield in 2020 as compared to the same period in 2019, partially offset by favorable valuations across the LP, LLC, and other equity method investments, primarily driven by private capital investments.

Net realized gains for the twelve months ended December 31, 2020 were \$796 million, an increase of \$271 million over the same period in 2019. The net realized gains in the current period were primarily driven by \$1.039 billion of net gains on fixed maturity sales and a \$108 million net change in equity unrealized gains, partially offset by a \$205 million net loss on the Liberty Energy, LLC transaction and \$70 million of net losses in metals and mining. The prior period was impacted by a \$349 million net change in equity unrealized gains and \$404 million of net gains on fixed maturity sales, partially offset by \$125 million of impairment charges primarily related to corporate real estate and natural resources.

Fee and other revenues for the twelve months ended December 31, 2020 were \$204 million, a decrease of \$302 million from the same period in 2019. The decrease was primarily driven by lower natural resource revenues due to the Liberty Energy, LLC transaction.

Claims, benefits and expenses for the twelve months ended December 31, 2020 were \$1.379 billion, an increase of \$64 million over the same period in 2019. The increase primarily reflects higher incurred losses attributable to prior years, specifically due to internally assumed casualty lines and strengthening on casualty run-off reserves and

increased employee-related costs. The increase was partially offset by lower natural resource expenses due to the Liberty Energy, LLC transaction.

INVESTMENTS

General

The Company's investment strategy seeks long-term returns through disciplined security selection, portfolio diversity and an integrated approach to risk management. The Company selects and monitors investments to balance the goals of safety, stability, liquidity, growth and after-tax total return with its need to comply with regulatory investment requirements. A relatively safe and stable income stream is achieved by maintaining a broadly-based portfolio of investment grade bonds. These holdings are supplemented by investments in additional asset types with the objective of further enhancing the portfolio's diversification and expected returns. These additional asset types include commercial mortgages and other real estate financing investments, non-investment grade bonds, including leveraged loans, common and preferred stock, private equity and direct investments in natural resource ventures. Risk management is accomplished through asset liability management (including both interest rate risk and foreign currency risk), diversification, credit limits and a careful analytical review of each investment decision.

The Company's investment policy and strategy are reviewed and approved by the Investment Committee of its Board of Directors, which meets on a regular basis to review and consider investment activities, tactics and new investment classes. In addition, the Company predominantly uses a subsidiary investment advisor for managing and administering the investment portfolios of its domestic and foreign insurance operations.

Invested Assets (including cash and cash equivalents)

The following table summarizes the Company's invested assets by asset category as of December 31, 2020 and December 31, 2019:

Invested Assets by Type \$ in Millions	As of December 31, 2020		As of December 31, 2019	
	Carrying Value	% of Total	Carrying Value	% of Total
Fixed maturities, available for sale, at fair value	\$71,301	75.9%	\$64,606	79.7%
Equity securities, at fair value	2,572	2.7	2,140	2.6
LP, LLC and other equity method investments	8,664	9.2	6,811	8.4
Commercial mortgage loans	2,219	2.4	1,981	2.4
Short-term investments	276	0.3	222	0.3
Other investments	723	0.8	407	0.5
Cash and cash equivalents	8,224	8.7	4,969	6.1
Total invested assets	\$93,979	100.0%	\$81,136	100.0%

Total invested assets as of December 31, 2020 were \$93.979 billion, an increase of \$12.843 billion or 15.8% over December 31, 2019. The increase was primarily related to an increase in fixed maturities and cash and cash equivalents.

Fixed maturities as of December 31, 2020 were \$71.301 billion, an increase of \$6.695 billion or 10.4% over December 31, 2019. The increase was primarily related to the reinvestment of proceeds from the sale of U.S. government and corporate bonds and the favorable impact of the decrease in treasury rates. As of December 31, 2020, included in fixed maturities are commitments to purchase various residential mortgage-backed securities at a cost and fair value of \$1.065 billion and \$1.066 billion, respectively.

Equity securities as of December 31, 2020 were \$2.572 billion (\$2.562 billion common stock and \$10 million preferred stock) versus \$2.140 billion as of December 31, 2019 (\$2.130 billion common stock and \$10 million preferred stock), an increase of \$432 million or 20.2% over December 31, 2019. Of the \$2.562 billion of common stock at December 31, 2020, \$773 million relates to securities associated with non-guaranteed unit linked life insurance where the policyholder bears the investment risk. The increase in total equity securities is primarily due to the purchase of equity ETF's and the favorable impact of market movement.

The following table summarizes the Company's LP, LLC and other equity method investments as of December 31, 2020 and December 31, 2019:

LP, LLC and other equity method investments \$ in Millions	As of December 31, 2020		As of December 31, 2019	
	Carrying Value	% of Total	Carrying Value	% of Total
Traditional private equity	\$3,764	43.4%	\$3,154	46.3%
Natural resources – Energy ¹	1,233	14.2	399	5.9
Natural resources – Other ²	793	9.2	780	11.5
Real estate	1,494	17.2	1,134	16.6
Private credit	805	9.3	715	10.5
Other	575	6.7	629	9.2
Total LP, LLC and other equity method investments	\$8,664	100.0%	\$6,811	100.0%

1 Included in Natural resources – Energy is \$925 million of investments related to the Liberty Energy, LLC transaction as of December 31, 2020.

2 Included in Natural Resources – Other is \$112 million and \$183 million of investments in metals & mining as of December 31, 2020 and December 31, 2019 respectively, \$135 million and \$125 million of investments in agriculture and timber as of December 31, 2020 and December 31, 2019 respectively, and \$546 million and \$472 million of investments in power and renewables as of December 31, 2020 and December 31, 2019 respectively.

Mortgage loans as of December 31, 2020 were \$2.219 billion (net of \$5 million of loan loss reserves or 0.2% of the outstanding loan portfolio), an increase of \$238 million or 12.0% over December 31, 2019. The increase is primarily driven by \$1.053 billion in funding, partially offset by \$812 million in principal reductions and a \$3 million increase to the loan loss reserve. The entire commercial loan portfolio is U.S.-based. The number of loans in the portfolio decreased from 4,090 at December 31, 2019 to 3,717 at December 31, 2020.

Cash and cash equivalents as of December 31, 2020 were \$8.224 billion, an increase of \$3.255 billion or 65.5% over December 31, 2019. The increase primarily reflects an increase in cash from operating and financing activities.

The following tables summarize the Company's available for sale portfolio by security type as of December 31, 2020 and December 31, 2019:

\$ in Millions	As of December 31, 2020			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. government and agency securities	\$7,056	\$159	(\$6)	\$7,209
Residential MBS ¹	5,755	206	(2)	5,959
Commercial MBS	4,407	328	(8)	4,727
Other MBS and ABS ²	5,229	118	(35)	5,312
U.S. state and municipal	8,549	740	(2)	9,287
Corporate and other	31,876	1,957	(55)	33,778
Foreign government securities	4,742	290	(3)	5,029
Total securities available for sale	\$67,614	\$3,798	(\$111)	\$71,301

1 Mortgage-backed securities ("MBS")

2 Asset-backed securities ("ABS")

\$ in Millions	As of December 31, 2019			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. government and agency securities	\$9,041	\$145	(\$6)	\$9,180
Residential MBS	6,166	105	(6)	6,265
Commercial MBS	4,410	131	(5)	4,536
Other MBS and ABS	5,134	48	(31)	5,151
U.S. state and municipal	8,429	497	(7)	8,919
Corporate and other	24,784	844	(47)	25,581
Foreign government securities	4,756	230	(12)	4,974
Total securities available for sale	\$62,720	\$2,000	(\$114)	\$64,606

The following table summarizes the Company's mortgage and asset-backed fixed maturity portfolio by credit quality as of December 31, 2020:

Mortgage & Asset-Backed Fixed Maturities by Credit Quality ¹	As of December 31, 2020							
	\$ in Millions	AAA	AA	A	BBB	BB	B or Lower	Total
Residential MBS	\$5,936	\$ -	\$ 20	\$ -	\$ -	\$ 3	\$ 5,959	37.2%
Commercial MBS	4,306	181	150	39	51	-	4,727	29.6%
Other MBS and ABS	2,808	761	676	758	223	86	5,312	33.2%
Total	\$13,050	\$942	\$846	\$797	\$274	\$89	\$15,998	100%
% of Total	81.6%	5.9%	5.3%	5.0%	1.7%	0.5%	100%	

¹ For purposes of this disclosure, credit quality is primarily based upon average credit ratings.

Approximately 60% of the Company's mortgage and asset-backed fixed maturity portfolio is explicitly backed by the U.S. government (SBA and GNMA) or by government-sponsored entities (FNMA and FHLMC). Approximately 81.6% of the holdings are rated AAA. Included in the commercial mortgage-backed securities at December 31, 2020, were \$3.407 billion in Agency CMBS and \$1.320 billion Non-agency CMBS. Included in the Other MBS and ABS at December 31, 2020 were \$520 million AAA rated SBA Loans. The commercial mortgage-backed securities portfolio is well diversified and of high quality with approximately 91% rated AAA.

The following table summarizes the Company's U.S. state and municipal fixed maturity portfolio of securities which are obligations of states, municipalities and political subdivisions (collectively referred to as U.S. state and municipal bonds) by credit quality as of December 31, 2020 and December 31, 2019:

U.S. State and Municipal by Credit Quality ¹	As of December 31, 2020			As of December 31, 2019		
	\$ in Millions	Fair Value	% of Total	Average Credit Rating	Fair Value	% of Total
State general obligation	\$2,168	23.3%	A	\$1,539	17.2%	AA
Local general obligation	1,738	18.7	AA	1,365	15.3	AA
Revenue	5,271	56.8	AA	5,929	66.5	AA
Pre-refunded	110	1.2	AAA	86	1.0	AAA
Total U.S. state and municipal	\$9,287	100%	AA	\$8,919	100.0%	AA

¹ For purposes of this disclosure, credit quality is primarily based upon average credit ratings.

The municipal bond portfolio (taxable and tax-exempt) includes general obligation and revenue bonds issued by states, cities, counties, school districts, hospitals, educational institutions, and similar issuers. Included in the municipal bond portfolio at December 31, 2020 and December 31, 2019 were \$110 million and \$86 million, respectively, of pre-refunded bonds, which are bonds for which states or municipalities have established irrevocable trusts, which were created to satisfy their responsibility for payments of principal and interest.

The following table summarizes the Company's allocation of fixed maturities by credit quality as of December 31, 2020 and December 31, 2019:

Fixed Maturities by Credit Quality ¹	As of December 31, 2020		As of December 31, 2019	
	Fair Value	% of Total	Fair Value	% of Total
\$ in Millions				
AAA	\$22,756	32.0%	\$25,592	39.6%
AA+, AA, AA-	10,006	14.0	9,419	14.6
A+, A, A-	15,764	22.1	12,163	18.8
BBB+, BBB, BBB-	17,127	24.0	13,696	21.2
Total investment grade	65,653	92.1	60,870	94.2
BB+, BB, BB-	3,078	4.3	2,030	3.2
B+, B, B-	2,211	3.1	1,449	2.2
CCC or lower	315	0.4	192	0.3
Unrated ²	44	0.1	65	0.1
Total below-investment grade	5,648	7.9	3,736	5.8
Total fixed maturities	\$71,301	100.0%	\$64,606	100.0%

1 For purposes of this disclosure, credit quality is primarily based upon average credit ratings.

2 Bank loans acquired as part of Ironshore acquisition.

The Company's holdings of below investment grade securities primarily consist of an actively managed diversified portfolio of high yield securities and leveraged loans within the domestic insurance portfolios and investments in emerging market sovereign and corporate debt primarily in support of the Company's international insurance operations. Overall, the average credit quality rating stands at A+ as of December 31, 2020.

The following table summarizes available for sale fixed maturity securities by contractual maturity at December 31, 2020 and December 31, 2019. Actual maturities may differ from contractual maturities because certain securities may be called or prepaid with or without call or prepayment penalties. Due to the potential for prepayment on MBS and ABS, they are not categorized by contractual maturity.

Fixed Maturity by Maturity Date	As of December 31, 2020		As of December 31, 2019	
	Fair Value	% of Total	Fair Value	% of Total
\$ in Millions				
One year or less	\$2,720	3.8%	\$3,462	5.4%
Over one year through five years	24,732	34.7	21,930	33.9
Over five years through ten years	18,790	26.4	15,309	23.7
Over ten years	9,061	12.7	7,953	12.3
MBS and ABS	15,998	22.4	15,952	24.7
Total fixed maturities	\$71,301	100.0%	\$64,606	100.0%

During 2020, after taking into consideration changes in investment opportunities and its view of the current and prospective business and economic environment, the Company has made only minor adjustments to the average duration of its investment portfolio. The average duration of the investment portfolio as of December 31, 2020 was 4.3 years.

The following tables summarize the Company's gross unrealized losses and fair value of fixed income by the length of time that individual securities have been in a continuous unrealized loss position as of December 31, 2020 and December 31, 2019 that are not deemed to be other-than-temporarily impaired:

	As of December 31, 2020			
\$ in Millions	Less Than 12 Months		12 Months or Longer	
Unrealized Losses & Fair Value by Security Type	Unrealized Losses	Fair Value of Investments with Unrealized Losses	Unrealized Losses	Fair Value of Investments with Unrealized Losses
U.S. Government and agency securities	(\$6)	\$797	\$ -	\$ -
Residential MBS	(2)	283	-	3
Commercial MBS	(5)	329	(3)	17
Other MBS and ABS	(26)	850	(9)	328
U.S. state and municipal	(2)	92	-	-
Corporate and other	(31)	1,278	(24)	282
Foreign government securities	(3)	300	-	4
Total securities available for sale	(\$75)	\$3,929	(\$36)	\$634

	As of December 31, 2019			
\$ in Millions	Less Than 12 Months		12 Months or Longer	
Unrealized Losses & Fair Value by Security Type	Unrealized Losses	Fair Value of Investments with Unrealized Losses	Unrealized Losses	Fair Value of Investments with Unrealized Losses
U.S. Government and agency securities	(\$5)	\$949	(\$1)	\$152
Residential MBS	(4)	575	(2)	493
Commercial MBS	(5)	409	-	43
Other MBS and ABS	(16)	1,204	(15)	534
U.S. state and municipal	(7)	681	-	4
Corporate and other	(28)	1,715	(19)	421
Foreign government securities	(11)	769	(1)	142
Total securities available for sale	(\$76)	\$6,302	(\$38)	\$1,789

Unrealized losses for fixed maturity securities decrease from \$114 million as of December 31, 2019 to \$111 million as of December 31, 2020. 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. The Company has concluded that the gross unrealized losses of fixed maturity securities as of December 31, 2020 are temporary.

The following tables summarize the Company's issuer and sector exposure¹ as of December 31, 2020:

Top 10 Issuers	As of December 31, 2020				
	Fixed Maturity	Equity	Short-Term	Total Exposure	% of Invested Assets
\$ in Millions					
Bank of America Corp	\$703	\$-	\$-	\$703	0.75%
JP Morgan Chase & Co	619	-	-	619	0.66
Citigroup Inc	566	-	-	566	0.60
Government of Brazil	536	-	-	536	0.57
Banco Santander	535	-	-	535	0.57
Morgan Stanley	490	-	-	490	0.52
Wells Fargo & Co	485	-	-	485	0.52
New York State Dormitory Authority	441	-	24	465	0.49
Government of United Kingdom	440	-	-	440	0.47
Goldman Sachs Group Inc	431	-	-	431	0.46
Total	\$5,246	\$-	\$24	\$5,270	5.61%

Top 10 Sectors	As of December 31, 2020				
	Fixed Maturity	Equity	Short-Term	Total Exposure	% of Invested Assets
\$ in Millions					
Banking	\$8,156	\$2	\$220	\$8,378	8.91%
Foreign Government	3,674	-	-	3,674	3.91
US Municipal - State & US Territory	2,332	-	24	2,356	2.51
REITS	893	1,458	2	2,353	2.50
Technology	2,100	241	-	2,341	2.49
Electric Utility	1,685	316	-	2,001	2.13
US Municipal - Local Govt	1,720	-	-	1,720	1.83
Insurance	1,581	69	1	1,651	1.76
Independent Energy	319	1,239	-	1,558	1.66
Healthcare	1,210	136	-	1,346	1.43
Total	\$23,670	\$3,461	\$247	\$27,378	29.13%

¹ Tables exclude U.S. Treasury and agency securities, mortgage-backed securities, ETFs, and municipal obligations that are pre-funded or escrowed to maturity.

As of December 31, 2020, investments in the energy sector accounted for \$3.702 billion or 3.9% of total invested assets. The energy sector is comprised of investments in the following sub-sectors: independent energy, integrated energy, midstream, oil field services, and refining (*classification per Bloomberg Barclays Industry Groups*). Energy investments consist of investment grade bonds of \$1.992 billion, bonds that were rated below investment grade of \$471 million, publicly traded equity securities of \$2 million and natural resources partnerships and other equity method investments of \$1.237 billion. Included in other equity method investments is \$925 million of investments in the new joint venture, Liberty Energy, LLC transaction, which is described further in the Consolidated Results of Operations. In addition, the Company has direct investments in oil and gas wells of \$10 million which are included in other assets on the Consolidated Balance Sheets. Agriculture and timber investments consist of natural resource partnerships of \$136 million. In addition, the Company has direct investment in agriculture and timber of \$324 million which are included in other assets on the Consolidated Balance Sheets.

The following table summarizes the Company's unfunded commitments as of December 31, 2020 and December 31, 2019:

Unfunded Commitments	As of December 31, 2020		As of December 31, 2019	
	Total	% of Total	Total	% of Total
\$ in Millions				
Traditional private equity	\$1,394	29.2%	\$1,160	32.4%
Natural resources – Energy	67	1.4	119	3.3
Natural resources – Other ¹	374	7.8	223	6.2
Real estate	1,267	26.5	796	22.2
Private credit	1,499	31.4	1,168	32.6
Other	176	3.7	116	3.3
Total unfunded commitments	\$4,777	100.0%	\$3,582	100.0%

¹ Includes power and renewables, and agriculture and timber commitments.

Unfunded commitments as of December 31, 2020 were \$4.777 billion, an increase of \$1.195 billion over December 31, 2019. The increase is primarily driven by new commitments offset by contributions to traditional private equity partnerships, real estate investments, and private credit. The \$67 million unfunded energy investment commitments as of December 31, 2020 related to energy partnerships. The \$119 million unfunded energy investment commitments as of December 31, 2019 included \$96 million related to energy partnerships and \$23 million related to direct investments in oil and gas wells.

LIQUIDITY AND CAPITAL RESOURCES

The liquidity requirements of the insurance subsidiaries are met primarily by funds generated from operations, asset maturities and income received on investments. Cash provided from these sources is used primarily for claims, claim adjustment expenses and operating expenses (underwriting and corporate benefit costs). There are certain cash outflows such as catastrophes and continued settlements of asbestos reserves that are unpredictable in nature and could create increased liquidity needs. The Company believes that the insurance subsidiaries' future business liquidity needs will be met from all the above sources. However, the Company maintains back up borrowing facilities as an additional contingent source of funds. These include:

- LMIC, Peerless Insurance Company ("PIC"), Liberty Mutual Fire Insurance Company ("LMFIC") and Employers Insurance Company of Wausau ("EICOW") are members of the Federal Home Loan Bank. The Company has \$300 million of Federal Home Loan Bank borrowings with maturity dates in 2032. As of December 31, 2020, the 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, however there is a five-year waiting period requirement, so the effective date of these membership cancellations will be February 2025.

Net cash flows are generally invested in marketable securities while keeping a certain amount in cash and short-term investments to meet unpredictable cash obligations. The Company monitors the duration of these investments, and purchases and sales are executed with the objective of having adequate cash available to satisfy its maturing liabilities. As the Company's investment strategy focuses on overall asset and liability durations, and not specific cash flows, asset sales may be required to satisfy obligations or rebalance asset portfolios. The Company's invested assets as of December 31, 2020 (including cash and cash equivalents) totaled \$93.979 billion.

Debt outstanding as of December 31, 2020 and December 31, 2019 was as follows:

Short-term debt:

\$ in Millions	As of December 31, 2020	As of December 31, 2019
Short-term debt ¹	\$ 330	\$ -

¹ Short-term debt is the current maturity of the 5.00% Notes, due June 1, 2021.

Long-term debt:

\$ in Millions	As of December 31, 2020	As of December 31, 2019
5.00% Notes, due 2021 ¹	\$ -	\$330
4.95% Notes, due 2022	473	473
4.25% Notes, due 2023	547	547
1.75% €500 Million Notes, due 2024	612	561
3.625% €500 Million Junior Subordinated notes, due 2059 ²	612	561
8.50% Surplus notes, due 2025	140	140
2.75% €750 Million Notes, due 2026	917	842
7.875% Surplus notes, due 2026	227	227
7.625% Notes, due 2028	3	3
4.569% Notes, due 2029	1,000	1,000
3.91% - 4.25% Federal Home Loan Bank Borrowings, due 2032	300	300
7.00% Notes, due 2034	124	153
6.50% Notes, due 2035	271	301
7.50% Notes, due 2036	19	19
7.80% Junior Subordinated notes, due 2087 ³	437	437
10.75% Junior Subordinated notes, due 2088 ⁴	35	35
6.50% Notes, due 2042	250	270
4.85% Notes, due 2044	564	614
4.50% Notes, due 2049	232	350
3.951% Notes, due 2050	1,248	1,248
3.95% Notes, due 2060	746	-
7.697% Surplus notes, due 2097	260	260
Subtotal	9,017	8,671
Unamortized discount	(472)	(431)
Long-term debt excluding unamortized debt issuance costs	8,545	8,240
Unamortized debt issuance costs	(48)	(40)
Total long-term debt	\$8,497	\$8,200

1 Short-term debt is the current maturity of the 5.00% Notes, due June 1, 2021.

2 The par value call date and final fixed rate interest payment date is May 23, 2024, subject to certain requirements.

3 The par value call date and final fixed rate interest payment date is March 15, 2037, subject to certain requirements.

4 The par value call date and final fixed rate interest payment date is June 15, 2038, subject to certain requirements.

As part of its overall capital strategy, the Company previously announced that it may issue, repurchase or exchange debt depending on market conditions. Debt repurchases may be executed through open market or other appropriate transactions. The Company continues to evaluate market conditions and may periodically affect transactions in its debt, subject to applicable limitations.

Debt Transactions

On May 7, 2020, LMGI issued \$500 million of 2060 Senior Notes and LMGI exchanged \$246 million par value of 2060 Senior Notes for \$29 million of its 7.00% Senior Notes due 2034, \$29 million of its 6.50% Senior Notes due 2035, \$20 million of its 6.50% Senior Notes due 2042, \$50 million of its 4.85% Senior Notes due 2044 and \$118 million of its 4.50% Senior Notes due 2049. Interest is payable semi-annually at a fixed rate of 3.95%. The exchanged notes are fully fungible with the 2060 Notes. The 2060 Notes mature on May 15, 2060. LMGI has determined to utilize a portion of the cash proceeds received from the issuance of the 2060 Notes for the retirement of its 5.00% Senior Notes, due 2021 at the time of their maturity.

Concurrently with the 2060 Notes exchange offer, LMGI completed a tender offer for the Target Notes with investors not eligible to participate in the 2020 Exchange Offer for an aggregate cash consideration of \$2 million, including

accrued and unpaid interest, for the tender of \$1 million of its 6.500% Senior Notes due 2035 and a nominal amount of its 6.500% Senior Notes due 2042.

On September 27, 2019, LMGI exchanged \$1.25 billion par value of the 2050 Notes for \$78 million of its 7.00% Senior Notes due 2034, \$170 million of its 6.50% Senior Notes due 2035, \$480 million of its 6.50% Senior Notes due 2042, \$436 million of its 4.85% Senior Notes due 2044, \$67 million of the 2087 Notes and \$17 million of its 10.75% Junior Subordinated Notes due 2088. LMGI paid an aggregate of \$411 million cash consideration, including accrued and unpaid interest, for the existing notes accepted for exchange. Interest on the 2050 Notes is payable semi-annually at a fixed rate of 3.951%. The 2050 Notes mature on October 15, 2050.

On June 11, 2019, LMGI issued \$350 million of Senior Notes due 2049 (the “2049 Notes”). Interest is payable semi-annually at a fixed rate of 4.50%. The 2049 Notes mature on June 15, 2049.

On June 7, 2019, LMGI tendered \$196 million of the 2087 Notes. LMGI paid an aggregate of \$247 million cash consideration, including accrued and unpaid interest, for the tender of the 2087 Notes.

On May 23, 2019, LMGI redeemed \$300 million Junior Subordinated Notes due 2067 (the redeemed “2067 Notes”). LMGI terminated the two interest rate swap transactions with respect to the redeemed 2067 Notes. LMGI paid \$43 million for the early termination of the swap transactions.

On May 23, 2019, LMGI issued €500 million of Series D Junior Subordinated notes (the “Series D Notes”) scheduled for redemption on May 23, 2059. The Series D Notes have a par value call date of May 23, 2024 (the “First Call Date”) and may be redeemed in whole or in part on each date falling on the fifth anniversary thereafter (the “Reset Period”). Interest is payable annually at a fixed rate of 3.625% up to but excluding the first call date. In the event the Series D Notes are not redeemed on the First Call Date, interest will be payable annually at a rate equal to the relevant Euro 5 Year Swap rate plus 3.700% per year (the “Margin”) in respect of the Reset Period commencing on the First Call Date and each subsequent Reset Period, up to but excluding May 23, 2044 (the “Step-up Date”). In the event the Series D Notes are not redeemed on or before the Step-up Date, interest will be payable annually, including the Step-up Date but excluding the stated maturity, in respect of each Reset Period between the Step-up Date and the stated maturity, the relevant Euro 5 Year Swap Rate plus the Margin plus 1.00% per year. LMGI has the right to defer interest payments on the Series D Notes for a period up to ten years. Interest compounds during periods of deferral.

On January 28, 2019, LMGI exchanged \$1 billion par value of the 2029 Notes for \$270 million of its 5.00% Notes due 2021, \$277 million of its 4.95% Notes due 2022 and \$453 million of its 4.25% Notes due 2023. LMGI paid an aggregate of \$40 million cash consideration, including accrued and unpaid interest, for the existing notes accepted for exchange. Interest on the 2029 Notes is payable semi-annually at a fixed rate of 4.569%. The 2029 Notes mature on February 1, 2029.

Interest Expense

Consolidated interest expense for the three months and twelve months ended December 31, 2020 was \$113 million and \$441 million respectively, an increase of \$6 million and \$3 million over the same periods in 2019.

Holding Company Liquidity and Capital Resources

The Company conducts substantially all of its operations through its wholly owned insurance and service company subsidiaries, and therefore is primarily dependent on dividends, distributions, loans or other payments of funds from these entities to meet its current and future obligations. However, the subsidiaries are separate and distinct legal entities and have no obligation to make funds available to the Company, whether in the form of loans, dividends or other distributions. As of December 31, 2020, the Company, through its downstream subsidiaries LMGI and LMFE, had \$7.5 billion and \$612 million, respectively, of debt outstanding, excluding discount and issuance costs.

The insurance subsidiaries’ ability to pay dividends is restricted under applicable insurance law and regulations and may only be paid from unassigned surplus. Under the insurance laws of the domiciliary states of the insurance subsidiaries, an insurer may make an ordinary dividend payment if its surplus as regards to policyholders, following such dividend, is reasonable in relation to its outstanding liabilities, is adequate to its financial needs and does not

exceed the insurer’s unassigned surplus. However, no insurer may pay an extraordinary dividend without the approval or non disapproval of the domiciliary insurance regulatory authority. Insurance subsidiaries owned directly by LMGI are LMIC, Liberty Mutual Personal Insurance Company (“LMPICO”), LMFIC and EICOW. Under the insurance laws of Massachusetts, the domiciliary state of LMIC, an extraordinary dividend is defined as a dividend whose fair market value, together with other dividends made within the preceding 12 months, exceeds the greater of 10% of the insurer’s surplus as regards policyholders as of the preceding December 31, or the insurer’s net income for the 12-month period ending on the preceding December 31. Under the insurance laws of New Hampshire, the domiciliary state of LMPICO, an extraordinary dividend is defined as (1) a dividend whose fair market value, together with other dividends paid within the preceding 12 months, exceeds the lesser of (a) 10% of the insurer’s surplus as regards policyholders as of the preceding December 31, or (b) the insurer’s net income, excluding realized capital gains, for the calendar year preceding the date of the dividend, but not including pro rata distributions of any class of the insurer’s own securities, or (2) the aggregate of the insurer’s net income from the previous two calendar years that has not already been paid out as dividends, excluding realized capital gains and any dividends paid in the previous two calendar years. Under the insurance laws of Wisconsin, the domiciliary state of LMFIC and EICOW, an extraordinary dividend is defined as a dividend whose fair market value, together with other dividends paid within the preceding 12 months, exceeds the lesser of (a) 10% of the insurer’s surplus with regard to policyholders as of the preceding December 31, or (b) the greater of (1) the insurer’s net income for the calendar year preceding the date of the dividend, minus realized capital gains for that calendar year, or (2) the aggregate of the insurer’s net income for the three calendar years preceding the date of the dividend, minus realized capital gains for those calendar years and minus dividends paid within the first two of the preceding three calendar years. Changes in the extraordinary dividend regulation of the domiciliary states of LMIC, LMFIC and EICOW could negatively affect LMGI’s ability to pay principal and interest on its debt, as could a redomestication or merger of LMIC, LMPICO, LMFIC or EICOW to a different domiciliary state.

The authorized control level risk-based capital (as of December 31, 2020) and 2021 available dividend capacity prior to needing regulatory approval for LMIC, LMFIC and EICOW were as follows:

\$ in Millions	RBC Ratio¹		Dividend Capacity²	Dividends Paid³
RBC Ratios and Dividend Capacity	2020	2019	2021	2020
LMIC	354%	388%	\$1,856	\$65
LMFIC	525%	502%	\$187	\$150
EICOW	488%	468%	\$185	\$150

1 Authorized control level risk-based capital as defined by the NAIC.

2 Represents the estimated maximum allowable dividend without prior regulatory approval in the state of domicile.

3 Dividends paid represent amounts paid during the twelve months ended December 31, 2020. Available dividend capacity as of December 31, 2020 is calculated as 2021 dividend capacity less dividends paid for the preceding 12 months.

LMGI also has access to the following sources of funding:

- An unsecured revolving credit facility of \$1 billion with an expiration date of June 25, 2024. To date, no funds have been borrowed under the facility.
- A management services agreement with LMIC pursuant to which LMGI is entitled to collect certain costs plus a management fee for services rendered by LMGI employees.
- Investment management agreements with affiliated entities pursuant to which an LMGI subsidiary investment advisor is entitled to recover annual expenses for investment management services performed by its employees.
- Liberty Corporate Services LLC (“LCS”), which through its subsidiaries collects fees and other revenues, primarily for claims administration, agency and IT services rendered for affiliated and non-affiliated entities. For the three and twelve months ended December 31, 2020, LCS recorded \$102 million and \$341 million, respectively, in pre-tax income.
- Approximately \$80 million of annual dividends related to non-redeemable perpetual preferred stock issuances by LMIC and LMFIC.

\$ in Millions	As of December 31, 2020²	As of December 31, 2019
Total long-term debt	\$8,497	\$8,200
Unamortized discount and debt issuance costs	(520)	(471)
Total long-term debt excluding unamortized discount and debt issuance costs	\$9,017	\$8,671
Total equity excluding accumulated other comprehensive loss	\$25,739	\$24,978
Total capital excluding accumulated other comprehensive loss ¹	\$34,756	\$33,649
Debt-to-capital capitalization excluding accumulated other comprehensive loss ¹	25.9%	25.8%
Statutory surplus	\$22,830	\$20,538

1 Excludes unamortized discount and debt issuance costs

2 Does not reflect \$800 million of 4.300% Series E Junior Subordinated Notes due 2061 issued on January 27, 2021

The total debt-to-capital capitalization ratio excluding accumulated other comprehensive loss is calculated by dividing (a) total debt excluding unamortized discount and debt issuance costs by (b) total capital excluding accumulated other comprehensive loss. Net unrealized gains and losses on investments can be significantly impacted by both interest rate movements and other economic factors. Accordingly, in the opinion of the Company's management, the debt-to-total capital ratio calculated on this basis provides another useful metric for investors to understand the Company's financial leverage position. The Company's ratio of debt-to-capital (excluding accumulated other comprehensive loss) of 25.9% at December 31, 2020 was within the Company's target range.

REINSURANCE

Reinsurance Recoverables

The Company reported reinsurance recoverables of \$16.163 billion and \$15.928 billion at December 31, 2020 and December 31, 2019, respectively, net of allowance for doubtful accounts of \$113 million and \$126 million, respectively. Included in these balances are \$1.145 billion and \$1.063 billion of paid recoverables and \$15.131 billion and \$14.991 billion of unpaid recoverables (including retroactive reinsurance), respectively.

S&P Rating ¹	As of December 31, 2020			
	Gross Recoverables ²	Collateral Held ³	Net Recoverables ⁴	% of Total Net Recoverables
\$ in Millions				
<u>Rated Entities</u>				
AAA	\$ -	\$ -	\$ -	-
AA+, AA, AA-	6,839	6,779	2,158	22%
A+, A, A-	4,211	356	3,904	40%
BBB+, BBB, BBB-	-	-	-	-
BB+ or below	-	-	-	-
Subtotal	11,050	7,135	6,062	62%
<u>Pools & Associations</u>				
State mandated involuntary pools and associations	2,811	-	2,810	29%
Voluntary	196	120	191	2%
Subtotal	3,007	120	3,001	31%
<u>Non-Rated Entities⁵</u>				
Captives & fronting companies	1,342	1,548	234	3%
Other	877	1,456	409	4%
Subtotal	2,219	3,004	643	7%
Grand Total	\$16,276	\$10,259	\$9,706	100%

1 Standard & Poor's ratings are as of December 31, 2020.

2 Gross recoverables are defined as paid and unpaid claims and claim adjustment expense including IBNR and before both bad debt reserve set aside for potential uncollectible reinsurance and consideration of collateral.

3 Collateral refers to letters of credit, trust accounts, and funds held against outstanding and potential future claims and claim adjustment expenses related to reinsurance recoverable balances.

4 Net recoverables are defined as the difference between the amount of gross recoverables and collateral held for each reinsurer. If the collateral held for a reinsurer is greater than the gross recoverable, net recoverables are reported as \$0.

5 Reinsurers not rated by Standard & Poor's.

Reinsurance Groups ¹	As of December 31, 2020		
	Gross Recoverables ²	Collateral Held ³	Net Recoverables ⁴
\$ in Millions			
1. Berkshire Hathaway Insurance Group	\$4,321	\$6,070	\$218
2. Swiss Re Group	1,331	545	908
3. Nationwide Group	1,286	-	1,285
4. Everest Re Group	564	160	415
5. Munich Re Group	404	8	396
6. Alleghany Corp	387	-	387
7. Partner Re Group	307	59	262
8. CUMIS Insurance Society Group	304	-	304
9. UPINSCO	303	405	-
10. Horseshoe Re Ltd.	278	233	45
11. Builders Reinsurance S.A.	259	359	-
12. Exchange Indemnity Company	248	121	128
13. Lloyd's of London	219	-	219
14. Hannover Re Group	207	36	172
15. Markel Corp	204	2	202
State Mandated Involuntary pools and associations	2,811	-	2,810
Voluntary pools and associations	196	120	191
All Other	2,647	2,141	1,764
Total Reinsurance Recoverables	\$16,276	\$10,259	\$9,706

1 Reinsurance Groups are defined as all reinsurance subsidiaries owned by a common parent.

2 Gross recoverables are defined as paid and unpaid claims and claim adjustment expense including IBNR and before both bad debt reserve set aside for potential uncollectible reinsurance and consideration of collateral.

3 Collateral refers to letters of credit, trust accounts, and funds held against outstanding and potential future claims and claim adjustment expenses related to reinsurance recoverable balances.

4 Net recoverables are defined as the difference between the amount of gross recoverables and collateral held for each reinsurer. If the collateral held for a reinsurer is greater than the gross recoverable, net recoverables are reported as \$0.

Approximately 94% and 93% of the Company's reinsurance recoverable balance, net of collateral held and including voluntary and involuntary pools and associations, was from reinsurers rated A- or better from A.M. Best and Standard & Poor's, respectively, at December 31, 2020. Collateral held against outstanding gross reinsurance recoverable balances was \$10.259 billion at December 31, 2020.

The remaining 6% and 7% of the Company's net reinsurance recoverable balance is well diversified. No single reinsurer rated A- or below by A.M. Best or Standard & Poor's accounts for more than 1% of GAAP equity. In addition, the average net reinsurance recoverable balance from individual reinsurers rated below A- or not rated by A.M. Best and Standard & Poor's was approximately \$1 million as of December 31, 2020.

The reinsurance recoverables from state mandated involuntary pools and associations primarily represent the Company's servicing carrier business. As a servicing carrier, the Company retains no direct underwriting risk but instead cedes 100% of the involuntary market premium and losses back to the pool. Payment of losses is shared by the pool participants in proportion to their pool participation. Reinsurer credit risk with respect to any such involuntary pool or association is a function of the creditworthiness of all the pool participants.

The Company's reinsurance recoverables from Nationwide Indemnity Company have been fully guaranteed by its parent, Nationwide Mutual Insurance Company, which has a financial strength rating of A+ from Standard & Poor's and A+ from A.M. Best.

Adverse Development Reinsurance

On November 5, 2019, LMIC entered into a reinsurance transaction with 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, commercial auto liability and general liability excluding umbrella and warranty

liabilities. The first layer of the contract attaches at \$300 million below applicable held reserves at inception of \$8.341 billion of combined aggregate reserves. The second layer of the contract provides adverse development coverage for \$1.000 billion above a retention equal to \$8.741 billion. The contract includes a sublimit of \$100 million 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 million of existing undiscounted liabilities, paid NICO total consideration of \$462 million and recorded a pre-tax loss of \$173 million. This contract is accounted for on a retroactive basis.

In general terms, the covered business includes post December 31, 2018 development for Global Retail Markets U.S. Business Lines and Global Risks Solutions National Insurance segment on: (1) certain workers compensation liabilities arising under policies on the books 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 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 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 GAAP 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 Statements of Income 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 million, deferred gains are now being recorded. The Company reported deferred gain amortization of \$25 million and zero at December 31, 2020 and December 31, 2019, respectively. As of December 31, 2020 and December 31, 2019, deferred gains were \$240 million and zero. Limits remaining on the contract as of December 31, 2020 were \$550 million.

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 million of held reserves at inception, for which the Company established reinsurance recoverables on the Consolidated Balance Sheet. The second layer of the contract provides adverse development coverage for 95% of \$500 million above a retention equal to \$3.006 billion, 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 million for certain construction liability liabilities. The Company paid NICO consideration of \$550 million, 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 \$475 million and zero as of December 31, 2020.

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, attaching at \$12.522 billion of combined aggregate reserves, with an aggregate limit of \$6.500 billion and sublimits of \$3.100 billion for asbestos and environmental liabilities and \$4.507 billion 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 billion of existing undiscounted liabilities under this retroactive reinsurance agreement. NICO will provide \$3.180 billion of additional aggregate adverse development reinsurance. The Company paid NICO total consideration of \$3.046 billion. 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. This 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 \$4 million and \$13 million as of December 31, 2020 and December 31, 2019, respectively. Limits remaining on the contracts in total, and for asbestos and environmental liabilities, respectively, were \$3.170 billion and \$614 million as of December 31, 2020.

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 \$3.3 billion of loss in excess of \$300 million of retained loss in the United States, Canada and the Caribbean, excluding certain reinsurance exposures; 2) aggregate excess of loss programs; 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' U.S. exposures. This program provides significant reinsurance protection in excess of \$360 million per occurrence retention, including coverage for terrorism events and/or losses for a single event at a single insured location in excess of \$75 million. These contracts generally exclude acts of terrorism which are "certified" by the U.S. government where such certified terrorism events involve the intentional use of nuclear, chemical, or biological materials.

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, 2020, the Company renewed coverage for 90% of approximately \$56 million excess of \$22 million. 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.

CRITICAL ACCOUNTING ESTIMATES

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 postretirement benefit obligations.

While the amounts included in the Consolidated Financial Statements reflect management's best estimates and assumptions, these amounts ultimately could vary.

For additional discussion, please refer to footnote 1 in the Company's December 31, 2020 Audited Consolidated Financial Statements.

Unpaid Claims and Claim Adjustment Expenses

Property and casualty insurance unpaid claims and claim adjustment expenses represent the Company's best estimate of amounts necessary to settle all outstanding claims, including claims that are incurred but not reported as of the reporting date. The Company's reserve projections are based primarily on detailed analysis of the facts in each case, experience with similar cases and various historical development patterns. Consideration is given to such historical patterns as field reserving trends and claims settlement practices, loss payments, pending levels of unpaid claims and product mix, as well as court decisions, economic conditions and public attitudes. All of these factors can affect the estimation of reserves.

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.

For additional discussion, please refer to footnote 6 in the Company's December 31, 2020 Audited Consolidated Financial Statements.

Asbestos and Environmental

As a result of the significant uncertainty inherent in determining a company's asbestos and environmental liabilities and establishing related reserves, the amount of reserves required to adequately fund the Company's asbestos and environmental claims cannot be accurately estimated using conventional reserving methodologies based on historical data and trends. As a result, the use of conventional reserving methodologies frequently has to be supplemented by subjective considerations including managerial judgment. In that regard, the estimation of asbestos claims and associated liabilities and the analysis of environmental claims considered prevailing applicable law and certain inconsistencies of court decisions as to coverage, plaintiffs' expanded theories of liability, and the risks inherent in major litigation and other uncertainties, the Company believes that in future periods it is possible that the outcome of the continued uncertainties regarding asbestos and environmental related claims could result in an aggregate liability that differs from current reserves and would be covered under the NICO Reinsurance Transaction.

For additional discussion, please refer to footnote 6 in the Company's December 31, 2020 Audited Consolidated Financial Statements.

Reinsurance Recoverables

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.

Ceded transactions that transfer risk but are retroactive are included in reinsurance recoverables. The excess of estimated liabilities for claims and claim costs over the consideration paid net of experience adjustments is established as a deferred credit at inception. The deferred amounts are subsequently amortized using the effective interest method over the expected settlement period. The periodic amortization is reflected in the accompanying Consolidated Statements of Income through benefits, claims and claim adjustment expenses. In transactions where the consideration paid exceeds the estimated liabilities for claims and claim costs a loss is recognized. If the adverse development net of experience adjustments exceeds the original loss, deferred gains are recorded. The deferred gains are subsequently recognized into earnings over the expected settlement period of the reserves.

For additional discussion, please refer to footnote 5 in the Company's December 31, 2020 Audited Consolidated Financial Statements.

Fair Value Determination

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. Securities are classified into three hierarchy levels: Level 1, Level 2 or Level 3.

Regarding fair value measurements, as of December 31, 2020, excluding other assets, the Company reflected \$9.542 billion (12.8%) as level 1 (quoted prices in active markets) primarily consisting of U.S. Treasuries and common equity securities. The majority of the Company's invested assets are reported as level 2 (quoted prices from other observable inputs). As of December 31, 2020, the Company reported \$63.629 billion (85.2%) as level 2, consisting primarily of fixed maturity securities. Finally, the Company reported \$1.506 billion (2.0%) as level 3 (unobservable inputs), primarily consisting of international and privately held securities for which a market price is not readily observable.

For additional discussion, please refer to footnote 10 in the Company's December 31, 2020 Audited Consolidated Financial Statements.

Impairment Losses on Investments

The Company reviews fixed maturity securities and other investments which include limited partnership and other equity method investments (primarily traditional private equity, natural resource and real estate) 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.

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.

The Company is required to review its oil and gas properties when facts and circumstances indicate the possible existence of impairment. When a property's carrying value is greater than the expected future cash flows, impairment

expense is recognized to the extent that the carrying value of the property exceeds its estimated fair market value. In employing the discounted cash flow method described, key inputs include commodity prices, locational basis difference, production, project development costs and the discount rate which are based on management's expectations about outcomes with respect to these variables. Unproved properties are assessed at least annually to determine whether impairment has occurred. During the year, the global commodity price volatility has challenged all energy industry segments. This downward price volatility has been driven by a sharp reduction in demand related to stay-at-home restrictions put in place globally in response to the COVID-19 pandemic as well as an unprecedented increase in supply resulting from tensions in the oil and gas market. Consequently, the Company has concluded these events may indicate a possible impairment and have updated key inputs where appropriate. As of June 30, 2020, as a result of the Liberty Energy, LLC transaction, the Company is no longer required to review its oil and gas properties for impairment.

For additional discussion, please refer to footnote 1 in the Company's December 31, 2020 Audited Consolidated Financial Statements.

Goodwill and Intangible Assets

Goodwill is tested for impairment at least annually using either a qualitative or a quantitative process. Election of the approach can be made at the reporting unit level. The reporting unit has the option to skip the qualitative test and move directly to completion of the quantitative process. As of December 31, 2020, the Company has two reporting units – Global Retail Markets and Global Risk Solutions.

Indefinite-lived intangible assets held by the Company are reviewed for impairment on at least an annual basis using a qualitative process. The classification of the asset as indefinite-lived is reassessed, and an impairment is recognized if the carrying amount of the asset exceeds its fair value.

In 2019, a goodwill impairment of \$33 million was recognized related to the sale of Pembroke Managing Agency Ltd. The Company recognized a syndicate capacity impairment of \$98 million in 2019. In addition, \$52 million of syndicate capacity was included in the sale of Pembroke Managing Agency Ltd. The Company had no material goodwill or intangible asset impairments recognized in 2020.

For additional discussion, please refer to footnote 1 in the Company's December 31, 2020 Audited Consolidated Financial Statements.

Deferred Income Taxes

The income tax provision is calculated under the liability method. Deferred income tax assets and liabilities are recorded based upon the difference between the financial statement and tax bases of assets and liabilities at the enacted tax rates. The principal assets and liabilities giving rise to such differences are insurance loss reserves, unearned premiums, net operating losses, employee benefits, accrued expenses, deferred policy acquisition costs, net unrealized gains and losses on investments, intangibles, equalization reserves and fixed assets.

No additional income taxes have been provided for any remaining undistributed foreign earnings not subject to the transition tax or any additional outside basis differences as these amounts continue to be indefinitely reinvested. Determining the amount of unrecognized deferred tax liability related to any remaining undistributed foreign earnings not subject to the transition tax or additional outside basis differences is not practicable.

As of December 31, 2020, the U.S. Treasury Department and the Internal Revenue Service ("IRS") are still in the process of issuing various regulations in accordance with the Tax Cuts and Jobs Act of 2017. Accordingly, future adjustments to the financial statements may be necessary as regulations are issued and the 2020 tax returns are filed with the IRS and foreign tax authorities.

Global intangible low-taxed income ("GILTI") is treated by the Company as a period expense.

For additional discussion, please refer to footnote 8 in the Company's December 31, 2020 Audited Consolidated Financial Statements.

Pension and Postretirement Benefit Obligations

On an annual basis, the Company reviews the discount rate assumption used to determine the benefit obligations and the composition of various yield curves to ensure that the assumed discount rate reflects the Company's best estimate of the rate of return inherent in a portfolio of high-quality debt instruments that would provide the cash flows necessary to settle the Company's projected benefit payments.

The discount rate assumption used to determine the benefit obligations was based on a yield curve approach where the cash flows related to the benefit plans' liability stream were discounted at an interest rate specifically applicable to the timing of the cash flows. Effective January 1, 2016, service cost is calculated by discounting the future cash flows attributable to the current year of service using spot rates specifically applicable to the timing of the cash flows. Interest cost is determined by multiplying each benefit obligation cash flow by the spot rate applicable to that timing of the cash flow.

In choosing the expected long-term rate of return on plan assets, the Company's Retirement Committee considered the historical returns of equity and fixed income markets in conjunction with current economic and financial market conditions.

Effective January 1, 2020, the Company has elected a change to its method of calculating the market-related value of assets used to determine the expected return on plan assets component of net periodic pension cost. The Company previously calculated market-related value for its pension plan by recognizing changes in the fair value of plan assets over a period of five years on all classes of assets. As a result of the change in accounting method, the Company will no longer recognize changes in fair value for the asset classes, such as investment grade fixed income securities and derivatives in the Immunizing Portfolio over five years. Instead, changes in the fair value of these assets will be recognized immediately for purposes of the market-related value. However, the Company will continue to recognize changes in the fair value of the asset classes in the Growth Portfolio over a five-year period. These assets include public equities, private equity, common collective trust funds, non-investment grade fixed income, and emerging market fixed income. The change is preferable to better align pension assets and liabilities with the investment policy designed for the Immunizing Portfolio to hedge the Plan's liability risks, specifically to offset changes in the Plan's liability value due to market-related risk factors such as change in interest rate and credit spreads. Comparative financial statements of prior years have been adjusted to apply the new methodology retrospectively. The change resulted in a \$9 million change to 2019 AOCI and unassigned funds and a \$9 million decrease in prepaid pension expense and accrued postretirement and pension benefits on the December 31, 2019 Balance Sheet for a net impact of \$7 million on net income for the twelve months ended December 31, 2019.

The adjustment is comprised of the difference between the net actuarial loss within AOCI before and after the change in methodology. The estimated impact on fiscal year 2020 expense of the MRVA methodology change compared to the current method will result in an overall decrease of \$90 million.

For additional discussion, please refer to footnote 9 in the Company's December 31, 2020 Audited Consolidated Financial Statements.

ABOUT THE COMPANY

Boston-based LMHC, the parent corporation of the Liberty Mutual Insurance group of entities, is a diversified global insurer and fourth largest property and casualty insurer in the U.S. based on 2019 direct written premium. The Company also ranks 77th on the Fortune 100 list of largest corporations in the U.S. based on 2019 revenue. As of December 31, 2020, LMHC had \$145.377 billion in consolidated assets, \$119.420 billion in consolidated liabilities, and \$43.796 billion in annual consolidated revenue.

LMHC, through its subsidiaries and affiliated companies, offers a wide range of property and casualty insurance products and services to individuals and businesses alike. In 2001 and 2002, the Company formed a mutual holding company structure, whereby the three principal mutual insurance companies, LMIC, LMFIC and EICOW, each became separate stock insurance companies under the ownership of LMHC.

Functionally, the Company conducts substantially all of its business through two business units, with each operating independently of the other in certain areas such as sales, underwriting, and claims, but, as appropriate, collaborating in other areas such as actuarial and financial. Management believes this structure provides increased synergy to the Company and permits each business unit to execute its business strategy and/or to make acquisitions without impacting or disrupting the operations of the other business unit.

LMHC employs over 45,000 people in 29 countries and economies around the world. For a full description of the Company's business operations, products and distribution channels, please visit Liberty Mutual's Investor Relations web site at www.libertymutualgroup.com/investors.