

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

Quarter Ended September 30, 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 nine months ended September 30, 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, 2019 Audited Consolidated Financial Statements and September 30, 2020 Unaudited 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).

Index

	Page
Cautionary Statement Regarding Forward Looking Statements	3
Executive Summary	5
Consolidated Results of Operations	7
Review of Financial Results by Business	
Global Retail Markets	20
Global Risk Solutions	25
Corporate and Other	30
Investments	34
Liquidity and Capital Resources	42
Reinsurance	47
Critical Accounting Estimates	51
About the Company	55

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 cyclicality 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 \$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 Unaudited Consolidated Financial Statements.

Consolidated Results of Operations

	Th	ree Months End September 30,	ded	Nine Months Ended September 30,			
\$ in Millions	2020	Revised 2019 ²	Change	2020	Revised 2019 ²	Change	
Net written premium	\$10,710	\$10,325	3.7%	\$30,529	\$30,063	1.6%	
Pre-tax operating (loss) income before partnerships, LLC and other equity method income	(158)	123	NM	220	991	(77.8)	
Partnerships, LLC and other equity method income	467	162	188.3	217	556	(61.0)	
Net realized gains	219	81	170.4	375	393	(4.6)	
Unit linked life insurance	(22)	(12)	83.3	21	(89)	NM	
Ironshore Inc. ("Ironshore") acquisition & integration costs	(5)	(4)	25.0	(16)	(16)	-	
Restructuring costs	(28)	(3)	NM	(30)	(6)	NM	
Loss on extinguishment of debt	-	-	-	-	(49)	(100.0)	
Discontinued operations, net of tax	(6)	-	NM	(19)	(50)	(62.0)	
Consolidated net income	397	272	46.0	598	1,338	(55.3)	
Less: Net income attributable to non-controlling interest	-	-	-	2	-	NM	
Net income attributable to LMHC	397	272	46.0	596	1,338	(55.5)	
Net income attributable to LMHC excluding unrealized impact ¹	356	288	23.6	648	1,145	(43.4)	
Cash flow provided by continuing operations	\$2,788	\$1,494	86.6%	\$4,906	\$3,039	61.4%	

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 September 30,			Nine Months Ended September 30,		
	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	93.6%	94.9%	(1.3)	91.8%	94.4%	(2.6)
Combined ratio ⁵	104.0%	102.5%	1.5	101.8%	100.0%	1.8

- 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 six months ended June 30, 2019.
- 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

	As of September 30,	As of December 31,	
\$ in Millions	2020	Revised 2019 ²	Change
Short-term debt ¹	\$330	\$-	NM
Long-term debt	8,403	8,200	2.5%
Total debt	\$8,733	\$8,200	6.5
Unassigned equity	\$25,546	\$24,950	2.4%
Accumulated other comprehensive loss	(447)	(1,359)	(67.1)
Non-controlling interest	30	28	7.1
Total equity	\$25,129	\$23,619	6.4%

- 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.

Subsequent Events

The Company has offered eligible employees an early retirement option. The Company estimates the cost of irrevocable acceptances of this special termination benefit to be approximately \$570 million, which will be recognized in the fourth quarter.

Management has assessed material subsequent events through November 4, 2020, 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.

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 \$305 million.

On May 7, 2020, Liberty Mutual Group, Inc. ("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 ("Insco 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 \$19 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 coverage
 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:

	Three Months Ended September 30,			ded Nine Months September		
\$ in Millions	2020	2019	Change	2020	2019	Change
Private passenger automobile	\$3,713	\$3,622	2.5%	\$10,474	\$10,576	(1.0%)
Homeowners	1,939	1,814	6.9	5,135	4,888	5.1
Global Risk Solutions specialty insurance ¹	870	770	13.0	2,458	2,287	7.5
Global Risk Solutions reinsurance	552	469	17.7	1,760	1,495	17.7
Commercial multiple-peril	600	628	(4.5)	1,670	1,765	(5.4)
Global Risk Solutions casualty ²	568	516	10.1	1,408	1,363	3.3
Workers compensation	482	562	(14.2)	1,401	1,639	(14.5)
Commercial automobile	465	539	(13.7)	1,394	1,618	(13.8)
Commercial property	454	442	2.7	1,149	1,065	7.9
Surety	293	256	14.5	874	770	13.5
Global Retail Markets general liability	225	221	1.8	676	657	2.9
Global Risk Solutions other reinsurance	113	8	NM	674	301	123.9
Global Risk Solutions inland marine	139	143	(2.8)	421	420	0.2
Corporate reinsurance ³	(110)	(109)	0.9	(121)	(33)	NM
Other ⁴	407	444	(8.3)	1,156	1,252	(7.7)
Total NWP	\$10,710	\$10,325	3.7%	\$30,529	\$30,063	1.6%

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.

NM = Not Meaningful

NWP for the three months ended September 30, 2020 was \$10.710 billion, an increase of \$385 million over the same period in 2019.

Significant changes by major line of business for the three months ended September 30, 2020 include:

- Private passenger automobile NWP increased \$91 million. The increase reflects the impact of strong new
 business production and retention in U.S. personal lines and strong motor results in China, 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.
- Homeowners NWP increased \$125 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.
- Global Risk Solutions specialty insurance NWP increased \$100 million. The increase reflects favorable rate, new business growth and a higher renewable premium base than prior year, partially offset by re-underwriting efforts and lower premium from the disposal of certain international Ironshore entities.
- Global Risk Solutions reinsurance increased \$83 million. The increase reflects favorable rate and a higher renewable premium base than prior year.

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.

- Workers compensation NWP decreased \$80 million. The decrease reflects unfavorable results in Global Retail Markets due to re-underwriting efforts as well as lower premium due to COVID-19 and the related economic impacts.
- Commercial automobile NWP decreased \$74 million. The decrease reflects the impact of unfavorable results in U.S. business lines driven by re-underwriting efforts.
- Global Risk Solutions other reinsurance increased \$105 million. The increase reflects the net impact of ceded reinsurance program changes.

NWP for the nine months ended September 30, 2020 was \$30.529 billion, an increase of \$466 million over the same period in 2019.

Significant changes by major line of business for the nine months ended September 30, 2020 include:

- Private passenger automobile NWP decreased \$102 million. The decrease reflects unfavorable results in the Global Retail Markets West region, 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 \$247 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 \$171 million. The increase reflects favorable rate, new business growth and a higher renewable premium base than prior year, partially offset by re-underwriting efforts and lower premium from the disposal of certain international Ironshore entities.
- Global Risk Solutions reinsurance NWP increased \$265 million. The increase reflects positive rate and a higher renewable premium base than prior year.
- Workers compensation NWP decreased \$238 million. The decrease reflects lower premium driven by COVID-19 and the related economic impacts and re-underwriting efforts in Global Retail Markets.
- Commercial automobile NWP decreased \$224 million. The decrease reflects unfavorable results driven by COVID-19 and the related economic impacts and re-underwriting efforts in Global Retail Markets.
- Commercial property NWP increased \$84 million. The increase reflects positive rate, partially offset by ceded reinsurance program structure changes.
- Surety NWP increased \$104 million. The increase reflects the AmTrust acquisitions which closed post first quarter of 2019.
- Global Risk Solutions other reinsurance NWP increased \$373 million. The increase reflects the net impact of ceded reinsurance program changes.
- Corporate reinsurance NWP decreased \$88 million. The decrease reflects additional ceded premium related to new property catastrophe placements and unfavorable pricing on the renewal of external catastrophe 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:

		ee Months Er September 30		Nine Months Ended September 30,		
\$ in Millions	2020 2019 Change			2020	2019	Change
Global Retail Markets	\$7,358	\$7,292	0.9%	\$20,728	\$21,074	(1.6%)
Global Risk Solutions	3,445	3,121	10.4	9,917	8,987	10.3
Corporate and Other	(93)	(88)	5.7	(116)	2	NM
Total NWP	\$10,710	\$10,325	3.7%	\$30,529	\$30,063	1.6%
Foreign exchange effect on growth			(0.5)			(0.9)
NWP growth excluding foreign exchange ¹			4.2%			2.5%

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

Consolidated NWP by geographic distribution channels was as follows:

	Three Months Ended September 30,			-	ne Months En September 30	
\$ in Millions	2020	2019	Change	2020	2019	Change
U.S.	\$8,512	\$7,952	7.0%	\$24,321	\$23,429	3.8%
International excluding foreign exchange ¹	2,245	2,373	(5.4%)	6,467	6,634	(2.5%)
Foreign exchange ¹	(47)	-	NM	(259)	-	NM
Total NWP	\$10,710	\$10,325	3.7%	\$30,529	\$30,063	1.6%

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

		e Months En		Nine Months Ended September 30,		
\$ in Millions	2020	Revised 2019 ⁸	Change	2020	Revised 2019 ⁸	Change
Revenues	\$11,371	\$10,839	4.9%	\$32,000	\$32,295	(0.9%)
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	\$871	\$790	10.3%	\$3,093	\$2,544	21.6%
Catastrophes ¹	(980)	(428)	129.0	(2,164)	(1,201)	80.2
COVID-19 ²	-	-	-	(565)	-	NM
Net incurred losses attributable to prior years:				(=)		
- Asbestos and environmental ³	2	-	NM	2	(3)	NM
- All other ⁴	(51)	(109)	(53.2)	(146)	(349)	(58.2)
Current accident year re-estimation ⁵	-	(130)	(100.0)	-	-	-
Pre-tax operating (loss) income before partnerships, LLC and other equity method income	(158)	123	NM	220	991	(77.8)
Partnerships, LLC and other equity method income ⁶	467	162	188.3	217	556	(61.0)
Pre-tax operating income	309	285	8.4	437	1,547	(71.8)
Net realized gains	219	81	170.4	375	393	(4.6)
Unit linked life insurance	(22)	(12)	83.3	21	(89)	NM
Ironshore acquisition & integration costs	(5)	(4)	25.0	(16)	(16)	-
Restructuring costs	(28)	(3)	NM	(30)	(6)	NM
Loss on extinguishment of debt	-	-	-	-	(49)	(100.0)
Pre-tax income	473	347	36.3	787	1,780	(55.8)
Income tax expense	70	75	(6.7)	170	392	(56.6)
Consolidated net income from continuing operations	403	272	48.2	617	1,388	(55.5)
Discontinued operations, net of tax	(6)	-	NM	(19)	(50)	(62.0)
Consolidated net income	397	272	46.0	598	1,338	(55.3)
Less: Net income attributable to non- controlling interest	-	-	-	2	-	NM
Net income attributable to LMHC	397	272	46.0	596	1,338	(55.5)
Net income attributable to LMHC excluding unrealized impact ⁷	\$356	\$288	23.6%	\$648	\$1,145	(43.4%)
Cash flow provided by continuing operations	\$2,788	\$1,494	86.6%	\$4,906	\$3,039	61.4%

- 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 \$114 million and \$218 million for the three and nine months ended September 30, 2020, and \$4 million and (\$5) million for the same periods in 2019.
- 5 Re-estimation of the current accident year loss reserves for the six months ended June 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.
- 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 September 30,			Nine Months Ended September 30,		
\$ in Millions	2020	2019	Change	2020	2019	Change
LP, LLC and other equity method						
income ¹	\$492	\$160	NM	\$325	\$552	(41.1%)
Direct investment in natural						
resources revenues ²	(32)	118	NM	123	349	(64.8)
Direct investment in natural						
resources expenses ³	7	(116)	NM	(231)	(345)	(33.0)
Partnerships, LLC and other equity						
method income	\$467	\$162	188.3%	\$217	\$556	(61.0%)

- 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 Mon Septem	Nine Months Ended September 30,		
\$ in Millions	2020	2019	2020	2019
Taxable interest income	\$430	\$459	\$1,307	\$1,378
Tax-exempt interest income	39	43	119	134
Dividends	4	11	21	49
LP, LLC and other equity method income	492	160	325	552
Commercial mortgage loans	22	22	63	62
Other investment income	1	1	8	6
Gross investment income	988	696	1,843	2,181
Investment expenses ¹	(73)	(66)	(202)	(186)
Total net investment income	\$915	\$630	\$1,641	\$1,995

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

Net Realized Gains (Losses) \$ in Millions	Sales & Settlements	Impairments	Unrealized Gains (Losses)	Total
Three Months Ended September 30, 2020:				
Fixed maturities	\$172	(\$17)	\$-	\$155
Equities	2	-	81	83
Derivatives	11	-	8	19
Other	(38)	(1)	1	(38)
Total	\$147	(\$18)	\$90	\$219
Three Months Ended September 30, 2019:				
Fixed maturities	\$170	(\$2)	\$-	\$168
Equities	(12)	-	(4)	(16)
Derivatives	(32)	-	(8)	(40)
Other	(10)	(21)	-	(31)
Total	\$116	(\$23)	(\$12)	\$81

Net Realized Gains (Losses) \$ in Millions	Sales & Settlements	Impairments	Unrealized (Losses) Gains	Total
Nine Months Ended September 30, 2020:				
Fixed maturities	\$870	(\$43)	\$-	\$827
Equities	(1)	-	(82)	(83)
Derivatives	(49)	-	(15)	(64)
Other	(53)	(255)	3	(305)
Total	\$767	(\$298)	(\$94)	\$375
Nine Months Ended September 30, 2019:				
Fixed maturities	\$336	(\$5)	\$-	\$331
Equities	23	-	339	362
Derivatives	(107)	-	(21)	(128)
Other	(45)	(126)	(1)	(172)
Total	\$207	(\$131)	\$317	\$393

Unrealized Gains (Losses) Related to Equity Securities ¹	Three Months Ended September 30,		Nine Months Ended September 30,			
\$ in Millions	2020	2019	Change	2020	2019	Change
Net gains (losses) recognized during the period on equity securities	\$82	(\$4)	NM	(\$79)	\$338	NM
Less: Net (losses) gains recognized during the period on equity securities sold during the period	(6)	(14)	NM	(25)	101	NM
Unrealized gains (losses) recognized during the reporting period on equity securities still held at the reporting date	\$88	\$10	NM	(\$54)	\$237	NM

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

Third Quarter Results:

Pre-tax operating (loss) income before partnerships, LLC and other equity method income for the three months ended September 30, 2020 was (\$158) million, versus \$123 million for the same period in 2019. Pre-tax operating loss before catastrophes, net incurred losses attributable to prior years, current accident year re-estimation, and partnerships, LLC and other equity method income was \$871 million, an increase of \$81 million over the same period in 2019. The increase reflects profit margin on higher earned premium, favorable current accident year and non-catastrophe losses, partially offset by increased insurance operating expenses driven by an increase in advertising spend in Global Retail Markets. Including the impact of catastrophes, net incurred losses attributable to prior years and current accident year re-estimation, the change in pre-tax operating (loss) income primarily reflects higher 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 lower net incurred losses attributable to prior years.

Partnerships, LLC, and other equity method income, including operating income from direct investments in natural resources, for the three months ended September 30, 2020 was \$467 million, an increase of \$305 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.

Revenues for the three months ended September 30, 2020 were \$11.371 billion, an increase of \$532 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 September 30, 2020 was \$10.075 billion, an increase of \$254 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 September 30, 2020 was \$915 million, an increase of \$285 million over the same period in 2019. The increase reflects more 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 September 30, 2020 were \$219 million, an increase of \$138 million over the same period in 2019. The net realized gains in the current quarter were primarily driven by \$172 million net gains on sales of fixed maturities, \$81 million net change in equity unrealized gains, and \$26 million gain from a true-up on the Liberty Energy, LLC transaction, partially offset by \$70 million loss on the sale of metals and mining investments. The prior period was impacted by \$170 million net gains on sales of fixed maturities, partially offset by \$40 million of derivative losses and \$23 million of impairment charges primarily related to natural resource investments.

Fee and other revenues for the three months ended September 30, 2020 were \$162 million, a decrease of \$145 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 September 30, 2020 were \$10.843 billion, an increase of \$370 million over the same period in 2019. The increase reflects higher current year catastrophe losses and higher insurance operating expenses driven by an increase in advertising spend in Global Retail Markets, partially offset by lower natural resource expenses due to the Liberty Energy, LLC transaction, favorable current accident year and non-catastrophe losses, and lower net incurred losses attributable to prior years driven by strengthening in 2019 that did not recur at the same level.

Income tax expense on continuing operations for the three months ended September 30, 2020 was \$70 million, a decrease of \$5 million from the same period in 2019. The Company's effective tax rate on continuing operations for the three months ended September 30, 2020 was 15% compared to 22% 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.

Discontinued operations, net of tax, for the three months ended September 30, 2020 were (\$6) 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 attributable to LMHC for the three months ended September 30, 2020 was \$397 million, an increase of \$125 million over the same period in 2019.

Cash flow provided by continuing operations for the three months ended September 30, 2020 was \$2.788 million, an increase of \$1.294 billion over the same period in 2019. The increase reflects favorable paid loss activity and premium collections in Global Risk Solutions and Global Retail Markets and favorable expense payment timing in Corporate, partially offset by unfavorable reinsurance payment timing in Global Risk Solutions and Corporate.

Year-to-date Results:

Pre-tax operating income before partnerships, LLC and other equity method income for the nine months ended September 30, 2020 was \$220 million, a decrease of \$771 million from the same period in 2019. Pre-tax operating loss before catastrophes, COVID-19, net incurred losses attributable to prior years, and partnerships, LLC and other equity method income was \$3.093 billion, an increase of \$549 million over the same period in 2019. The increase reflects favorable current accident year and non-catastrophe losses, partially offset by higher insurance operating expenses, lower profit margin due to reduced earned premium as a result of the premium refunds in Global Retail Markets and lower net investment income. 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.

Partnerships, LLC, and other equity method income, including operating income from direct investments in natural resources, for the nine months ended September 30, 2020 was \$217 million, a decrease of \$339 million from the same period in 2019. The decrease is due to the impact of COVID-19 and the related economic impacts, primarily driven by private capital and energy investments.

Revenues for the nine months ended September 30, 2020 were \$32.000 billion, a decrease of \$295 million from 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 nine months ended September 30, 2020 was \$29.282 billion, an increase of \$292 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 nine months ended September 30, 2020 was \$1.641 billion, a decrease of \$354 million from the same period in 2019. The decrease reflects lower valuations across the LP, LLC, and other equity method investments, primarily driven by private capital and energy investments, as compared to the same period in 2019. Also driving the decrease is lower earned yield in 2020 as compared to the same period in 2019.

Net realized gains for the nine months ended September 30, 2020 were \$375 million, a decrease of \$18 million from the same period in 2019. The net realized gains in the current period were primarily driven by \$870 million net gains on sales of fixed maturities, partially offset by a \$205 million net loss on the Liberty Energy, LLC transaction, \$82 million net change in equity unrealized losses, \$70 million loss on the sale of metals and mining investments, and \$64 million of derivatives losses. The prior period was impacted by \$336 million net gains on sales of fixed maturities and \$339 million net change in equity unrealized gains, partially offset by \$131 million of impairment charges, primarily related to corporate real estate, the sale of certain international Ironshore entities, and natural resources.

Fee and other revenues for the nine months ended September 30, 2020 were \$702 million, a decrease of \$215 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 nine months ended September 30, 2020 were \$31.188 billion, an increase of \$833 million over the same period in 2019. The increase reflects higher current year catastrophe losses, the impact of COVID-19 related losses, and increased insurance operating expenses. 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 nine months ended September 30, 2020 was \$170 million, a decrease of \$222 million from the same period in 2019. The Company's effective tax rate on continuing operations for the nine months ended September 30, 2020 was 22% which is consistent with the same period in 2019.

Discontinued operations, net of tax, for the nine months ended September 30, 2020 were (\$19) million, a decrease of \$31 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 nine months ended September 30, 2020 was \$596 million, a decrease of \$742 million from the same period in 2019.

Cash flow provided by continuing operations for the nine months ended September 30, 2020 was \$4.906 billion, an increase of \$1.867 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, favorable reinsurance payment timing in Corporate and lower taxes paid. The increases were partially offset by unfavorable investment results, unfavorable premium collections and expenses paid in Global Retail Markets and unfavorable reinsurance payment timing in Global Risk Solutions.

	Three Months Ended September 30,			Nine Months Ended September 30,		
CONSOLIDATED	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	65.6%	66.2%	(0.6)	62.4%	65.6%	(3.2)
Underwriting expense ratio	28.0	28.7	(0.7)	29.4	28.8	0.6
Subtotal	93.6	94.9	(1.3)	91.8	94.4	(2.6)
Catastrophes ¹	10.0	4.4	5.6	7.5	4.1	3.4
COVID-19 ²	-	-	-	2.0	-	2.0
Net incurred losses attributable to prior years:						
- Asbestos and environmental	-	0.6	(0.6)	0.1	0.2	(0.1)
- All other ³	0.4	1.3	(0.9)	0.4	1.3	(0.9)
Current accident year re-estimation ⁴	-	1.3	(1.3)	-	-	-
Total combined ratio ⁵	104.0%	102.5%	1.5	101.8%	100.0%	1.8

- 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 six months ended June 30, 2019.
- 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.

Third 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 September 30, 2020 was 93.6%, a decrease of 1.3 points from the same period in 2019. The decrease was primarily driven by a decrease in the underwriting expense ratio driven by expense management and premium growth in Global Risk Solutions as well as a decrease in the claims and claim adjustment expense ratio due to lower non-catastrophe losses.

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 September 30, 2020 was 104.0%, an increase of 1.5 points over the same period in 2019. The increase was driven by higher current year catastrophe losses, partially offset by the decreases to the combined ratio mentioned above, lower net incurred losses attributable to prior years driven by strengthening in 2019 that did not recur at the same level and a favorable change in current accident year re-estimation driven by 2019 activity.

Year-to-date Results:

The consolidated combined ratio before catastrophes, COVID-19 and net incurred losses attributable to prior years for the nine months ended September 30, 2020 was 91.8%, a decrease of 2.6 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 losses. The decrease in the underwriting expense ratio reflects expense management and premium growth

in Global Risk Solutions, partially offset by premium refunds, higher technology investments, and advertising spend in Global Retail Markets.

Including the impact of catastrophes, COVID-19 and net incurred losses attributable to prior years, the total combined ratio for the nine months ended September 30, 2020 was 101.8%, an increase of 1.8 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 above 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 1,940 licensed employee sales representatives, 820 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:

	Three Months Ended September 30,			Nine Months Ended September 30,		
\$ in Millions	2020	2019	Change	2020	2019	Change
U.S.	\$6,366	\$6,208	2.5%	\$17,960	\$17,949	0.1%
West	667	756	(11.8)	1,868	2,200	(15.1)
East	318	314	1.3	881	895	(1.6)
Global Retail Markets Reinsurance	7	14	(50.0)	19	30	(36.7)
Total NWP	\$7,358	\$7,292	0.9%	\$20,728	\$21,074	(1.6%)
Foreign exchange effect on growth			(0.9)			(1.1)
NWP growth excluding foreign exchange ¹			1.8%			(0.5%)

Determined by assuming constant foreign exchange rates between periods.

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

		Three Months Ended September 30,			Nine Months Ended September 30,			
\$ in Millions	2020	2019	Change	2020	2019	Change		
Private passenger automobile	\$3,713	\$3,622	2.5%	\$10,474	\$10,576	(1.0%)		
Homeowners	1,939	1,814	6.9	5,135	4,888	5.1		
Commercial multiple-peril	478	508	(5.9)	1,479	1,573	(6.0)		
Commercial automobile	301	356	(15.4)	970	1,157	(16.2)		
General liability	225	221	1.8	676	657	2.9		
Workers compensation	154	179	(14.0)	479	604	(20.7)		
Commercial property	139	142	(2.1)	346	341	1.5		
Life and health	107	105	1.9	305	300	1.7		
Other ¹	302	345	(12.5)	864	978	(11.7)		
Total NWP	\$7,358	\$7,292	0.9%	\$20,728	\$21,074	(1.6%)		

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.

Third Quarter Results:

NWP for the three months ended September 30, 2020 was \$7.358 billion, an increase of \$66 million over the same period in 2019. The increase was driven by strong personal property in the U.S. due to an increase in new business production and higher retention. In addition, the increase was driven by private passenger auto results primarily in the U.S. due to an increase in new business production and higher retention, and in the East driven by strong motor results in China. These increases were partially offset by results in commercial auto, commercial multiple-peril, and workers compensation driven by underwriting actions 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. Adding to the offset 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.

Year-to-date Results:

NWP for the nine months ended September 30, 2020 was \$20.728 billion, a decrease of \$346 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, and in U.S. personal lines due to premium refunds. 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. This was partially offset by strong new business production and higher retention in personal property and private passenger auto results in U.S. and strong property results in the Western Europe Market, particularly in Spain.

Results of Operations - Global Retail Markets

		ee Months E September 30		Nine Months Ended September 30,		
\$ in Millions	2020	2019	Change	2020	2019	Change
Revenues	\$7,323	\$7,245	1.1%	\$21,092	\$21,477	(1.8%)
PTOI before catastrophes, net incurred						
losses attributable to prior years and						
current accident year re-estimation	\$698	\$668	4.5%	\$2,563	\$2,087	22.8%
Catastrophes ¹	(802)	(317)	153.0	(1,814)	(1,035)	75.3
Net incurred losses attributable to						
prior years	(7)	45	NM	(25)	74	NM
Current accident year re-estimation ²	_	(83)	(100.0)	-	-	-
Pre-tax operating (loss) income	(\$111)	\$313	NM	\$724	\$1,126	(35.7%)

- 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 six months ended June 30, 2019. NM = Not Meaningful

Third Quarter Results:

Pre-tax operating (loss) income for the three months ended September 30, 2020 was (\$111) million, versus \$313 million for the same period in 2019. Pre-tax operating income before catastrophes, net incurred losses attributable to prior years and current accident year re-estimation was \$698 million, an increase of \$30 million over the same period in 2019. The increase was primarily driven by profit margin on higher earned premium primarily due to strong topline results in U.S. personal lines, lower non-catastrophe losses in personal and commercial auto due to lower frequency, and commercial multiple peril due to lower large losses, partially offset by higher insurance operating expenses and unfavorable credit losses on premium receivables from payment forbearance programs. Additionally, U.S. personal property non-catastrophe losses were unfavorable due to increased exposures and pressure from weather and fire activity. Including the impact of catastrophes, net incurred losses attributable to prior years and current accident year re-estimation, the change in pre-tax operating (loss) income was primarily driven by higher catastrophe losses due to an increase in severity and frequency compared to prior year, partially offset by current accident year re-estimation in 2019 that did not recur.

Revenues for the three months ended September 30, 2020 were \$7.323 billion, an increase of \$78 million over the same period in 2019. The increase was primarily driven by higher earned premium primarily due to strong topline results in U.S. personal lines. Adding to the favorability was an increase in unrealized and realized gains due to market valuation changes on unit linked life insurance where the policyholder bears the investment risk.

Claims, benefits and expenses for the three months ended September 30, 2020 were \$7.412 billion, an increase of \$485 million over the same period in 2019. The increase was driven by higher catastrophe losses due to an increase in severity and frequency compared to prior year, higher insurance operating expenses driven by an increase in advertising spend, and U.S. personal property non-catastrophe losses due to increased exposures and pressure from weather and fire activity. This was partially offset by lower non-catastrophe losses in personal and commercial auto due to lower frequency and commercial multiple peril due to lower large losses.

Year-to-date Results:

Pre-tax operating income for the nine months ended September 30, 2020 was \$724 million, a decrease of \$402 million from the same period in 2019. Pre-tax operating income before catastrophes and net incurred losses attributable to prior years was \$2.563 billion, an increase of \$476 million over the same period in 2019. The increase was primarily driven by lower non-catastrophe losses due to lower auto frequency and homeowners claim activity, and lower loss adjustment expenses due to lower independent adjustor spend, partially offset by higher insurance operating expenses, lower profit margin on lower earned premium due to the premium refunds in the U.S., topline shortfall in the West region and unfavorable credit losses on premium receivables from payment forbearance programs. Including the

impact of catastrophes and net incurred losses attributable to prior years, the decrease in pre-tax operating income was primarily driven by higher catastrophe losses due to an increase in severity and frequency compared to prior year and an unfavorable change in net incurred losses attributable to prior years due to 2019 catastrophe reserve releases in the U.S. that did not recur.

Revenues for the nine months ended September 30, 2020 were \$21.092 billion, a decrease of \$385 million from the same period in 2019. The decrease was primarily driven by lower premium earned due to the premium refunds in the U.S. and topline shortfall in the West region. Additionally, a decline in unrealized and realized gains due to market valuation changes on unit linked life insurance where the policyholder bears the investment risk and a realized loss from the sale of UKH's Russian insurance affiliate, Liberty Insurance (JSC) contributed to the decrease.

Claims, benefits and expenses for the nine months ended September 30, 2020 were \$20.413 billion, an increase of \$137 million over the same period in 2019. The increase was primarily driven by higher catastrophe losses due to an increase in severity and frequency compared to prior year and higher insurance operating expenses driven by advertising spend. This was partially offset by lower non-catastrophe losses due to lower auto frequency and homeowners claim activity and lower loss adjustment expenses due to lower independent adjustor spend.

	Three Months Ended September 30,			Nine Months Ended September 30,		
GLOBAL RETAIL MARKETS	2020	2019	Change (Points)	2020	2019	Change (Points)
Combined ratio before catastrophes, net incurred losses attributable to						
prior years and current accident year re-estimation						
Claims and claim adjustment expense						
ratio	63.7%	65.0%	(1.3)	60.5%	64.3%	(3.8)
Underwriting expense ratio	28.5	28.1	0.4	29.2	28.3	0.9
Subtotal	92.2	93.1	(0.9)	89.7	92.6	(2.9)
Catastrophes ¹	11.6	4.6	7.0	9.0	5.1	3.9
Net incurred losses attributable to prior						
years	0.1	(0.7)	0.8	0.1	(0.5)	0.6
Current accident year re-estimation ²	-	1.2	(1.2)	-	-	-
Total combined ratio	103.9%	98.2%	5.7	98.8%	97.2%	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.

Third Ouarter 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 September 30, 2020 was 92.2%, a decrease of 0.9 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 losses in personal and commercial auto from lower frequency, commercial multiple peril due to lower large losses, and lower loss adjustment expenses. This was partially offset by higher U.S. personal property non-catastrophe losses due to increased exposures and pressure from weather and fire activity and an increase in the underwriting expense ratio driven by an increase in advertising spend.

Including the impact of catastrophes, net incurred losses attributable to prior years and current accident year reestimation the total combined ratio for the three months ended September 30, 2020 was 103.9%, an increase of 5.7 points over the same period in 2019. The increase is driven by higher catastrophe losses due to higher severity and frequency and higher net incurred losses attributable to prior years driven by 2019 catastrophe reserve releases in the U.S. that did not reoccur. This is partially offset by the net favorability from the drivers mentioned above and current accident year re-estimation in 2019 that did not recur.

² Re-estimation of the current accident year loss reserves for the six months ended June 30, 2019.

Year-to-date Results:

The Global Retail Markets combined ratio before catastrophes and net incurred losses attributable to prior years for the nine months ended September 30, 2020 was 89.7%, a decrease of 2.9 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 losses from lower auto frequency and homeowners claim activity and lower loss adjustment expenses due to lower independent adjustor spend. This was partially offset by an increase in the underwriting expense ratio primarily driven by higher advertising spend and lower earned premium due to the premium refunds in the U.S.

Including the impact of catastrophes and net incurred losses attributable to prior years, the total combined ratio for the nine months ended September 30, 2020 was 98.8%, an increase of 1.6 points over the same period in 2019. The increase was driven by higher catastrophe losses due to higher severity and frequency and an unfavorable change in net incurred losses attributable to prior years due to 2019 catastrophe reserve releases in the U.S. that did not recur. This was partially offset by the net favorability from the drivers mentioned above.

GLOBAL RISK SOLUTIONS

Overview - Global Risk Solutions

Global Risk Solutions ("GRS") offers a wide array of property, casualty, specialty and reinsurance coverage 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 Insco 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:

		Three Months Ended September 30,			Nine Months Ended September 30,		
\$ in Millions	2020	2019	Change	2020	2019	Change	
North America	\$1,559	\$1,463	6.6%	\$4,054	\$3,811	6.4%	
Liberty Specialty Markets	1,329	1,183	12.3	3,790	3,394	11.7	
Global Surety	285	246	15.9	842	735	14.6	
Other Global Risk Solutions	272	229	18.8	1,231	1,047	17.6	
Total NWP	\$3,445	\$3,121	10.4%	\$9,917	\$8,987	10.3%	
Foreign exchange effect on growth			0.7			(0.2)	
NWP growth excluding foreign exchange ¹			9.7%			10.5%	

¹ Determined by assuming constant foreign exchange rates between periods.

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

		ee Months En September 30		Nine Months Ended September 30,			
\$ in Millions	2020	2019	Change	2020	2019	Change	
Specialty insurance ¹	\$870	\$770	13.0%	\$2,458	\$2,287	7.5%	
Reinsurance	552	469	17.7	1,760	1,495	17.7	
Casualty ²	568	516	10.1	1,408	1,363	3.3	
Workers compensation	311	363	(14.3)	912	994	(8.2)	
Surety	291	249	16.9	866	750	15.5	
Commercial property	315	300	5.0	803	724	10.9	
Other reinsurance	113	8	NM	674	301	123.9	
Commercial automobile	164	183	(10.4)	424	461	(8.0)	
Inland marine ³	139	143	(2.8)	421	420	0.2	
Commercial multiple-peril	122	120	1.7	191	192	(0.5)	
Total NWP	\$3,445	\$3,121	10.4%	\$9,917	\$8,987	10.3%	

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

Third Quarter Results:

NWP for the three months ended September 30, 2020 was \$3.445 billion, an increase of \$324 million over the same period in 2019.

The increase was driven by:

- Renewal rate increases across all lines of business, totaling 16% including the impact of changing terms and conditions;
- AmTrust acquisitions which closed post first quarter of 2019;
- New business growth;
- A higher renewable premium base than prior year; and
- Ceded reinsurance program structure changes

Partially offset by:

- Lower premium due to reduced exposures, primarily within commercial auto, workers compensation and general liability;
- Non-renewal of certain program business including high value homeowners; and
- Lower premium in specialty insurance, commercial property and casualty from the disposal of certain international Ironshore entities.

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

Year-to-date Results:

NWP for the nine months ended September 30, 2020 was \$9.917 billion, an increase of \$930 million over the same period in 2019.

The increase was driven by:

- Renewal rate increases across nearly all lines of business, totaling 13% including the impact of changing terms and conditions;
- AmTrust acquisitions which closed post first quarter of 2019;
- New business growth;

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

- A higher renewable premium base than prior year; and
- Ceded reinsurance program structure changes

Partially offset by:

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

Results of Operations - Global Risk Solutions

	Three Months Ended September 30,			Nine Months Ended September 30,		
\$ in Millions	2020	2019	Change	2020	2019	Change
Revenues	\$3,484	\$3,240	7.5%	\$10,198	\$9,533	7.0%
PTOI before catastrophes, COVID-19, current accident year re-estimation, and net incurred losses attributable to						
prior years	\$320	\$243	31.7%	\$1,021	\$764	33.6%
Catastrophes ¹	(178)	(111)	60.4	(350)	(166)	110.8
COVID-19 ²	-	-	-	(565)	_	NM
Net incurred losses attributable to prior years ³	(63)	(115)	(45.2)	(103)	(377)	(72.7)
Current accident year re-estimation ⁴	-	(47)	(100.0)	-	-	-
Pre-tax operating income (loss)	\$79	(\$30)	NM	\$3	\$221	(98.6%)

- 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.
- Net of earned premium and reinstatement premium attributable to prior years of \$114 million and \$218 million for the three and nine months ended September 30, 2020, and \$4 million and (\$5) million for the same periods in 2019.
- 4 Re-estimation of the current accident year loss reserves for the six months ended June 30, 2019. NM = Not Meaningful

Third Quarter Results:

Pre-tax operating income (loss) for the three months ended September 30, 2020 was \$79 million, versus (\$30) million for 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 September 30, 2020 was \$320 million, an increase of \$77 million over the same period in 2019. The increase reflects profit margin on higher earned premium primarily due to rate increases and higher net investment income partially offset by higher 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 change in pre-tax operating income (loss) was due to the drivers mentioned above, lower incurred losses attributable to prior years 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 higher catastrophe losses.

Revenues for the three months ended September 30, 2020 were \$3.484 billion, an increase of \$244 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 September 30, 2020 were \$3.400 billion, an increase of \$134 million over the same period in 2019. The increase reflects the impact of the factors described above as well as attritional losses due to growth. Additionally, expenses increased due to higher commissions from growth and product and channel mix.

Year-to-date Results:

Pre-tax operating income for the nine months ended September 30, 2020 was \$3 million, a decrease of \$218 million from the same period in 2019. Pre-tax operating income before catastrophes, COVID-19, and net incurred losses attributable to prior years for the nine months ended September 30, 2020 was \$1.021 billion, an increase of \$257 million over the same period in 2019. The increase reflects profit margin on higher earned premium primarily due to rate increases and higher investment income, partially offset by higher credit loss provisions on policyholder receivables. Including the impact of catastrophes, COVID-19, and net incurred losses attributable to prior years, the decrease in pre-tax operating income reflects COVID-19 related losses, of which approximately half was related to event cancellation coverage, a number of other impacted lines, an Incurred But Not Reported ("IBNR") provision and a reserve for future litigation costs as well as higher catastrophe losses, partially offset by lower incurred losses attributable to prior years.

Revenues for the nine months ended September 30, 2020 were \$10.198 billion, an increase of \$665 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 nine months ended September 30, 2020 were \$10.204 billion, an increase of \$869 million over the same period in 2019. The increase reflects the 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 acquisition mentioned previously, as well as higher commissions from business mix and growth.

	Three Months Ended September 30,			Nine Months Ended September 30,		
GLOBAL RISK SOLUTIONS	2020	2019	Change (Points)	2020	2019	Change (Points)
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	67.6%	68.1%	(0.5)	65.4%	67.9%	(2.5)
Underwriting expense ratio	29.4	30.8	(1.4)	30.4	30.7	(0.3)
Dividend ratio	0.1	0.1	-	0.1	0.1	-
Subtotal	97.1	99.0	(1.9)	95.9	98.7	(2.8)
Catastrophes ¹	5.8	3.8	2.0	3.9	1.9	2.0
COVID-19 ²	-	-	-	6.3	-	6.3
Net incurred losses attributable to prior						
years ³	1.9	4.5	(2.6)	1.0	4.6	(3.6)
Current accident year re-estimation ⁴	-	1.6	(1.6)	-	-	-
Total combined ratio	104.8%	108.9%	(4.1)	107.1%	105.2%	1.9

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 six months ended June 30, 2019.

Third 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 September 30, 2020 was 97.1%, a decrease of 1.9 points from the same period in 2019. The decrease in the claims and claim adjustment expense ratio was primarily driven by rate increases and the expense ratio was lower due to a combination of premium growth and expense management.

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 September 30, 2020 was 104.8%, a decrease of 4.1 points over the same period in 2019. The change was driven by the decreases to the combined ratio mentioned above, lower net incurred losses attributable to prior years, partially offset by higher current year catastrophe losses.

Year-to-date Results:

The Global Risk Solutions combined ratio before catastrophes, COVID-19 and net incurred losses attributable to prior years for the nine months ended September 30, 2020 was 95.9%, a decrease of 2.8 points from the same period in 2019. The decrease in the claims and claim adjustment expense ratio was primarily driven by rate increases and the expense ratio was lower due to a combination of premium growth and expense management.

Including the impact of catastrophes, COVID-19 and net incurred losses attributable to prior years, the total combined ratio for the nine months ended September 30, 2020 was 107.1%, an increase of 1.9 points over the prior year. The increase reflects the improvement noted above and lower prior year incurred losses, offset by higher catastrophe losses and the impact of COVID-19 losses described above.

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.
- 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:

	Three Months Ended September 30,			Nine Months Ended September 30,			
\$ in Millions	2020	2019	Change	2020	2019	Change	
Reinsurance, net	(\$110)	(\$109)	0.9%	(\$121)	(\$33)	NM	
Workers compensation ¹	17	20	(15.0)	10	41	(75.6%)	
Other	-	1	NM	(5)	(6)	(16.7)	
Total NWP	(\$93)	(\$88)	5.7%	(\$116)	\$2	NM	

Booked as billed adjustment. NM = Not Meaningful

Third Quarter Results:

NWP for the three months ended September 30, 2020 was (\$93) million, a decrease of \$5 million from the same period in 2019. The decrease primarily reflects a decrease in the booked as billed adjustment.

Year-to-date Results:

NWP for the nine months ended September 30, 2020 was (\$116) million versus \$2 million for the same period in 2019. The change reflects the reinsurance line of business primarily driven by additional ceded premium related to new property catastrophe placements and unfavorable pricing on the renewal of external catastrophe treaties, and a decrease in the booked as billed adjustment.

Results of Operations - Corporate and Other

	Three Months Ended September 30,			Nine Months Ended September 30,		
\$ in Millions	2020	2019 ⁵	Change	2020	20195	Change
Revenues	\$564	\$354	59.3%	\$710	\$1,285	(44.7%)
Pre-tax operating loss before						
catastrophes, net incurred losses						
attributable to prior years, and						
partnerships, LLC and other equity						
method income	(\$147)	(\$121)	21.5	(\$491)	(\$307)	59.9
Catastrophes ¹	-	-	-	-	-	-
Net incurred losses attributable to						
prior years:						
-Asbestos and environmental ²	2	-	NM	2	(3)	NM
-All other ^{2,3}	19	(39)	NM	(18)	(46)	(60.9)
Pre-tax operating loss before						
partnerships, LLC and other equity						
method income	(126)	(160)	(21.3)	(507)	(356)	42.4
Partnerships, LLC and other equity						
method income ⁴	467	162	188.3	217	556	(61.0)
Pre-tax operating income (loss)	\$341	\$2	NM	(\$290)	\$200	NM

- 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 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 nine months ended September 30, 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

Third Quarter Results:

Pre-tax operating income for the three months ended September 30, 2020 was \$341 million, an increase of \$339 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 \$147 million, an increase of \$26 million over the same period in 2019. The increase in loss reflects lower net investment income excluding partnerships, LLC and other equity method income, partially offset by decreased 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 income primarily reflects higher partnerships, LLC and other equity method income, lower net incurred losses attributable to prior years driven by strengthening in 2019 that did not recur,

Revenues for the three months ended September 30, 2020 were \$564 million, an increase of \$210 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 (losses), and fee and other revenues.

Net premium earned for the three months ended September 30, 2020 was (\$32) million, a decrease of \$20 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 three months ended September 30, 2020 was \$425 million, an increase of \$263 million over the same period in 2019. The increase reflects more favorable valuations across the LP, LLC, and other equity method investments, primarily driven by private capital and energy investments, partially offset by lower earned yield in 2020 as compared to the same period in 2019.

Net realized gains for the three months ended September 30, 2020 were \$192 million, an increase of \$120 million over the same period in 2019. The net realized gains in the current quarter were primarily driven by \$172 million net gains on sales of fixed maturities, \$61 million net change in equity unrealized gains, and \$26 million gain from a true-up on the Liberty Energy, LLC transaction, partially offset by a \$70 million loss on the sale of metals and mining investments. The prior period was impacted by \$170 million net gains on sales of fixed maturities, partially offset by \$40 million of derivative losses and \$23 million of impairment charges primarily related to natural resource investments.

Fee and other revenues for the three months ended September 30, 2020 were (\$21) million, versus \$132 million for 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 September 30, 2020 were \$31 million, a decrease of \$249 million from the same period in 2019. The decrease primarily reflects lower natural resource expenses due to the Liberty Energy, LLC transaction, lower net incurred losses attributable to prior years driven by strengthening in 2019 that did not recur and decreased employee-related costs.

Year-to-date Results:

Pre-tax operating (loss) income for the nine months ended September 30, 2020 was (\$290) million, versus \$200 million for 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 \$491 million, an increase of \$184 million over the same period in 2019. The increase in loss reflects lower net investment income excluding partnerships, LLC and other equity method income. Including the impact of catastrophes, net incurred losses attributable to prior years, and partnerships, LLC and other equity method income, the change in pre-tax operating (loss) income reflects lower partnerships, LLC and other equity method income.

Revenues for the nine months ended September 30, 2020 were \$710 million, a decrease of \$575 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 nine months ended September 30, 2020 was (\$65) million, a decrease of \$31 million from the same period in 2019. The decrease primarily reflects the reinsurance earnings impact of new property catastrophe placements and various pricing changes on external catastrophe treaties.

Net investment income for the nine months ended September 30, 2020 was \$173 million, a decrease of \$420 million from the same period in 2019. The decrease lower valuations across the LP, LLC, and other equity method investments, primarily driven by private capital and energy investments, as compared to the same period in 2019. Also driving the decrease is lower earned yield in 2020 as compared to the same period in 2019.

Net realized gains for the nine months ended September 30, 2020 were \$429 million, an increase of \$88 million over the same period in 2019. The net realized gains in the current period were primarily driven by \$870 million net gains on sales of fixed maturities, partially offset by \$205 million net loss on the Liberty Energy, LLC transaction, \$70 million loss on the sale of metals and mining investments, \$54 net change in equity unrealized losses, and \$47 million of derivatives losses. The prior period was impacted by \$336 million net gains on sales of fixed maturities and \$244 million net change in equity unrealized gains, partially offset by impairment charges, primarily related to corporate real estate and natural resources.

Fee and other revenues for the nine months ended September 30, 2020 were \$173 million, a decrease of \$212 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 nine months ended September 30, 2020 were \$571 million, a decrease of \$173 million from the same period in 2019. The decrease primarily reflects lower natural resource expenses due to the Liberty Energy, LLC transaction and lower net incurred losses attributable to prior years driven by strengthening in 2019 that did not recur.

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 September 30, 2020 and December 31, 2019:

Invested Assets by Type	As of Septen	As of September 30, 2020		As of December 31, 2019	
	Carrying	% of	Carrying	% of	
\$ in Millions	Value	Total	Value	Total	
Fixed maturities, available for sale, at fair value	\$70,016	77.7%	\$64,606	79.7%	
Equity securities, at fair value	1,755	1.9	2,140	2.6	
LP, LLC and other equity method investments	8,098	9.0	6,811	8.4	
Commercial mortgage loans	2,003	2.2	1,981	2.4	
Short-term investments	243	0.3	222	0.3	
Other investments	455	0.5	407	0.5	
Cash and cash equivalents	7,565	8.4	4,969	6.1	
Total invested assets	\$90,135	100.0%	\$81,136	100.0%	

Total invested assets as of September 30, 2020 were \$90.135 billion, an increase of \$8.999 billion or 11.1% over December 31, 2019. The increase was primarily related to an increase in fixed maturities and cash and cash equivalents partially offset by a decrease in equity securities.

Fixed maturities as of September 30, 2020 were \$70.016 billion, an increase of \$5.410 billion or 8.4% 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 partially offset by the unfavorable impact of widening credit spreads. As of September 30, 2020, included in fixed maturities are commitments to purchase various residential mortgage-backed securities at a cost and fair value of \$1.272 billion and \$1.270 billion, respectively.

Equity securities as of September 30, 2020 were \$1.755 billion (\$1.746 billion common stock and \$9 million preferred stock) versus \$2.140 billion as of December 31, 2019 (\$2.130 billion common stock and \$10 million preferred stock), a decrease of \$385 million or 18.0% from December 31, 2019. Of the \$1.746 billion of common stock at September 30, 2020, \$699 million relates to securities associated with non-guaranteed unit linked life insurance where the policyholder bears the investment risk. The decrease in total equity securities is primarily due to the sale of equity ETF's and the unfavorable impact of market movement.

The following table summarizes the Company's LP, LLC and other equity method investments as of September 30, 2020 and December 31, 2019:

LP, LLC and other equity method investments	As of September 30, 2020		As of December 31, 2019	
\$ in Millions	Carrying Value	% of Total	Carrying Value	% of Total
Traditional private equity	\$3,482	43.0%	\$3,154	46.3%
Natural resources – Energy ¹	1,207	14.9	399	5.9
Natural resources – Other ²	744	9.2	780	11.5
Real estate	1,317	16.2	1,134	16.6
Private credit	782	9.7	715	10.5
Other	566	7.0	629	9.2
Total LP, LLC and other equity method investments	\$8,098	100.0%	\$6,811	100.0%

Included in Natural resources – Energy is \$927 million of investments related to the Liberty Energy, LLC transaction as of September 30, 2020.

Mortgage loans as of September 30, 2020 were \$2.003 billion (net of \$4 million of loan loss reserves or 0.2% of the outstanding loan portfolio), an increase of \$22 million or 1.1% over December 31, 2019. The increase is primarily driven by \$527 million in funding, partially offset by \$503 million in principal reductions and a \$2 million increase to the loan loss reserve. The entire loan portfolio is U.S.-based. The number of loans in the portfolio decreased from 4,090 at December 31, 2019 to 3,808 at September 30, 2020.

Cash and cash equivalents as of September 30, 2020 were \$7.565 billion, an increase of \$2.596 billion or 52.2% over December 31, 2019. The increase primarily reflects an increase in cash from operating and financing activities.

² Included in Natural resources – Other is \$105 million and \$183 million of investments in metals & mining as of September 30, 2020 and December 31, 2019 respectively, \$132 million and \$125 million of investments in agriculture and timber as of September 30, 2020 and December 31, 2019 respectively, and \$507 million and \$472 million of investments in power and renewables as of September 30, 2020 and December 31, 2019 respectively.

The following tables summarize the Company's available for sale portfolio by security type as of September 30, 2020 and December 31, 2019:

		As of September 30, 2020			
\$ in Millions	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	
U.S. government and agency securities	\$5,796	\$186	(\$1)	\$5,981	
Residential MBS ¹	6,080	227	(4)	6,303	
Commercial MBS	4,418	342	(9)	4,751	
Other MBS and ABS ²	5,255	128	(53)	5,330	
U.S. state and municipal	8,784	672	(6)	9,450	
Corporate and other	32,061	1,664	(147)	33,578	
Foreign government securities	4,359	269	(5)	4,623	
Total securities available for sale	\$66,753	\$3,488	(\$225)	\$70,016	

Mortgage-backed securities ("MBS") Asset-backed securities ("ABS")

		As of December 31, 2019			
\$ in Millions	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 September 30, 2020:

Mortgage & Asset-Backed Fixed Maturities by Credit Quality ¹			A	s of Septem	ber 30, 202	20		
\$ in Millions	AAA	AA	A	BBB	BB	B or Lower	Total	% of Total
Residential MBS	\$6,300	\$ -	\$ -	\$ -	\$ -	\$3	\$6,303	38.5%
Commercial MBS	4,422	179	98	38	14	-	4,751	29.0%
Other MBS and ABS	2,982	672	658	765	172	81	5,330	32.5%
Total	\$13,704	\$851	\$756	\$803	\$186	\$84	\$16,384	100%
% of Total	83.7%	5.2%	4.6%	4.9%	1.1%	0.5%	100%	

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

Approximately 63% 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 84% of the holdings are rated AAA. Included in the commercial mortgage-backed securities at September 30, 2020, were \$3.417 billion in Agency CMBS and \$1.334 billion Non-agency CMBS. Included in the Other MBS and ABS at September 30, 2020 were \$751 million AAA rated SBA Loans. The commercial mortgage-backed securities portfolio is well diversified and of high quality with approximately 93% 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 September 30, 2020 and December 31, 2019:

U.S. State and Municipal by Credit Quality ¹	As of	As of September 30, 2020			As of December 31, 2019		
\$ in Millions	Fair Value	% of Total	Average Credit Rating	Fair Value	% of Total	Average Credit Rating	
State general obligation	\$2,364	25.0%	AA	\$1,539	17.2%	AA	
Local general obligation	1,735	18.4	AA	1,365	15.3	AA	
Revenue	5,266	55.7	AA	5,929	66.5	AA	
Pre-refunded	85	0.9	AAA	86	1.0	AAA	
Total U.S. state and municipal	\$ 9,450	100%	AA	\$8,919	100.0%	AA	

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 September 30, 2020 and December 31, 2019 were \$85 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 September 30, 2020 and December 31, 2019:

Fixed Maturities by Credit Quality ¹	As of Septen	nber 30, 2020	As of Decem	ber 31, 2019
\$ in Millions	Fair Value	% of Total	Fair Value	% of Total
AAA	\$22,296	31.8%	\$25,592	39.6%
AA+, AA, AA-	10,202	14.6	9,419	14.6
A+, A, A-	16,362	23.4	12,163	18.8
BBB+, BBB, BBB-	16,338	23.3	13,696	21.2
Total investment grade	65,198	93.1	60,870	94.2
BB+, BB, BB-	2,552	3.6	2,030	3.2
B+, B, B-	1,929	2.8	1,449	2.2
CCC or lower	289	0.4	192	0.3
Unrated ²	48	0.1	65	0.1
Total below-investment grade	4,818	6.9	3,736	5.8
Total fixed maturities	\$70,016	100.0%	\$64,606	100.0%

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

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 September 30, 2020.

The following table summarizes available for sale fixed maturity securities by contractual maturity at September 30, 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 Septen	nber 30, 2020	As of December 31, 2019		
O ' A M'II'	Fair	% of	Fair	% of	
\$ in Millions	Value	Total	Value	Total	
One year or less	\$2,417	3.5%	\$3,462	5.4%	
Over one year through five years	24,720	35.3	21,930	33.9	
Over five years through ten years	17,469	25.0	15,309	23.7	
Over ten years	9,026	12.9	7,953	12.3	
MBS and ABS	16,384	23.3	15,952	24.7	
Total fixed maturities	\$70,016	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 September 30, 2020 was 4.3 years.

² Bank loans acquired as part of Ironshore acquisition.

The following tables summarize the Company's gross unrealized losses and fair value of fixed income and equity securities by the length of time that individual securities have been in a continuous unrealized loss position as of September 30, 2020 and December 31, 2019 that are not deemed to be other-than-temporarily impaired:

	As of September 30, 2020						
\$ in Millions	Less Tha	n 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	(\$1)	\$592	\$ -	\$ -			
Residential MBS	(4)	1,152	-	8			
Commercial MBS	(7)	355	(2)	17			
Other MBS and ABS	(34)	1,165	(19)	275			
U.S. state and municipal	(6)	473	-	-			
Corporate and other	(111)	3,813	(36)	317			
Foreign government securities	(5)	387	-	-			
Total securities available for sale	(\$168)	\$7,937	(\$57)	\$617			

	As of December 31, 2019						
\$ in Millions	Less Tha	n 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 increased from \$114 million as of December 31, 2019 to \$225 million as of September 30, 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 September 30, 2020 are temporary.

The following tables summarize the Company's issuer and sector exposure¹ as of September 30, 2020:

Top 10 Issuers		As of September 30, 2020						
\$ in Millions	Fixed Maturity	Equity	Short- Term	Total Exposure	% of Invested Assets			
Bank of America Corp	\$679	\$-	\$-	\$679	0.75%			
JP Morgan Chase & Co	639	-	-	639	0.71			
Citigroup Inc	558	-	-	558	0.62			
Morgan Stanley	502	-	-	502	0.56			
Banco Santander	491	-	-	491	0.54			
Government of Brazil	483	-	-	483	0.54			
Wells Fargo & Co	463	-	-	463	0.51			
New York State Dormitory Authority	436	-	20	456	0.51			
Goldman Sachs Group Inc	399	-	-	399	0.43			
Government of Spain	361	-	-	361	0.39			
Total	\$5,011	\$-	\$20	\$5,031	5.56%			

Top 10 Sectors		As of September 30, 2020						
\$ in Millions	Fixed Maturity	Equity	Short- Term	Total Exposure	% of Invested Assets			
Banking	\$8,106	\$2	\$174	\$8,282	9.19%			
Foreign Government	3,367	-	2	3,369	3.74			
US Municipal - State & US Territory	2,513	-	20	2,533	2.81			
Technology	2,291	220	-	2,511	2.79			
REITS	862	1,316	1	2,179	2.42			
Electric Utility	1,817	330	1	2,148	2.38			
US Municipal - Local Govt	1,732	-	-	1,732	1.91			
Insurance	1,619	60	4	1,683	1.87			
Independent Energy	372	1,211	-	1,583	1.76			
Pharmaceuticals	1,274	-	1	1,275	1.41			
Total	\$23,953	\$3,139	\$203	\$27,295	30.28%			

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 September 30, 2020, investments in the energy sector accounted for \$3.684 billion or 4.1% 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 \$2.065 billion, bonds that were rated below investment grade of \$408 million, publicly traded equity securities of \$2 million, and natural resources partnerships and other equity method investments of \$1.209 billion. Included in other equity method investments is \$927 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 \$132 million. In addition, the Company has direct investment in agriculture and timber of \$311 million which are included in other assets on the Consolidated Balance Sheets.

The following table summarizes the Company's unfunded commitments as of September 30, 2020 and December 31, 2019:

Unfunded Commitments	As of September 30, 2020		As of Decem	ber 31, 2019
0. 2500	% of			% of
\$ in Millions	Total	Total	Total	Total
Traditional private equity	\$1,363	35.4%	\$1,160	32.4%
Natural resources – Energy	73	1.9	119	3.3
Natural resources – Other ¹	200	5.2	223	6.2
Real estate	1,083	28.2	796	22.2
Private credit	1,044	27.2	1,168	32.6
Other	82	2.1	116	3.3
Total unfunded commitments	\$3,845	100.0%	\$3,582	100.0%

Includes power and renewables, and agriculture and timber commitments.

Unfunded commitments as of September 30, 2020 were \$3.845 billion, an increase of \$263 million over December 31, 2019. The increase is primarily driven by new commitments offset by contributions to exiting investments to traditional private equity partnerships, real estate investments, and private credit. The \$73 million unfunded energy investment commitments as of September 30, 2020 included \$73 million relate 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:

- A \$250 million repurchase agreement for a three-year period, which terminates December 1, 2020. At September 30, 2020, no funds were borrowed under the facility.
- A \$250 million repurchase agreement with an expiration date of November 24, 2020. At September 30, 2020, no funds were borrowed under the facility.
- 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 September 30, 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 September 30, 2020 (including cash and cash equivalents) totaled \$90.135 billion.

Debt outstanding as of September 30, 2020 and December 31, 2019 was as follows:

Short-term debt:

\$ in Millions	As of September 30, 2020	As of December 31, 2019
Short-term debt ¹	\$ 330	\$ -

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

Long-term debt:

	As of	As of
\$ in Millions	September 30, 2020	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	586	561
3.625% €500 Million Junior Subordinated notes, due 2059 ²	586	561
8.50% Surplus notes, due 2025	140	140
2.75% €750 Million Notes, due 2026	880	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	8,928	8,671
Unamortized discount	(477)	(431)
Long-term debt excluding unamortized debt issuance costs	8,451	8,240
Unamortized debt issuance costs	(48)	(40)
Total long-term debt	\$8,403	\$8,200

- 1 Short-term debt is the current maturity of the 5.00% Notes, due June 1, 2021.
- 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 nine months ended September 30, 2020 was \$112 million and \$328 million respectively, an increase of \$2 million and a decrease of \$3 million from 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 September 30, 2020, the Company, through its downstream subsidiaries LMGI and LMFE, had \$7.4 billion and \$586 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, 2019) and 2020 available dividend capacity prior to needing regulatory approval for LMIC, LMFIC and EICOW were as follows:

\$ in Millions	RBC	Ratio ¹	Dividend Capacity ²	Dividends Paid ³
RBC Ratios and Dividend Capacity	2019	2018	2020	2020
LMIC	388%	399%	\$1,641	\$49
LMFIC	502%	494%	\$183	\$11
EICOW	468%	454%	\$181	\$-

- 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.
- Dividends paid represent amounts paid during the nine months ended September 30, 2020. Available dividend capacity as of September 30, 2020 is calculated as 2020 dividend capacity less dividends paid for the preceding 12 months. Dividends paid October 1, 2019 through September 30, 2020 for LMIC, LMFIC and EICOW were \$65 million, \$15 million and zero, respectively.

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 nine months ended September 30, 2020, LCS recorded \$73 million and \$239 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 September 30, 2020	As of December 31, 2019
Total debt	\$8,733	\$8,200
Unamortized discount and debt issuance costs	(525)	(471)
Total debt excluding unamortized discount and debt issuance costs	\$9,258	\$8,671
Total equity excluding accumulated other comprehensive loss	\$25,576	\$24,978
Total capital excluding accumulated other comprehensive loss ¹	\$34,834	\$33,649
Debt-to-capital capitalization excluding accumulated other comprehensive loss ¹	26.6%	25.8%
Statutory surplus	\$20,992	\$20,538

¹ Excludes unamortized discount and debt issuance costs

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 26.6% at September 30, 2020 was within the Company's target range.

REINSURANCE

Reinsurance Recoverables

The Company reported reinsurance recoverables of \$15.933 billion and \$15.928 billion at September 30, 2020 and December 31, 2019, respectively, net of allowance for doubtful accounts of \$100 million and \$126 million, respectively. Included in these balances are \$1.184 billion and \$1.063 billion of paid recoverables and \$14.849 billion and \$14.991 billion of unpaid recoverables (including retroactive reinsurance), respectively.

S&P Rating ¹	As of December 31, 2019			
\$ in Millions	Gross Recoverables ²	Collateral Held ³	Net Recoverables ⁴	% of Total Net Recoverables
Rated Entities				
AAA	\$ -	\$ -	\$ -	-
AA+, AA, AA-	6,462	5,970	2,156	22%
A+, A, A-	4,385	267	4,130	42%
BBB+, BBB, BBB-	(1)	-	(1)	-
BB+ or below	1	-	1	-
Subtotal	10,847	6,237	6,286	64%
Pools & Associations				
State mandated involuntary pools and				
associations	2,832	-	2,832	28%
Voluntary	187	119	182	2%
Subtotal	3,019	119	3,014	30%
Non-Rated Entities ⁵				
Captives & fronting companies	1,381	1,499	247	2%
Other	807	1,310	390	4%
Subtotal	2,188	2,809	637	6%
Grand Total	\$16,054	\$9,165	\$9,937	100%

¹ Standard & Poor's ratings are as of December 31, 2019.

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 o	As of December 31, 2019		
\$ in Millions	Gross Recoverables ²	Collateral Held ³	Net Recoverables ⁴	
1. Berkshire Hathaway Insurance Group	\$4,047	\$5,150	\$176	
2. Nationwide Group	1,322	-	1,321	
3. Swiss Re Group	1,220	666	929	
4. Everest Re Group	595	110	485	
5. Munich Re Group	425	10	419	
6. Alleghany Corp	397	-	397	
7. Lloyd's of London	329	-	329	
8. UPINSCO	317	386	-	
9. CUMIS Insurance Society Group	276	-	276	
10. Builders Reinsurance S.A.	269	344	-	
11. Partner Re Group	249	30	219	
12. Exchange Indemnity Company	244	116	130	
13. Horseshoe Re Ltd.	242	521	3	
14. Markel Corp	217	2	216	
15. Hannover Re Group	170	23	148	
State Mandated Involuntary pools and associations	2,832	-	2,832	
Voluntary pools and associations	187	119	182	
All Other	2,716	1,688	1,875	
Total Reinsurance Recoverables	\$16,054	\$9,165	\$9,937	

- 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% 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, 2019. Collateral held against outstanding gross reinsurance recoverable balances was \$9.165 billion at December 31, 2019.

The remaining 6% of the Company's net reinsurance recoverable balance is well diversified. No single reinsurer rated B++ or below by A.M. Best or below A- by 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, 2019.

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 \$3 million and zero at September 30, 2020 and December 31, 2019, respectively. As of September 30, 2020 and December 31, 2019, deferred gains were \$22 million and zero. Limits remaining on the contract as of September 30, 2020 were \$797 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 \$3.0055 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 September 30, 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 \$9 million and \$13 million as of September 30, 2020 and December 31, 2019, respectively. Limits remaining on the contracts in total, and for asbestos and environmental liabilities, respectively, were \$3.160 billion and \$814 million as of September 30, 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, 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, 2019 Audited Consolidated Financial Statements and footnote 1 in the Company's September 30, 2020 Unaudited 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, 2019 Audited Consolidated Financial Statements and footnote 6 in the Company's September 30, 2020 Unaudited 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, 2019 Audited Consolidated Financial Statements and footnote 6 in the Company's September 30, 2020 Unaudited 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, 2019 Audited Consolidated Financial Statements and footnote 4 in the Company's September 30, 2020 Unaudited 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 September 30, 2020, excluding other assets, the Company reflected \$7.516 billion (10.4%) 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 September 30, 2020, the Company reported \$63.782 billion (88.0%) as level 2, consisting primarily of fixed maturity securities. Finally, the Company reported \$1.169 billion (1.6%) 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, 2019 Audited Consolidated Financial Statements and footnote 9 in the Company's September 30, 2020 Unaudited 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. As at September 30, 2020, 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. As a result, the Company prepared multiple undiscounted cash flow scenarios for their oil and gas properties based on the most recent property and market information. These undiscounted cash flow scenarios were then compared to the carrying amounts of these assets. Based on this analysis and the lack of credibility on any one point in the range of potential outcomes compared to another, the Company did not book any impairments for the three months ended September 30, 2020. The Company will continue to monitor changes in the energy market and refine its estimate in future reporting periods.

For additional discussion, please refer to footnote 1 in the Company's December 31, 2019 Audited Consolidated Financial Statements and footnote 3 in the Company's September 30, 2020 Unaudited 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 September 30, 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, 2019 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.

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

For additional discussion, please refer to footnote 8 in the Company's December 31, 2019 Audited Consolidated Financial Statements and footnote 7 in the Company's September 30, 2020 Unaudited 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 \$6 million on net income for the nine months ended September 30, 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, 2019 Audited Consolidated Financial Statements and footnote 8 in the Company's September 30, 2020 Unaudited 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, 2019, LMHC had \$133.635 billion in consolidated assets, \$110.016 billion in consolidated liabilities, and \$43.228 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.