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

Quarter Ended March 31, 2018

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 months ended March 31, 2018 and 2017. 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, 2017 Audited Consolidated Financial Statements and March 31, 2018 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	4
Consolidated Results of Operations	6
Review of Financial Results by Business	
Global Retail Markets	15
Global Risk Solutions	18
Corporate and Other	21
Investments	24
Liquidity and Capital Resources	32
Reinsurance	36
Critical Accounting Estimates	39
About the Company	43

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, 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; 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 natural resource working interests; 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; 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.

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 2018 Unaudited Consolidated Financial Statements.

Consolidated Results of Operations

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Net written premium ("NWP")	$9,434	$8,688	8.6%
Pre-tax operating income ("PTOI") before partnerships, LLC and other equity method income	393	101	NM
Net operating income before partnerships, LLC and other equity method income	312	101	NM
Partnerships, LLC and other equity method income, net of tax	170	104	63.5
Net realized gains, net of tax	121	98	23.5
Ironshore Inc. ("Ironshore") acquisition & integration costs, net of tax	(11)	(8)	37.5
Restructuring costs, net of tax	(2)	-	NM
Loss on extinguishment of debt, net of tax	-	(1)	(100.0)
Discontinued operations, net of tax	59	57	3.5
Consolidated net income	649	351	84.9
Less: Net income attributable to non-controlling interest	1	-	NM
Net income attributable to LMHC	648	351	84.6
Cash flow provided by (used in) continuing operations	$36	($253)	NM

NM = Not Meaningful

	Three Months Ended March 31,		
	2018	**2017**	**Change (Points)**
Combined ratio before catastrophes[1] and net incurred losses attributable to prior years[2]	95.2%	94.2%	1.0
Combined ratio[3]	99.0%	101.8%	(2.8)

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

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

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

$ in Millions	As of March 31, 2018	As of December 31, 2017	Change
Short-term debt	$8	$11	(27.3%)
Long-term debt	8,352	8,314	0.5
Total debt	$8,360	$8,325	0.4%
Unassigned equity	$22,476	$21,687	3.6%
Accumulated other comprehensive loss	(2,016)	(1,026)	96.5
Non-controlling interest	29	27	7.4
Total equity	$20,489	$20,688	(1.0%)

Subsequent Events

On May 3, 2018, the Company's Spanish subsidiary, Liberty Seguros Compania de Seguros y Reaseguros S.A., completed the sale of its entire 99.44% interest in its Turkish insurance affiliate, Liberty Sigorta A.S., to Talanx International.

On May 1, 2018, the Company completed the sale of the Liberty Life Assurance Company ("LLAC") to Lincoln Financial Group.

Management has assessed material subsequent events through May 3, 2018, the date the financial statements were available to be issued.

CONSOLIDATED RESULTS OF OPERATIONS

The Company has identified consolidated PTOI, PTOI before partnerships, LLC and other equity method income, and net operating income 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, loss on extinguishment of debt, extraordinary items, 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 the production and sale of oil and gas. Net operating income is defined as net income excluding the after-tax impact of net realized gains, Ironshore acquisition and integration costs, restructuring costs and loss on extinguishment of debt. PTOI before partnerships, LLC and other equity method income, PTOI, and net operating income before partnerships, LLC and other equity method income 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 significantly impacted by permanent differences. References to 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.

Property and casualty operations' investment income is allocated to the businesses based on planned ordinary investment income returns by investment category. Effective in 2017, the amount allocated to the businesses was updated to better reflect the current yield environment. The difference between allocated net investment income and actual net investment income is included in Corporate and Other.

On January 22, 2018, the Company's Spanish subsidiary, Liberty Seguros Compania de Seguros y Reaseguros S.A., entered into an agreement to sell its entire 99.44% interest in its Turkish insurance affiliate, Liberty Sigorta A.S., to Talanx International. Completion of the transaction is expected to occur during the second quarter.

On January 19, 2018, the Company announced the realignment of its businesses to enhance its ability to meet the changing needs of consumer and business customers. The Company's realignment featured the following changes:

- Global Risk Solutions which brings together Liberty's Global Specialty, Ironshore (formerly in Global Specialty), National Insurance (formerly in Commercial Insurance) and the Global Reinsurance Strategy Group (formerly in Corporate and Other) into a single business. Dennis J. Langwell, formerly the Company's Chief Financial Officer, has been appointed to lead Global Risk Solutions.
- Global Retail Markets combines Global Consumer Markets with Business Insurance and Accident and Health organizations (both formerly in Commercial Insurance). Timothy Sweeney, formerly the President of Global Consumer Markets, has been appointed to lead Global Retail Markets.
- Christopher L. Peirce, formerly the President of Global Specialty, has been appointed Liberty's Chief Financial Officer.

On January 19, 2018, the Company announced the sale of LLAC, which provides group disability, group life, individual life and annuity products, to Lincoln Financial Group. The companies expect to complete the transaction in the second quarter of 2018, pending regulatory approvals and other customary closing conditions. The results of LLAC are presented as discontinued operations in the accompanying Consolidated Statements of Income and are no longer included within Liberty Mutual Benefits (formerly in Commercial Insurance) or within Corporate and Other. The prior periods have been restated to reflect this change.

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act of 2017 (the "Act"). The Act reduces the U.S. Federal corporate tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and creates new taxes on certain foreign-sourced earnings. More details can be found in "Critical Accounting Estimates" under "Deferred Income Taxes".

On May 1, 2017, the Company acquired Ironshore for approximately $2.9 billion. Transaction related costs primarily consist of non-recurring banking, legal, tax, and accounting expenses. These expenses and integration related costs are reflected on the Consolidated Statements of Income separately. Concurrent with the acquisition, the Company combined its existing Liberty International Underwriters' U.S. business and Ironshore's U.S. specialty lines business under the Ironshore brand. Effective May 1, 2017, the Company also entered into a reinsurance transaction with National Indemnity Company ("NICO"), a subsidiary of Berkshire Hathaway Inc., on a combined aggregate excess of loss agreement providing coverage for substantially all of Ironshore's reserves ("Ironshore Reinsurance"). On May 2, 2017, Ironshore exercised its option to redeem in full its outstanding $250 million Ironshore Holdings (US) Inc. 8.5% Senior Notes maturing in 2020 in accordance with the contractual make whole provisions.

On April 17, 2017, the Company completed the acquisition of TRU Services, LLC, specializing in providing medical stop loss products to mid and large-size medical plan sponsors. The transaction is not material to the Company.

On March 27, 2017, Liberty Mutual Finance Europe DAC ("LMFE") issued €500 million par value of Senior Notes due 2024 (the "2024 Notes"). Interest is payable annually at a fixed rate of 1.75%. The 2024 Notes mature on March 27, 2024.

On February 27, 2017, the United Kingdom's Ministry of Justice announced a reduction in the discount rate utilized for certain lump sum personal injury compensation claims from 2.5% to (.75%) effective March 20, 2017. The Company's reserve estimation process provided for the impact of a range of events such as this.

On January 5, 2017, the Company completed the sale of its 10 St. James and 75 Arlington properties. The Company has entered into a sale lease back agreement for such properties with a term of 15 years and resulting in a net lease obligation of $258 million. The sale resulted in a gain of $297 million, of which $188 million was deferred over the terms of the lease and $109 million was recognized in the Consolidated Statements of Income.

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 three market segments: U.S. Consumer Markets, Business Insurance, and Global Retail Markets East | West.

- Global Risk Solutions offers a wide array of property, casualty, specialty and reinsurance coverages through brokers, independent agents and captive agents globally. Global Risk Solutions is organized into the following four market segments: Liberty Specialty Markets, National Insurance, North America Specialty, and Global Surety.

Overview – Consolidated

Consolidated NWP by significant line of business was as follows:

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Private passenger automobile	$3,491	$3,316	5.3%
Homeowners	1,372	1,373	(0.1)
Global Risk Solutions specialty insurance[1]	981	535	83.4
Global Risk Solutions reinsurance	824	726	13.5
Workers compensation	577	523	10.3
Commercial multiple-peril	544	537	1.3
Commercial automobile	504	481	4.8
General liability	395	388	1.8
Surety	218	203	7.4
Global Risk Solutions inland marine	142	131	8.4
Commercial property	138	146	(5.5)
Corporate reinsurance[2]	(136)	(23)	NM
Other[3]	384	352	9.1
Total NWP	$9,434	$8,688	8.6%

1 Specialty insurance is reported within Global Risk Solutions and includes marine, energy, construction, aviation, property, casualty, warranty and indemnity, excess casualty, directors and officers, errors and omissions, environmental impairment liability, railroad, trade credit, excess and surplus property, crisis management, contingent lines and other.

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

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

NM = Not Meaningful

NWP for the three months ended March 31, 2018 was $9.434 billion, an increase of $746 million over the same period in 2017.

Significant changes by major line of business for the three months ended March 31, 2018 include:

- Private passenger automobile NWP increased $175 million. The increase reflects rate in U.S. Consumer Markets and organic growth in Global Retail Markets East | West. The year was further impacted by favorable foreign exchange due to the U.S. dollar weakening against the euro.
- Global Risk Solutions specialty insurance increased $446 million. The increase reflects the Ironshore acquisition and growth, partially offset by a new reinsurance program. The year was further impacted by favorable foreign exchange due to the U.S. dollar weakening against the euro and British pound.
- Global Risk Solutions reinsurance NWP increased $98 million. The increase reflects new business growth.
- Workers compensation NWP increased $54 million. The increase reflects a change in booking methodology in Global Retail Markets and the booked as billed adjustment within Corporate.
- Corporate reinsurance NWP decreased $113 million. The decrease reflects the net impact of increased property catastrophe reinsurance costs and an accounting change to book ceded written premium for excess of loss contracts at inception of the contract.

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:

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Global Retail Markets	$6,622	$6,299	5.1%
Global Risk Solutions	2,955	2,444	20.9
Corporate and Other	(143)	(55)	160.0
Total NWP	$9,434	$8,688	8.6%
Foreign exchange effect on growth			1.4
NWP growth excluding foreign exchange[1]			7.2%

1 Determined by assuming constant foreign exchange rates between periods.

Major drivers of NWP growth were as follows:

	Three Months Ended March 31,			
$ in Millions	**2018**	**2017**	**$ Change**	**Points Attribution**
Components of growth:				
Domestic personal automobile	$2,880	$2,782	$98	1.1
Domestic homeowners	1,317	1,330	(13)	(0.1)
Global Retail Markets East | West (ex foreign exchange)[1]	975	870	105	1.2
Global Risk Solutions specialty insurance (ex foreign exchange)[1]	951	535	416	4.8
Global Risk Solutions reinsurance (ex foreign exchange)[1]	799	726	73	0.8
Domestic workers compensation	527	495	32	0.4
Surety	214	197	17	0.2
Global Risk Solutions inland marine (ex foreign exchange)[1]	138	131	7	0.1
Corporate reinsurance (ex foreign exchange)[1,2]	(136)	(23)	(113)	(1.3)
Other lines	1,649	1,645	4	-
Foreign exchange[1]	120	-	120	1.4
Total NWP	$9,434	$8,688	$746	8.6

1 Determined by assuming constant foreign exchange rates between periods.
2 NWP associated with internal reinsurance assumed into Corporate, net of corporate external placements.

Consolidated NWP by geographic distribution channels was as follows:

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
U.S.	$7,507	$7,092	5.9%
International	1,927	1,596	20.7
Total NWP	$9,434	$8,688	8.6%

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

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Revenues	$10,290	$9,261	11.1%
PTOI before catastrophes, net incurred losses attributable to prior years, and partnerships, LLC and other equity method income	$733	$734	(0.1%)
Catastrophes[1]	(352)	(639)	(44.9)
Net incurred losses attributable to prior years:			
- Asbestos and environmental[2]	(10)	(4)	150.0
- All other[2,3]	22	10	120.0
PTOI before partnerships, LLC and other equity method income	393	101	NM
Partnerships, LLC and other equity method income[4]	216	160	35.0
PTOI	609	261	133.3
Net realized gains	155	151	2.6
Ironshore acquisition & integration costs	(14)	(10)	40.0
Restructuring costs	(3)	-	NM
Loss on extinguishment of debt	-	(1)	(100.0)
Pre-tax income	747	401	86.3
Income tax expense	157	107	46.7
Consolidated net income from continuing operations	590	294	100.7
Discontinued operations, net of tax	59	57	3.5
Consolidated net income	649	351	84.9
Less: Net income attributable to non-controlling interest	1	-	NM
Net income attributable to LMHC	$648	$351	84.6%
Cash flow provided by continuing operations before pension contributions	$36	$148	(75.7%)
Pension contributions	-	(401)	(100.0)
Cash flow provided by (used in) continuing operations	$36	($253)	NM

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

2 Asbestos and environmental is gross of the related adverse development reinsurance (the "NICO Reinsurance Transaction"), and All other includes all cessions related to the NICO Reinsurance Transaction, which is described further in "Reinsurance".

3 Net of earned premium and reinstatement premium attributable to prior years of $2 million and $3 million for the three months ended March 31, 2018 and 2017, respectively.

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.

NM = Not Meaningful

Partnerships, LLC and Other Equity Method Income	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
LP, LLC and other equity method income[1]	$203	$167	21.6%
Direct investment in natural resources revenues[2]	96	49	95.9
Direct investment in natural resources expenses[3]	(83)	(56)	48.2
Partnerships, LLC and other equity method income	$216	$160	35.0%

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.

Net Investment Income	Three Months Ended March 31,	
$ in Millions	**2018**	**2017**
Taxable interest income	$399	$359
Tax-exempt interest income	49	67
Dividends	7	13
LP, LLC and other equity method income	203	167
Commercial mortgage loans	18	19
Other investment income	1	1
Gross investment income	677	626
Investment expenses[1]	(58)	(50)
Net investment income	$619	$576

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

Net Realized Gains (Losses) $ in Millions	Sales & Dispositions	Impairments	Change in Derivatives Value	Total
Three Months Ended March 31, 2018:				
Fixed maturities	($13)	($5)	$-	($18)
Equities	3	-	-	3
Other	191	(4)	(17)	170
Total	$181	($9)	($17)	$155
Three Months Ended March 31, 2017:				
Fixed maturities	$27	($12)	$-	$15
Equities	56	(1)	-	55
Other	112	(31)	-	81
Total	$195	($44)	$-	$151

PTOI before partnerships, LLC, and other equity method income for the three months ended March 31, 2018 was $393 million, an increase of $292 million over the same period in 2017. The increase reflects lower catastrophe losses across Global Retail Markets and Global Risk Solutions, the profit margin on growth in earned premium in Global Retail Markets and Global Risk Solutions, and the Ironshore acquisition in Global Risk Solutions. These increases were partially offset by the impact of increased property catastrophe reinsurance costs and higher employee benefits expenses in Corporate, and the impact of higher current accident year commercial lines liability loss trends in Global Retail Markets and Global Risk Solutions.

Partnerships, LLC, and other equity method income, including operating income from direct working interests, for the three months ended March 31, 2018 was $216 million, an increase of $56 million over the same period in 2017. The increase reflects more favorable net operating income from direct investments in oil and gas and new investments in agriculture and timber in 2018 as compared to the same period in 2017. The increase also reflects more favorable valuations and distributions in LP, LLC and other equity method investments, including real estate and metals and mining investments, partially offset by less favorable valuations in traditional private equity investments as compared to the same period in 2017.

Revenues for the three months ended March 31, 2018 were $10.290 billion, an increase of $1.029 billion over the same period in 2017. 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 March 31, 2018 was $9.250 billion, an increase of $903 million over the same period in 2017. The increase primarily reflects the premium earned associated with the changes in NWP previously discussed and growth during the last nine months of 2017.

Net investment income for the three months ended March 31, 2018 was $619 million, an increase of $43 million over the same period in 2017. The increase reflects new investments in agriculture and timber in 2018 as compared to the same period in 2017. The increase also reflects more favorable valuations and distributions in LP, LLC and other equity method investments, including real estate and metals and mining investments, partially offset by less favorable valuations in traditional private equity investments as compared to the same period in 2017. The increase also reflects a higher invested asset base primarily driven by the Ironshore acquisition.

Net realized gains for the three months ended March 31, 2018 were $155 million, an increase of $4 million over the same period in 2017. The net realized gains in the current quarter were primarily driven by a $162 million gain as a result of the acquisition of a previously held equity method investment in 2018, compared to a $109 million gain on the sale of company-owned real estate in 2017. In addition, in 2017 there were equity gains realized from sales due to portfolio repositioning that did not recur in 2018.

Fee and other revenues for the three months ended March 31, 2018 were $266 million, an increase of $79 million over the same period in 2017. The increase reflects higher oil and gas revenues as a result of increased prices and production, higher non-traditional revenues and bill fees in Global Retail Markets, and the Ironshore acquisition.

Claims, benefits and expenses for the three months ended March 31, 2018 were $9.526 billion, an increase of $677 million over the same period in 2017. The increase reflects the Ironshore acquisition, the impact of higher current accident year commercial lines liability loss trends in Global Retail Markets and Global Risk Solutions, higher employee benefits expenses in Corporate, and business growth. These increases were partially offset by lower catastrophe losses across Global Retail Markets and Global Risk Solutions.

Income tax expense on continuing operations for the three months ended March 31, 2018 was $157 million, an increase of $50 million over the same period in 2017. The Company’s effective tax rate on continuing operations for the three months ended March 31, 2018 was 21%, compared to 27% for the same period in 2017. The decrease in the effective tax rate on continuing operations from 2017 to 2018 was primarily driven by the reduction of the U.S. Federal corporate tax rate. The Company’s effective tax rate on continuing operations differs from the U.S. Federal statutory rate of 21% principally due to tax-exempt investment income offset by non-U.S. operations.

Discontinued operations, net of tax, for the three months ended March 31, 2018 were $59 million, an increase of $2 million over the same period in 2017.

Net income attributable to LMHC for the three months ended March 31, 2018 was $648 million, an increase of $297 million over the same period in 2017.

Cash flow provided by (used in) continuing operations for the three months ended March 31, 2018 was $36 million versus ($253) million for the same period in 2017. The change reflects higher premium collections in Global Retail Markets driven by business growth and pension funding in 2017 that did not recur, partially offset by loss payments related to the Ironshore acquisition.

CONSOLIDATED	Three Months Ended March 31, 2018	2017	Change (Points)
Combined ratio before catastrophes and net incurred losses attributable to prior years			
Claims and claim adjustment expense ratio	65.0%	64.1%	0.9
Underwriting expense ratio	30.2	30.1	0.1
Subtotal	95.2	94.2	1.0
Catastrophes[1]	3.8	7.7	(3.9)
Net incurred losses attributable to prior years:			
- Asbestos and environmental	0.1	-	0.1
- All other[2]	(0.1)	(0.1)	-
Total combined ratio[3]	99.0%	101.8%	(2.8)

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

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

3 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.

The consolidated combined ratio before catastrophes and net incurred losses attributable to prior years for the three months ended March 31, 2018 was 95.2%, an increase of 1.0 point over the same period in 2017. The increase in the claims and claim adjustment expense ratio reflects the impact of higher current accident year commercial lines liability loss trends in Global Retail Markets and Global Risk Solutions, partially offset by the impact of the Ironshore business, which operates at a lower claims and claim adjustment expense ratio relative to total Global Risk Solutions. The increase in the underwriting expense ratio reflects the Ironshore acquisition, which operates at a higher underwriting expense ratio relative to total Global Risk Solutions, and higher employee benefits expenses in Corporate, partially offset by a lower underwriting expense ratio associated with the growth in earned premium in Global Retail Markets and Global Risk Solutions.

Including the impact of catastrophes and net incurred losses attributable to prior years, the total combined ratio for the three months ended March 31, 2018 was 99.0%, a decrease of 2.8 points from the same period in 2017. The decrease reflects lower catastrophe losses partially offset by the increases in the combined ratio previously discussed.

GLOBAL RETAIL MARKETS

Overview – Global Retail Markets

During the quarter ended March 31, 2018, Global Consumer Markets, comprised of U.S. Consumer Markets and East | West Consumer Markets, combined with the Business Insurance segment (formerly in Commercial Insurance) to form 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 in order to take advantage of opportunities to grow its business globally.

U.S. Consumer Markets sells automobile, homeowners and other types of property and casualty insurance coverage to individuals in the United States. U.S. Consumer Markets' products are distributed through approximately 2,000 licensed employee sales representatives, approximately 800 licensed telesales counselors, independent agents, third-party producers, the Internet, and sponsored affinity groups, which are a significant source of new business.

Business Insurance serves small commercial customers through an operating model that combines local underwriting, market knowledge and service with the scale advantages of a national company.

Global Consumer Markets East | West sells property and casualty, health and life insurance products and services to individuals and businesses in two operating regions. These operating regions are West, including Brazil, Colombia, Chile, Ecuador, Spain, Portugal, Ireland, and West Other; and East, including Thailand, Singapore, Hong Kong, Vietnam, Malaysia, India, China, Russia, Turkey, and East Other. Other in each region includes internal reinsurance and home office revenue and expenses. Private passenger automobile insurance is the single largest line of business.

On January 22, 2018, the Company's Spanish subsidiary, Liberty Seguros Compania de Seguros y Reaseguros S.A., entered into an agreement to sell its entire 99.44% interest in its Turkish insurance affiliate, Liberty Sigorta A.S., to Talanx International. Completion of the transaction is expected to occur during the second quarter.

Global Retail Markets NWP by market segment was as follows:

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
U.S. Consumer Markets	$4,436	$4,345	2.1%
Business Insurance	1,150	1,084	6.1
Global Retail Markets East | West	1,036	870	19.1
Total NWP	$6,622	$6,299	5.1%
Foreign exchange effect on growth			1.0
NWP growth excluding foreign exchange[1]			4.1%

1 Determined by assuming constant foreign exchange rates between periods.

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

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Private passenger automobile	$3,491	$3,316	5.3%
Homeowners	1,372	1,373	(0.1)
Commercial multiple-peril	496	475	4.4
Commercial automobile	378	354	6.8
Workers compensation	213	182	17.0
General liability	191	171	11.7
Life and health	104	81	28.4
Commercial property	86	69	24.6
Other[1]	291	278	4.7
Total NWP	$6,622	$6,299	5.1%

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

NWP for the three months ended March 31, 2018 was $6.622 billion, an increase of $323 million over the same period in 2017. The growth was primarily driven by an increase in private passenger automobile in both the U.S. and East | West segments. The growth in U.S. private passenger automobile reflects growth in average written premiums due to increased rate to keep pace with industry loss cost trends. Favorable automobile results in East | West were driven by several countries, most notably Brazil due to increased new business and higher retention. The increase was further driven by workers compensation in Portugal due to a change in booking methodology, commercial automobile due to increased rate within the U.S., and favorable foreign exchange as a result of the weakening of the U.S. dollar versus the euro as compared to the average rates in 2017.

Results of Operations – Global Retail Markets

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Revenues	$6,948	$6,551	6.1%
PTOI before catastrophes and net incurred losses attributable to prior years	$712	$642	10.9%
Catastrophes[1]	(330)	(603)	(45.3)
Net incurred losses attributable to prior years	13	11	18.2
PTOI	$395	$50	NM

1 Catastrophes are defined as a natural catastrophe or terror event exceeding $25 million in estimated ultimate losses, net of reinsurance, and before taxes. Catastrophe losses, where applicable, include the impact of accelerated earned catastrophe premiums and earned reinstatement premiums.
NM = Not Meaningful

PTOI for the three months ended March 31, 2018 was $395 million, an increase of $345 million over the same period in 2017. The increase was driven by a decrease in catastrophe losses due to lower severity compared to the same period in 2017 and profit margin on growth in earned premium due to strong topline results. These increases were partially offset by the impact of higher current accident year commercial lines liability loss trends in the Business Insurance segment.

Revenues for the three months ended March 31, 2018 were $6.948 billion, an increase of $397 million over the same period in 2017. The increase reflects the premium earned associated with the changes in NWP previously discussed and growth during the last nine months of 2017.

Claims, benefits and expenses for the three months ended March 31, 2018 were $6.557 billion, an increase of $56 million over the same period in 2017. The increase was driven primarily by higher current accident year non-catastrophe losses in all segments, partially offset by decreased catastrophe losses due to lower severity.

	Three Months Ended March 31,		
GLOBAL RETAIL MARKETS	**2018**	**2017**	**Change (Points)**
Combined ratio before catastrophes and net incurred losses attributable to prior years			
Claims and claim adjustment expense ratio	63.5%	63.5%	-
Underwriting expense ratio	28.5	29.1	(0.6)
Subtotal	92.0	92.6	(0.6)
Catastrophes[1]	5.0	9.7	(4.7)
Net incurred losses attributable to prior years	(0.2)	(0.3)	0.1
Total combined ratio	96.8%	102.0%	(5.2)

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

The Global Retail Markets combined ratio before catastrophes and net incurred losses attributable to prior years for the three months ended March 31, 2018 was 92.0%, a decrease of 0.6 points from the same period in 2017. The decrease was driven by a decrease in the underwriting expense ratio primarily due to earned premium growth.

Including the impact of catastrophes and net incurred losses attributable to prior years, the total combined ratio for the three months ended March 31, 2018 was 96.8%, a decrease of 5.2 points from the same period in 2017. The decrease was driven by lower catastrophe losses due to lower severity and the changes in the underwriting expense ratio previously discussed.

GLOBAL RISK SOLUTIONS

Overview – Global Risk Solutions

On January 19, 2018, the Company announced the realignment of its businesses to enhance its ability to meet the changing needs of consumer and business customers. Global Risk Solutions brings together Global Specialty, Ironshore (formerly in Global Specialty), National Insurance (formerly in Commercial Insurance) and the Global Reinsurance Strategy Group (formerly in Corporate and Other) into a single business. Global Risk Solutions offers a wide array of property, casualty, specialty and reinsurance coverages through brokers, independent agents and captive agents globally. The new segments for Global Risk Solutions are as follows:

- Liberty Specialty Markets – Includes Liberty Specialty Markets, Ironshore's international business, and the international business in Liberty International Underwriters ("LIU"), excluding Canada. Liberty Specialty Markets provides insurance and reinsurance for a wide range of product capabilities and capacity for specialty markets worldwide.
- National Insurance – Includes National Insurance and Asurion (formerly part of Global Specialty). National Insurance consists of domestic commercial property and casualty products and services as well as inland marine coverage for lost or damaged wireless devices.
- North America Specialty – includes Ironshore's North American operations and LIU Canada. North America Specialty consists of specialty insurance through offices in the United States and Canada.
- Global Surety – Leading provider of global contract and commercial surety bonds to businesses of all sizes.
- Other Global Risk Solutions primarily consists of internal reinsurance programs across the Liberty Mutual enterprise.

Global Risk Solutions NWP by market segment was as follows:

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Liberty Specialty Markets	$1,080	$838	28.9%
National Insurance	898	931	(3.5)
North America Specialty	429	143	NM
Global Surety	209	193	8.3
Other Global Risk Solutions	339	339	-
Total NWP	$2,955	$2,444	20.9%
Foreign exchange effect on growth			2.4
NWP growth excluding foreign exchange[1]			18.5%

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

Global Risk Solutions' major lines of business are as follows:

(1) Specialty insurance: includes marine, energy, construction, aviation, property, casualty, warranty and indemnity, excess casualty, directors and officers, errors and omissions, environmental impairment liability, railroad, trade credit, excess and surplus property, crisis management, contingent lines and other;
(2) Reinsurance: includes worldwide multi-line marine, property, casualty, specialty and internal reinsurance;
(3) Surety: includes contract and commercial surety bonds;
(4) Inland marine: handset protection coverage for lost or damaged wireless devices;
(5) Workers compensation, general liability, commercial automobile, commercial property and commercial multiple-peril which encompasses the domestic National Insurance business.

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

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Specialty insurance	$981	$535	83.4%
Reinsurance	824	726	13.5
Workers compensation	364	372	(2.2)
Surety	214	197	8.6
General liability	204	217	(6.0)
Inland marine	142	131	8.4
Commercial automobile	126	127	(0.8)
Commercial property	52	77	(32.5)
Commercial multiple-peril	48	62	(22.6)
Total NWP	$2,955	$2,444	20.9%

NWP for the three months ended March 31, 2018 was $2.955 billion, an increase of $511 million over the same period in 2017. The increase was driven by specialty insurance primarily due to the Ironshore acquisition and growth and new business growth in reinsurance. These increases were partially offset by higher ceded premium within National Insurance commercial property lines due to an increase in externally placed reinsurance and a new reinsurance program within specialty insurance. Additionally, foreign exchange favorably impacted the year over year change due to the weakening of the U.S. dollar versus the euro and British pound as compared to the average rates in 2017.

Results of Operations – Global Risk Solutions

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Revenues	$2,973	$2,383	24.8%
PTOI before catastrophes and net incurred losses attributable to prior years	248	245	1.2
Catastrophes[1]	(28)	(46)	(39.1)
Net incurred losses attributable to prior years[2]	3	3	-
PTOI	$223	$202	10.4%

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

2 Net of earned premium and reinstatement premium attributable to prior years of $2 million and $3 million for the three months ended March 31, 2018 and 2017, respectively.

PTOI for the three months ended March 31, 2018 was $223 million, an increase of $21 million over the same period in 2017. The increase reflects the impact of the Ironshore acquisition, profit margin on growth in earned premium and lower catastrophe losses, partially offset by higher current accident year casualty losses in National Insurance commercial automobile and general liability.

Revenues for the three months ended March 31, 2018 were $2.973 billion, an increase of $590 million over the same period in 2017. The increase reflects premium earned associated with the changes in NWP previously discussed, as well as higher writings in prior years.

Claims, benefits and expenses for the three months ended March 31, 2018 were $2.750 billion, an increase of $569 million over the same period in 2017. The increase reflects the impact of the Ironshore acquisition, higher current accident year casualty losses in National Insurance commercial automobile and general liability as well as attritional losses from growth, partially offset by lower catastrophe losses.

GLOBAL RISK SOLUTIONS	Three Months Ended March 31, 2018	2017	Change (Points)
Combined ratio before catastrophes and net incurred losses attributable to prior years			
Claims and claim adjustment expense ratio	67.3%	64.2%	3.1
Underwriting expense ratio	31.4	32.1	(0.7)
Dividend ratio	0.1	0.1	-
Subtotal	98.8	96.4	2.4
Catastrophes[1]	1.1	2.1	(1.0)
Net incurred losses attributable to prior years[2]	(0.2)	-	(0.2)
Total combined ratio	99.7%	98.5%	1.2

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

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

The Global Risk Solutions combined ratio before catastrophes and net incurred losses attributable to prior years for the three months ended March 31, 2018 was 98.8%, an increase of 2.4 points over the same period in 2017. The increase in the claims and claim adjustment expense ratio reflects higher current accident year casualty losses in National Insurance commercial automobile and general liability, partially offset by the impact of the Ironshore business, which operates at a lower claims and claim adjustment expense ratio relative to total Global Risk Solutions. The decrease in the underwriting expense ratio was driven by higher earned premium, partially offset by the impact of the Ironshore acquisition, which operates at a higher underwriting expense ratio relative to total Global Risk Solutions.

Including the impact of catastrophes and net incurred losses attributable to prior years, the total combined ratio for the three months ended March 31, 2018 was 99.7%, an increase of 1.2 points over the same period in 2017. The increase reflects the changes to the combined ratio mentioned above, partially offset by lower catastrophe losses.

CORPORATE AND OTHER

Overview – Corporate and Other

Corporate and Other includes the following significant items:

- Certain internal discontinued operations, which comprises: the run-off of certain commercial lines business, the run-off of the California workers compensation business of Golden Eagle Insurance Corporation and certain distribution channels related to Prudential Property and Casualty Insurance Company, Prudential General Insurance Company and Prudential Commercial Insurance Company (together, "PruPac") and Liberty Re annuity business.

- Cessions related to certain retroactive reinsurance agreements, including the NICO Reinsurance Transaction, which is 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".

- 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 risks on U.S. Consumer Markets 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.

- The Company discounts the long-term indemnity portion of its settled unpaid workers compensation claims at risk-free discount rates. The businesses report their discount based on statutory discount rates. Corporate and Other results reflect the difference between the statutory and risk-free rate.

- 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).

- Income related to LP, LLC and other equity method investments.

- Fee and other revenues include revenues from certain wholly owned non-insurance subsidiaries, primarily Liberty Energy. Liberty Energy generates revenue from the production and sale of oil and gas and related LP, LLC and other equity method investments.

- The results of LLAC presented as discontinued operations.

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

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Reinsurance, net	($136)	($23)	NM
Workers compensation[1]	-	(31)	(100.0)
Other	(7)	(1)	NM
Total NWP	($143)	($55)	160.0%

1 Booked as billed adjustment.
NM = Not Meaningful

NWP for the three months ended March 31, 2018 was ($143) million, a decrease of $88 million from the same period in 2017. The decrease reflects the net impact of increased property catastrophe reinsurance costs and an accounting change to book ceded written premium for excess of loss contracts at inception of the contract, partially offset by the booked as billed adjustment.

Results of Operations – Corporate and Other

	Three Months Ended March 31,		
$ in Millions	**2018**	**2017**	**Change**
Revenues	$369	$327	12.8%
Pre-tax operating loss before catastrophes, net incurred losses attributable to prior years, and partnerships, LLC and other equity method income	($227)	($153)	48.4%
Catastrophes[1]	6	10	(40.0)
Net incurred losses attributable to prior years:			
- Asbestos and environmental[2]	(10)	(4)	150.0
- All other[2,3]	6	(4)	NM
Pre-tax operating loss before partnerships, LLC and other equity method income	(225)	(151)	49.0
Partnerships, LLC and other equity method income[4]	216	160	35.0
Pre-tax operating (loss) income	($9)	$9	NM

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

2 Asbestos and environmental is gross of the NICO Reinsurance Transaction, and All other includes all cessions related to the NICO Reinsurance Transaction, which is described further in “Reinsurance”.

3 Net of earned premium attributable to prior years of zero for each of the three months ended March 31, 2018 and 2017.

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.
NM = Not Meaningful

Pre-tax operating (loss) income for the three months ended March 31, 2018 was ($9) million versus $9 million for the same period in 2017. The change reflects lower net investment income excluding partnerships, LLC and other equity method investments, lower earned premium within the reinsurance segment and higher employee benefits expenses, partially offset by higher partnerships, LLC and other equity method income.

Revenues for the three months ended March 31, 2018 were $369 million, an increase of $42 million over the same period in 2017. The major components of revenues are net premium earned, net investment income (including LP, LLC and other equity method investments), net realized gains, and fee and other revenues.

Net premium earned for the three months ended March 31, 2018 was ($86) million, a decrease of $30 million from the same period in 2017. The decrease reflects the premium earned associated with the changes in NWP previously discussed.

Net investment income for the three months ended March 31, 2018 was $191 million, an increase of $10 million over the same period in 2017. The increase reflects new investments in agriculture and timber in 2018 as compared to the same period in 2017. The increase also reflects more favorable valuations and distributions in LP, LLC, and other equity method investments, including real estate and metals and mining investments, partially offset by less favorable valuations in traditional private equity investments as compared to the same period in 2017.

Net realized gains for the three months ended March 31, 2018 were $159 million, an increase of $8 million over the same period in 2017. The net realized gains in the current quarter were primarily driven by a $162 million gain as a result of the acquisition of a previously held equity method investment in 2018, compared to a $109 million gain on the sale of company-owned real estate in 2017. In addition, in 2017 there were equity gains realized from sales due to portfolio repositioning that did not recur in 2018.

Fee and other revenues for the three months ended March 31, 2018 were $105 million, an increase of $54 million over the same period in 2017. The increase was primarily driven by higher oil and gas revenues as a result of increased prices and production.

Claims, benefits and expenses for the three months ended March 31, 2018 were $219 million, an increase of $52 million over the same period in 2017. The increase reflects higher depreciation, depletion and amortization expenses related to Liberty Energy and higher employee benefits expenses.

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 March 31, 2018 and December 31, 2017:

Invested Assets by Type	**As of March 31, 2018**		**As of December 31, 2017**	
$ in Millions	**Carrying Value**	**% of Total**	**Carrying Value**	**% of Total**
Fixed maturities, available for sale, at fair value	$53,615	76.5%	$54,040	76.4%
Equity securities, available for sale, at fair value[1]	2,574	3.7	2,608	3.7
LP, LLC and other equity method investments	5,850	8.3	6,223	8.8
Commercial mortgage loans	1,594	2.3	1,623	2.3
Short-term investments	443	0.6	494	0.7
Other investments	764	1.1	905	1.3
Cash and cash equivalents	5,262	7.5	4,827	6.8
Total invested assets	$70,102	100.0%	$70,720	100.0%

1 Included in Equity securities, available for sale, at fair value as of March 31, 2018 and December 31, 2017 were $1.191 billion and $1.217 billion of investments in bond ETFs, respectively.

Total invested assets as of March 31, 2018 were $70.102 billion, a decrease of $618 million or 0.9% from December 31, 2017. The decrease was primarily driven by a decrease in fixed maturities. In addition, the decrease in LP, LLC, and other equity method investments was driven by the sale of certain LP investments in the secondary market. The increase in cash includes proceeds from the sale of LP investments and cash from operations and financing.

Fixed maturities as of March 31, 2018 were $53.615 billion, a decrease of $425 million or 0.8% from December 31, 2017. The decrease is primarily due to a reduction in the fair value driven by the increase in treasury rates. As of March 31, 2018, included in fixed maturities are commitments to purchase various residential mortgage-backed securities at a cost and fair value of $496 million and $497 million, respectively.

Equity securities as of March 31, 2018 were $2.574 billion ($2.521 billion common stock and $53 million preferred stock) versus $2.608 billion as of December 31, 2017 ($2.556 billion common stock and $52 million preferred stock), a decrease of $34 million or 1.3% from December 31, 2017. Of the $2.521 billion of common stock at March 31, 2018, $679 million relates to securities associated with non-guaranteed unit linked products where the policyholder bears the investment risk.

The following table summarizes the Company's LP, LLC and other equity method investments as of March 31, 2018 and December 31, 2017:

LP, LLC and other equity method investments	As of March 31, 2018		As of December 31, 2017	
$ in Millions	Carrying Value	% of Total	Carrying Value	% of Total
Traditional private equity	$2,994	51.2%	$3,422	55.0%
Natural resources – Energy	645	11.0	605	9.7
Natural resources – Other[1]	303	5.2	338	5.4
Real estate	888	15.2	915	14.7
Other	1,020	17.4	943	15.2
Total LP, LLC and other equity method investments	$5,850	100.0%	$6,223	100.0%

1 Included in Natural Resources – Other is $197 million of investments in metals & mining and $106 million of investments in agriculture and timber.

Commercial mortgage loans as of March 31, 2018 were $1.594 billion (net of $3 million of loan loss reserves or 0.19% of the outstanding loan portfolio), a decrease of $29 million or 1.8% from December 31, 2017. The decrease primarily reflects $39 million in principal reductions, partially offset by $10 million in funding. The entire commercial loan portfolio is U.S.-based. The number of loans in the portfolio decreased from 4,827 at December 31, 2017 to 4,813 at March 31, 2018.

Cash and cash equivalents as of March 31, 2018 were $5.262 billion, an increase of $435 million or 9.0% over December 31, 2017. The increase in cash includes proceeds from the sale of LP investments and cash from operations and financing.

The following tables summarize the Company's available for sale portfolio by security type as of March 31, 2018 and December 31, 2017:

	As of March 31, 2018			
$ in Millions	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. government and agency securities	$3,398	$11	($54)	$3,355
Residential MBS [1]	5,671	40	(108)	5,603
Commercial MBS	2,560	6	(43)	2,523
Other MBS and ABS [2]	4,121	15	(34)	4,102
U.S. state and municipal	8,221	154	(92)	8,283
Corporate and other	24,216	304	(288)	24,232
Foreign government securities	5,347	199	(29)	5,517
Total fixed maturities	53,534	729	(648)	53,615
Common stock	2,385	181	(45)	2,521
Preferred stock	45	8	-	53
Total equity securities	2,430	189	(45)	2,574
Total securities available for sale	$55,964	$918	($693)	$56,189

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

$ in Millions	As of December 31, 2017 Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. government and agency securities	$3,485	$13	($32)	$3,466
Residential MBS	5,819	51	(47)	5,823
Commercial MBS	2,711	19	(16)	2,714
Other MBS and ABS	3,265	25	(18)	3,272
U.S. state and municipal	9,088	271	(35)	9,324
Corporate and other	23,894	502	(91)	24,305
Foreign government securities	4,961	196	(21)	5,136
Total fixed maturities	53,223	1,077	(260)	54,040
Common stock	2,345	221	(10)	2,556
Preferred stock	45	7	-	52
Total equity securities	2,390	228	(10)	2,608
Total securities available for sale	$55,613	$1,305	($270)	$56,648

The following table summarizes the Company's mortgage and asset-backed fixed maturity portfolio by credit quality as of March 31, 2018:

Mortgage & Asset-Backed Fixed Maturities by Credit Quality[1]	As of March 31, 2018							
$ in Millions	AAA	AA	A	BBB	BB	B or Lower	Total	% of Total
Residential MBS	$5,488	$13	$-	$1	$5	$96	$5,603	45.8%
Commercial MBS	2,371	124	6	14	3	5	2,523	20.6
Other MBS and ABS	3,072	298	134	515	56	27	4,102	33.6
Total	$10,931	$435	$140	$530	$64	$128	$12,228	100%
% of Total	89.5%	3.6%	1.1%	4.3%	0.5%	1.0%	100%	

1 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 90% of the holdings are rated AAA. Included in the commercial mortgage-backed securities at March 31, 2018, were $900 million in Agency CMBS and $1.623 billion Non-agency CMBS. Included in the Other MBS and ABS at March 31, 2018 were $1.393 billion AAA rated SBA Loans. The commercial mortgage-backed securities portfolio is well diversified and of high quality with approximately 94% 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 March 31, 2018 and December 31, 2017:

U.S. State and Municipal by Credit Quality[1]	As of March 31, 2018			As of December 31, 2017		
$ in Millions	Fair Value	% of Total	Average Credit Rating	Fair Value	% of Total	Average Credit Rating
State general obligation	$1,147	13.9%	AA	$1,316	14.1%	AA
Local general obligation	975	11.8	AA	1,113	11.9	AA
Revenue	5,884	71.0	AA	6,498	69.7	AA
Pre-refunded	277	3.3	AAA	397	4.3	AAA
Total U.S. state and municipal	$8,283	100%	AA	$9,324	100.0%	AA

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

The municipal bond portfolio (taxable and tax-exempt) includes general obligation and revenue bonds issued by states, cities, counties, school districts, hospitals, educational institutions, and similar issuers. Included in the municipal bond portfolio at March 31, 2018 and December 31, 2017 were $277 million and $397 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 March 31, 2018 and December 31, 2017:

Fixed Maturities by Credit Quality[1]	As of March 31, 2018		As of December 31, 2017	
$ in Millions	Fair Value	% of Total	Fair Value	% of Total
AAA	$16,994	31.8%	$17,178	31.8%
AA+, AA, AA-	8,334	15.5	8,859	16.4
A+, A, A-	11,594	21.6	11,354	21.0
BBB+, BBB, BBB-	12,667	23.6	12,956	24.0
Total investment grade	49,589	92.5	50,347	93.2
BB+, BB, BB-	2,141	4.0	1,851	3.4
B+, B, B-	1,542	2.9	1,486	2.8
CCC or lower	230	0.4	237	0.4
Unrated[2]	113	0.2	119	0.2
Total below-investment grade	4,026	7.5	3,693	6.8
Total fixed maturities	$53,615	100.0%	$54,040	100.0%

1 For purposes of this disclosure, credit quality is primarily based upon average credit ratings.
2 Bank loans acquired as part of Ironshore acquisition.

The Company's holdings of below investment grade securities primarily consist of an actively managed diversified portfolio of high yield securities and leveraged loans within the domestic insurance portfolios and investments in emerging market sovereign and corporate debt primarily in support of the Company's international insurance operations. Overall, the average credit quality rating stands at A+ as of March 31, 2018.

The following table summarizes available for sale fixed maturity securities by contractual maturity at March 31, 2018 and December 31, 2017. 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 March 31, 2018**		**As of December 31, 2017**	
$ in Millions	**Fair Value**	**% of Total**	**Fair Value**	**% of Total**
One year or less	$2,953	5.5%	$2,943	5.4%
Over one year through five years	20,279	37.8	19,635	36.3
Over five years through ten years	12,043	22.5	12,867	23.8
Over ten years	6,112	11.4	6,786	12.6
MBS and ABS	12,228	22.8	11,809	21.9
Total fixed maturities	$53,615	100.0%	$54,040	100.0%

The fixed maturities over five years as of March 31, 2018 were $18.155 billion, a decrease of $1.5 billion ($824 million over five years through ten years and $674 million over ten years) or 7.6% from December 31, 2017. The decrease was primarily due to a reduction in the fair value driven by the increase in treasury rates. During 2018, 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 March 31, 2018 was 3.9.

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 March 31, 2018 and December 31, 2017 that are not deemed to be other-than-temporarily impaired:

	As of March 31, 2018			
$ in Millions	**Less Than 12 Months**		**12 Months or Longer**	
Unrealized Losses & Fair Value by Security Type	**Unrealized Losses**	**Fair Value of Investments with Unrealized Losses**	**Unrealized Losses**	**Fair Value of Investments with Unrealized Losses**
U.S. Government and agency securities	($38)	$2,309	($16)	$485
Residential MBS	(65)	3,076	(43)	1,316
Commercial MBS	(39)	1,893	(4)	130
Other MBS and ABS	(22)	2,201	(12)	402
U.S. state and municipal	(40)	2,367	(52)	1,094
Corporate and other	(247)	13,694	(41)	908
Foreign government securities	(19)	1,402	(10)	391
Total fixed maturities	(470)	26,942	(178)	4,726
Common stock	(43)	1,350	(2)	23
Preferred stock	-	-	-	-
Total equity securities	(43)	1,350	(2)	23
Total securities available for sale	($513)	$28,292	($180)	$4,749

	As of December 31, 2017			
$ in Millions	**Less Than 12 Months**		**12 Months or Longer**	
Unrealized Losses & Fair Value by Security Type	**Unrealized Losses**	**Fair Value of Investments with Unrealized Losses**	**Unrealized Losses**	**Fair Value of Investments with Unrealized Losses**
U.S. Government and agency securities	($20)	$2,544	($12)	$486
Residential MBS	(21)	2,891	(26)	1,440
Commercial MBS	(12)	1,549	(4)	139
Other MBS and ABS	(6)	1,270	(12)	437
U.S. state and municipal	(8)	958	(27)	1,214
Corporate and other	(64)	7,575	(27)	1,115
Foreign government securities	(11)	1,260	(10)	411
Total fixed maturities	(142)	18,047	(118)	5,242
Common stock	(8)	599	(2)	21
Preferred stock	-	-	-	-
Total equity securities	(8)	599	(2)	21
Total securities available for sale	($150)	$18,646	($120)	$5,263

Unrealized losses increased from $270 million as of December 31, 2017 to $693 million as of March 31, 2018. The $2 million of unrealized losses 12 months or longer on common stock relates to securities associated with non-guaranteed unit linked products where the policyholder bears the investment risk. 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 March 31, 2018 are temporary.

For equity securities, if the decline is believed to be other-than-temporary, the carrying value of the investment is written down to fair value and a realized loss is recorded. The Company has concluded that the gross unrealized losses of equity securities as of March 31, 2018 are temporary, and the Company has the intent and ability to hold these securities until recovery.

The following tables summarize the Company's issuer and sector exposure[1] as of March 31, 2018:

Top 10 Issuers	**As of March 31, 2018**				
$ in Millions	**Fixed Maturity**	**Equity**	**Short Term**	**Total Exposure**	**% of Invested Assets**
Government of Brazil	$702	$-	$-	$702	1.00%
Government of United Kingdom	630	-	1	631	0.90
Invenergy	-	382	-	382	0.54
Government of Spain	369	-	-	369	0.53
Bank of America Corp	326	5	-	331	0.47
Government of Canada	320	-	4	324	0.46
Government of Colombia	314	-	-	314	0.45
State of Illinois	282	-	20	302	0.43
Anheuser-Busch InBev NV	298	-	-	298	0.43
CVS Caremark Corp	263	-	-	263	0.38
Total	$3,504	$387	$25	$3,916	5.59%

Top 10 Sectors	**As of March 31, 2018**				
$ in Millions	**Fixed Maturity**	**Equity**	**Short Term**	**Total Exposure**	**% of Invested Assets**
Banking	$4,591	$113	$322	$5,026	7.17%
Foreign Government	4,472	-	18	4,490	6.41
Electric Utility	1,756	142	3	1,901	2.71
Technology	1,630	221	-	1,851	2.64
Food and Beverage	1,330	23	7	1,360	1.94
US Municipal – State	1,146	-	21	1,167	1.66
REITS	268	881	-	1,149	1.64
Healthcare	970	173	-	1,143	1.63
Insurance	1,024	107	2	1,133	1.62
US Municipal - Education	1,065	-	-	1,065	1.52
Total	$18,252	$1,660	$373	$20,285	28.94%

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

As of March 31, 2018, investments in the energy sector accounted for $2.735 billion or 3.9% of total invested assets. The energy sector is comprised of investments in the following sub-sectors: independent energy, integrated energy, midstream, oil field services, and refining (*classification per Bloomberg Barclays Industry Groups*). These individual energy sub-sectors are not material enough at an individual level to appear within the top 10 rankings in the sector table above. Energy investments consist of investment grade bonds of $1.859 billion, bonds that were rated below investment grade of $225 million, publicly traded equity securities of $4 million, and natural resources partnerships and other equity method investments of $647 million. In addition, the Company has direct investments in oil and gas wells of $1.296 billion which are included in other assets on the Consolidated Balance Sheets.

The following table summarizes the Company's unfunded commitments as of March 31, 2018 and December 31, 2017:

Unfunded Commitments[1]	**As of March 31, 2018**		**As of December 31, 2017**	
$ in Millions	**Total**	**% of Total**	**Total**	**% of Total**
Traditional private equity	$1,315	46.0%	$1,554	45.3%
Natural resources – Energy	358	12.5	715	20.8
Natural resources – Other[2]	20	0.7	20	0.6
Real estate	625	21.8	607	17.7
Other	544	19.0	537	15.6
Total unfunded commitments	$2,862	100.0%	$3,433	100.0%

1 Represents Liberty Mutual Holding Company Inc. view.
2 Includes both agriculture and timber commitments.

Unfunded commitments as of March 31, 2018 were $2.862 billion, a decrease of $571 million from December 31, 2017. The decrease is primarily driven by contributions net of new commitments related to traditional private equity partnerships and real estate investments as well as the removal of unfunded commitments related to the sale of private equity partnerships. The $358 million unfunded energy investment commitments as of March 31, 2018 included $226 million related to energy partnerships and $132 million related to direct investments in oil and gas wells. The $715 million unfunded energy investment commitments as of December 31, 2017 included $355 million related to natural resource partnerships and $360 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:

- On December 1, 2017, Liberty Mutual Insurance Company ("LMIC") replaced its $1 billion repurchase agreement with a $250 million repurchase agreement for a three-year period, which terminates December 1, 2020. At March 31, 2018, no funds were borrowed under the facility.
- On November 24, 2017, LMIC entered into a $250 million repurchase agreement with an expiration date of November 24, 2020. At March 31, 2018, no funds were borrowed under the facility.
- LMIC, Peerless Insurance Company ("PIC"), LLAC, Liberty Mutual Fire Insurance Company ("LMFIC"), Employers Insurance Company of Wausau ("EICOW"), Ironshore Specialty Insurance Company ("ISIC") and Ironshore Indemnity Insurance ("III") 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 March 31, 2018, all of the outstanding Federal Home Loan Bank borrowings are fully collateralized.

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 March 31, 2018 (including cash and cash equivalents) totaled $70.102 billion.

Debt outstanding as of March 31, 2018 and December 31, 2017 was as follows:

Short-term debt:

$ in Millions	**As of March 31, 2018**	**As of December 31, 2017**
Short-term debt	$8	$11

Long-term debt:

$ in Millions	As of March 31, 2018	As of December 31, 2017
Junior Subordinated notes, due 2067[1, 2]	$300	$300
5.00% Notes, due 2021	600	600
4.95% Notes, due 2022	750	750
4.25% Notes, due 2023	1,000	1,000
1.75% €500 Million Notes, due 2024	615	600
8.50% Surplus notes, due 2025	140	140
2.75% €750 Million Notes, due 2026	923	901
7.875% Surplus notes, due 2026	227	227
7.625% Notes, due 2028	3	3
3.91% - 4.25% Federal Home Loan Bank Borrowings, due 2032	300	300
7.00% Notes, due 2034	231	231
6.50% Notes, due 2035	471	471
7.50% Notes, due 2036	19	19
7.80% Junior Subordinated notes, due 2087[2]	700	700
10.75% Junior Subordinated notes, due 2088[3]	66	66
6.50% Notes, due 2042	750	750
4.85% Notes, due 2044	1,050	1,050
7.697% Surplus notes, due 2097	260	260
Subtotal	8,405	8,368
Unamortized discount	(13)	(13)
Long-term debt excluding unamortized debt issuance costs	8,392	8,355
Unamortized debt issuance costs	(40)	(41)
Total long-term debt	$8,352	$8,314

1 7.00% fixed rate became 6.324% starting March 15, 2017 through a swap. Bondholders are paid 3-month LIBOR + 2.905%.

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

3 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 effect transactions in its debt, subject to applicable limitations.

Debt Transactions

During the three months ended March 31, 2018, the Company repurchased zero of the 10.75% Junior Subordinated notes due 2088 compared to $2 million for the same period in 2017. Pre-tax losses of zero were recorded on these transactions for the three months ended March 31, 2018 compared to $1 million for the same period in 2017 and are included in loss on extinguishment of debt in the accompanying Consolidated Statements of Income.

In connection with the Ironshore acquisition, on June 1, 2017, the Company repurchased $250 million of Ironshore's 8.5% senior note maturing in 2020 for $298 million, which reflects the fair value of the long term debt on the opening balance sheet.

On March 27, 2017, LMFE issued €500 million par value of the 2024 Notes. Interest is payable annually at a fixed rate of 1.75%. The 2024 Notes mature on March 27, 2024. The Company has designated the 2024 Notes as non-derivative foreign-currency denominated long-term debt and the related accrued interest as hedges of its net investment in certain foreign operations.

On January 20, 2012, Liberty Mutual Group Inc. ("LMGI") entered into two interest rate swap transactions having a notional amount of $300 million with respect to LMGI's $300 million Junior Subordinated Notes due 2067. Pursuant to the terms of the swap agreements, commencing on March 15, 2017 and effective through March 15, 2037, LMGI has agreed with the counterparties to pay a fixed rate of interest on the notional amount and the counterparties have agreed to pay a floating rate of interest on the notional amount.

Interest Expense

Consolidated interest expense for the three months ended March 31, 2018 was $111 million, a $3 million increase over the same period in 2017.

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 March 31, 2018, the Company, through its downstream subsidiaries LMGI and LMFE, had $6.860 billion and $615 million, respectively, of debt outstanding, excluding discount and issuance costs.

The insurance subsidiaries' ability to pay dividends on preferred or common stock is restricted under applicable insurance laws and regulations and may be paid only 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 policyholders, following such dividend, is reasonable in relation to its outstanding liabilities, is adequate to meet 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 and LMPICO, 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 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 as regards policyholders as of the preceding December 31, or (b) the greater of (1) the insurer's net income for the preceding calendar year, minus realized capital gains for that calendar year, or (2) the aggregate of the insurer's net income for the three preceding calendar years 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, 2017) and 2018 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	**2017**	**2016**	**2018**	**2018**
LMIC	354%	487%	$1,423	$16
LMFIC	452%	502%	$112	$4
EICOW	422%	507%	$143	$-

1 Authorized control level risk-based capital as defined by the NAIC.
2 Represents the estimated maximum allowable dividend without prior regulatory approval in the state of domicile.
3 Dividends paid represent amounts paid during the three months ended March 31, 2018. Available dividend capacity as of March 31, 2018 is calculated as 2018 dividend capacity less dividends paid for the preceding 12 months. Dividends paid April 1, 2017 through March 31, 2018 for LMIC, LMFIC and EICOW were $70 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 March 5, 2020. 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 and agency services rendered for affiliated and non-affiliated entities. For the three months ended March 31, 2018, LCS recorded $87 million in pre-tax income.
- Approximately $80 million of annual dividends related to non-redeemable perpetual preferred stock issuances by LMIC and LMFIC.

On October 9, 2017, LMGI terminated its $1 billion commercial paper program.

$ in Millions	**As of March 31, 2018**	**As of December 31, 2017**
Total debt	$8,360	$8,325
Adjusted debt[1]	$7,360	$7,325
Total equity	$20,489	$20,688
Less: Accumulated other comprehensive loss	(2,016)	(1,026)
Total equity excluding accumulated other comprehensive loss	$22,505	$21,714
Total capital excluding accumulated other comprehensive loss	$30,865	$30,039
Adjusted debt-to-capital capitalization excluding accumulated other comprehensive loss	23.8%	24.4%
Statutory surplus	$17,893	$17,493

1 Assumes that the Series A and B Junior Subordinated Notes receive 100% equity credit.

The adjusted debt-to-capital capitalization ratio excluding accumulated other comprehensive loss is calculated by dividing (a) adjusted debt 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 23.8% at March 31, 2018 was within the Company's target range.

REINSURANCE

Reinsurance Recoverables

The Company reported reinsurance recoverables of $16.727 billion and $16.899 billion at March 31, 2018 and December 31, 2017, respectively, net of allowance for doubtful accounts of $207 million and $218 million, respectively. Included in these balances are $850 million and $725 million of paid recoverables and $16.084 billion and $16.392 billion of unpaid recoverables (including retroactive reinsurance), respectively.

S&P Rating[1]	**As of December 31, 2017**			
$ in Millions	**Gross Recoverables[2]**	**Collateral Held[3]**	**Net Recoverables[4]**	**% of Total Net Recoverables**
<u>Rated Entities</u>				
AAA	$ -	$ -	$ -	-
AA+, AA, AA-	6,924	4,489	2,972	27%
A+, A, A-	4,670	404	4,291	38%
BBB+, BBB, BBB-	2	-	2	-
BB+ or below	1	-	1	-
Subtotal	11,597	4,893	7,266	65%
<u>Pools & Associations</u>				
State mandated involuntary pools and associations	3,092	-	3,092	28%
Voluntary	212	101	206	2%
Subtotal	3,304	101	3,298	30%
<u>Non-Rated Entities[5]</u>				
Captives & fronting companies	1,497	1,746	210	2%
Other	719	819	387	3%
Subtotal	2,216	2,565	597	5%
Grand Total	$17,117	$7,559	$11,161	100%

1 Standard & Poor's ratings are as of December 31, 2017.

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

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

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

5 Reinsurers not rated by Standard & Poor's.

Reinsurance Groups[1]	As of December 31, 2017		
$ in Millions	**Gross Recoverables[2]**	**Collateral Held[3]**	**Net Recoverables[4]**
1. Berkshire Hathaway Insurance Group	$3,947	$3,533	$710
2. Swiss Re Group	1,723	806	1,137
3. Nationwide Group	1,525	-	1,525
4. Everest Re Group	556	161	400
5. Alleghany Corp	530	40	489
6. Munich Re Group	478	19	468
7. Lloyd's of London	443	-	443
8. UPINSCO	435	550	-
9. Builders Reinsurance S.A.	266	329	-
10. CUMIS Insurance Society Group	250	-	250
11. Partner Re Group	237	27	216
12. Exchange Indemnity Company	216	95	121
13. AEGIS Group	196	232	-
14. Markel Corp	162	3	160
15. Hannover Re Group	162	7	158
State Mandated Involuntary pools and associations	3,092	-	3,092
Voluntary pools and associations	212	101	206
All Other	2,687	1,656	1,786
Total Reinsurance Recoverables	$17,117	$7,559	$11,161

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 95% 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 at December 31, 2017. Collateral held against outstanding gross reinsurance recoverable balances was $7.559 billion at December 31, 2017.

The remaining 5% 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, 2017.

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.

Property Catastrophe Reinsurance

The Company has reinsurance coverage for its domestic business and certain specialty operations including: 1) hurricanes and earthquake reinsurance covering a substantial portion of $3.1 billion of loss in excess of $500 million of retained loss in the United States, Canada and the Caribbean, excluding certain reinsurance exposures; 2) aggregate excess of loss programs; 3) quota share reinsurance programs; and 4) regional or country specific catastrophe reinsurance programs. These programs are structured to meet the Company's established tolerances under its Enterprise Risk Management Program.

Adverse Development Reinsurance

In conjunction with the Ironshore acquisition and effective May 1, 2017, the Company entered into a reinsurance transaction with NICO, a subsidiary of Berkshire Hathaway Inc., 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 $2.991 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 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.

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 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 Commercial Insurance business unit as of December 31, 2013, as respects injuries or accidents occurring prior to January 1, 2014.

As the aggregate of workers compensation and asbestos and environmental development has exceeded the original pre-tax loss of $128 million, deferred gains are now being recorded. Deferred gains are amortized into earnings over the period when underlying claims are settled. The Company reported deferred gain amortization of $3 million and ($4) million at March 31, 2018 and 2017, respectively. As of March 31, 2018 and December 31, 2017, deferred gains were $211 million and $205 million, respectively, and are included in other liabilities within the accompanying Consolidated Balance Sheets.

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 working interests in oil and gas properties, (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, 2017 Audited Consolidated Financial Statements.

Unpaid Claims and Claim Adjustment Expenses

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

Establishing loss reserves, including loss reserves for catastrophic events that have occurred, is an estimation process. Many factors can ultimately affect the final settlement of a claim and, therefore, the necessary reserve.

For additional discussion, please refer to footnote 6 in the Company's December 31, 2017 Audited Consolidated Financial Statements and footnote 6 in the Company's March 31, 2018 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, 2017 Audited Consolidated Financial Statements.

Reinsurance Recoverables

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

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

For additional discussion, please refer to footnote 5 in the Company's December 31, 2017 Audited Consolidated Financial Statements and footnote 4 in the Company's March 31, 2018 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 available for sale 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 March 31, 2018, excluding other assets, the Company reflected $5.678 billion (9.9%) 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 March 31, 2018, the Company reported $50.592 billion (88.3%) as level 2, consisting primarily of fixed maturity securities. Finally, the Company reported $1.042 billion (1.8%) 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, 2017 Audited Consolidated Financial Statements and footnote 9 in the Company's March 31, 2018 Unaudited Consolidated Financial Statements.

Impairment Losses on Investments

The Company reviews fixed maturity securities, equity 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.

For additional discussion, please refer to footnote 1 in the Company's December 31, 2017 Audited Consolidated Financial Statements and footnote 3 in the Company's March 31, 2018 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.

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.

For additional discussion, please refer to footnote 1 in the Company's December 31, 2017 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 unearned premiums, employee benefits, credits, net operating losses, insurance loss reserves, deferred policy acquisition costs, net unrealized gains and losses on investments, fixed assets, and intangibles.

On December 22, 2017, the U.S. enacted the Act which reduced the U.S. Federal corporate tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and creates new taxes on certain foreign-sourced earnings. At December 31, 2017, the Company made a reasonable estimate of the effects of the reduction in the U.S. Federal corporate tax rate and the one-time transition tax, resulting in a tax expense of $252 million, of which $240 million was considered provisional and $12 million was due to the impact of proportional amortization on investments in qualified affordable housing projects.

During the quarter ended March 31, 2018, the Company recognized a provisional measurement period expense of $3 million related to the reduction of the U.S. Federal corporate tax rate. The impact of this provisional adjustment on the 2018 effective tax rate was immaterial. The Company is still analyzing certain aspects of the Act and refining its calculations, which could potentially affect the measurement of these balances or potentially give rise to new deferred tax amounts. The Company has not yet made any measurement period adjustments related to the one-time transition tax as the Company has not yet completed its calculation of the total post-1986 foreign E&P, therefore it is subject to change. Calculations for these provisional amounts will be completed within one year of the date of enactment of the Act.

For additional discussion, please refer to footnote 8 in the Company's December 31, 2017 Audited Consolidated Financial Statements and footnote 7 in the Company's March 31, 2018 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. The discount rate assumption used to determine the benefit obligations is based on the yield curve where the cash flows related to each of the benefit plans’ liability stream is discounted using spot rates specifically applicable to the timing of the cash flows of each plan. 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. The spot rate change, which is accounted for as a change in estimate, had a $57 million impact on the net periodic benefit cost reported for 2016. There was no impact on the benefit obligation.

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.

For additional discussion, please refer to footnote 9 in the Company’s December 31, 2017 Audited Consolidated Financial Statements and footnote 8 in the Company’s March 31, 2018 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 third largest property and casualty insurer in the U.S. based on 2017 direct written premium. The Company also ranks 75th on the Fortune 100 list of largest corporations in the U.S. based on 2016 revenue. As of December 31, 2017, LMHC had \$142.502 billion in consolidated assets, \$121.814 billion in consolidated liabilities, and \$39.409 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 more than 50,000 people in over 800 offices throughout 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.