UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2018

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to Commission file number 1-8993

WHITE MOUNTAINS INSURANCE GROUP, LTD.

(Exact name of Registrant as specified in its charter)

Bermuda 94-2708455

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

80 South Main Street Hanover, New Hampshire (Address of principal executive offices)

03755-2053

(Zip Code)

Registrant's telephone number, including area code: **(603) 640-2200** Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Shares, par value \$1.00	New York Stock Exchange
per share	Bermuda Stock Exchange
Securities registered pursu	uant to Section 12(g) of the Act: None
Indicate by check mark if the Registrant is a well-known seasoned	issuer, as defined in Rule 405 of the Securities Act. Yes ⊠ No □
Indicate by check mark if the Registrant is not required to file repo	rts pursuant to Section 13 or Section 15(d) of the Act. Yes 🗆 No 🗷
	orts required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 required to file such reports), and (2) has been subject to such filing requirements for
,	ronically and posted on its corporate Web site, if any, every Interactive Data File S-T (§232.405 of this chapter) during the preceding 12 months (or shorter period that
1 1	o Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and titive proxy or information statements incorporated by reference in Part III of this
Indicate by check mark whether the registrant is a large accelerated definitions of "large accelerated filer," "accelerated filer," and "smaller r	I filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See eporting company" in Rule 12b-2 of the Exchange Act.
Large accelerated filer	occelerated filer ☐ Non-accelerated filer ☐
Smaller reporting company □	Emerging growth company □

The aggregate market value of voting shares (based on the closing price of those shares listed on the New York Stock Exchange and the consideration received for those shares not listed on a national or regional exchange) held by non-affiliates of the Registrant as of June 30, 2018, was \$2,745,786,244.

or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes \square No \boxtimes

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new

As of February 25, 2019, 3,167,436 common shares, par value of \$1.00 per share, were outstanding (which includes 27,795 restricted common shares that were not vested at such date).

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Definitive Proxy Statement to be filed with the Securities and Exchange Commission ("SEC") pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), relating to the Registrant's Annual General Meeting of Members scheduled to be held May 23, 2019 are incorporated by reference into Part III of this Form 10-K. With the exception of the portions of the Proxy Statement specifically incorporated herein by reference, the Proxy Statement is not deemed to be filed as part of this Form 10-K.

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PART I Item 1. Business

GENERAL

White Mountains Insurance Group, Ltd. (the "Company" or the "Registrant") is an exempted Bermuda limited liability company whose principal businesses are conducted through its subsidiaries and affiliates. Within this report, the term "White Mountains" is used to refer to one or more entities within the consolidated organization, as the context requires. The Company's headquarters is located at 26 Reid Street, Hamilton, Bermuda HM 11, its principal executive office is located at 80 South Main Street, Hanover, New Hampshire 03755-2053 and its registered office is located at Clarendon House, 2 Church Street, Hamilton, Bermuda HM 11.

White Mountains is engaged in the business of making opportunistic and value-oriented acquisitions of businesses and assets in the insurance, financial services and related sectors, operating these businesses and assets through its subsidiaries and, if and when attractive exit valuations become available, disposing of these businesses and assets.

White Mountains conducts its business primarily in four areas: municipal bond insurance, specialty insurance distribution, marketing technology (for insurance and other verticals) and other operations. White Mountains's municipal bond insurance business is conducted through its subsidiary HG Global Ltd. and its reinsurance subsidiary HG Re Ltd. ("HG Re"), (collectively, "HG Global"). HG Global was established to fund the startup of and provide reinsurance, through HG Re, to Build America Mutual Assurance Company ("BAM"), a mutual municipal bond insurance company. White Mountains's specialty insurance distribution business is conducted through its subsidiary NSM Insurance HoldCo, LLC and its subsidiaries (collectively, "NSM"). White Mountains's marketing technology business is conducted through its subsidiary QL Holdings LLC and its subsidiary QuoteLab, LLC (collectively "MediaAlpha"). White Mountains's investing activities are conducted through its investment management subsidiary, White Mountains Advisors LLC ("WM Advisors"). White Mountains's reportable segments are HG Global/BAM, NSM, MediaAlpha and Other Operations.

White Mountains's Operating Principles

White Mountains strives to operate within the spirit of four operating principles. These are:

Underwriting Comes First. An insurance enterprise must respect the fundamentals of insurance. There must be a realistic expectation of underwriting profit on all business written and demonstrated fulfillment of that expectation over time, with focused attention to the loss ratio and to all the professional insurance disciplines of pricing, underwriting and claims management.

Maintain a Disciplined Balance Sheet. The first concern here is that insurance liabilities must always be fully recognized. Loss reserves and expense reserves must be solid before any other aspect of the business can be solid. Pricing, marketing and underwriting all depend on informed judgment of ultimate loss costs that can be managed effectively only with a disciplined balance sheet.

Invest for Total Return. Historically, the insurance industry has emphasized investment income (interest and dividends) above capital gains. White Mountains invests to maximize total return over time. White Mountains manages its bond portfolios for after-tax total return and also invests prudently in equities.

Think Like Owners. Thinking like owners has a value all its own. There are stakeholders in a business enterprise, and doing good work requires more than this quarter's profit. Thinking like an owner embraces all of that and is the touchstone of a capitalist enterprise.

HG GLOBAL/BAM

The HG Global/BAM segment consists of the consolidated results of HG Global and BAM. BAM is the first and only mutual municipal bond insurance company in the United States. By insuring the timely payment of principal and interest, BAM provides market access to, and lowers interest expense for, issuers of municipal bonds used to finance essential public purposes. BAM is domiciled in New York and is owned by and operated for the benefit of its policyholders, the municipalities that purchase BAM's insurance for their debt issuances. Generally accepted accounting principles in the United States ("GAAP") require White Mountains to consolidate BAM's results in its financial statements, which are attributed to noncontrolling interests. BAM reports on a statutory accounting basis to the New York State Department of Financial Services ("NYDFS") and does not report stand-alone GAAP financial results.

HG Global was established to fund the startup of BAM and, through HG Re, to provide up to 15%-of-par, first loss reinsurance protection for policies underwritten by BAM. HG Global and HG Re are domiciled in Bermuda.

BAM charges an insurance premium on each municipal bond insurance policy it writes. A portion of the premium is a member's surplus contribution ("MSC") and the remainder is a risk premium. In the event of a municipal bond refunding, the MSC from the original issuance can be reutilized, in effect serving as a credit against the total insurance premium on the refunding of the municipal bond. Issuers of debt insured by BAM are members of BAM so long as any of their BAM-insured debt is outstanding, and as members they have certain interests in BAM, including the right to vote for BAM's directors and to receive dividends, if declared.

BAM focuses on municipal bonds issued to finance essential public purposes, such as schools, utilities and transportation facilities. BAM focuses on small-to-medium sized investment grade municipal bonds, primarily in the AA, A and BBB categories. BAM seeks to build a relatively low risk insurance portfolio with prudent single risk limits. White Mountains believes that municipal bonds insured by BAM have strong appeal to retail investors, who buy smaller, less liquid issues, have less portfolio diversification and have fewer credit differentiation skills and analytical resources than institutional investors.

BAM launched in July 2012 after securing an "AA/stable" rating from Standard & Poor's Financial Services LLC ("Standard & Poor's"). In June 2018, Standard & Poor's affirmed BAM's "AA/stable" rating. "AA" is the third highest of 23 financial strength ratings assigned by Standard & Poor's.

At inception in 2012, HG Global was capitalized with \$609 million. HG Global, together with its subsidiaries, funded the initial capitalization of BAM through the purchase of \$503 million of surplus notes issued by BAM, consisting of \$203 million of Series A Notes and \$300 million of Series B Notes (the "BAM Surplus Notes"). See "CRITICAL ACCOUNTING ESTIMATES — Surplus Notes Valuation — BAM Surplus Notes" on page 60 for a discussion on the accounting and risks associated with the BAM Surplus Notes.

At inception, BAM and HG Re also entered into a first loss reinsurance treaty ("FLRT"). HG Re provides first loss protection up to 15%-of-par outstanding on each municipal bond insured by BAM. For capital appreciation bonds, par is adjusted to the estimated equivalent par value for current interest paying bonds. In return, BAM cedes 60% of the risk premium charged for insuring the municipal bond, net of a ceding commission.

HG Re's obligations under the FLRT are limited to the assets in two collateral trusts: a Regulation 114 Trust and a supplemental collateral trust (the "Supplemental Trust" and, together with the Regulation 114 Trust, the "Collateral Trusts"). Losses required to be reimbursed under the FLRT are subject to an aggregate limit equal to the assets held in the Collateral Trusts at any point in time.

At inception, the Supplemental Trust contained the original \$300 million of Series B Notes and \$100 million of cash and fixed income securities. During 2017, in order to further support BAM's long-term capital position and business prospects, HG Global agreed to contribute the original \$203 million of Series A Notes into the Supplemental Trust. At the same time HG Global and BAM also agreed to change the payment terms of the Series B Notes, so that payments will reduce principal and accrued interest on a pro rata basis, consistent with the payment terms on the Series A Notes. The terms of the Series B Notes had previously stipulated that payments would first reduce interest owed, then reduce principal owed once all accrued interest had been paid. The NYDFS approved the change during 2017. In connection with the contribution and change in payment terms of the Series B Notes, the Series A Notes were merged into the Series B Notes.

The Regulation 114 Trust target balance is equal to gross ceded unearned premiums and unpaid ceded loss and LAE expenses, if any. The Supplemental Trust target balance is equal to \$603 million. As the BAM Surplus Notes are repaid over time, the BAM Surplus Notes will be replaced in the Supplemental Trust by cash and fixed income securities. The Collateral Trust balances must be at target levels before excess funds can be distributed out of the Supplemental Trust.

If, at any point in time, the sum of the Regulation 114 Trust balance and the Supplemental Trust balance equals zero, BAM may choose to terminate the FLRT on a runoff basis. However, HG Re can elect to continue the FLRT by depositing into the Regulation 114 Trust assets with a fair market value not less than the greater of (i) \$100 million or (ii) 10% of the then Regulation 114 Trust target balance.

The FLRT is a perpetual agreement, with an initial term of 10 years. The FLRT can be amended after the first 10-year period and after each subsequent 5-year period on a prospective basis. If the parties are unable to mutually agree to amended terms, the dispute is resolved through arbitration, according to certain principles agreed to by the parties. Amended contract terms must be approved by the NYDFS. Should BAM consider the amended terms unacceptable, it has the option to purchase HG Re, or cause another reinsurer to purchase HG Re, at fair value.

Pursuant to the FLRT, BAM's underwriting guidelines may only be amended with the consent of HG Re. In addition, HG Holdings Ltd, a subsidiary of HG Global, has the right to designate two directors for election to BAM's board of directors.

In addition to the FLRT, BAM is party to a collateralized excess of loss reinsurance agreement provided by Fidus Re, Ltd. ("Fidus Re"), a Bermuda based special purpose insurer created solely to provide reinsurance protection to BAM. Fidus Re was capitalized by the issuance of \$100 million of insurance linked securities. The proceeds from issuance were placed in a collateral trust supporting Fidus Re's obligations to BAM. The insurance linked securities were issued by Fidus Re with an initial term of 12 years, and are callable 5 years after the date of issuance. Fidus Re reinsures 90% of aggregate losses exceeding \$165 million on a portion of BAM's financial guarantee portfolio (the "Covered Portfolio") up to a total reimbursement of \$100 million. The Covered Portfolio consists of approximately 73% of BAM's portfolio of financial guaranty policies issued through December 31, 2018.

As of December 31, 2018 and 2017, White Mountains reported \$926 million and \$860 million of total assets, and \$496 million and \$516 million of total equity related to HG Global. As of December 31, 2018 and 2017, White Mountains owned 96.9% of HG Global's preferred equity and 88.4% of its common equity. As of December 31, 2018 and 2017, White Mountains reported \$15 million and \$16 million of non-controlling interests related to HG Global.

As of December 31, 2018 and 2017, White Mountains reported \$555 million and \$541 million of total assets, and \$(171) million and \$(163) million of non-controlling interest related to BAM.

Competition

The municipal bond insurance industry is highly competitive. BAM's primary competitor is Assured Guaranty Ltd. ("Assured").

BAM and Assured each seeks to differentiate itself through financial strength ratings, claims paying resources and underwriting strategies. BAM believes it has a number of distinct competitive advantages. BAM's insured portfolio consists only of essential public purpose U.S. municipal bonds, and it has no exposure to mortgage and asset-backed securities, derivatives, non-U.S. structured or sovereign credits or territorial credits, such as Puerto Rico. BAM believes that, over time, its mutual structure will deliver a cost of capital advantage relative to its stock company competitors.

BAM seeks to provide transparency with respect to its insured portfolio and each insured issuer. In order to allow issuers and investors in BAM-insured municipal bonds to monitor financial strength first-hand, BAM publishes Credit Profiles on every insured issuer. Credit Profiles are accessible by CUSIP, obligor, state or sector on BAM's website.

Pricing (i.e., premium level) is affected by a number of factors, including interest rate levels, credits spreads, trading value, and capture rate (i.e., the percentage of total interest savings captured in the form of insurance premium). All other things being equal, pricing is higher when interest rates are higher, credit spreads are wider, BAM's trading value is higher relative to competitors and the capture rate is higher.

Insured Portfolio

The following table presents BAM's insured portfolio by asset class as of December 31, 2018 and 2017:

Millions	 December	31, 2018	December 31, 2017				
Sector	Gross Par Outstanding	Average Standard & Poor's Credit Rating (1)	Gross Par outstanding	Average Standard & Poor's Credit Rating ⁽¹⁾			
General Obligation	\$ 30,627.0	A	\$ 25,147.7	A			
Utility	6,451.0	\mathbf{A}	5,425.8	A			
Dedicated Tax	6,263.8	\mathbf{A}	4,852.6	Α			
General Fund	4,858.5	\mathbf{A}	3,638.8	Α			
Public Higher Education	2,406.6	A-	1,781.7	A-			
Transportation	1,293.6	\mathbf{A}	953.4	Α			
Other Public Finance	301.1	A-	290.6	A-			
Total gross par outstanding	\$ 52,201.6	A	\$ 42,090.6	A			

⁽¹⁾ The average credit ratings are based on Standard & Poor's credit ratings, or if unrated by Standard & Poor's, the Standard & Poor's equivalent of credit ratings provided by Moody's Investor Service ("Moody's")

The following tables present BAM's ten largest direct exposures based upon gross par outstanding as of December 31, 2018 and 2017:

			December 31, 2018		
\$ in Millions	_	ross Par tstanding	Percent of Total Gross Par Outstanding	Standard & Poor's Credit Rating ⁽¹⁾	
Municipal Authority of Westmoreland County, PA, Water	\$	329.9	0.6%	A +	
State of Illinois		329.8	0.6	BBB-	
City of Shreveport, LA (Caddo Parish), Water & Sewer		269.7	0.5	A-	
New Jersey Transportation Trust Fund Authority, System & Program Bonds, NJ, Gas Tax ⁽²⁾		264.5	0.5	BBB+	
Eastern Michigan University, MI (Lapeer County), Public Higher Education - Gross Revenue		258.1	0.5	A	
State of New Jersey		250.6	0.5	BBB+	
Suffolk Country, NY		246.7	0.5	A-	
New Jersey Economic Development Authority (Motor Vehicle Surcharge)		225.7	0.4	BBB+	
State of Louisiana		219.6	0.4	A +	
State of Connecticut		211.0	0.4	\mathbf{A}	
Total of top ten exposures	\$	2,605.6	4.9%		

^{(1) &}quot;A+" is the fifth highest, "A" is the sixth highest, "A-" is the seventh highest, "BBB+" is the eighth highest and "BBB-" is the tenth highest of 23 credit ratings assigned by Standard & Poor's

ratings assigned by Standard & Poor's.

(2) The bonds issued for the New Jersey Transportation Trust Fund Authority, System & Program Bonds, NJ, Gas Tax include capital appreciation bonds. The estimated equivalent par value for current interest paying bonds is approximately \$350.0.

		December 31, 2017	
\$ in Millions	Gross Par utstanding	Percent of Total Gross Par Outstanding	Standard & Poor's Credit Rating (1)
Municipal Authority of Westmoreland County, PA, Water	\$ 334.0	0.8%	A+
State of Illinois	284.1	0.7	BBB-
Commonwealth of Pennsylvania	260.8	0.6	A-
Suffolk County, NY	257.4	0.6	A-
Eastern Michigan University, MI (Lapeer County), Public Higher Education - Gross Revenue	252.2	0.6	A
New Jersey Economic Development Authority (Motor Vehicle Surcharge)	213.3	0.5	BBB+
State of New Jersey	197.0	0.5	BBB+
West Travis County Public Utility Agency, TX (Travis County), Water & Sewer	188.6	0.4	A
City of Shreveport, LA (Caddo Parish), Water & Sewer	177.6	0.4	A-
City of New Brunswick, NJ (Middlesex County)	162.5	0.4	A+
Total of top ten exposures	\$ 2,327.5	5.5%	

^{(1) &}quot;A+" is the fifth highest, "A" is the sixth highest, "A-" is the seventh highest, "BBB+" is the eighth highest and "BBB-" is the tenth highest of 23 credit ratings assigned by Standard & Poor's.

The following table presents the geographic distribution of BAM's insured portfolio as of December 31, 2018 and 2017:

		Dece	mber 31, 2018		December 31, 2017					
\$ in Millions	Number of Risks		Gross Par outstanding	Percent of Total Gross Par Outstanding	Number of Risks		Gross Par Outstanding	Percent of Total Gross Par Outstanding		
California	621	\$	12,044.6	23.1%	468	\$	9,810.7	23.3%		
Texas	643		7,015.4	13.4	523		6,079.0	14.4		
Pennsylvania	417		6,460.1	12.4	334		5,726.1	13.6		
Illinois	290		4,342.0	8.3	248		3,201.3	7.6		
New York	312		3,234.9	6.2	261		2,931.5	7.0		
New Jersey	118		2,429.1	4.7	93		1,839.5	4.4		
Ohio	126		1,436.2	2.8	82		1,174.3	2.8		
Arizona	62		1,314.2	2.5	52		1,077.4	2.6		
Michigan	97		1,236.0	2.4	78		1,092.9	2.6		
Louisiana	55		1,208.5	2.3	43		895.4	2.1		
Florida	55		1,145.0	2.2	48		1,006.4	2.4		
Other States	769		10,335.6	19.7	594		7,256.1	17.2		
Total insured portfolio	3,565	\$	52,201.6	100.0%	2,824	\$	42,090.6	100.0%		

The following table presents BAM's insured portfolio by issue size of exposure as of December 31, 2018 and 2017:

\$ in Millions	,	Dec	ember 31, 2018	8	December 31, 2017					
Original Par Amount Per Issue ⁽¹⁾	Number of Risks			Gross Par outstanding	Percent of Total Gross Par Outstanding					
Less than \$10 million	2,159	\$	8,938.3	17.1%	1,665	\$	7,479.3	17.8%		
\$10 to \$50 million	1,182		23,567.4	45.1	981		20,113.5	47.8		
\$50 to \$100 million	164		10,335.0	19.8	141		8,916.7	21.2		
\$100 to \$200 million	46		5,972.5	11.4	30		3,782.3	9.0		
\$200 to \$300 million	12		2,728.8	5.2	6		1,464.8	3.5		
\$300 to \$400 million	2		659.7	1.4	1		334.0	.7		
Total insured portfolio	3,565	\$	52,201.7	100.0%	2,824	\$	42,090.6	100%		

⁽¹⁾ The original par amount per issue does not include refunded and re-issued deals.

Insured Credit Watchlist

BAM management maintains a surveillance committee that evaluates the credit profile of each insured municipal bond on a periodic basis. The surveillance committee places each insured municipal bond into one of four surveillance categories, the last two of which represent insured municipal bonds that are on BAM's insured credit watchlist. Insured municipal bonds on the watchlist are monitored closely and are subject to BAM's distressed credit management procedures, including a remediation plan developed in consultation with BAM's legal counsel and consultants. The objectives of any remediation plan are to address the problems the issuer is facing, to address any external factors impacting the credit, to ensure that creditors' rights are enforced and to cure any breaches that may have occurred with respect to any credit triggers or covenants. BAM may work with other insurers, municipal bondholders and/or interested parties on remediation efforts, as applicable.

Surveillance category 3 represents insured municipal bonds whose issuers are experiencing financial, legal or administrative issues causing overall credit quality deterioration, but whose probability of generating an insured loss is considered remote. Surveillance category 4 represents insured municipal bonds where a loss is expected or losses have been paid and have not been recovered or are not recoverable. As of December 31, 2018, BAM did not have any credits assigned to surveillance category 3 or surveillance category 4.

NSM

During 2018, White Mountains acquired a 95.0% equity interest in NSM for cash consideration of \$276 million. NSM is a full-service managing general underwriting agency ("MGU") and program administrator for specialty property and casualty insurance. The company places insurance in niche sectors such as specialty transportation, social services and real estate. On behalf of its insurance carrier partners, NSM manages all aspects of the placement process, including product development, marketing, underwriting, policy issuance and claims. NSM earns commissions based on the volume and profitability of the insurance that it places. NSM does not take insurance risk.

NSM distributes through a variety of channels. Commercial products are sold through a network of roughly 6,000 independent brokers. NSM also transacts business on a "direct to consumer" basis in certain segments (e.g., collector car, non-standard personal lines).

As of December 31, 2018, NSM had approximately 100 insurance carrier partners. NSM has consistently generated strong loss ratios for its insurance carrier partners, expanding its programs when market conditions are attractive and shrinking and/or shutting down its programs when market conditions are challenging. This practice has led to longstanding insurance carrier partner relationships, in some cases over 20 years. As of December 31, 2018, the five largest carrier partners account for approximately 58% of total premiums placed by NSM, with the largest carrier partner accounting for approximately 33%.

Historically, NSM has grown both organically and inorganically through acquisitions. Since its inception in 1990, NSM has completed over 20 acquisitions, including two sizable acquisitions under White Mountains's ownership. On May 18, 2018, NSM acquired 100% of Fresh Insurance Services Group Limited ("Fresh Insurance"). Fresh Insurance is an insurance broker that focuses on non-standard personal lines products in the United Kingdom. On December 3, 2018, NSM acquired all of the net assets of KBK Insurance Group, Inc. and KBK Premium Services, Inc. (collectively, "KBK"). KBK is a specialty MGU focused on the towing and transportation space.

The NSM segment also includes White Mountains Catskill Holdings, Inc., the immediate holding company of NSM. As of December 31, 2018, White Mountains reported \$627 million of total assets and \$298 million of total equity related to NSM. As of December 31, 2018, White Mountains owned 95.5% of NSM and reported \$14 million of non-controlling interest related to NSM.

Competition

NSM operates in a highly competitive property and casualty insurance intermediary industry. Competitors are differentiated based on price, conditions of coverage, loss ratio performance, quality of service, technology and other factors. NSM's primary competitors are typically specialty insurance carriers and their agents.

Verticals

NSM's business consists of over 15 active programs that are broadly categorized into five market verticals. The following table presents the controlled premium and commission revenues by vertical for the years ended December 31, 2018, 2017 and 2016:

		Year Ended December 31,											
		2018				20		2016					
Millions	Controlled Premium (1)		Commission and Fee Revenue		Controlled Premium (1)		Commission and Fee Revenue		Controlled Premium ⁽¹⁾		Commission and Fee Revenue		
Specialty Transportation	<u>\$</u>	136.8	\$	43.0	\$	112.6	\$	32.9	\$	112.4	\$	37.4	
Real Estate		135.7		30.3		106.8		22.2		97.6		19.9	
Social Services		94.0		23.8		111.6		28.8		122.3		32.3	
United Kingdom		108.8		34.9		46.0		16.1		1.2		.7	
Other		119.4		19.8		113.4		18.6		112.3		18.3	
Total	\$	594.7	\$	151.8	\$	490.4	\$	118.6	\$	445.8	\$	108.6	

⁽¹⁾ Controlled premium are total premiums placed by NSM during the period.

A description of the key programs within each market vertical follows:

Specialty Transportation

The specialty transportation vertical consists of NSM's U.S. collector car programs as well as all other transportation-related programs in the United States. NSM operates its U.S. collector car business through three programs: (i) American Collectors Insurance, (ii) Condon Skelly and (iii) Heacock Classic. Each program has an exclusive underwriting contract with an insurance carrier partner to provide insurance coverage for antique and classic cars, vintage motorcycles and related automotive collectibles. The other large program in the specialty transportation vertical is KBK, which is an MGU primarily focused on providing insurance coverages for the towing businesses (e.g., tow truck operators, dealers, and repair shops). NSM also offers specialty insurance coverage for motor carriers and owner operators through its True Transport and Transport Specialties programs.

Real Estate

The real estate vertical consists of NSM's specialty real estate programs. The largest program is CHAMP, which specializes in providing insurance coverage (e.g., property, general liability, umbrella) for wind-exposed coastal condominium associations. NSM also offers specialty insurance coverages for non-coastal apartment complexes, condominiums and hotels and motels through its HabPro program.

Social Services

The social services segment consists of three key programs: (i) Care Providers Insurance Services, which provides insurance coverages to non-profit social services organizations such as private/charter schools, charitable institutions and adult & youth centers, (ii) Addiction Treatment Providers Insurance, which provides insurance coverages to addiction treatment providers and mental healthcare facilities, and (iii) Sports & Wellness Insurance, which provides insurance coverages to a broad range of sports and wellness organizations such as fitness centers, yoga studios and university sponsored recreational programs and groups.

United Kingdom

The United Kingdom vertical consists of all of NSM's U.K. based programs. The two largest programs today are Vantage Insurance Services ("Vantage") and Fresh Insurance. Vantage provides a variety of specialty insurance coverages in the U.K. market, including coverages for mid-market and high-end collector cars and the outdoor leisure industry (e.g., motor caravans and trailers). Fresh Insurance focuses on non-standard auto insurance and buildings and content insurance for non-standard properties.

Other

The other vertical consists of approximately 10 other programs, providing a wide variety of tailored insurance coverages to niche sectors including (i) professional liability insurance for architects and engineers, (ii) packaged insurance solutions for outplacement & staffing agencies, and (iii) workers compensation insurance coverages primarily for artisan contractors and restaurants and hotels.

MEDIAALPHA

In March 2014, White Mountains acquired a controlling interest in MediaAlpha. On October 5, 2017, White Mountains acquired 131,579 additional newly-issued Class A common units of MediaAlpha for \$13 million in connection with MediaAlpha's acquisition of certain assets associated with the Health, Life and Medicare insurance business of Healthplans.com. Through December 31, 2018, White Mountains has invested approximately \$48 million in MediaAlpha (\$21 million net of distributions received of \$27 million).

On February 26, 2019, MediaAlpha completed the sale of a significant minority stake to Insignia Capital Group in connection with a recapitalization and cash distribution to existing equityholders. MediaAlpha also repurchased a portion of the holdings of existing equityholders. White Mountains retained a 42% ownership interest in MediaAlpha on a fully-diluted basis. As a result of the transaction, White Mountains also expects that it will no longer consolidate MediaAlpha in its financial statements and will mark its interest in MediaAlpha to fair value at the transaction closing date and in subsequent periods.

MediaAlpha is a leading marketing technology company that enables the programmatic buying and selling of vertical-specific, performance-based media between advertisers (buyers of advertising inventory) and publishers (sellers of advertising inventory) through cost-per-click, cost-per-call and cost-per-lead pricing models. MediaAlpha's media buying platform ("MediaAlpha for Advertisers") enables advertisers to create and automate data-driven bidding strategies designed to improve the efficiency and enhance the overall performance of their marketing campaigns. MediaAlpha has developed distinctive platform solutions for a range of insurance verticals, including auto, motorcycle, home, renter, health and life, and non-insurance verticals, including travel, education and personal finance. MediaAlpha powers over 200 million transactions annually, representing more than \$400 million in aggregate media spend.

As of December 31, 2018 and 2017, White Mountains reported \$88 million and \$97 million of total assets and \$42 million and \$37 million of total equity related to MediaAlpha. As of December 31, 2018 and 2017, White Mountains owned 61.0% and 64.4% of MediaAlpha. On a fully diluted basis, White Mountains owned 58.9% of MediaAlpha at December 31, 2018 and 2017. As of December 31, 2018 and 2017, White Mountains reported \$16 million and \$13 million of non-controlling interest related to MediaAlpha.

Business Model

MediaAlpha generates revenue based on the value of the media bought and sold by advertisers and publishers through its exchange platforms. MediaAlpha's cost of sales is comprised primarily of revenue share-based payments to publishers and traffic acquisition costs paid to top tier search engines. MediaAlpha's primary business model is to facilitate transactions between buyers and sellers and to retain a percentage of the advertising spend as gross profit. MediaAlpha only takes media risk when advertising revenue is generated through its owned and operated websites, with cost of sales consisting primarily of traffic acquisition spend on top tier search engines such as Google.

MediaAlpha offers its partners the flexibility to transact using MediaAlpha's platforms through the following relationship types:

- *Open Exchange*: Under this model, the advertiser pays for media placement on publisher sites, on a source-transparent basis, through an agreement with MediaAlpha. MediaAlpha secures and manages the advertising partnerships, as well as the publisher relationships. MediaAlpha bills the advertiser for the media purchased through the Open Exchange and is responsible for collections from the advertiser and disbursements to publisher partners. Revenue recognized represents the gross dollars transacted through the Open Exchange ("transaction value") and cost of sales is comprised of the revenue share payments to publisher partners.
- Buyer Exchange: Under this model, the advertiser uses MediaAlpha's advertiser platform to manage and optimize
 media campaigns that place ads on third-party publisher sites or advertising networks that do not use MediaAlpha for
 Publishers for the sale of their media. MediaAlpha tracks the transaction value of the media purchased through
 MediaAlpha's platform from these third-party media partners and bills the advertiser a platform fee based on that total
 transaction value. Revenue is recognized on a net basis, representing the licensing fee, since MediaAlpha is not
 responsible for disbursing funds to the advertiser's various third-party media partners.
- Seller Exchange: Under this model, the publisher uses MediaAlpha's publisher platform to manage, track, and optimize the media spend from advertisers with whom the publisher maintains direct contractual relationships. The publisher utilizes the platform as its ad serving, demand management, yield optimization, reporting, and analytics platform to enable the direct, programmatic sale of its performance media to its advertisers. MediaAlpha tracks the total transaction value generated through the publisher platform, but is not responsible for billing or collections from the publisher's advertisers. MediaAlpha bills the publisher a platform fee based on the transaction value of the media sold by the publisher and recognizes this revenue on a net basis.

The following table presents the transaction value by relationship types for the years ended December 31, 2018, 2017, and 2016:

	Year Ended December 31,										
\$ in Millions	2018			2017				2016			
Open Exchange (1)	\$	289.0	73.2%	\$	159.9	73.1%	\$	113.2	64.8%		
Seller Exchange		67.6	17.1		33.9	15.5		38.4	21.9		
Buyer Exchange		38.4	9.7		25.0	11.4		23.2	13.3		
Total transaction value	\$	395.0	100.0%	\$	218.8	100.0%	\$	174.8	100.0%		

⁽¹⁾ Includes transaction value from owned and operated properties.

Media Alpha operates in several data-rich verticals, including Property & Casualty ("P&C"), Health, Life and Medicare ("HLM"), Travel, and Others (Education and Consumer Finance).

- **P&C** consists of advertisers who acquire customers with the intent of selling automobile, home or motorcycle insurance coverage. The advertisers in this vertical are primarily national insurance carriers and advertising agencies commissioned by carriers. The publishers in this vertical are a mix of third-party publishers and national carriers ("Carrier Publishers") and MediaAlpha's owned and operated properties.
- *HLM* consists of advertisers who acquire customers with the intent of selling them health, life and Medicare insurance coverage. The advertisers in this vertical are primarily national carriers and advertising agencies commissioned by carriers. The publishers in this vertical are primarily third-party publishers and MediaAlpha's owned and operated properties. On October 5, 2017, MediaAlpha acquired certain assets associated with the Health, Life and Medicare insurance business of Healthplans.com. The acquisition allowed MediaAlpha to supplement its position as the leading marketing technology provider for advertisers and publishers in this market. See **Note 4** "Goodwill and Other Intangibles Assets" on page F-30.
- *Travel* consists of advertisers who acquire customers with the intent of selling a leisure travel item (e.g. air fare, hotel, package deal, car rental). The advertisers in this vertical are primarily national brands, online travel agents, travel metasearch sites and advertising agencies commissioned by national brands. The publishers in this vertical are a mix of third-party publishers and MediaAlpha's owned and operated properties. On January 15, 2016, MediaAlpha acquired certain travel-related assets from Oversee.net, including owned and operated websites, domain names and key customer relationships. The acquisition accelerated MediaAlpha's entry into the travel vertical, providing MediaAlpha with access to a high quality owned and operated inventory and existing advertiser relationships, consisting primarily of major online travel agents, metasearch sites and national brands. See Note 4 "Goodwill and Other Intangibles Assets" on page F-30.
- Other verticals MediaAlpha operates in include the following:
 - *Education* consists of advertisers in the for-profit education industry, who seek to acquire customers that will enroll in higher or technical education programs.
 - Personal Finance consists of multiple sub verticals, ranging from mortgage products (refinance, HELOC, new home) to personal loans.

The following table presents the transaction value by vertical for the years ended December 31, 2018, 2017, and 2016:

	Year Ended December 31,										
\$ in Millions	2018			2017				2016			
P&C	\$	225.4	57.1%	\$	121.6	55.5%	\$	126.5	72.4%		
HLM		113.7	28.8		65.4	29.9		32.4	18.5		
Travel		29.5	7.5		18.3	8.4		10.1	5.8		
Other		26.4	6.6		13.5	6.2		5.8	3.3		
Total transaction value	\$	395.0	100.0%	\$	218.8	100.0%	\$	174.8	100.0%		

Strategy

MediaAlpha's goal is to gain adoption of its technology platforms in all data-rich, performance-marketing verticals. MediaAlpha believes that online advertising spend will continue to shift toward measurable, data-driven models and that advertisers will continue to focus on performance and return on investment ("ROI") on advertising spend. Since inception, MediaAlpha's approach has been to facilitate this shift by providing partners with unparalleled pricing control and full source transparency down to the domain level, and by continually improving its technology platforms to provide key constituents with more and deeper capabilities.

Competition

The marketing industry is very competitive, highly fragmented and historically dominated by advertising networks. MediaAlpha's direct competitors include QuinStreet Inc., Intent Media and Clicktripz. MediaAlpha differentiates itself from the competition in the following areas:

- *Technology*: MediaAlpha's proprietary technology provides advertisers with a set of robust tools to help them manage their adverting spend programmatically, on a granular, real time basis.
- *Transparency*: The marketplaces powered by MediaAlpha's technology are fully source transparent, offering full placement-level pricing control to the advertiser.
- *Control:* MediaAlpha's technology gives granular, self-service buying control to advertisers and enables publishers to control and manage all aspects of how their media is made available to advertisers.
- *Quality:* MediaAlpha's publishers include some of the largest and most reputable names in the industry.

OTHER OPERATIONS

White Mountains's Other Operations segment consists of the Company and its wholly-owned subsidiary, White Mountains Capital, Inc. ("WM Capital"), its other intermediate holding companies, its wholly-owned investment management subsidiary, WM Advisors, investment assets managed by WM Advisors, its interests in PassportCard Limited ("PassportCard") and DavidShield Life Insurance Agency (2000) Ltd. ("DavidShield") (collectively "PassportCard/DavidShield") and Kudu Investment Management, LLC ("Kudu"), certain other consolidated and unconsolidated entities ("Other Operating Businesses") and certain other strategic investments ("Strategic Investments").

PassportCard/DavidShield

In April 2015, White Mountains acquired a 50% interest in PassportCard, a UK-based global managing general agency ("MGA") offering the travel industry's first real-time, paperless insurance solution, which facilitates claim payouts in minutes wherever and whenever the customer needs it. PassportCard directly markets its solutions in select markets and also franchises its offerings to major travel insurance and medical assistance companies. PassportCard receives commissions for placing policies with its insurance carrier partners and licensing fees for use of its card-based technology.

On January 24, 2018, White Mountains acquired 50% of DavidShield for a net purchase price of \$28 million. As a result of the transaction, White Mountains and its joint venture partner both hold 50% stakes in PassportCard and DavidShield. DavidShield is an MGA that is the leading provider of expatriate medical insurance in Israel and uses the same card-based delivery system as PassportCard. Since 2000, DavidShield has delivered industry leading medical insurance solutions to diplomats, non-governmental organizations and thousands of multinational corporations and individuals in over 95 countries.

There are a number of distinct advantages to the PassportCard and DavidShield insurance solutions that differentiate them in the marketplace. Through the real-time claims handling process, PassportCard and DavidShield are generally able to control claims, loss costs and fraud upfront, driving lower than industry average loss ratios. Further, the card-based, paperless delivery model enables a superior customer experience, commanding industry-leading customer retention rates and strong brand loyalty.

PassportCard and DavidShield launched originally in Israel and are now focused on international expansion. In the second quarter of 2018, PassportCard launched in Australia (under the "TravelCard" brand).

White Mountains's non-controlling equity interests in PassportCard and DavidShield are accounted for at fair value within other long-term investments. As of December 31, 2018, the fair value of these interests totaled \$75 million. As of December 31, 2017, the fair value of White Mountains's interest in PassportCard was \$21 million.

Kudu

On February 5, 2018, White Mountains entered into an agreement to fund up to \$125 million in Kudu, a capital provider to asset management and wealth management firms. As of December 31, 2018, White Mountains owned 49.5% of Kudu. Kudu specializes in providing capital solutions to asset managers and registered investment advisers for purposes including generational ownership transfers, management buyouts, acquisition and growth finance and legacy partner liquidity. Kudu also provides strategic assistance to investees from time to time. Kudu's capital solutions typically are structured as long-term or permanent revenue shares.

As of December 31, 2018, Kudu had completed transactions with two asset management firms and one wealth manager since the inception of White Mountains's commitment. As of December 31, 2018, White Mountains had funded \$31 million of its \$125 million commitment, plus an additional \$4 million for working capital. White Mountains's non-controlling equity interest in Kudu is accounted for at fair value within other long-term investments. As of December 31, 2018, the fair value of this interest was \$31 million.

On February 14, 2019, White Mountains entered into a definitive agreement to buy all of the interests in Kudu held by certain funds managed by Oaktree Capital Management, L.P. ("Oaktree") for approximately \$50 million. In connection with the transaction, White Mountains will assume all of Oaktree's unfunded capital commitments to Kudu, increasing White Mountains's total unfunded Kudu capital commitment to approximately \$167 million. If Kudu calls additional capital from Oaktree prior to the closing of the transaction, the purchase price would increase by the amount of the capital called, and White Mountains's assumed unfunded capital commitment would decrease by an equal amount.

As a result of the transaction, White Mountains's ownership of Kudu will increase from 49.5% to 99.0%, and it expects to consolidate Kudu in its financial statements after closing.

Other Operating Businesses

Buzz

In August 2016, White Mountains acquired a controlling interest in Removal Stars Ltd. ("Buzz"). As of December 31, 2018 and 2017, White Mountains owned 77.1% of Buzz. Buzz is a portfolio of three related business models that leverage its household inventory technology and the household moving process. Buzzmove is an online price comparison and booking platform for all moving related services in the United Kingdom. Buzzsurvey provides remote surveying technology and services to moving companies. Buzzvault is a digital asset vault that inventories consumers' belongings and offers insurance policies in respect of those belongings. As of December 31, 2018 and 2017, White Mountains reported \$10 million and \$12 million of total assets and \$9 million and \$11 million of shareholders' equity related to Buzz.

Wobi

In February 2014, White Mountains acquired a controlling interest in Wobi Insurance Agency, Ltd ("Wobi"). As of December 31, 2018 and 2017, White Mountains owned 100.0% and 96.8% of Wobi. Wobi is a financial-sector price comparison business in Israel. Wobi has built a consumer-facing technology platform to enable price comparison and has assembled a panel of large, branded insurance carriers. The company sells primarily auto insurance and earns commissions on all policy sales. As of December 31, 2018 and 2017, White Mountains reported \$4 million and \$5 million of total assets and \$1 million and \$2 million of shareholders' equity related to Wobi.

Other

White Mountains maintains various other non-controlling equity interests in operating businesses accounted for at fair value within other long-term investments. As of December 31, 2018 and 2017, the fair value of these interests totaled \$50 million and \$52 million, respectively.

Strategic Investments

Enlightenment Capital

In November 2012, in connection with its initial limited partnership investment in Enlightenment Capital Fund I, White Mountains acquired a 15% general partner interest in Enlightenment Capital, a private investment firm that provides flexible capital solutions to middle market businesses in the aerospace, defense and government sectors. White Mountains also holds non-controlling limited partnership interests in Enlightenment Capital Fund I, Enlightenment Capital Fund II and Enlightenment Capital Fund III. As of December 31, 2018 and 2017, the fair value of White Mountains's investments in Enlightenment Capital and the Enlightenment Capital Funds totaled \$28 million and \$16 million, respectively.

Tuckerman Capital

White Mountains owns a 25% general partnership interest in Tuckerman Capital, a private investment firm with a focus on manufacturing and industrial service sectors. White Mountains also holds non-controlling limited partnership interests in the Tuckerman Capital III Fund, the Tuckerman Capital IV Fund, the Tuckerman Capital V Fund and the Tuckerman Capital V Coinvestment Fund. White Mountains also holds a direct interest in Galvanic Applied Sciences ("Galvanic"), a manufacturer of liquid and gas analyzers, through Tuckerman Capital. As of both December 31, 2018 and 2017, the fair value of White Mountains's investment in Tuckerman Capital, the Tuckerman Capital Funds and Galvanic totaled \$47 million.

Other

White Mountains maintains various other non-controlling equity interests in strategic investments accounted for at fair value within other long-term investments. As of December 31, 2018 and 2017, the fair value of these interests totaled \$18 million and \$14 million, respectively.

WM Advisors

WM Advisors manages substantially all of White Mountains's investment portfolio, which primarily consists of fixed maturity investments, short-term investments, common equity securities and other long-term investments.

Previously, WM Advisors was a registered investment adviser that also managed investment portfolios for former White Mountains's subsidiaries OneBeacon Insurance Group, Ltd. ("OneBeacon") and Sirius International Insurance Group, Ltd. ("Sirius Group"), and former White Mountains affiliate Symetra Financial Corporation ("Symetra"). WM Advisors managed investment portfolios for each party prior to their sales and for a transition period after each respective transaction. See "**Discontinued Operations**" on page 48 for a description of the OneBeacon and Sirius Group transactions. As of December 31, 2017, WM Advisors no longer managed any invested assets for OneBeacon, Sirius Group or Symetra. Consequently, WM Advisors de-registered with the SEC on January 29, 2018 and is no longer a registered investment adviser.

INVESTMENTS

White Mountains's investment philosophy is to maximize long-term after-tax total returns while taking prudent levels of risk and maintaining a diversified portfolio, subject to White Mountains's investment guidelines and various regulatory restrictions. Under White Mountains's philosophy, each dollar of after-tax investment income or investment gains (realized or unrealized) is valued equally.

White Mountains maintains an equity portfolio that consists primarily of common equity securities and other long-term investments, including unconsolidated entities, private equity funds and hedge funds. White Mountains's portfolio of common equity securities primarily consists of passive exchange traded funds ("ETFs") and publicly-traded common equity securities that are actively managed by select third-party registered investment advisers, whom White Mountains believes have a differentiated investment strategy and approach.

White Mountains's maintains a fixed income portfolio that consists primarily of high-quality, short-duration, fixed maturity investments and short-term investments. White Mountains invests in fixed maturity investments that are attractively priced in relation to their investment risks and actively manages the average duration of the fixed income portfolio. As of December 31, 2018, the fixed income portfolio duration, including short-term investments, was 3.4 years. White Mountains has established relationships with select third-party registered investment advisers to manage a portion of its fixed income portfolio.

See "Portfolio Composition" on page 46.

DISCONTINUED OPERATIONS

Over the past three years, White Mountains has disposed of a number of its principal operating businesses and recorded large transaction gains. See Note 2 — "Significant Transactions" on page F-16 and Note 19 — "Held for Sale and Discontinued Operations" on page F-55 for details regarding these dispositions. A description of the largest of these dispositions follows:

OneBeacon

On September 28, 2017, Intact Financial Corporation completed its acquisition of OneBeacon Insurance Group, Ltd. in an all-cash transaction for \$18.10 per share (the "OneBeacon Transaction"). White Mountains received \$1.3 billion in cash proceeds and recorded a \$557 million comprehensive gain from sale of discontinued operations, net of transaction costs. The comprehensive gain includes \$3 million related to the reversal of accumulated other comprehensive income from benefit plan assets and obligations.

While owned by White Mountains, OneBeacon was a provider of a wide range of property and casualty insurance products in the United States primarily through independent agencies, regional and national brokers, wholesalers and MGAs.

Tranzact

On July 21, 2016, White Mountains completed the disposition of Tranzact Holdings, LLC ("Tranzact") to an affiliate of Clayton, Dubilier & Rice, LLC and received \$221 million in cash proceeds. The increase to White Mountains's book value from the sale of Tranzact was \$82 million.

While owned by White Mountains, Tranzact was a provider of comprehensive direct-to-consumer customer acquisition solutions, primarily to insurance companies. Tranzact operated in the health, life and property and casualty insurance verticals (as well as several non-insurance verticals). Tranzact generated revenues through commissions and technology licensing, maintenance, and professional fees.

Sirius Group

On April 18, 2016, White Mountains completed the disposition of Sirius Group to CM International Pte. Ltd. and CM Bermuda Limited (collectively "CMI"). White Mountains received approximately \$2.6 billion in cash proceeds and recorded a \$477 million comprehensive gain from sale of discontinued operations. The comprehensive gain includes \$113 million related to the reversal of accumulated other comprehensive income from foreign currency translation.

While owned by White Mountains, Sirius Group was a provider of reinsurance and insurance products for property, accident and health, aviation and space, trade credit, marine, agriculture and certain other exposures on a worldwide basis through its subsidiary, Sirius International Insurance Corporation. Sirius Global Solutions, formerly known as White Mountains Solutions, specialized in the acquisition and management of runoff liabilities for insurance and reinsurance companies both in the United States and internationally.

REGULATION

United States

Insurance Regulation

BAM is subject to regulation and supervision in New York and each of the states where it is licensed to conduct business. Generally, state regulatory authorities have broad supervisory and administrative powers over such matters as licenses, standards of solvency, premium rates, policy forms, investments, statutory deposits, methods of accounting, form and content of financial statements, claims reserves and LAE liabilities, reinsurance, minimum capital and surplus requirements, dividends and other distributions to shareholders, annual and other report filings and other market conduct. In general, such regulation is for the protection of policyholders rather than shareholders. White Mountains believes that BAM is in compliance with all applicable laws and regulations pertaining to its business that would have a material effect on its financial condition and results of operation in the event of non-compliance.

NSM, through its subsidiaries is licensed in all 50 states and the District of Columbia. White Mountains believes NSM is in compliance with all applicable laws and regulations pertaining to its business that would have a material effect on its financial condition and results of operations in the event of non-compliance.

State Accreditation and Monitoring

State insurance laws and regulations include numerous provisions governing marketplace activities of insurers, including provisions governing marketing and sales practices, policyholder services, claims management and complaint handling. State regulatory authorities generally test and enforce these provisions through periodic market conduct examinations.

New York Insurance Law establishes single and aggregate risk limits for financial guaranty insurers. Single risk limits for financial guaranty insurers are applicable to all obligations issued by a single entity and backed by a single revenue source. Insurance on municipal obligations is also subject to a limit where the insured average annual debt service for a single risk, net of qualifying reinsurance and collateral, may not exceed 10% of policyholders' surplus and contingency reserves. In addition, the insured principal of municipal obligations attributable to any single risk, net of qualifying reinsurance and collateral, is limited to 75% of policyholders' surplus and contingency reserves.

The New York Insurance Law also establishes aggregate risk limits on the basis of total outstanding principal and interest of guaranteed obligations insured net of qualifying reinsurance and collateral (the "Aggregate Net Liability"), compared to the sum of the insurer's policyholders' surplus and contingency reserves. Under these limits, policyholders' surplus and contingency reserves for municipal obligations must not be less than 0.33% of the Aggregate Net Liability. If a financial guaranty insurer fails to comply with single or aggregate risk limits, the NYDFS has broad discretion to order the insurer to cease new business originations. As of December 31, 2018, BAM was in compliance with the single and aggregate risk limits.

No payment of interest or principal on the BAM Surplus Notes may be made without the approval of the NYDFS.

Under the New York Insurance Law, BAM must establish a contingency reserve to protect policyholders against the effect of adverse economic developments or cycles or other unforeseen circumstances. BAM determines its contingency reserves by applying the calculations required by each state in which it is licensed and recording a contingency reserve equal to the calculation that results in the highest contingency reserve.

When considering the principal amount guaranteed, New York Insurance Law permits the insurer to take credit for amounts ceded through reinsurance.

The NYDFS, the regulatory authority of BAM's state of domicile, conducts periodic examinations of insurance companies domiciled in New York, usually at five-year intervals. In 2014, the NYDFS commenced and completed its examination of BAM and issued a Report on Examination of BAM for the period beginning at BAM's inception and ending December 31, 2013. The reports did not note any significant regulatory issues concerning BAM.

Investments

BAM is subject to state laws and regulations that require investment portfolio diversification and that dictate the quality, quantity and general types of investments they may hold. Non-compliance may cause non-conforming investments to be non-admitted when measuring statutory surplus and, in some instances, may require divestiture.

Holding Company Structure

Regulations under certain state insurance holding company acts contain reporting requirements relating to the capital structure, ownership, financial condition and general business operations of insurance entities. These regulations also contain special reporting and prior approval requirements with respect to certain transactions among affiliates. The domiciliary states of insurance entities impose regulatory application and approval requirements on acquisitions that may be deemed to confer control, as that concept is defined under the applicable state laws. In some states as little as 5% may be deemed to confer control, and the application process for approval can be extensive and time consuming.

Legislation

Although the federal government does not directly regulate the insurance business, federal legislation and administrative policies impact the industry. In addition, legislation has been introduced in recent years that, if enacted, could result in the federal government assuming a more direct role in the regulation of the insurance industry. Notably, the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") created the Federal Insurance Office ("FIO") within the Treasury Department, which is responsible for gathering information and monitoring the insurance industry to identify gaps in the regulation of insurers that could contribute to a systemic crisis in the insurance industry or U.S. financial system.

In addition to emerging federal regulation, many states are adopting laws that attempt to strengthen the ability of regulators to understand and regulate the risk management practices of insurers and insurance groups. For example, many states have adopted measures related to the NAIC's Solvency Modernization Initiative ("SMI"), which have included model regulations that require insurers to summarize their key risks and risk management strategies to regulators. The SMI resulted in a 2010 amendment to the NAIC's Model Insurance Holding Company System Regulatory Act (the "Model Holding Company Act"), which requires the ultimate controlling person in an insurer's holding company structure to identify and report material enterprise risks to the state insurance regulator.

The SMI also produced the NAIC Risk Management and Own Risk Solvency Model Act ("ORSA"), which requires insurers meeting premium thresholds to maintain a risk management framework, and annually submit a comprehensive report designed to assess the adequacy of an insurer's risk management practices, including risks related to the insurer's future solvency position.

Premium Accounts Held in Trust

NSM maintains approximately 40 trust accounts in order to comply with fiduciary requirements under U.S. state and U.K. Financial Conduct Authority (the "FCA") insurance laws and regulations relating to premium trust accounts. Under such laws, insurance agencies that do not make immediate remittances to counterparties (such as insurance companies, clients or other producers to which premium, commissions or other amounts are due from time to time) must segregate funds owed to such counterparties and these funds must be held in trust for the insurance company, client or other relevant third-party payee.

NSM's use of trust accounts is routinely subject to audits by carrier partners and other external auditors. NSM believes that it is in compliance with its fiduciary requirements.

Bermuda

Insurance Regulation

The Insurance Act 1978 of Bermuda and related regulations, as amended (the "Insurance Act"), regulates the insurance business of HG Re, and provides that no person may carry on any insurance business in or from within Bermuda unless registered as an insurer under the Insurance Act by the Bermuda Monetary Authority ("BMA"). The BMA, in deciding whether to grant registration, has broad discretion to act as it thinks fit in the public interest. The BMA is required by the Insurance Act to determine whether the applicant is a fit and proper body to be engaged in the insurance business and, in particular, whether it has, or has available to it, adequate knowledge and expertise to operate an insurance business. In addition, the BMA is required by the Insurance Act to determine whether a person who proposes to control 10 percent, 20 percent, 33 percent or 50 percent (as applicable) of the voting powers of a Bermuda registered insurer or its parent company is a fit and proper person to exercise such degree of control. See "Dividend Capacity" on page 49 for further discussion.

The continued registration of an applicant as an insurer is subject to the applicant complying with the terms of its registration and such other conditions as the BMA may impose from time to time. The Insurance Act also grants to the BMA powers to supervise, investigate and intervene in the affairs of Bermuda insurance companies.

The Insurance Act imposes solvency and liquidity standards on Bermuda insurance companies, as well as auditing and reporting requirements. White Mountains believes that it is in compliance with all applicable laws and regulations pertaining to its business that would have a material effect on its financial condition and results of operations in the event of non-compliance.

Certain Other Bermuda Law Considerations

The Company is an exempted company incorporated and organized under the Companies Act 1981 of Bermuda (the "Companies Act"). As a result, the Company is required to comply with the provisions of the Companies Act regulating the payment of dividends and making of distributions from contributed surplus. A company is prohibited from declaring or paying a dividend, or making a distribution out of contributed surplus, if there are reasonable grounds for believing that:

- (1) the company is, or would after the payment be, unable to pay its liabilities as they become due; or
- (2) the realizable value of the company's assets would thereby be less than its liabilities.

Under the Company's bye-laws, each common share is entitled to dividends if, and when, dividends are declared by its board of directors, subject to any preferred dividend rights of the holders of any preference shares. Issued share capital is the aggregate par value of the company's issued shares, and the share premium account is the aggregate amount paid for issued shares over and above their par value. Share premium accounts may be reduced in certain limited circumstances. In addition, the Companies Act regulates return of capital, reduction of capital and any purchase or redemption of shares by the Company.

Although the Company is incorporated in Bermuda, it has been designated as a non-resident of Bermuda for exchange control purposes by the BMA. Pursuant to its non-resident status, the Company may hold any currency other than Bermuda dollars and convert that currency into any other currency, other than Bermuda dollars, without restriction.

Shares may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act 2003 and the Exchange Control Act 1972, and related regulations of Bermuda which regulate the sale of securities in Bermuda. In addition, specific permission is required from the BMA pursuant to the provisions of the Exchange Control Act 1972 and related regulations, for all issuances and transfers of securities of Bermuda companies, other than in cases where the BMA has granted a general permission. The BMA in its policy dated June 1, 2005 provides that where any equity securities, including the Company's common shares, of a Bermuda company are listed on an appointed stock exchange, general permission is given for the issue and subsequent transfer of any securities of a company from and/or to a non-resident, for as long as any equity securities of such company remain so listed. The New York Stock Exchange is deemed to be an appointed stock exchange under Bermuda law. Notwithstanding the above general permission, the BMA has granted the Company permission to, subject to its common shares being listed on an appointed stock exchange, (a) issue and transfer its shares, up to the amount of its authorized capital from time to time, to persons resident and non-resident of Bermuda for exchange control purposes; (b) issue and transfer options, warrants, depositary receipts, rights, and other securities; and (c) issue and transfer loan notes and other debt instruments to persons resident and non-resident of Bermuda for exchange control purposes.

On January 1, 2019 the Economic Substance Act 2018 (the "ESA") came into effect in Bermuda. Under the provisions of the ESA, every Bermuda registered entity engaged in a "relevant activity" must satisfy economic substance requirements by maintaining a substantial economic presence in Bermuda. Carrying on as a business either in insurance or holding entity activities (both as defined in the ESA and Economic Substance Regulations 2018) are relevant activities under the ESA. To the extent that the ESA applies to any of our entities registered in Bermuda, we will be required to demonstrate compliance with economic substance requirements by filing an annual economic substance declaration with the Registrar of Companies in Bermuda.

Under Bermuda law, exempted companies are companies formed for the purpose of conducting business outside Bermuda from a principal place in Bermuda. As an exempted company, the Company may not, without the express authorization of the Bermuda legislature or under a license granted by the Bermuda Minister of Finance (the "Minister"), participate in various specified business transactions, including

- the acquisition or holding of land in Bermuda, except land held by way of lease or tenancy agreement which is
 required for the Company's business and held for a term not exceeding 50 years, or which is used to provide
 accommodation or recreational facilities for the Company's officers and employees and held with the consent of
 the Minister, for a term not exceeding 21 years;
- the taking of mortgages on land in Bermuda in excess of \$50,000;
- the acquisition of any bonds or debentures secured by any land in Bermuda, other than certain types of Bermuda government or public authority securities; or
- subject to some exceptions, the carrying on of business of any kind in Bermuda for which the Company is not licensed in Bermuda.

Under Bermuda law, non-Bermudians (other than spouses of Bermudians, holders of permanent resident certificates and holders of working resident certificates) may not engage in any gainful occupation in Bermuda without an appropriate governmental work permit. Work permits may be granted or extended by the Bermuda government upon showing that, after proper public advertisement in most cases, no Bermudian (or spouse of a Bermudian or a holder of a permanent resident's certificate or holder of a working resident's certificate) is available who meets the minimum standard requirements for the advertised position. A waiver from advertising is automatically granted in respect of any chief executive officer position and other chief officer positions. The employer can also make a request for a waiver from the requirement to advertise in certain other cases, as expressed in the Bermuda government's work permit policies. Currently, all of the Company's Bermuda-based professional employees who require work permits have been granted work permits by the Bermuda government.

United Kingdom

NSM is regulated in the United Kingdom by the FCA. The FCA has a wide range of rule-making, investigatory and enforcement powers, and monitors compliance with regulatory requirements.

RATINGS

Insurance companies are evaluated by various rating agencies in order to measure each company's financial strength. Higher ratings generally indicate financial stability and a stronger ability to pay claims. White Mountains believes that strong ratings are important factors in the marketing and sale of insurance products and services to agents and consumers and ceding companies.

As of February 27, 2019, BAM is rated "AA/stable" by Standard & Poor's. "AA" is the third highest of 23 financial strength ratings assigned by Standard & Poor's.

EMPLOYEES

As of December 31, 2018, White Mountains employed 1,058 people (consisting of 58 people at the Company, WM Capital, its other intermediate holding companies, WM Advisors and HG Global, 741 people at NSM, 145 people at Wobi, 65 people at MediaAlpha and 49 people at Buzz). Management believes that White Mountains has satisfactory relations with its employees.

AVAILABLE INFORMATION

The Company is subject to the informational reporting requirements of the Exchange Act. In accordance therewith, the Company files reports, proxy statements and other information with the SEC. These documents are available at www.whitemountains.com shortly after such material is electronically filed with or furnished to the SEC. In addition, the Company's code of business conduct and ethics as well as the various charters governing the actions of certain of the Company's Committees of its Board of Directors, including its Audit Committee, Compensation Committee and Nominating and Governance Committee, are available at www.whitemountains.com.

The Company will provide to any shareholder, upon request and without charge, copies of these documents (excluding any applicable exhibits unless specifically requested). Written or telephone requests should be directed to the Corporate Secretary, White Mountains Insurance Group, Ltd., 26 Reid Street, Hamilton, HM 11 Bermuda, telephone number (441) 278-3160. Additionally, all such documents are physically available at the Company's registered office at Clarendon House, 2 Church Street, Hamilton, HM 11 Bermuda.

Item 1A. Risk Factors

The information contained in this report may contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. See "FORWARD-LOOKING STATEMENTS" on page 62 for specific important factors that could cause actual results to differ materially from those contained in forward-looking statements. The Company's actual future results and trends may differ materially depending on a variety of factors including, but not limited to, the risks and uncertainties discussed below.

Our investment portfolio may suffer reduced returns or losses, which could materially adversely affect our results of operations and financial condition. Adverse changes in equity markets, interest rates, debt markets or foreign currency exchange rates could result in significant losses to the value of our investment portfolio.

Our investment portfolio primarily consists of fixed maturity investments, short-term investments, common equity securities and other long-term investments, including unconsolidated entities, private equity funds and hedge funds. We invest to maximize long-term after-tax total returns while taking prudent levels of risk and maintaining a diversified portfolio subject to our investment guidelines and various regulatory restrictions. However, investing entails substantial risks. We may not achieve our investment objectives, and our investment performance may vary substantially over time. Losses or volatility in the equity or fixed income markets could materially adversely affect our results of operations and financial condition.

The fair market value of our investment portfolio is affected by general economic and market conditions that are outside of our control, including fluctuations in equity market levels, interest rates, debt market levels, foreign currency exchange rates and credit losses sustained by issuers. A significant decline in the equity markets such as that experienced from September 2008 to March 2009 could materially adversely affect our results of operations and financial condition. We are also exposed to changes in debt markets. Interest rates are highly sensitive to many factors, including governmental monetary policies, economic and political conditions and other factors beyond our control. In particular, a significant increase in interest rates could result in significant losses in the value of our investment portfolio and, consequently, could materially adversely affect our results of operations and financial condition. We also hold investments, such as unconsolidated entities, private equity funds and hedge funds that are not regularly traded in active investment markets and may be illiquid. These investments can experience volatility in their returns or valuation, which could materially adversely affect our results of operations and financial condition. Additionally, a portion of our investment portfolio is invested in securities denominated in currencies other than the U.S. dollar, predominantly British Pound Sterling ("GBP"), Japanese Yen and the Euro. A significant strengthening of the U.S. dollar against these other currencies could materially adversely affect our results of operations and financial condition.

We have successfully created shareholder value through acquisitions and dispositions. We may not be able to continue to create shareholder value through such transactions in the future.

In past years, we have completed numerous acquisitions and dispositions, many of which have contributed significantly to creating shareholder value. Failure to identify and complete future acquisitions and dispositions could limit our ability to create shareholder value. Even if we were to identify and complete future acquisitions and dispositions, there is no assurance that such transactions will ultimately achieve their anticipated benefits, and such transactions could materially adversely affect our results of operation and financial condition.

BAM may not maintain a favorable financial strength rating, which could materially adversely affect its ability to conduct business and, consequently, could materially adversely affect our results of operations and financial condition.

Third-party rating agencies assess and rate the financial strength of insurers, including claims-paying ability. These ratings are based upon criteria established by the rating agencies and are subject to revision at any time at the sole discretion of the rating agencies. Some of the criteria relate to general economic conditions and other circumstances outside the rated insurer's control. The financial strength rating of Standard & Poor's is used by outside parties to assess the suitability of BAM as a business counterparty and is an important factor in establishing BAM's competitive position.

Standard & Poor's periodically evaluates BAM to confirm that it continues to meet the criteria of the rating previously assigned to it. On June 6, 2017, Standard & Poor's placed BAM on credit watch negative and initiated a detailed review of BAM's financial strength rating. On June 26, 2017, Standard & Poor's concluded its review and affirmed BAM's "AA/stable" financial strength rating. During the time that BAM was under review by Standard & Poor's, it voluntarily withdrew from the marketplace and did not write any municipal bond insurance policies.

The maintenance of an "AA" or better financial strength rating from Standard & Poor's is particularly important to BAM's ability to write municipal bond insurance policies and meet its debt service obligations under the BAM Surplus Notes. As of February 27, 2019, BAM is rated "AA/stable" by Standard & Poor's. A downgrade, withdrawal or negative watch/outlook of BAM's financial strength rating could severely limit or prevent BAM's ability to write municipal bond insurance policies, which could materially adversely affect our results of operations and financial condition.

If BAM does not pay some or all of the principal and interest due on the BAM Surplus Notes, it could materially adversely affect our results of operations and financial condition.

As of December 31, 2018, White Mountains owned \$481 million in BAM Surplus Notes and had accrued \$144 million of interest thereon. No payment of principal or interest on the BAM Surplus Notes may be made without the approval of the NYDFS. Under its agreements with HG Global, BAM is required to seek regulatory approval to pay principal and interest on the BAM Surplus Notes only to the extent that its capital resources continue to support its outstanding obligations, business plan and rating. It is unlikely that BAM would pay principal and interest on the BAM Surplus Notes if such payments could lead to a rating downgrade. In the fourth quarter of 2018, the NYDFS approved a payment on the BAM Surplus Notes of \$18 million of principal and \$5 million of accrued interest. We cannot guarantee that the NYDFS will approve payments on the BAM Surplus Notes in the future.

If BAM does not repay some or all of the principal and interest on the BAM Surplus Notes, it could materially adversely affect our results of operations and financial condition. BAM's ability to repay principal and interest on the BAM Surplus Notes is dependent on a number of factors, many of which are beyond BAM's control, including primary municipal bond issuance levels, insured penetration rates, interest rate levels, credit spreads, trading value, capture rate and market share. BAM also could incur significant losses from the municipal bonds it insures. In addition, the municipal bond insurance industry is highly competitive. BAM's primary competitor is Assured and, if BAM is unable to compete effectively against Assured, it could result in fewer policies issued, lower premium levels and less favorable policy terms and conditions.

We are exposed to losses from municipal bond insurance written by BAM through our reinsurance arrangement between BAM and HG Re, which could materially adversely affect our results of operations and financial condition.

Our reinsurance subsidiary, HG Re, reinsures losses on the first 15%-of-par outstanding on each municipal bond insured by BAM. Should the policies underwritten by BAM experience insured losses for any reason, it could materially adversely affect our results of operations and financial condition.

If we are required to write down goodwill and other intangible assets, it could materially adversely affect our results of operations and financial condition.

As of December 31, 2018, we had total goodwill and other intangible assets of \$538 million on our consolidated balance sheet, most of which relate to our acquisition of NSM and NSM's subsequent acquisitions of Fresh Insurance and KBK. As of December 31, 2018, goodwill and other intangible assets related to NSM were \$486 million.

We periodically review goodwill and other intangible assets to determine whether an impairment has occurred. An impairment of goodwill or other intangible assets occurs when the carrying value of the asset exceeds its fair value. The evaluation of goodwill or other intangible assets for impairment requires the use of significant judgment in determining fair value, including assumptions about the future performance of the associated business. We may experience unexpected circumstances that cause future results to differ significantly from those assumptions used in our estimation of the fair value of our goodwill and other intangible assets that could cause us to conclude that goodwill and other intangible assets are impaired. Such an impairment would result in a non-cash charge to income that could materially adversely affect our results of operations and financial condition.

Our commission revenues are dependent on many factors, some of which are beyond our control, including the pricing and profitability of certain segments of the property and casualty insurance industry, which is highly competitive and cyclical.

NSM generates most of its revenues from commissions that are a portion of premiums charged by insurance companies to their insureds. NSM also generates profit commissions from certain of its businesses that are paid by insurance companies based on the profitability of policies placed with them. NSM is an MGU, and as such its carrier partners bear the insurance risk on the programs designed and underwritten by NSM. Should NSM fail to meet the profitability expectations of the carriers that write the business it places, those carriers could choose to stop writing the business, which could materially adversely affect NSM's commission revenues and, consequently, could materially adversely affect our results of operations and financial condition.

The property and casualty insurance industry is highly competitive and has historically been cyclical, experiencing periods of severe price competition and less selective underwriting standards ("soft markets") followed by periods of relatively high prices and more selective underwriting standards ("hard markets"). The cyclicality of the property and casualty markets is beyond our control and could materially adversely affect our results of operations and financial condition by reducing the commissions we receive for property and casualty insurance we place during soft markets. We expect to continue to experience the effects of cyclicality and may not be able to successfully manage the associated risks.

Our future commission revenues could also be materially adversely affected by other factors beyond our control, including (i) the increasing availability of capital markets-based products designed to replace traditional insurance and reinsurance products; (ii) growth in the direct-to-consumer sales channel at the expense of insurance intermediaries including agents; and (iii) the percentage of premium insurance carriers will pay for placement services.

A substantial portion of NSM's business is placed with one insurance carrier, and most of NSM's business is placed with a small number of carriers.

NSM placed approximately 33% and 40% of its business with its single largest carrier during the years ended December 31, 2018 and 2017. NSM placed approximately 58% and 68% of its business with its five largest carriers during the years ended December 31, 2018 and 2017. Should any of these carriers reduce the volume of business accepted from NSM or adversely change the terms and conditions of placement, we cannot guarantee that NSM would be able to find other carriers to assume the business, which could materially adversely affect our results of operations and financial condition.

We may be treated as a PFIC, in which case a U.S. holder of our common shares could be subject to disadvantageous rules under U.S. federal income tax laws.

Significant potential adverse U.S. federal income tax consequences apply to any U.S. person who owns shares in a passive foreign investment company ("PFIC"). In general, a non-U.S. corporation is classified as a PFIC for a taxable year in which, after taking into account the income and assets of the corporation and certain subsidiaries pursuant to certain "look-through" rules, either (i) 75% or more of its gross income is passive income or (ii) 50% or more of the average quarterly value of its gross assets is attributable to assets that produce passive income or are held for the production of passive income. If a corporation is treated as a PFIC for a taxable year, it is generally treated as a PFIC for all later taxable years.

Passive income for PFIC purposes generally includes interest, dividends and other investment income, subject to certain exceptions. Under a previous special exception for insurance companies, income derived in the active conduct of an insurance business, including investment income derived in such an insurance business, was not treated as passive income for purposes of the PFIC rules. The Tax Cuts and Jobs Act of 2017 (the "TCJA") modified the insurance exception to apply to a company only if (i) the company would be taxed as an insurance company were it a U.S. corporation and (ii) either (A) loss and loss adjustment expenses and certain reserves constitute more than 25% of the company's gross assets for the relevant year or (B) loss and loss adjustments expense and certain reserves constitute more than 10% of the company's gross assets for the relevant year and, based on the applicable facts and circumstances, the company is predominantly engaged in an insurance business and the failure of the company to satisfy the preceding 25% test is due solely to run-off related or rating-related circumstances involving the insurance business.

At the present time White Mountains does not qualify for the insurance exception described above. However, based on the income and assets of White Mountains and, under applicable "look-through" rules, the income and assets of its subsidiaries, we believe that White Mountains should not be treated as a PFIC, and we do not expect that White Mountains will become a PFIC in the future. However, there is no assurance that White Mountains will not become a PFIC at some future time as a result of changes in our assets, income or business operations. In addition, there is no assurance that the Internal Revenue Service will not successfully argue that White Mountains is now, or in the future may become, a PFIC.

If we are determined to be a PFIC, a U.S. person may be subject to less advantageous tax consequences upon the sale, exchange or receipt of dividends with respect to our common shares and may be required to pay U.S. federal income tax at ordinary income rates for gains and dividends, as well as an interest charge on certain "excess distributions." Certain elections designed to mitigate the adverse consequences of owning shares in a PFIC, including a "Protective QEF Election," may be available. If you are a U.S. person, we encourage you to consult your own tax advisor concerning the potential tax consequences to you under the PFIC rules.

The Company and our non-U.S. subsidiaries may become subject to U.S. tax, which could materially adversely affect our results of operations and financial condition.

The Company and our non-U.S. subsidiaries operate in a manner such that none of these companies should be subject to U.S. tax (other than U.S. excise tax on insurance and reinsurance premium income attributable to insuring or reinsuring U.S. risks and U.S. withholding tax on some types of U.S. source investment income) because none of these companies should be treated as engaged in a trade or business within the United States. However, because there is considerable uncertainty as to the activities that constitute being engaged in a trade or business within the United States, we cannot be certain that the Internal Revenue Service will not contend successfully that the Company or its non-U.S. subsidiaries are engaged in a trade or business in the United States. If the Company or any of its non-U.S. subsidiaries were considered to be engaged in a trade or business in the United States, such entity could be subject to U.S. corporate income and branch profits taxes on the portion of its earnings effectively connected to such U.S. business, which could materially adversely affect our results of operations and financial condition.

Changes in tax laws or tax treaties could materially adversely affect our results of operations and financial condition.

The income of our U.S. subsidiaries is subject to U.S. federal, state and local income tax and other taxes. The TCJA contains changes that decrease the tax rate applicable to our U.S. subsidiaries, but also could increase their taxable income. We continue to monitor potential impacts from the TCJA.

The income of our non-U.S. subsidiaries is generally subject to a lower tax rate than that imposed by the United States. Certain of our non-U.S. subsidiaries are eligible for the benefits of tax treaties between the United States and other countries. We believe our non-U.S. subsidiaries will continue to be eligible for treaty benefits. However, it is possible that factual changes or changes to U.S. tax laws or changes to tax treaties that presently apply to our non-U.S. subsidiaries could increase income subject to tax, or the tax rate on income, in the United States. Similarly, changes to the applicable tax laws, treaties or regulations of other countries could subject the income of members of our group to higher rates of tax outside the United States. Additionally, the base erosion and profit shifting ("BEPS") project currently being undertaken by the Organization for Economic Cooperation and Development ("OECD") and the European Commission's investigation into illegal state aid may result in changes to long standing tax principles, which could materially adversely affect our results of operations and financial condition.

Our non-U.S. subsidiaries are treated as CFCs and may subject a U.S. 10% shareholder of our common shares to disadvantageous rules under U.S. federal income tax laws.

The TCJA modified certain U.S. tax rules that apply to controlled foreign corporations ("CFCs"). As a result of these changes, each of our non-U.S. subsidiaries is treated as a CFC. If any of our shareholders is a "U.S. 10% shareholder" (as described below) that directly or indirectly owns stock in White Mountains, that shareholder must include in its taxable income each year its pro rata share of our CFC subsidiaries" "subpart F income" for that year, even if no distributions are received by the U.S. 10% shareholder.

Due to changes made by the TCJA, for 2018 and later years a shareholder is treated as a U.S. 10% shareholder if the shareholder is a U.S. person who owns directly, indirectly or through constructive ownership rules 10% or more of either the voting power or the total value of our shares. As a result, a U.S. person that owns (directly, indirectly or through constructive ownership rules) 10% or more of our shares will generally be treated for 2018 and later years as a U.S. 10% shareholder of our CFC subsidiaries, notwithstanding the voting power restrictions of our shares. However, a person that is a U.S. 10% shareholder solely as a result of constructive ownership rules (i.e., such person does not directly or indirectly own stock of White Mountains) should not have a subpart F income inclusion with respect to our CFC subsidiaries.

If you are a U.S. person who might be a U.S. 10% shareholder, we encourage you to consult your own tax advisor concerning the CFC rules.

We may be deemed to be an investment company under U.S. federal securities law.

The Investment Company Act of 1940, as amended (the "Investment Company Act"), regulates certain companies that are engaged in the business of investing in or trading securities. Although the recent completion of the OneBeacon Transaction and other recent dispositions have resulted in the Company currently having a high level of undeployed capital relative to our historic levels, we do not believe that we are an investment company under the Investment Company Act. White Mountains has been, and will continue to be, engaged in the business of making opportunistic and value-oriented acquisitions of businesses and assets in the insurance, financial services and related sectors, operating these businesses and assets through our subsidiaries and, if and when attractive exit valuations become available, disposing of these businesses and assets.

However, notwithstanding the foregoing, if the Company is found to be an investment company and becomes obligated to register as such under the Investment Company Act, we would attempt to implement various changes to our operations and capital structure. There can be no assurance that the implementation of these changes would be successful. If the Company were ultimately required to register as an investment company, it would become subject to extensive, restrictive and potentially adverse regulation relating to, among other things, operating methods, management, capital structure, our ability to raise additional debt and equity capital or issue options or warrants (which could impact our ability to compensate key employees), financial leverage, dividends, board of director composition and transactions with affiliates. Accordingly, if we were required to register as an investment company, we may not be able to operate our business as it is currently conducted.

If at any time it were found that we had been operating as an investment company in violation of the registration requirements of the Investment Company Act, there would be a risk, among other material adverse consequences, that we could become subject to monetary penalties or injunctive relief, or both, that we could be unable to enforce contracts with third parties, or that third parties could seek to obtain rescission of transactions with us undertaken during the period in which it was established that we were an unregistered investment company. If, subsequently, we were not permitted or were unable to register as an investment company, it is possible that we would be forced to cease operations.

We may be unable to adequately maintain our systems and safeguard the security of our data, which could adversely impact our ability to operate our business and cause reputational harm and, consequently, could materially adversely affect our results of operations and financial condition.

Because our business and operations rely on secure and efficient information technology systems, we depend on our ability, and the ability of certain third parties, including vendors and business partners, to access our computer systems to perform necessary functions such as providing quotes and product pricing, billing and processing transactions, administering claims, and reporting our financial results. The functioning of these systems may be impacted by any number of events, including power outages, natural and manmade catastrophes, and cyber-attacks. In the event we are unable to access any of our systems, or any third-party system that we rely upon, our ability to operate our business effectively may be significantly impaired.

Our business also depends upon our ability to securely process, store, transmit and safeguard confidential and proprietary information that is in our possession. This information includes confidential information relating to our business, and personally identifiable information ("PII") and protected health information ("PHI") belonging to our employees, customers, claimants and business partners. Because our systems may be vulnerable to a variety of forms of unauthorized access that could result in a data breach, including hackers, computer viruses, and other cyber-attacks, as well as breaches that result from dishonest employees, errors by employees or lost or stolen computer devices, we may not be able to protect the confidentiality of such information.

Third parties present an additional risk of cyber-related events. We outsource certain technological and business process functions to third-party providers. We rely on these third parties to maintain and store PII and PHI and other confidential information on their systems. We also routinely transmit such information by e-mail and other electronic means. Although we attempt to establish sufficient controls and secure capabilities to transmit such information and to prevent unauthorized disclosure, these controls may not be sufficient. Furthermore, third-party providers may not have appropriate controls in place to protect such information.

Our computer systems have been and will continue to be the target of cyber-attacks, although we are not aware that we have experienced a material cybersecurity breach. We are also not aware of any third-party vendor having experienced a material cybersecurity breach that impacted our data. The risk of a cyber-attack may increase, and we may experience more significant attacks in the future.

The risks identified above could expose us to data breaches, disruptions of service, financial losses and significant increases in compliance costs and reputational harm. In addition, a data breach that involves the compromise of PII or PHI could subject us to legal liability or regulatory action under data protection and privacy laws and regulations enacted by federal, state and foreign governments, or other regulatory bodies. As a result, our ability to conduct our business and our results of operations and financial condition could be materially adversely affected.

We depend on our key personnel to manage our business effectively and they may be difficult to replace.

Much of our competitive advantage is based on the expertise, experience and know-how of our key personnel. We do not have fixed term employment agreements with any of our key personnel or key man life insurance and the loss of one or more of these key personnel could materially adversely affect our results of operations and financial condition. Our success also depends on the ability to hire and retain additional personnel. Difficulty in hiring or retaining personnel could materially adversely affect our results of operations and financial condition.

We may suffer losses from unfavorable outcomes from litigation and other legal proceedings.

From time to time we are subject to legal proceedings. In the event of an unfavorable outcome in one or more legal matters, our ultimate liability may be in excess of amounts we have reserved and such additional amounts could materially adversely affect our results of operations and financial condition. Furthermore, it is possible that these legal proceedings could result in equitable remedies or other unexpected outcomes that could materially adversely affect our results on operations and financial condition.

Regulation may restrict our ability to operate.

Changes in laws and regulations may restrict our ability to operate and/or have an adverse effect upon the profitability of our business within a given jurisdiction. For example, as a result of various state, federal and international regulatory efforts to modernize and harmonize insurer solvency regulations in the wake of the 2008-2009 financial crisis, the states could further restrict allowable investments or increase our capital requirements, both of which could materially adversely affect our results of operations and financial condition.

Bermuda law differs from the laws in effect in the United States and may afford less protection to shareholders.

We are organized under the laws of Bermuda, and a portion of our assets are located outside the United States. As a result, it may not be possible for our shareholders to enforce court judgments obtained in the United States against us based on the civil liability provisions of the federal or state securities laws of the United States, either in Bermuda or in countries other than the United States where we will have assets. In addition, there is some doubt as to whether the courts of Bermuda and other countries would recognize or enforce judgments of U.S. courts obtained against us or our directors or officers based on the civil liabilities provisions of the federal or state securities laws of the United States or would hear actions against us or those persons based on those laws.

Our corporate affairs are governed by the Companies Act. The Companies Act differs in some material respects from laws generally applicable to U.S. corporations and shareholders, including the provisions relating to interested directors, amalgamations, mergers and acquisitions, takeovers, shareholder lawsuits and indemnification of directors. Generally, the duties of directors and officers of a Bermuda company are owed to the company only. Shareholders of Bermuda companies generally do not have rights to take action against directors or officers of the company and may only do so in limited circumstances. Class actions and derivative actions are generally not available to shareholders under Bermuda law. The Bermuda courts, however, would ordinarily be expected to permit a shareholder to commence an action in the name of a company to remedy a wrong to the company where the act complained of is alleged to be beyond the corporate power of the company or illegal, or would result in the violation of the company's memorandum of association or bye-laws. Furthermore, consideration would be given by a Bermuda court to acts that are alleged to constitute a fraud against non-controlling shareholders or, for instance, where an act requires the approval of a greater percentage of the company's shareholders than that which actually approved it.

When the affairs of a company are being conducted in a manner that is oppressive or prejudicial to the interests of some part of the shareholders, one or more shareholders may apply to the Supreme Court of Bermuda, which may make such order as it sees fit, including an order regulating the conduct of the company's affairs in the future or ordering the purchase of the shares of any shareholders by other shareholders or by the company. Additionally, under our bye-laws and as permitted by Bermuda law, each shareholder has waived any claim or right of action against our directors or officers for any action taken by directors or officers in the performance of their duties, except for actions involving fraud or dishonesty. In addition, the rights of our shareholders and the fiduciary responsibilities of our directors under Bermuda law are not as clearly established as under statutes or judicial precedent in existence in jurisdictions in the United States, particularly the State of Delaware. Therefore, our shareholders may have more difficulty protecting their interests than would shareholders of a corporation incorporated in a jurisdiction within the United States.

We could be materially adversely affected if our controls designed to ensure compliance with guidelines, policies, and legal and regulatory standards are not effective.

Our business is highly dependent on our ability to successfully execute a large number of transactions, many of which are complex. These processes are often subject to internal guidelines and policies, and government regulation. A control system, no matter how well designed and operated, can provide only reasonable assurance that the control system's objectives will be met. If controls are not effective, it could lead to unanticipated risk exposure, or damage to our reputation and, consequently, could materially adversely affect our results of operations and financial condition.

1B. Unresolved Staff Comments

As of the date of this report, the Company had no unresolved comments from the Commission staff regarding its periodic or current reports under the Exchange Act.

Item 2. Properties

The Company maintains two professional offices in Hamilton, Bermuda, which serve as its headquarters and its registered office. The Company's principal executive office is in Hanover, New Hampshire. In addition, White Mountains maintains professional offices in Guilford, Connecticut, which house its corporate finance and investment functions and Boston, Massachusetts, which house its corporate accounting, reporting and internal audit functions.

HG Global's headquarters are located in Hamilton, Bermuda. BAM's headquarters are located in New York, New York. NSM's headquarters are located in Conshohocken, Pennsylvania. MediaAlpha's headquarters are located in Los Angeles, California. Buzz's headquarters are located in London, United Kingdom. Wobi's headquarters are located in in Ramat Gan, Israel.

The Company's headquarters, registered office, principal executive office, and corporate accounting, reporting and internal audit offices are leased. White Mountains owns its corporate finance and investment office in Guilford, Connecticut. HG Global's, BAM's, NSM's, MediaAlpha's, Buzz's and Wobi's offices are leased. Management considers its office facilities suitable and adequate for its current level of operations.

Item 3. Legal Proceedings

None.

Item 4. Mine Safety Disclosures

None.

Executive Officers of the Registrant and its Subsidiaries (As of February 27, 2019)

Name	Position	Age	Executive Officer Since
G. Manning Rountree	Chief Executive Officer	46	2009
Reid T. Campbell	Executive Vice President and Chief Financial Officer	51	2007
J. Brian Palmer	Managing Director and Chief Accounting Officer	46	2001
Robert L. Seelig	Executive Vice President and General Counsel	50	2002

All executive officers of the Company and its subsidiaries are elected by the Board for a term of one year or until their successors have been elected and have duly qualified. Information with respect to the principal occupation and relevant business experience of the Executive Officers follows:

Mr. Rountree was appointed as a director and Chief Executive Officer of the Company in March 2017. Prior to that, he served as an Executive Vice President of the Company and President of WM Capital. He joined White Mountains in 2004 and served as President of WM Advisors from March 2009 until December 2014. Prior to joining White Mountains, Mr. Rountree was a Senior Vice President at Putnam Investments for two years. Prior to joining Putnam Investments, Mr. Rountree spent three years with McKinsey & Company. Mr. Rountree is a director and member of the Group Risk Committee of Admiral Group plc, a large car insurance provider based in the United Kingdom. Mr. Rountree also serves as a director of BAM.

Mr. Campbell was appointed Executive Vice President and Chief Financial Officer of the Company in May 2017. Prior to that, he served as a Managing Director of WM Capital and as President of WM Advisors. He joined White Mountains in 1994 and has served in a variety of financial management positions with the Company and its subsidiaries. Prior to joining White Mountains, Mr. Campbell spent three years with KPMG. Mr. Campbell also serves as a director of BAM.

Mr. Palmer is a Managing Director and the Chief Accounting Officer of the Company. Prior to joining White Mountains in 1999, Mr. Palmer was with PricewaterhouseCoopers.

Mr. Seelig is Executive Vice President and General Counsel of the Company. Prior to joining White Mountains in 2002, Mr. Seelig was with the law firm of Cravath, Swaine & Moore.

PART II

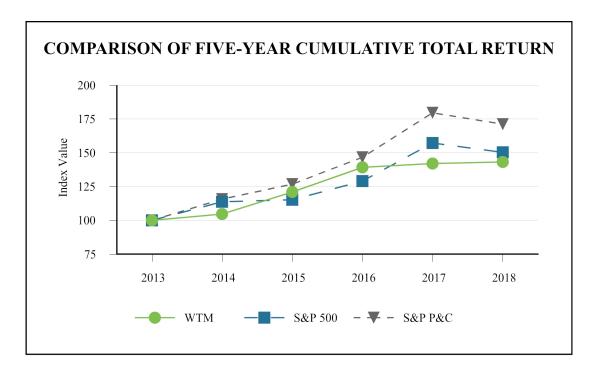
Item 5. Market for the Company's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

White Mountains's common shares are listed on the New York Stock Exchange (symbol "WTM") and the Bermuda Stock Exchange (symbol "WTM-BH"). As of February 25, 2019, there were 223 registered holders of White Mountains common shares, par value \$1.00 per share. The following table presents the quarterly range of the high and low sales price for common shares during 2018 and 2017:

	ı	20	18		2017					
Quarter Ended:		High		Low		High	Low			
December 31	\$	942.35	\$	832.88	\$	903.26	\$	841.33		
September 30		980.89		895.01		888.00		838.65		
June 30		933.70		804.40		900.05		845.41		
March 31		858.09		786.23		948.94		834.20		

For information on securities authorized for issuance under the Company's equity compensation plans, see "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" on page 65.

The following graph presents the five-year cumulative total return for a shareholder who invested \$100 in common shares as of December 31, 2012, assuming re-investment of dividends. Cumulative returns for the five-year period ended December 31, 2018 are also shown for the Standard & Poor's 500 Stocks (Property & Casualty) Capitalization Weighted Index ("S&P P&C") and the Standard & Poor's 500 Stocks Capitalization Weighted Index ("S&P 500") for comparison.



Purchases of Equity Securities by the Company

The following table provides information regarding common shares repurchased by the Company during the fourth quarter of 2018:

Months	Total Number of Shares Purchased	Av	Average Price Paid Per Share Total Number of Shar Purchased as Part of Pul Announced Plan (1)		Maximum Number of Shares that May Yet Be Purchased Under the Plan ⁽¹⁾
October 1 - 31, 2018	_	\$	_	_	643,130
November 1 - 30, 2018		\$	_	_	643,130
December 1 - 31, 2018	7,425	\$	840.82	7,425	635,705
Total	7,425	\$	840.82	7,425	635,705

⁽¹⁾ White Mountains's board of directors has authorized the Company to repurchase its common shares, from time to time, subject to market conditions. The repurchase authorization does not have a stated expiration.

Item 6. Selected Financial Data

The following table presents selected consolidated income statement data and ending balance sheet data for each of the five years ended through December 31, 2018:

	Year Ended December 31,											
\$ in Millions, Except Share and Per Share Amounts Income Statement Data:		2018		2017		2016	2015			2014		
Revenues (a)	\$	369	\$	374	\$	158	\$	440	\$	137		
Expenses (b)		547		366		305		311		216		
Pre-tax (loss) income		(178)		8		(147)		129		(79)		
Income tax benefit (expense)		4		8		33		(13)		3		
Non-controlling interest income (loss) ^(c)		50		34		(7)		19		22		
Equity in earnings of unconsolidated affiliates		_		_				25		45		
Discontinued operations, net of tax (d)		(17)		577		523		135		314		
Net (loss) income attributable to White Mountains's common shareholders	\$	(141)	\$	627	\$	402	\$	295	\$	305		
(Loss) income attributable to White Mountains's common shareholders per share:												
Basic — continuing operations	\$	(36.67)	\$	11.56	\$	(24.26)	\$	27.22	\$	(1.39)		
Basic — discontinued operations		(5.09)		134.50		104.37		22.98		51.37		
Total basic (loss) income per share	\$	(41.76)	\$	146.06	\$	80.11	\$	50.20	\$	49.98		
Diluted — continuing operations	\$	(36.67)	\$	11.56	\$	(24.26)	\$	27.22	\$	(1.39)		
Diluted — discontinued operations		(5.09)		134.50		104.32		22.98		51.37		
Total diluted (loss) income per share	\$	(41.76)	\$	146.06	\$	80.06	\$	50.20	\$	49.98		
Balance Sheet Data:												
Total assets (e)	\$	3,363	\$	3,659	\$	6,520	\$	10,271	\$	10,448		
Debt ^(f)		193		24		13		65		1		
Non-controlling interests (g)		(125)		(132)		133		454		543		
White Mountains's common shareholders' equity		2,843		3,493		3,583		3,903		3,996		
Book value per share	\$	896.00	\$	931.30	\$	785.01	\$	694.06	\$	667.46		
Adjusted book value per share (h)	\$	887.85	\$	914.75	\$	789.08	\$	697.16	\$	664.48		
Share Data:												
Cash dividends paid per common share	\$	1.00	\$	1.00	\$	1.00	\$	1.00	\$	1.00		
Ending common shares (000's) (i)		3,173		3,750		4,564		5,624		5,986		

⁽a) MediaAlpha recognized advertising and commission revenues of \$296 in 2018, compared to \$163 in 2017, and NSM, which was acquired during 2018, recognized advertising and commission revenues of \$95 from May 11, 2018 through December 31, 2018. Other Operations recognized net realized and unrealized investment (losses) gains of \$(101), \$133 and \$(28), in 2018 and 2017 and 2016, respectively, which contributed to the increase and decrease in revenues. In 2015, White Mountains changed the accounting for its investment in Symetra Financial Corporation from the equity method to fair value and recognized \$259 of unrealized investment gains.

White Mountains reported \$52 of non-controlling interest loss related to BAM in 2018, compared to \$40 in 2017. Amounts also include non-controlling interests in OneBeacon, Sirius Group and Tranzact prior to their sales.

(e) White Mountains's total assets decreased as a result of share repurchases, and the sales of OneBeacon in 2017 and Sirius Group in 2016.

(h) Adjusted book value per share is a non-GAAP measure. See "NON-GAAP FINANCIAL MEASURES" on page 55.

⁽b) MediaAlpha recognized cost of sales of \$245 in 2018, compared to \$136 in 2017, and NSM recognized general and administrative expenses of \$62 and broker commission expenses of \$29 in the 2018 ownership period.

As a result of the sale of OneBeacon, Sirius Group, Tranzact and Esurance Holdings, Inc. and its subsidiaries and Answer Financial Inc. and its subsidiaries (collectively, "Esurance"), White Mountains has reclassified the results from these businesses for the past five years in the table above to discontinued operations, net of tax. In 2018, discontinued operations, net of tax, includes a loss of \$17 for the recognition of a contingent liability related to the sale of Sirius. In 2017, discontinued operations, net of tax, includes a gain from sale of OneBeacon of \$555 and income of \$21 and a (loss) gain from sale of Sirius and Tranzact of \$(1) and \$3. In 2016, discontinued operations, net of tax, includes a gain from sale of Sirius and Tranzact of \$363 and \$52 and net income of \$108 primarily related to the operations of OneBeacon. In 2015, discontinued operations, net of tax, includes a gain from sale of Esurance of \$18 and net income of \$117. In 2014, discontinued operations, net of tax, includes a loss on sale of other discontinued operations of \$19, mostly offset by a gain from sale of Fireman's Fund Insurance Company ("FFIC") of \$14, and net income of \$261, primarily related to the operations of Sirius Group. See Note 19 — "Held for Sale and Discontinued Operations" on page F-55.

White Mountains's total debt increased as a result of the acquisition of NSM in 2018. As of December 31, 2015, White Mountains had \$50 outstanding under its credit facility, which was repaid in April 2016. See **Note 5** — "**Debt"** on page F-32.

White Mountains's non-controlling interests decreased as a result of the sale of OneBeacon in 2017 and Sirius Group in 2016. See Note 11 — "Common Shareholders' Equity and Non-controlling Interests" on page F-47 for a detailed breakdown of non-controlling interests by consolidated entity.

During 2018, 2017, 2016, 2015, and 2014, White Mountains repurchased 592,458, 832,725, 1,106,145, 387,495, and 217,879 respectively, of its common shares through a combination of tender offers, open market transactions and other transactions.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion contains "forward-looking statements". White Mountains intends statements that are not historical in nature, which are hereby identified as forward-looking statements, to be covered by the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. White Mountains cannot promise that its expectations in such forward-looking statements will turn out to be correct. White Mountains's actual results could be materially different from and worse than its expectations. See "FORWARD-LOOKING STATEMENTS" on page 62 for specific important factors that could cause actual results to differ materially from those contained in forward-looking statements.

The following discussion also includes four non-GAAP financial measures (i) adjusted book value per share, (ii) gross written premiums and MSC from new business, (iii) adjusted capital, and (iv) adjusted earnings before interest, taxes, depreciation and amortization ("adjusted EBITDA"), that have been reconciled from their most comparable GAAP financial measures on page 55. White Mountains believes these measures to be useful in evaluating White Mountains's financial performance and condition.

RESULTS OF OPERATIONS FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016

Overview—Year Ended December 31, 2018 versus Year Ended December 31, 2017

White Mountains ended 2018 with book value per share of \$896 and adjusted book value per share of \$888, a decrease of 3.7% and 2.8% for the year, including dividends. Comprehensive loss attributable to common shareholders was \$146 million in 2018 compared to comprehensive income attributable to common shareholders of \$631 million in 2017. The decrease in book value per share and adjusted book value per share and the comprehensive loss attributable to common shareholders in 2018 was driven primarily by investment results, which were adversely impacted by the sharp decline in equity markets in the fourth quarter of 2018, while comprehensive income attributable to common shareholders in 2017 was driven primarily by the \$557 million gain from the OneBeacon Transaction.

On February 26, 2019, MediaAlpha completed the sale of a significant minority stake to Insignia Capital Group in connection with a recapitalization and cash distribution to existing equityholders. MediaAlpha also repurchased a portion of the holdings of existing equityholders. The transaction valued MediaAlpha at approximately \$350 million. The transaction results in an estimated gain of approximately \$55 to each of White Mountains's book value per share and adjusted book value per share. Including the estimated gain of \$55 per share for the MediaAlpha transaction, December 31, 2018 book value per share would have been \$951 and adjusted book value per share would have been \$943. See "MediaAlpha" on page 41.

During 2018, White Mountains repurchased and retired 592,458 of its common shares for \$519 million at an average share price of \$877. The average share price paid was approximately 98% and 99%, respectively, of White Mountains's December 31, 2018 book value per share and adjusted book value per share. The average share price paid was approximately 92% and 93%, respectively, of White Mountains's December 31, 2018 book value per share including the estimated gain from the MediaAlpha transaction and adjusted book value per share including the estimated gain from the MediaAlpha transaction. During 2018, White Mountains also allocated roughly \$300 million to new business opportunities, ending the year with approximately \$1.2 billion of undeployed capital.

Gross written premiums and MSC collected in the HG Global/BAM segment totaled \$107 million in 2018, compared to \$101 million in 2017. BAM insured municipal bonds with par value of \$12.0 billion in 2018, compared to \$10.4 billion in 2017. Total pricing was 93 basis points in 2018, compared to 99 basis points in 2017. BAM's total claims paying resources were \$871 million as of December 31, 2018, compared to \$708 million as of December 31, 2017. The increase in claims paying resources was driven by positive cash flow from operations as well as the \$100 million reinsurance agreement that BAM entered into with Fidus Re in the second quarter of 2018. During 2018, BAM paid \$23 million of principal and interest on the BAM Surplus Notes held by HG Global.

On May 11, 2018, White Mountains acquired a 95.0% equity interest in NSM, a full-service MGU and program administrator for specialty property & casualty insurance. NSM reported pre-tax loss of \$5 million from May 11, 2018, the date of acquisition, through December 31, 2018 ("the 2018 ownership period"). NSM reported adjusted EBITDA of \$16 million and revenues of \$102 million in the 2018 ownership period.

MediaAlpha reported pre-tax income of \$9 million in 2018, compared to break-even pre-tax income in 2017. MediaAlpha's adjusted EBITDA was \$32 million in 2018, compared to \$11 million in 2017. MediaAlpha reported advertising and commission revenues of \$296 million in 2018, compared to \$163 million in 2017. The increases in pre-tax income, adjusted EBITDA and revenues were driven primarily by growth in the P&C vertical and the HLM vertical, which includes business generated from assets acquired from Healthplans.com in the fourth quarter of 2017.

White Mountains's pre-tax total return on invested assets was -1.7% for 2018, compared to 5.6% for 2017.

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White Mountains's portfolio of common equity securities and other long-term investments returned -3.6% for 2018, outperforming the S&P 500 Index return of -4.4%, driven primarily by a favorable fair value adjustment to White Mountains's investment in PassportCard/DavidShield and strong private equity fund returns, partially offset by weak returns from the non-U.S. actively managed common equity portfolios. White Mountains's portfolio of common equity securities and other long-term investments returned 12.7% for 2017, underperforming the S&P 500 Index returns of 21.8%, driven primarily by losses from foreign currency forward contracts and unconsolidated entities.

White Mountains's fixed income portfolio returned 1.2% for 2018, outperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index return of 0.9%. White Mountains's fixed income portfolio returned 3.5% for 2017, outperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index return of 2.3%.

Overview—Year Ended December 31, 2017 versus Year Ended December 31, 2016

White Mountains ended 2017 with book value per share of \$931 and adjusted book value per share of \$915, an increase of 18.8% and 16.1% for the year, including dividends. The increases were driven primarily by the gain from the OneBeacon Transaction. Comprehensive income attributable to common shareholders increased to \$631 million in 2017, compared to \$547 million in 2016. Comprehensive income attributable to common shareholders in both 2017 and 2016 was driven primarily by large transaction gains. In 2017, OneBeacon was acquired by Intact Financial Corporation in an all-cash transaction for \$18.10 per share, from which White Mountains received \$1.3 billion in proceeds and recorded a net gain of \$557 million. In 2016, White Mountains recorded net gains of \$477 million and \$82 million from the sales of Sirius Group and Tranzact. See **Note 2**— "Significant Transactions" on page F-16 for a description of each transaction.

For the year ended December 31, 2017, White Mountains repurchased and retired 832,725 of its common shares for \$724 million at an average share price of \$869.29. The average share price paid was approximately 93% and 95%, respectively, of White Mountains's December 31, 2017 book value per share and adjusted book value per share. For the year ended December 31, 2017, White Mountains returned a total of \$728 million of capital to shareholders through share repurchases and dividends.

Gross written premiums and MSC collected in the HG Global/BAM segment totaled \$101 million in 2017, compared to \$77 million in 2016, as higher pricing more than offset a decrease in issuance volume. BAM insured municipal bonds with par value of \$10.4 billion in 2017, compared to \$11.3 billion in 2016. Total pricing was 99 basis points, up from 68 basis points in 2016. BAM's total claims paying resources were \$708 million as of December 31, 2017, compared to \$644 million as of December 31, 2016. The increase in claims paying resources was driven by positive cash flow from operations. During 2017, BAM paid \$5 million of principal and interest on the surplus notes held by HG Global.

Beginning in the second quarter of 2017, White Mountains changed its calculation of adjusted book value per share (i) to include a discount for the time value of money arising from the expected timing of cash payments of principal and interest on the BAM Surplus Notes and (ii) to add back the unearned premium reserve, net of deferred acquisition costs, at HG Global. See "NON-GAAP FINANCIAL MEASURES" on page 55.

MediaAlpha reported break-even pre-tax income in 2017, compared to pre-tax loss of \$4 million in 2016. MediaAlpha's adjusted EBITDA was \$11 million in 2017, compared to \$7 million in 2016. The increases in pre-tax income and adjusted EBITDA were driven primarily by growth in the HLM vertical and the P&C vertical. In October 2017, MediaAlpha acquired certain assets associated with the Health, Life and Medicare insurance business of Healthplans.com. The acquired assets included domain names, advertiser and publisher relationships, traffic acquisition accounts, and owned and operated websites. During the fourth quarter of 2017, which includes the annual open enrollment period for health and Medicare coverages, business from the acquired assets contributed \$2 million of both pre-tax income and adjusted EBITDA.

White Mountains's pre-tax total return on invested assets was 5.6% for 2017, compared to 2.7% for 2016.

White Mountains's portfolio of common equity securities and other long-term investments returned 12.7% for 2017, underperforming the S&P 500 Index return of 21.8%, driven primarily by losses from foreign currency forward contracts and unconsolidated entities. White Mountains's portfolio of common equity securities and other long-term investments returned 4.3% for 2016, underperforming the S&P 500 Index return of 12.0%, driven primarily by losses from private equity funds and unconsolidated entities and weak returns from certain actively managed common equity portfolios.

White Mountains's fixed income portfolio returned 3.5% for 2017, outperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index return of 2.3%. White Mountains's fixed income portfolio returned 2.4% for 2016, outperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index return of 2.0%.

Adjusted Book Value Per Share

The following table presents White Mountains's adjusted book value per share, a non-GAAP financial measure, for the years ended December 31, 2018, 2017 and 2016 and reconciles this non-GAAP measure to book value per share, the most comparable GAAP measure. See "NON-GAAP FINANCIAL MEASURES" on page 55.

	December 31,						
		2018		2017		2016	
Book value per share numerators (in millions):							
White Mountains's common shareholders' equity	\$	2,843.1	\$	3,492.5	\$	3,582.7	
Future proceeds from options (1)				_		29.7	
Time-value of money discount on expected future payments on the BAM Surplus Notes (2)		(141.2)		(157.0)		N/A	
HG Global's unearned premium reserve (2)		136.9		103.9		N/A	
HG Global's net deferred acquisition costs (2)		(34.6)		(24.3)		N/A	
Adjusted book value per share numerator	\$	2,804.2	\$	3,415.1	\$	3,612.4	
Book value per share denominators (in thousands of shares):							
Common shares outstanding		3,173.1		3,750.2		4,563.8	
Unearned restricted shares		(14.6)		(16.8)		(25.9)	
Options assumed issued (1)		_		_		40.0	
Adjusted book value per share denominator		3,158.5		3,733.4		4,577.9	
GAAP book value per share	\$	896.00	\$	931.30	\$	785.01	
Adjusted book value per share	\$	887.85	\$	914.75	\$	789.08	
Dividends paid per share	\$	1.00	\$	1.00	\$	1.00	

⁽¹⁾ Adjusted book value per share at December 31, 2016 includes the impact of 40,000 non-qualified stock options exercisable for \$742 per common share. All non-qualified options were exercised prior to their expiration date of January 20, 2017.

The following tables presents goodwill and other intangible assets that are included in White Mountains's adjusted book value as of December 31, 2018, 2017 and 2016:

	December 31,									
Millions		2018		2017	2016					
Goodwill:										
NSM ⁽¹⁾	\$	354.3	\$	_	\$	_				
MediaAlpha		18.3		18.3		18.3				
Buzz		7.3		7.6		7.6				
Total goodwill		379.9		25.9		25.9				
Other intangible assets:										
NSM		131.9		_		_				
MediaAlpha		25.1		35.4		18.3				
Buzz		.6		.8		1.0				
Total other intangible assets		157.6		36.2		19.3				
Total goodwill and other intangible assets (2)		537.5		62.1		45.2				
Goodwill and other intangible assets held for sale		_				1.2				
Goodwill and other intangible assets attributed to non-controlling interests		(40.6)		(21.1)		(17.1)				
Goodwill and other intangible assets included in White Mountains's common shareholders' equity	\$	496.9	\$	41.0	\$	29.3				

⁽¹⁾ The relative fair values of goodwill and other intangible assets recognized in connection with the acquisition of KBK had not yet been determined at December 31, 2018.

⁽²⁾ Amounts reflects White Mountains's preferred share ownership in HG Global of 96.9%.

⁽²⁾ See Note 4 — "Goodwill and Other Intangible Assets" on page F-30 for details of other intangible assets.

Summary of Consolidated Results

The following table presents White Mountains's consolidated financial results by industry for the years ended December 31, 2018, 2017 and 2016:

	Year Ended December 31,									
Millions		2018		2017	2016					
Revenues										
Financial Guarantee revenues	\$	24.3	\$	23.3	\$	16.7				
Specialty Insurance Distribution revenues		101.6		_		_				
Marketing Technology revenues		297.1		163.2		116.5				
Other revenues		(53.9)		187.3		24.5				
Total revenues		369.1		373.8		157.7				
Expenses										
Financial Guarantee expenses		53.7		47.3		43.4				
Specialty Insurance Distribution expenses		106.8		_		_				
Marketing Technology expenses		288.2		163.6		120.6				
Other expenses		98.6		155.1		141.0				
Total expenses		547.3		366.0		305.0				
Pre-tax (loss) income										
Financial Guarantee pre-tax loss		(29.4)		(24.0)		(26.7)				
Specialty Insurance Distribution pre-tax loss		(5.2)		_		_				
Marketing Technology pre-tax income (loss)		8.9		(.4)		(4.1)				
Other pre-tax (loss) income		(152.5)		32.2		(116.5)				
Total pre-tax (loss) income		(178.2)		7.8		(147.3)				
Income tax benefit		4.0		7.8		32.9				
Net (loss) income from continuing operations		(174.2)		15.6		(114.4)				
(Loss) gain on sale of discontinued operations, net of tax		(17.2)		557.0		415.1				
Net income from discontinued operations, net of tax				20.5		108.3				
Net (loss) income		(191.4)		593.1		409.0				
Net loss (income) attributable to non-controlling interests		50.2		34.1		(7.2)				
Net (loss) income attributable to White Mountains's common shareholders	-	(141.2)		627.2		401.8				
Other comprehensive (loss) income, net of tax		(4.8)		.3		(.7)				
Comprehensive income from discontinued operations, net of tax		_		3.2		146.3				
Comprehensive (loss) income		(146.0)		630.7		547.4				
Comprehensive income (loss) attributable to non-controlling interests		.3		(.2)		(.3)				
Comprehensive (loss) income attributable to White Mountains's common shareholders	\$	(145.7)	\$	630.5	\$	547.1				

I. Summary of Operations By Segment

White Mountains conducts its operations through four segments: (1) HG Global/BAM, (2) NSM (3) MediaAlpha and (4) Other Operations. A discussion of White Mountains's consolidated investment operations is included after the discussion of operations by segment. White Mountains's segment information is presented in **Note 13** — "**Segment Information**" on page F-49 to the Consolidated Financial Statements.

As a result of the OneBeacon, Sirius Group and Tranzact transactions, the results of operations for OneBeacon, Sirius Group and Tranzact have been classified as discontinued operations and are now presented separately, net of related income taxes, in the statement of comprehensive income. Prior year amounts have been reclassified to conform to the current period's presentation. See **Note 19** — "Held for Sale and Discontinued Operations" on page F-55.

HG Global/BAM

The following tables present the components of pre-tax income included in White Mountains's HG Global/BAM segment related to the consolidation of HG Global, which includes HG Re and its other wholly-owned subsidiaries, and BAM for the years ended December 31, 2018, 2017 and 2016:

	December 31, 2018										
Millions		HG Global		BAM		minations		Total			
Direct written premiums	\$	_	\$	44.8	\$	_	\$	44.8			
Assumed (ceded) written premiums		44.9		(36.8)		_		8.1			
Net written premiums	\$	44.9	\$	8.0	\$		\$	52.9			
Earned insurance and reinsurance premiums	\$	11.0	\$	2.9	\$	_	\$	13.9			
Net investment income		5.7		11.0		_		16.7			
Net investment income - BAM Surplus Notes		22.9				(22.9)					
Net realized and unrealized investment losses		(4.1)		(3.4)		_		(7.5)			
Other revenues				1.2		_		1.2			
Total revenues		35.5		11.7		(22.9)		24.3			
Insurance and reinsurance acquisition expenses		2.7		2.6				5.3			
Other underwriting expenses		_		.4		_		.4			
General and administrative expenses		1.1		46.9		_		48.0			
Interest expense - BAM Surplus Notes		_		22.9		(22.9)		_			
Total expenses		3.8		72.8		(22.9)		53.7			
Pre-tax income (loss)	\$	31.7	\$	(61.1)	\$		\$	(29.4)			
Supplemental information:											
MSC collected (1)	\$	_	\$	53.8	\$		\$	53.8			

⁽¹⁾ MSC collected are recorded directly to BAM's equity, which is recorded as non-controlling interest on White Mountains's balance sheet.

	December 31, 2017										
Millions		Global	BAM		Eliminations			Total			
Direct written premiums	\$		\$	63.2	\$	_	\$	63.2			
Assumed (ceded) written premiums		53.6		(53.6)				_			
Net written premiums	\$	53.6	\$	9.6	\$		\$	63.2			
Earned insurance and reinsurance premiums	\$	7.1	\$	2.3	\$	_	\$	9.4			
Net investment income		3.3		9.0				12.3			
Net investment income - BAM Surplus Notes		19.0		_		(19.0)					
Net realized and unrealized investment (losses) gains		(1.2)		1.8		_		.6			
Other revenues				1.0				1.0			
Total revenues		28.2		14.1		(19.0)		23.3			
Insurance and reinsurance acquisition expenses		1.5		2.5				4.0			
Other underwriting expenses		_		.4				.4			
General and administrative expenses		1.0		41.9				42.9			
Interest expense - BAM Surplus Notes				19.0		(19.0)		_			
Total expenses		2.5		63.8		(19.0)		47.3			
Pre-tax income (loss)	\$	25.7	\$	(49.7)	\$		\$	(24.0)			
Supplemental information:											
MSC collected (1)	\$		\$	37.4	\$		\$	37.4			

⁽¹⁾ MSC collected are recorded directly to BAM's equity, which is recorded as non-controlling interest on White Mountains's balance sheet.

	December 31, 2016										
Millions	HG	Global	BAM		Eliminations			Total			
Direct written premiums	\$		\$	38.6	\$		\$	38.6			
Assumed (ceded) written premiums		27.2		(27.2)							
Net written premiums	\$	27.2	\$	11.4	\$		\$	38.6			
Earned insurance and reinsurance premiums	\$	4.4	\$	1.5	\$	_	\$	5.9			
Net investment income		2.2		6.8				9.0			
Net investment income - BAM Surplus Notes		17.8				(17.8)					
Net realized and unrealized investment gains		.1		.6		_		.7			
Other revenues				1.1				1.1			
Total revenues		24.5		10.0		(17.8)		16.7			
Insurance and reinsurance acquisition expenses		.9		2.5		_		3.4			
Other underwriting expenses				.4				.4			
General and administrative expenses		1.4		38.2		_		39.6			
Interest expense - BAM Surplus Notes				17.8		(17.8)					
Total expenses		2.3		58.9		(17.8)		43.4			
Pre-tax income (loss)	\$	22.2	\$	(48.9)	\$		\$	(26.7)			
Supplemental information:											
MSC collected (1)	\$		\$	38.0	\$		\$	38.0			

⁽¹⁾ MSC collected are recorded directly to BAM's equity, which is recorded as non-controlling interest on White Mountains's balance sheet.

HG Global/BAM Results—Year Ended December 31, 2018 versus Year Ended December 31, 2017

BAM charges an insurance premium on each municipal bond insurance policy it writes. A portion of the premium is an MSC and the remainder is a risk premium. In the event of a municipal bond refunding, the MSC from the original issuance can be reutilized, in effect serving as a credit against the total insurance premium on the refunding of the municipal bond. Issuers of debt insured by BAM are members of BAM so long as any of their BAM-insured debt is outstanding, and as members they have certain interests in BAM, including the right to vote for BAM's directors and to receive dividends, if declared.

Gross written premiums and MSC collected in the HG Global/BAM segment totaled \$107 million in 2018, compared to \$101 million in 2017. In 2018, BAM insured \$12.0 billion of municipal bonds, \$11.0 billion of which were in the primary market, up 15% from 2017. During the fourth quarter of 2018, BAM completed an assumed reinsurance transaction to insure municipal bonds with a par value of \$2.2 billion for gross written premiums and MSC collected of \$20 million.

Total pricing, which is based on gross written premiums and MSC from new business, was 93 basis points in 2018, down from 99 basis points in 2017. See "NON-GAAP FINANCIAL MEASURES" on page 55. Total pricing in the primary market, which includes assumed business, increased slightly to 75 basis points in 2018, compared to 74 basis points in 2017.

The following table presents the gross par value of primary and secondary market policies issued and a reconciliation of GAAP gross written premiums to gross written premiums and MSC from new business for the twelve months ended December 31, 2018 and 2017:

	Year Ended December 31,				
\$ in Millions	2018			2017	
Gross par value of primary market policies issued	\$	11,015.7	\$	9,633.5	
Gross par value of secondary market policies issued		959.6		793.2	
Total gross par value of market policies issued	\$	11,975.3	\$	10,426.7	
Gross written premiums	\$	52.9	\$	63.2	
MSC collected		53.8		37.4	
Total gross written premiums and MSC collected	\$	106.7	\$	100.6	
Present value of future installment MSC collections		3.1		2.8	
Gross written premium adjustments on existing installment policies		1.1		_	
Gross written premiums and MSC from new business (1)	\$	110.9	\$	103.4	
Total pricing		93 bps		99 bps	

⁽¹⁾ See "NON-GAAP FINANCIAL MEASURES" on page 55.

HG Global reported GAAP pre-tax income of \$32 million and \$26 million in 2018 and 2017, which was driven by \$23 million and \$19 million of interest income on the BAM Surplus Notes, respectively.

BAM is a mutual insurance company that is owned by its members. BAM's results are consolidated into White Mountains's GAAP financial statements and attributed to non-controlling interests. White Mountains reported \$61 million of GAAP pre-tax losses on BAM in 2018, driven primarily by \$23 million of interest expense on the BAM Surplus Notes and \$47 million of general and administrative expenses, compared to \$50 million of pre-tax losses in 2017, driven primarily by \$19 million of interest expense on the BAM Surplus Notes and \$42 million of general and administrative expenses. The increase in general and administrative expenses was primarily due to financing expense from the reinsurance agreement with Fidus Re, which is accounted for using the deposit method under GAAP. During 2018, BAM paid \$23 million of principal and interest on the BAM Surplus Notes held by HG Global.

HG Global/BAM Results—Year Ended December 31, 2017 versus Year Ended December 31, 2016

Gross written premiums and MSC collected in the HG Global/BAM segment totaled \$101 million in 2017, compared to \$77 million in 2016, as higher pricing more than offset a decrease in issuance volume. BAM's volume for 2017 was affected by Standard & Poor's review of BAM's financial strength rating. On June 6, 2017, Standard & Poor's placed BAM on credit watch negative and initiated a detailed review of BAM's financial strength rating. On June 26, 2017, Standard & Poor's concluded its review and affirmed BAM's "AA/stable" financial strength rating. During the time that BAM was under review by Standard & Poor's, it voluntarily withdrew from the marketplace and did not write any municipal bond insurance policies. In 2017, BAM insured \$10.4 billion of municipal bonds, \$9.6 billion of which were in the primary market, down 8% from 2016.

Total pricing was 99 basis points in 2017, up from 68 basis points in 2016. Total pricing in the primary market increased to 74 basis points in 2017, compared to 58 basis points in 2016.

The following table presents the gross par value of primary and secondary market policies issued and a reconciliation of GAAP gross written premiums to gross written premiums and MSC from new business for the twelve months ended December 31, 2017 and 2016:

	Year Ended	Decen	nber 31,	
\$ in Millions	2017			2016
Gross par value of primary market policies issued	\$	9,633.5	\$	10,336.1
Gross par value of secondary market policies issued		793.2		967.2
Total gross par value of market policies issued	\$	10,426.7	\$	11,303.3
Gross written premiums	\$	63.2	\$	38.6
MSC collected		37.4		38.0
Total gross written premiums and MSC collected	\$	100.6	\$	76.6
Present value of future installment MSC collections		2.8		_
Gross written premium adjustments on existing installment policies		_		_
Gross written premiums and MSC from new business (1)	\$	103.4	\$	76.6
Total pricing		99 bps		68 bps

⁽¹⁾ See "NON-GAAP FINANCIAL MEASURES" on page 55.

HG Global reported GAAP pre-tax income of \$26 million and \$22 million in 2017 and 2016, which was driven primarily by \$19 million and \$18 million of interest income on the BAM Surplus Notes, respectively.

White Mountains reported \$50 million of GAAP pre-tax losses on BAM in 2017, driven primarily by \$19 million of interest expense on the BAM Surplus Notes and \$42 million of operating expenses, compared to \$49 million of pre-tax losses in 2016, driven primarily by \$18 million of interest expense on the BAM Surplus Notes and \$38 million of operating expenses. During 2017, BAM paid \$5 million of principal and interest on the BAM Surplus Notes held by HG Global.

Claims Paying Resources

BAM's "claims paying resources" represent the capital and other financial resources BAM has available to pay claims and, as such, is a key indication of BAM's financial strength. In 2018, BAM expanded its claims paying resources by \$100 million through the collateralized reinsurance agreement with Fidus Re, a special-purpose insurer created solely to provide collateralized reinsurance protection to BAM.

The following table presents BAM's total claims paying resources as of December 31, 2018 and 2017:

Millions	Decem	ber 31, 2018	Decem	ber 31, 2017
Policyholders' surplus	\$	413.7	\$	427.3
Contingency reserve		50.3		34.8
Qualified statutory capital		464.0		462.1
Net unearned premiums		36.2		30.5
Present value of future installment premiums and MSC		12.9		9.0
HG Re Collateral Trusts at statutory value		258.3		206.8
Fidus Re collateral trust at statutory value		100.0		
Claims paying resources	\$	871.4	\$	708.4

BAM's claims paying resources increased 23% to \$871 million as of December 31, 2018. The increase was driven primarily by the \$100 million reinsurance agreement with Fidus Re, \$54 million of MSC collected and a \$52 million increase in the invested assets of the HG Re Collateral Trusts, partially offset by BAM's 2018 statutory net loss of \$35 million.

The following table presents BAM's total claims paying resources as of December 31, 2017 and 2016:

Millions	Decem	ber 31, 2017	Decem	ber 31, 2016
Policyholders' surplus	\$	427.3	\$	431.5
Contingency reserve		34.8		22.7
Qualified statutory capital		462.1		454.2
Net unearned premiums		30.5		23.2
Present value of future installment premiums and MSC		9.0		3.3
HG Re Collateral Trusts at statutory value		206.8		163.0
Claims paying resources	\$	708.4	\$	643.7

BAM's claims paying resources increased 10% to \$708 million as of December 31, 2017. The increase was driven primarily by \$37 million of MSC collected and a \$44 million increase in the invested assets of the HG Re Collateral Trusts, partially offset by BAM's 2017 statutory net loss of \$25 million.

HG Global/BAM Balance Sheets

The following table presents amounts from HG Global, which includes HG Re and its other wholly-owned subsidiaries, and BAM that are contained within White Mountains's consolidated balance sheet as of December 31, 2018 and 2017:

	December 31, 2018							
Millions	н	G Global	Eliminatio and Segme obal BAM Adjustme			nt	nt Total	
Assets								
Fixed maturity investments	\$	225.8	\$	475.6	\$	—	\$	701.4
Short-term investments		28.5		38.4		—		66.9
Total investments		254.3		514.0		_		768.3
Cash		6.0		6.5		—		12.5
BAM Surplus Notes		481.3		_	(48)	1.3)		_
Accrued interest receivable on BAM Surplus Notes		143.7		_	(143	3.7)		_
Deferred acquisition costs		35.7		19.0	(35	5.7)		19.0
Insurance premiums receivable		4.0		6.4	(4	4.0)		6.4
Accounts receivable on unsettled investments sales				_				_
Other assets		1.3		9.0		(.3)		10.0
Total assets	\$	926.3	\$	554.9	\$ (665	5.0)	\$	816.2
Liabilities								
BAM Surplus Notes (1)	\$		\$	481.3	\$ (48)	1.3)	\$	_
Accrued interest payable on BAM Surplus Notes (2)				143.7	(143	3.7)		_
Preferred dividends payable to White Mountains's subsidiaries (3)		278.5						278.5
Preferred dividends payable to non-controlling interests		9.6		_				9.6
Unearned insurance premiums		141.3		34.7		—		176.0
Accounts payable on unsettled investment purchases				2.2		—		2.2
Other liabilities		1.1		63.6	(40	0.0)		24.7
Total liabilities		430.5		725.5	(665	5.0)		491.0
Equity								
White Mountains's common shareholders' equity (3)		481.3		_				481.3
Non-controlling interests		14.5		(170.6)				(156.1)
Total equity		495.8		(170.6)				325.2
Total liabilities and equity	\$	926.3	\$	554.9	\$ (665	5.0)	\$	816.2

⁽¹⁾ Under GAAP, the BAM Surplus Notes are classified as debt by the issuer. Under U.S. Statutory accounting, they are classified as policyholders' surplus.

⁽²⁾ Under GAAP, interest accrues daily on the BAM Surplus Notes. Under U.S. Statutory accounting, interest is not accrued on the BAM Surplus Notes until it has been approved for payment by insurance regulators.

⁽³⁾ HG Global preferred dividends payable to White Mountains's subsidiaries is eliminated in White Mountains's consolidated financial statements. For segment reporting, the HG Global preferred dividends payable to White Mountains's subsidiaries included within the HG Global/BAM segment are eliminated against the offsetting receivable included within the Other Operations segment, and therefore are added back to White Mountains's common shareholders' equity within the HG Global/BAM segment.

	December 31, 2017						
Millions	н	G Global		Eliminations and Segment BAM Adjustment			Total Segment
Assets							
Fixed maturity investments	\$	175.5	\$	448.1	\$ —	\$	623.6
Short-term investments		28.5		41.3			69.8
Total investments		204.0		489.4	_		693.4
Cash		1.9		23.7			25.6
BAM Surplus Notes		499.0			(499.0))	_
Accrued interest receivable on BAM Surplus Notes		126.0			(126.0))	_
Deferred acquisition costs		25.1		14.9	(25.2))	14.8
Insurance premiums receivable		2.7		4.7	(2.9))	4.5
Accounts receivable on unsettled investments sales				.1			.1
Other assets		.8		8.2			9.0
Total assets	\$	859.5	\$	541.0	\$ (653.1)	\$	747.4
Liabilities						_	
BAM Surplus Notes (1)	\$		\$	499.0	\$ (499.0)	\$	_
Accrued interest payable on BAM Surplus Notes (2)				126.0	(126.0))	
Preferred dividends payable to White Mountains's subsidiaries (3)		227.9					227.9
Preferred dividends payable to non-controlling interests		7.7					7.7
Unearned insurance premiums		107.2		29.6			136.8
Accounts payable on unsettled investment purchases				.6			.6
Other liabilities		1.0		49.0	(28.1))	21.9
Total liabilities		343.8		704.2	(653.1)	_	394.9
Equity							
White Mountains's common shareholders' equity (3)		499.8					499.8
Non-controlling interests		15.9		(163.2)			(147.3)
Total equity		515.7		(163.2)	_		352.5
Total liabilities and equity	\$	859.5	\$	541.0	\$ (653.1)	\$	747.4

Under GAAP, the BAM Surplus Notes are classified as debt by the issuer. Under U.S. Statutory accounting, they are classified as policyholders' surplus.
 Under GAAP, interest accrues daily on the BAM Surplus Notes. Under U.S. Statutory accounting, interest is not accrued on the BAM Surplus Notes until it has been approved for payment by insurance regulators.

Par Value of Policies Issued and Priced by BAM

The following table presents the gross par value of policies issued and priced by BAM for the years ended December 31, 2018 and 2017:

		December 31,			
Millions		2018		2017	
Gross par value of primary market policies issued	<u> </u>	11,015.7	\$	9,633.5	
Gross par value of secondary market policies issued		959.6		793.2	
Total gross par value of policies issued		11,975.3		10,426.7	
Gross par value of policies priced yet to close		247.3		114.4	
Less: Gross par value of policies closed that were priced in a previous period		114.4		353.3	
Total gross par value of market policies priced	\$	12,108.2	\$	10,187.8	

⁽³⁾ HG Global preferred dividends payable to White Mountains's subsidiaries is eliminated in White Mountains's consolidated financial statements. For segment reporting, the HG Global preferred dividends payable to White Mountains's subsidiaries included within the HG Global/BAM segment are eliminated against the offsetting receivable included within the Other Operations segment, and therefore are added back to White Mountains's common shareholders' equity within the HG Global/BAM segment.

NSM

During 2018, White Mountains acquired a 95.0% equity interest in NSM for cash consideration of \$276 million. NSM is a full-service MGU and program administrator for specialty property and casualty insurance. As part of the acquisition, White Mountains assumed estimated contingent consideration earnout liabilities related to NSM's previous acquisitions of its U.K.-based operations of \$10 million.

On May 18, 2018, NSM acquired 100% of Fresh Insurance, an insurance broker that focuses on non-standard personal lines products in the United Kingdom. NSM paid \$50 million of upfront cash consideration for its equity interest in Fresh Insurance. The purchase price is subject to additional adjustments based upon growth in EBITDA during two earnout periods ending in February 2020 and February 2022. In connection with the acquisition, NSM recorded a contingent consideration earnout liability of \$8 million.

On December 3, 2018, NSM acquired all of the net assets of KBK, a specialty MGU focused on the towing and transportation space. NSM paid \$60 million of upfront cash consideration for the net assets of KBK. NSM recognized \$59 million of goodwill and other intangible assets, reflecting estimated acquisition date fair values. The relative fair values of goodwill and other intangible assets recognized in connection with the acquisitions of KBK had not yet been determined as of December 31, 2018. The purchase price is subject to additional adjustments based upon growth in EBITDA during three earnout periods ending in December 2019, December 2020 and December 2021. In connection with the acquisition, NSM expects to record a contingent consideration earnout liability in the first quarter of 2019.

The contingent consideration earnout liabilities related to these acquisitions are subject to adjustment based upon reported EBITDA, projected EBITDA, and present value factors for the acquired entities. During the 2018 ownership period, NSM recognized pre-tax expense of \$3 million for the change in the fair value of its contingent consideration earnout liabilities for Fresh Insurance and its other U.K.-based operations. Any future adjustments to contingent consideration earnout liabilities under the agreements will also be recognized through pre-tax income. As of December 31, 2018, NSM recorded contingent consideration earnout liabilities of \$20 million.

The following table presents the components of GAAP net loss and adjusted EBITDA included in White Mountains's NSM segment for the 2018 ownership period:

Millions	Perio Decembo	od Ended er 31, 2018 ⁽¹⁾
Commission revenues	<u> </u>	94.7
Broker commission expense		28.9
Gross profit		65.8
Other revenues		6.9
General and administrative expenses		61.6
Amortization of other intangible assets		8.3
Interest expense		8.0
GAAP pre-tax loss		(5.2)
Income tax expense		
GAAP net loss		(5.2)
Add back:		
Change in fair value of contingent consideration earnout liabilities		2.7
Interest expense		8.0
Income tax expense		
General and administrative expenses — depreciation		1.7
Amortization of other intangible assets		8.3
Adjusted EBITDA (2)	\$	15.5

⁽¹⁾ NSM's results are from May 11, 2018, the date of acquisition, through December 31, 2018 ("the 2018 ownership period").

⁽²⁾ See "NON-GAAP FINANCIAL MEASURES" on page 55.

NSM Results for the 2018 ownership period

During the 2018 ownership period, NSM reported pre-tax loss of \$5 million, commission revenues of \$95 million, and adjusted EBITDA of \$16 million. NSM's pre-tax loss also included interest expense of \$8 million and amortization of other intangible assets of \$8 million.

Broker commission expenses and general and administrative expenses were \$29 million and \$62 million in the 2018 ownership period.

NSM Business Trends

The following is a discussion of the trends in NSM's business including periods prior to White Mountains's ownership of NSM. White Mountains believes this is useful in understanding the newly acquired business.

NSM's business consists of over 15 active programs that are broadly categorized into five market verticals. The following table presents the controlled premium and commission revenues by vertical for the years ended December 31, 2018, 2017 and 2016:

					Ŋ	ear Ended	Decer	nber 31,						
		20	18			20	17			16	16			
\$ in Millions	Co Pre	ontrolled emium ⁽¹⁾	Commission olled and Fee Co um ⁽¹⁾ Revenue Pr		Co Pro	Controlled and		Controlled and Fee		Commission and Fee Revenue		ontrolled emium ⁽¹⁾	a	nmission nd Fee evenue
Specialty Transportation	\$	136.8	\$	43.0	\$	112.6	\$	32.9	\$	112.4	\$	37.4		
Real Estate		135.7		30.3		106.8		22.2		97.6		19.9		
Social Services		94.0		23.8		111.6		28.8		122.3		32.3		
United Kingdom		108.8		34.9		46.0		16.1		1.2		.7		
Other		119.4		19.8		113.4		18.6		112.3		18.3		
Total	\$	594.7	\$	151.8	\$	490.4	\$	118.6	\$	445.8	\$	108.6		

⁽¹⁾ Controlled premium are total premiums placed by NSM during the period.

Year Ended December 31, 2018 versus Year Ended December 31, 2017

<u>Specialty Transportation:</u> NSM's specialty transportation controlled premium and commission and fee revenue growth in 2018 was due in part to organic growth in the ACI program. In addition, profit commissions in this vertical were higher in 2018 compared to 2017, as there were no major catastrophes in 2018, while profit commissions were significantly reduced in 2017 due to hurricanes Harvey and Irma.

<u>Real Estate:</u> NSM's real estate controlled premium and commission and fee revenue grew in 2018 primarily due to the CHAMP program, which places coverages for coastal condominium associations and high-end hotels. CHAMP grew with greater penetration in the southeast U.S. market and coverages with existing policyholders. CHAMP also benefited from customer goodwill produced by exceptional claims handling in the wake of the hurricanes in 2017.

<u>Social Services:</u> NSM's social services controlled premium and commission and fee revenue experienced a decline in 2018 primarily due to the continued pull back of a key carrier partner and in response to elevated loss ratios. NSM has established relationships with two new carrier partners in the Social Services vertical for 2019.

<u>United Kingdom:</u> NSM's United Kingdom controlled premium and commission and fee revenue grew significantly in 2018 due to the acquisition of Fresh Insurance.

<u>Other:</u> NSM's other controlled premium and commission and fee revenue increased due to growth in the retail brokerage program, partially offset by a reduction in the worker's compensation program.

Year Ended December 31, 2017 versus Year Ended December 31, 2016

<u>Specialty Transportation</u>: The decrease in NSM's specialty transportation commission and fee revenue in 2017 compared to 2016 was driven primarily by decreased profit commissions from the impact of hurricanes Harvey and Irma in 2017.

<u>Real Estate:</u> NSM's real estate controlled premium and commission and fee revenue grew in 2017 primarily due to the CHAMP program with increased penetration in the southeast U.S. market.

<u>Social Services</u>: NSM's social services controlled premium and commission and fee revenue experienced a decline in 2017 primarily due to pull back of a key carrier partner and the decision to non-renew certain programs within the vertical.

<u>United Kingdom:</u> NSM acquired Vantage Holdings in the fourth quarter of 2016, which generated nearly all of the controlled premium and commission and fee revenues in the United Kingdom vertical for 2017.

<u>Other</u>: NSM's other controlled premium and commission and fee revenue experienced modest growth in 2017 over 2016 with the growth in the retail brokerage and architect programs offset by the shutdown of the dental program.

MediaAlpha

The following table presents the components of GAAP net income (loss) and adjusted EBITDA included in White Mountains's MediaAlpha segment for the years ended 2018, 2017 and 2016:

	Year Ended December 31,					
Millions		2018		2017		2016
Advertising and commission revenues	\$	295.5	\$	163.2	\$	116.5
Cost of sales		245.0		135.9		97.8
Gross profit		50.5		27.3		18.7
Other revenue		1.6		_		_
General and administrative expenses		31.7		16.2		11.8
Amortization of other intangible assets		10.3		10.5		10.1
Interest expense		1.2		1.0		.9
GAAP pre-tax income (loss)		8.9		(.4)		(4.1)
Income tax expense		_				
GAAP net income (loss)		8.9		(.4)		(4.1)
Add back:						
Non-cash equity-based compensation expense		11.7				
Interest expense		1.2		1.0		.9
Income tax expense				_		
General and administrative expenses — depreciation		.2		.2		.1
Amortization of other intangible assets		10.3		10.5		10.1
Adjusted EBITDA (1)	\$	32.3	\$	11.3	\$	7.0

⁽¹⁾ See "NON-GAAP FINANCIAL MEASURES" on page 55.

On February 26, 2019, MediaAlpha completed the sale of a significant minority stake to Insignia Capital Group in connection with a recapitalization and cash distribution to existing equityholders. MediaAlpha also repurchased a portion of the holdings of existing equityholders. The transaction valued MediaAlpha at approximately \$350 million. White Mountains retained a 42% ownership interest in MediaAlpha on a fully-diluted basis, and received a net cash distribution of approximately \$88 million. As a result of the transaction, White Mountains also expects that it will no longer consolidate MediaAlpha in its financial statements and will mark its interest in MediaAlpha to fair value at the transaction closing date and in subsequent periods.

MediaAlpha Results—Year Ended December 31, 2018 versus Year Ended December 31, 2017

MediaAlpha reported GAAP pre-tax income of \$9 million and adjusted EBITDA of \$32 million in 2018, compared to break-even pre-tax income and adjusted EBITDA of \$11 million in 2017. MediaAlpha reported advertising and commission revenues of \$296 million in 2018, compared to \$163 million in 2017. The increase in GAAP pre-tax income, adjusted EBITDA and revenues were driven primarily by growth in MediaAlpha's P&C vertical, driven by increased demand from advertisers, and growth in the HLM vertical, driven by strong revenues generated from assets acquired from Healthplans.com in the fourth quarter of 2017. Revenues from MediaAlpha's P&C vertical were \$162 million in 2018, compared to \$88 million in 2017, while revenues from the HLM vertical were \$100 million in 2018 compared to \$56 million in 2017.

MediaAlpha's cost of sales is comprised primarily of revenue share based payments to partners, which are correlated to and vary with revenue volume. Cost of sales were \$245 million in 2018, compared to \$136 million in 2017. The increase in cost of sales was driven primarily by the increase in revenues. MediaAlpha's general and administrative expenses were \$32 million in 2018, compared to \$16 million in 2017. The increase in general and administrative expenses in 2018 compared to 2017 was driven primarily by the recognition of non-cash equity-based compensation expense of \$12 million that relates to MediaAlpha's Class B units held by certain employees. The units entitle the award recipient to participate in distributions from MediaAlpha once a cumulative distribution threshold has been met. Compensation expense is recognized when it is deemed probable that the distribution threshold will be met in the future.

Media Alpha Results—Year Ended December 31, 2017 versus Year Ended December 31, 2016

On October 5, 2017, MediaAlpha acquired certain assets associated with the Health, Life and Medicare insurance business of Healthplans.com for a purchase price of \$28 million. The acquired assets include domain names, advertiser and publisher relationships, traffic acquisition accounts, and owned and operated websites. During the fourth quarter of 2017, which includes the annual open enrollment period for health and Medicare coverages, business from the acquired assets contributed \$15 million of revenues and \$2 million of both pre-tax income and adjusted EBITDA.

MediaAlpha reported break-even pre-tax income in 2017, compared to a pre-tax loss of \$4 million in 2016. Adjusted EBITDA was \$11 million in 2017, compared to \$7 million in 2016. For the year ended December 31, 2017, the increase in pre-tax income and adjusted EBITDA were driven primarily by increases in gross profit of \$7 million in the HLM vertical and \$1 million in the P&C vertical, partially offset by increased operating expenses.

Advertising and commission revenues were \$163 million in 2017, compared to \$117 million in 2016. The increase in revenues was driven primarily by growth generated from the newly acquired assets in the HLM vertical and growth in the P&C vertical. The HLM vertical revenues increased \$27 million, to \$56 million for the year ended December 31, 2017. The P&C vertical revenues increased \$11 million, to \$88 million for the year ended December 31, 2017.

MediaAlpha's cost of sales is comprised primarily of revenue share based payments to partners. Cost of sales were \$136 million in 2017, compared to \$98 million in 2016. The increase in cost of sales was driven primarily by the increase in revenues.

Other Operations

The following table presents White Mountains's financial results from its Other Operations segment for the years ended December 31, 2018, 2017 and 2016:

	Ye	ar En	ded Decembe	r 31,	
Millions	2018		2017		2016
Earned insurance premiums	<u> </u>	\$	1.0	\$	7.5
Net investment income	42.3		43.7		23.1
Net realized and unrealized investment (losses) gains	(100.8)	132.7		(28.1)
Advertising and commission revenues	4.1		3.8		1.8
Other revenues	.5		6.1		20.2
Total revenues	(53.9	_	187.3		24.5
Losses and LAE			1.1		8.0
Insurance and reinsurance acquisition expenses	_		.1		2.2
Cost of sales	3.7		3.5		4.2
General and administrative and other expenses	94.4		148.9		124.1
Amortization of other intangible assets	.2		.2		.4
Interest expense	.3		1.3		2.1
Total expenses	98.6		155.1		141.0
Pre-tax (loss) income	\$ (152.5) \$	32.2	\$	(116.5)

Other Operations Results—Year Ended December 31, 2018 versus Year Ended December 31, 2017

White Mountains's Other Operations segment reported pre-tax loss of \$153 million in 2018, compared to pre-tax income of \$32 million in 2017. The results were driven primarily by lower investment returns in 2018. Net realized and unrealized investment losses were \$101 million in 2018, compared to net realized and unrealized investment gains of \$133 million in 2017. See "Summary of Investment Results" on page 43. Other revenues were \$1 million in 2018, compared to \$6 million in 2017. In 2017, other revenues included \$4 million of third-party investment management fee income at WM Advisors.

The Other Operations segment reported general and administrative expenses of \$94 million in 2018, compared to \$149 million in 2017. General and administrative expenses in 2017 included additional compensation expenses related to the severance of former company executives and higher incentive compensation costs resulting from the OneBeacon Transaction.

Share repurchases

For the year ended December 31, 2018, White Mountains repurchased and retired 592,458 of its common shares for \$519 million, at an average share price of \$877. The average share price paid was approximately 98% and 99%, respectively, of White Mountains's December 31, 2018 book value per share and adjusted book value per share. The average share price paid was approximately 92% and 93%, respectively, of White Mountains's December 31, 2018 book value per share including the estimated gain from the MediaAlpha transaction and adjusted book value per share including the estimated gain from the MediaAlpha transaction.

Other Operations Results—Year Ended December 31, 2017 versus Year Ended December 31, 2016

White Mountains's Other Operations segment reported pre-tax income of \$32 million in 2017 compared to pre-tax loss of \$117 million in 2016. The results were driven primarily by strong equity returns in 2017. Net realized and unrealized investment gains were \$133 million in 2017, compared to net realized and unrealized investment losses of \$28 million in 2016. Net investment income increased to \$44 million in 2017 from \$23 million in 2016. The increase was driven by a higher invested asset base driven primarily from the proceeds received from the OneBeacon Transaction. See "Summary of Investment Results" on page 43. Other revenues were \$6 million in 2017, compared to \$20 million in 2016, driven primarily by lower third-party investment management fee income at WM Advisors.

The Other Operations segment reported general and administrative expenses of \$149 million in 2017, compared to \$124 million in 2016. The increase in general and administrative expenses was driven primarily by additional compensation expenses related to the severance of former company executives and higher incentive compensation costs resulting from the OneBeacon Transaction.

Share repurchases

For the year ended December 31, 2017, White Mountains repurchased and retired 832,725 of its common shares for \$724 million at an average share price of \$869. The average share price paid was approximately 93% and 95%, respectively, of White Mountains's December 31, 2017 book value per share and adjusted book value per share.

II. Summary of Investment Results

White Mountains's total investment results include continuing operations and discontinued operations. The OneBeacon and Sirius Group investment results are included in discontinued operations for each respective period.

For purposes of discussing rates of return, all percentages are presented gross of management fees and trading expenses in order to produce a better comparison to benchmark returns, while all dollar amounts are presented net of management fees and trading expenses.

The following table presents the pre-tax investment returns for White Mountains's consolidated portfolio, including the returns from discontinued operations, for the years ended December 31, 2018, 2017 and 2016:

Gross Investment Returns and Benchmark Returns(1)

	Year Ended December 31,					
	2018	2017	2016			
Common equity securities	(7.7)%	20.1 %	6.2%			
Other long-term investments	10.0 %	(5.8)%	0.8%			
Total common equity securities and other long-term investments	(3.6)%	12.7 %	4.3%			
S&P 500 Index (total return)	(4.4)%	21.8 %	12.0%			
Fixed income investments	1.2 %	3.5 %	2.4%			
Bloomberg Barclays U.S. Intermediate Aggregate Index	0.9 %	2.3 %	2.0%			
Total consolidated portfolio	(1.7)%	5.6 %	2.7%			

⁽¹⁾ For 2018, investment returns are calculated using a daily weighted average of investments held. For periods prior to 2018, investment returns are calculated using a quarterly weighted average of investments held.

Investment Returns—Year Ended December 31, 2018 versus Year Ended December 31, 2017

White Mountains's pre-tax total return on invested assets was -1.7% for 2018, compared to 5.6% for 2017. Investment returns for 2018 were adversely impacted by the sharp decline in equity markets in the fourth quarter. Investment returns for 2017 benefited from the relatively short-duration of the fixed income portfolio and strong equity markets.

Common Equity Securities and Other Long-Term Investments Results

White Mountains's portfolio of common equity securities and other long-term investments returned -3.6% for 2018 compared to 12.7% for 2017. White Mountains's portfolio of common equity securities and other long-term investments represented approximately 49% and 32% of total invested assets as of December 31, 2018 and 2017. The increase in this percentage was driven primarily by additions to the common equity security portfolio and a decline in the investment asset base principally due to share repurchase activity during the year.

White Mountains's portfolio of common equity securities returned -7.7% for 2018, underperforming the S&P 500 Index return of -4.4%. White Mountains's portfolio of common equity securities returned 20.1% for 2017, underperforming the S&P 500 Index return of 21.8%. White Mountains's portfolio of common equity securities primarily consists of passive ETFs and publicly-traded common equity securities that are actively managed by third-party registered investment advisers.

White Mountains's portfolio of ETFs seeks to provide investment results that, before expenses, generally correspond to the performance of broad market indices. As of December 31, 2018 and 2017, White Mountains had approximately \$675 million and \$570 million invested in ETFs. In 2018 and 2017, the ETFs essentially earned the effective index return, before expenses, over the period in which White Mountains was invested in these funds.

As of December 31, 2018, White Mountains's relationships with third-party registered investment advisers (the "actively managed common equity portfolios") were with Highclere International Investors ("Highclere"), who invests in small to midcap equity securities listed in markets outside of the United States and Canada through a unit trust, Silchester International Investors ("Silchester"), who invests in value-oriented non-U.S. equity securities through a unit trust and Lateef Investment Management ("Lateef"), a growth at a reasonable price adviser managing a highly concentrated separate account portfolio of U.S. mid-cap and large-cap growth companies. As of December 31, 2018 and 2017, White Mountains had approximately \$250 million and \$296 million of common equity securities invested with third-party registered investment advisers. White Mountains's actively managed common equity portfolios returned -15.6% for 2018, underperforming the S&P 500 Index return of -4.4%. The underperformance was driven primarily by weak returns from the non-U.S. common equity portfolios managed by Highclere and Silchester. White Mountains's actively managed common equity portfolios returned 25.2% for 2017, outperforming the S&P 500 Index return of 21.8%. The outperformance was driven primarily by strong returns from the common equity portfolios managed by Silchester and Lateef.

During 2017, White Mountains entered into foreign currency forward contracts, which were recorded in other long-term investments, to manage its foreign currency exposure relating to a portion of the non-U.S. common equity portfolios managed by Highelere and Silchester. These foreign currency forward contracts were closed as of December 31, 2017.

White Mountains maintains a portfolio of other long-term investments that primarily consists of unconsolidated entities, private equity funds and hedge funds. White Mountains's other long-term investments portfolio returned 10.0% for 2018. The results were driven primarily by a \$26 million fair value adjustment to White Mountains's investment in PassportCard/ DavidShield, which was driven by strong profitable growth in its core businesses, and strong private equity fund returns. White Mountains's other long-term investments portfolio returned -5.8% for 2017. The results were driven primarily by losses from foreign currency forward contracts and unconsolidated entities. These losses were partially offset by strong performance from private equity funds and favorable fair value adjustments to surplus notes issued to OneBeacon in connection with the sale of its runoff business (the "OneBeacon Surplus Notes").

Fixed Income Results

As of both December 31, 2018 and 2017, the fixed income portfolio duration, including short-term investments, was 3.4 years.

White Mountains's fixed income portfolio returned 1.2% for 2018, outperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index return of 0.9%. These results were driven primarily by strong performance from White Mountains's overweight exposure to municipal obligations versus the benchmark. In addition, White Mountains's short duration positioning of the fixed income portfolio also contributed to the outperformance relative to the benchmark as rates rose during the period. However, White Mountains's overweight exposure to debt securities issued by corporations lessened the positive relative impact of having a short duration portfolio when credit spreads widened significantly in the fourth quarter. White Mountains's fixed income portfolio returned 3.5% for 2017, outperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index return of 2.3% as short-term yields rose during the period.

In the fourth quarter of 2017, White Mountains established a U.S. investment grade corporate bond mandate with Principal Global Investors, LLC ("Principal"), a third-party registered investment adviser. As of December 31, 2018, the fair value of the Principal investment grade corporate bond mandate was \$247 million, with a duration of approximately 4.6 years.

During 2016, White Mountains established a GBP investment grade corporate bond mandate with a third-party registered investment adviser and entered into a foreign currency forward contract, which was recorded in other long-term investments, to manage the foreign currency exposure relating to this mandate. In the first quarter of 2018, White Mountains terminated this mandate and closed the associated foreign currency forward contract. White Mountains also established a portfolio of high-yield fixed maturity investments managed by a third-party registered investment adviser during 2016. In the third quarter of 2018, White Mountains liquidated the high-yield fixed maturity portfolio and reinvested the bulk of the proceeds into U.S. government securities.

Investment Returns—Year Ended December 31, 2017 versus Year Ended December 31, 2016

White Mountains's pre-tax total return on invested assets was 5.6% for 2017, compared to 2.7% for 2016. Investment returns for 2017 benefited from the relatively short-duration of the fixed income portfolio and strong equity markets. Investment returns for 2016 were driven primarily by strong equity markets and decent fixed income returns despite rising interest rates

Common Equity Securities and Other Long-Term Investments Results

White Mountains's portfolio of common equity securities and other long-term investments returned 12.7% for 2017, compared to 4.3% for 2016. White Mountains's portfolio of common equity securities and other long-term investments represented approximately 32% and 15% of total invested assets as of December 31, 2017 and 2016. The increase in this percentage was driven primarily by additions to the common equity security portfolio and a decline in the investment asset base due to the OneBeacon Transaction and share repurchase activity during the year.

White Mountains's portfolio of common equity securities returned 20.1% for 2017, underperforming the S&P 500 Index return of 21.8%. White Mountains's portfolio of common equity securities returned 6.2% for 2016, underperforming the S&P 500 Index return of 12.0%. As of December 31, 2017 and 2016, White Mountains had approximately \$570 million and \$322 million invested in ETFs. In 2017 and 2016, the portfolio of ETFs essentially earned the effective index return, before expenses, over the period in which White Mountains was invested in these funds. As of December 31, 2017 and 2016, White Mountains had approximately \$296 million and \$152 million of common equity securities invested with third-party registered investment advisers. White Mountains's actively managed common equity portfolios returned 25.2% in 2017, outperforming the S&P 500 Index return of 21.8%. The outperformance was driven primarily by strong returns from the common equity portfolios managed by Silchester and Lateef. White Mountains's actively managed common equity portfolios returned 4.0% in 2016, underperforming the S&P 500 Index return of 12.0%, driven primarily by weak returns from the common equity portfolio managed by Lateef.

White Mountains's other long-term investments portfolio returned -5.8% for 2017. The results were driven primarily by losses from foreign currency forward contracts and unconsolidated entities. These losses were partially offset by strong performance from private equity funds and favorable fair value adjustments to the OneBeacon Surplus Notes. White Mountains's other long-term investments portfolio returned 0.8% for 2016. The results were driven primarily by favorable fair value adjustments to the OneBeacon Surplus Notes, mostly offset by losses from private equity funds and unconsolidated entities.

Fixed Income Results

As of December 31, 2017, the fixed income portfolio duration, including short-term investments, was 3.4 years compared to 2.8 years as of December 31, 2016.

White Mountains's fixed income portfolio returned 3.5% for 2017, outperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index return of 2.3% as short-term yields rose during the period. White Mountains's fixed income portfolio returned 2.4% for 2016, outperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index return of 2.0%, as interest rates rose in the period.

Portfolio Composition

The following table presents the composition of White Mountains's total operations investment portfolio as of December 31, 2018 and 2017:

		December 31	, 2018	December 31, 2017				
\$ in Millions	Car	rying Value	% of Total	Car	rrying Value	% of Total		
Fixed maturity investments	<u> </u>	1,077.5	42.4%	\$	2,129.7	63.0%		
Short-term investments		214.2	8.4		176.1	5.2		
Common equity securities		925.6	36.4		866.1	25.6		
Other long-term investments		325.6	12.8		208.8	6.2		
Total investments	\$	2,542.9	100.0%	\$	3,380.7	100.0%		

The following table presents the breakdown of White Mountains's fixed maturity investments as of December 31, 2018 by credit class, based upon issuer credit ratings provided by Standard & Poor's, or if unrated by Standard & Poor's, long term obligation ratings provided by Moody's:

	December 31, 2018									
\$ in Millions	A	mortized Cost	% of Total	Carrying Value	% of Total					
U.S. government and government-sponsored entities (1)	\$	271.9	25.0 %	\$ 268.6	25.0 %					
AAA/Aaa		66.4	6.1	66.1	6.1					
AA/Aa		264.2	24.3	264.4	24.6					
A/A		328.2	30.1	324.8	30.1					
BBB/Baa		151.8	14.0	148.0	13.7					
Other/not rated		5.6	0.5	5.6	0.5					
Total fixed maturity investments	\$	1,088.1	100.0%	\$ 1,077.5	100.0%					

⁽¹⁾ Includes mortgage-backed securities, which carry the full faith and credit guaranty of the U.S. government (i.e., GNMA) or are guaranteed by a government sponsored entity (i.e., FNMA, FHLMC).

The cost or amortized cost and carrying value of White Mountains's fixed maturity investments as of December 31, 2018 is presented below by contractual maturity. Actual maturities could differ from contractual maturities because certain borrowers may call or prepay their obligations with or without call or prepayment penalties.

		Decembe	r 31, 2	2018	
Millions	A		Carrying Value		
Due in one year or less	\$	84.8	\$	84.4	
Due after one year through five years		500.8		496.2	
Due after five years through ten years		222.4		218.0	
Due after ten years		144.0		145.4	
Mortgage and asset-backed securities		136.1		133.5	
Total fixed maturity investments	\$	1,088.1	\$	1,077.5	

Foreign Currency Exposure

As of December 31, 2018, White Mountains had foreign currency exposure on \$244 million of net assets primarily relating to common equity securities managed by Silchester and Highclere, NSM's U.K. operations, Buzz, Wobi and certain unconsolidated entities.

White Mountains may enter into foreign currency forward contracts from time to time in order to mitigate its foreign currency exposure on certain invested assets. In the fourth quarter of 2017, White Mountains closed the foreign currency forward contracts associated with the investment assets managed by Silchester and Highclere. In conjunction with the liquidation of the GBP investment grade corporate bond mandate in the first quarter of 2018, White Mountains closed the associated foreign currency forward contract.

The following table presents the fair value of White Mountains's foreign denominated net assets as of December 31, 2018:

\$ in Millions			% of Common				
Currency (1)	Fa	ir Value	Shareholders' Equity				
GBP	\$	76.0	2.7 %				
EUR		54.0	1.9				
JPY		49.9	1.8				
All other		63.9	2.2				
Total	\$	243.8	8.6%				

⁽¹⁾ Includes net assets of NSM's U.K. operations, Wobi and Buzz.

Income Taxes

The Company and its Bermuda-domiciled subsidiaries are not subject to Bermuda income tax under current Bermuda law. In the event there is a change in the current law such that taxes are imposed, the Company and its Bermuda-domiciled subsidiaries would be exempt from such tax until March 31, 2035, pursuant to the Bermuda Exempted Undertakings Tax Protection Act of 1966. The Company has subsidiaries and branches that operate in various other jurisdictions around the world that are subject to tax in the jurisdictions in which they operate.

White Mountains reported income tax benefit of \$4 million in 2018 on pre-tax loss from continuing operations of \$178 million. White Mountains's effective tax rate was different from the current U.S. federal statutory rate of 21% primarily due to a full valuation allowance on most of the net deferred tax assets at U.S. operations, income generated in jurisdictions with lower tax rates than the United States, withholding taxes and a tax benefit recorded at BAM related to its MSC collected. For BAM, MSC collected and the related taxes thereon are recorded directly to non-controlling interest equity, while the valuation allowance on such taxes is recorded through the income statement. As a result, BAM recorded a tax benefit of \$9 million associated with the valuation allowance on taxes related to MSC collected that is included in the effective tax rate. See Note 6—"Income Taxes" on page F-34.

White Mountains reported income tax benefit of \$8 million in 2017 on pre-tax income from continuing operations of \$8 million. White Mountains's effective tax rate was different from the 2017 U.S. federal statutory rate of 35% primarily due to a full valuation allowance on most of the net deferred tax assets at U.S. operations net of the impact of tax rate changes, income generated in jurisdictions with lower tax rates than the United States, a tax benefit recorded at BAM related to its MSC collected and consolidated pre-tax income being near break-even. For BAM, MSC collected and the related taxes thereon are recorded directly to non-controlling interest equity, while the valuation allowance on such taxes is recorded through the income statement. As a result, BAM recorded a tax benefit of \$10 million associated with the valuation allowance on taxes related to MSC collected that is included in the effective tax rate.

White Mountains reported income tax benefit of \$33 million in 2016 on pre-tax loss from continuing operations of \$147 million. White Mountains's effective tax rate was different from the 2016 U.S. federal statutory rate of 35% primarily due to a full valuation allowance on all of the net deferred tax assets at U.S. operations including a \$21 million tax benefit generated by the sale of Tranzact recognized in continuing operations related to the reversal of a valuation allowance that resulted from income that was recognized within discontinued operations, income generated in jurisdictions with lower tax rates than the United States and a tax benefit recorded at BAM related to its MSC collected. For BAM, MSC collected and the related taxes thereon are recorded directly to non-controlling interest equity, while the valuation allowance on such taxes is recorded through the income statement. As a result, BAM recorded a tax benefit of \$11 million associated with the valuation allowance on taxes related to MSC collected that is included in the effective tax rate.

Discontinued Operations

White Mountains has entered into a number of sale transactions that have been accounted for as discontinued operations within its consolidated financial statements. See **Note 19**— "Held for Sale and Discontinued Operations" on page F-55 for detailed financial information on each business sold.

OneBeacon

On September 28, 2017, Intact Financial Corporation completed its acquisition of OneBeacon Insurance Group, Ltd. in an all-cash transaction for \$18.10 per share.

OneBeacon Results — Period Ended September 28, 2017

For the 2017 period, White Mountains reported net income from OneBeacon of \$21 million in discontinued operations. OneBeacon's combined ratio for the 2017 period was 105%, driven by four points of net unfavorable loss reserve development, primarily in the Program, Healthcare and Government Risk businesses, and four points of catastrophe losses, primarily due to losses from Hurricane Harvey.

OneBeacon Results—Year Ended December 31, 2016

For the year ended December 31, 2016, White Mountains reported net income from OneBeacon of \$109 million in discontinued operations, driven primarily by investment results. OneBeacon's GAAP combined ratio increased to 97% for 2016 from 96% for 2015, primarily due to a higher expense ratio driven by a lower premium volume and changing business mix.

Sirius Group

On April 18, 2016, White Mountains completed the sale of Sirius Group to CMI. Sirius Group's results inured to White Mountains until the closing date of the transaction.

Sirius Group Tax Contingency

In October 2018, the Swedish Administrative Court ruled against Sirius Group on its appeal of the Swedish Tax Agency's denial of certain interest deductions relating to periods prior to the sale of Sirius Group to CMI. In connection with the sale, White Mountains indemnified Sirius Group against the loss of certain tax attributes, including those related to these interest deductions. As a result, in the third quarter of 2018, White Mountains recorded a loss of \$17 million within net (loss) gain on sale of discontinued operations reflecting the value of these interest deductions. Sirius Group has appealed the decision to the Swedish Administrative Court of Appeal.

Sirius Group Results — Period Ended April 18, 2016

For the 2016 period, White Mountains reported Sirius Group's comprehensive income of \$27 million and a combined ratio of 102%, which was driven primarily by \$17 million of recorded losses from the Ecuador earthquake that occurred on April 16, 2016.

Tranzact

On July 21, 2016, White Mountains completed the sale of Tranzact to an affiliate of Clayton, Dubilier & Rice, LLC. Tranzact's results inured to White Mountains until the closing date of the transaction. For the 2016 period, White Mountains reported Tranzact's net loss from discontinued operations of \$3 million.

LIQUIDITY AND CAPITAL RESOURCES

Operating Cash and Short-term Investments

Holding Company Level

The primary sources of cash for the Company and certain of its intermediate holding companies are expected to be distributions and tax sharing payments received from its operating subsidiaries, capital raising activities, net investment income, proceeds from sales, repayments and maturities of investments and, from time to time, proceeds from sales of operating subsidiaries. The primary uses of cash are expected to be repurchases of the Company's common shares, payments on and repurchases/retirements of its debt obligations, dividend payments to holders of the Company's common shares, distributions to non-controlling interest holders of consolidated subsidiaries, purchases of investments, payments to tax authorities, contributions to operating subsidiaries, operating expenses and, from time to time, purchases of operating subsidiaries.

Operating Subsidiary Level.

The primary sources of cash for White Mountains's operating subsidiaries are expected to be premium and fee collections, net investment income, proceeds from sales, repayments and maturities of investments, contributions from holding companies, capital raising activities and, from time to time, proceeds from sales of operating subsidiaries. The primary uses of cash are expected to be loss payments, policy acquisition and other underwriting costs, cost of sales, purchases of investments, payments on and repurchases/retirements of its debt obligations, distributions and tax sharing payments made to holding companies, distributions to non-controlling interest holders, operating expenses and, from time to time, purchases of operating subsidiaries.

Both internal and external forces influence White Mountains's financial condition, results of operations and cash flows. Premium and fee levels, loss payments, cost of sales and investment returns may be impacted by changing rates of inflation and other economic conditions. Some time may lapse between the occurrence of an insured loss, the reporting of the loss to White Mountains and the settlement of the liability for that loss. The exact timing of the payment of losses and benefits cannot be predicted with certainty.

Management believes that White Mountains's cash balances, cash flows from operations and routine sales and maturities of investments are adequate to meet expected cash requirements for the foreseeable future on both a holding company and subsidiary level.

Dividend Capacity

Following is a description of the dividend capacity of White Mountains's reinsurance and other operating subsidiaries:

HG Global/BAM

As of December 31, 2018, HG Global had \$619 million face value of preferred shares outstanding, of which White Mountains owned 96.9%. Holders of the HG Global preferred shares receive cumulative dividends at a fixed annual rate of 6.0% on a quarterly basis, when and if declared by HG Global. HG Global did not declare or pay any preferred dividends in 2018. As of December 31, 2018, HG Global had accrued \$288 million of dividends payable to holders of its preferred shares, \$279 million of which is payable to White Mountains and eliminated in consolidation. As of December 31, 2018, HG Global and its subsidiaries had \$2 million of cash outside of HG Re.

HG Re is a Special Purpose Insurer subject to regulation and supervision by the BMA but does not require regulatory approval to pay dividends. However, HG Re's dividend capacity is limited to amounts held outside of the Collateral Trusts pursuant to the FLRT with BAM. As of December 31, 2018, HG Re had statutory capital and surplus of \$699 million, \$757 million of assets held in the Collateral Trusts pursuant to the FLRT with BAM and \$3 million of cash and investments outside the Collateral Trusts.

Effective January 1, 2014, HG Global and BAM agreed to change the interest rate on the BAM Surplus Notes for the five years ending December 31, 2018 from a fixed rate of 8.0% to a variable rate equal to the one-year U.S. treasury rate plus 300 basis points, set annually. In 2018, BAM exercised its option to extend the variable rate period for an additional three years and during 2019, the interest rate will be 5.70%. At the end of the variable rate period, the interest rate will be fixed at the higher of the then current variable rate or 8.0%. BAM is required to seek regulatory approval to pay interest and principal on the BAM Surplus Notes only to the extent that its capital resources continue to support its outstanding obligations, business plan and rating. No payment of interest or principal on the BAM Surplus Notes may be made without the approval of the New York State Department of Financial Services ("NYDFS").

BAM has stated its intention to seek regulatory approval to pay interest and principal on its surplus notes to the extent that its remaining qualified statutory capital and other capital resources continue to support its outstanding obligations, its business plan and its "AA/stable" rating from Standard & Poor's. BAM repaid \$18 million of the BAM Surplus Notes and \$5 million of accrued interest during 2018. BAM repaid \$4 million of the BAM Surplus Notes and \$1 million of accrued interest during 2017.

NSM

During the period from White Mountains's acquisition of NSM through December 31, 2018, NSM did not pay any dividends to its shareholders. As of December 31, 2018, NSM had \$16 million of net unrestricted cash.

MediaAlpha

During 2018, MediaAlpha paid \$16 million of dividends, \$10 million of which was paid to White Mountains. As of December 31, 2018, MediaAlpha had \$6 million of net unrestricted cash.

Other Operations

During 2018, White Mountains paid a \$4 million common share dividend. As of December 31, 2018, the Company and its intermediate holding companies had \$536 million of net unrestricted cash, short-term investments and fixed maturity investments, \$926 million of common equity securities and \$67 million of other long-term investments included in its Other Operations segment.

Financing

The following table summarizes White Mountains's capital structure as of December 31, 2018 and 2017:

	Decem	ber 3	31,
\$ in Millions	2018		2017
WTM Bank Facility	\$ _	\$	_
NSM Bank Facility, net of unamortized issuance costs	176.6		
MediaAlpha Bank Facility, net of unamortized issuance costs	14.2		23.8
Other NSM debt	1.9		
Total debt	192.7		23.8
Non-controlling interests — other, excluding BAM	45.7		31.5
Total White Mountains's common shareholders' equity	2,843.1		3,492.5
Total capital	3,081.5		3,547.8
Time-value discount on expected future payments on the BAM Surplus Notes (1)	(141.2)		(157.0)
HG Global's unearned premium reserve (1)	136.9		103.9
HG Global's net deferred acquisition costs (1)	(34.6)		(24.3)
Total adjusted capital	\$ 3,042.6	\$	3,470.4
Total debt to total adjusted capital	 6.3%		0.7%

⁽¹⁾ Amount reflects White Mountains's preferred share ownership in HG Global of 96.9%.

Management believes that White Mountains has the flexibility and capacity to obtain funds externally through debt or equity financing on both a short-term and long-term basis. However, White Mountains can provide no assurance that, if needed, it would be able to obtain additional debt or equity financing on satisfactory terms, if at all.

It is possible that, in the future, one or more of the rating agencies may lower White Mountains's existing ratings. If one or more of its ratings were lowered, White Mountains could incur higher borrowing costs on future borrowings and its ability to access the capital markets could be impacted.

White Mountains had an unsecured revolving credit facility with a syndicate of lenders administered by Wells Fargo Bank, N.A., which had a total commitment of \$425 million. White Mountains terminated the WTM Bank Facility on May 8, 2018.

On May 11, 2018, NSM entered into a secured credit facility (the "NSM Bank Facility") with Ares Capital Corporation in order to refinance NSM's existing debt and to fund the acquisition of Fresh Insurance. The NSM Bank Facility is comprised of a term loan of \$100 million, delayed-draw term loans of \$51 million to fund the Fresh Insurance acquisition and \$30 million to fund incremental term loans to fund the KBK acquisition and a revolving credit loan commitment of \$10 million, under which NSM initially borrowed \$2 million. The term loans under the NSM Bank Facility mature on May 11, 2024, and the revolving credit loan under the NSM Bank Facility matures on May 11, 2018 through December 31, 2018, NSM repaid \$1 million on the term loans and \$2 million on the revolving credit loan under the NSM Banking Facility. As of December 31, 2018, no revolving credit loans were outstanding under the NSM Bank Facility.

Interest on the NSM Bank Facility accrues at a floating interest rate equal to the three-month LIBOR or the Prime Rate, as published by the Wall Street Journal plus, in each case, an applicable margin. The margin over LIBOR may vary between 4.25% and 4.75%, and the margin over the Prime Rate may vary between 3.25% and 3.75%, in each case, depending on the consolidated total leverage ratio of the borrower.

On June 15, 2018, NSM entered into an interest rate swap agreement to hedge its exposure to interest rate risk on \$151 million of its variable rate term loans. Under the terms of the swap agreement, NSM pays a fixed rate of 2.97% and receives a variable rate, which is reset monthly, based on the then-current LIBOR. As of December 31, 2018, the variable rate received by NSM under the swap agreement was 2.52%. As of December 31, 2018, the effective interest rate for the outstanding term loans of \$150 million that are hedged by the swap was 7.47%. The effective interest rate on the outstanding term loans of \$30 million that are unhedged was 6.85%. The effective interest rate on the total outstanding term loans under the NSM Bank Facility of \$180 million was 7.42%. See **Note 7** — "**Derivatives** — **NSM Interest Rate Swap**" on page F-40.

The NSM Bank Facility is secured by all property of NSM and contains various affirmative, negative and financial covenants that White Mountains considers to be customary for such borrowings, including a maximum consolidated total leverage ratio covenant.

MediaAlpha has a secured credit facility (the "MediaAlpha Bank Facility") with Western Alliance Bank, which has a total commitment of \$28 million and a maturity date of October 6, 2020. The MediaAlpha Bank Facility consists of an \$18 million term loan facility, which has an outstanding balance of \$14 million as of December 31, 2018, and a revolving loan facility for \$10 million, which was undrawn as of December 31, 2018. During 2018, MediaAlpha repaid \$4 million on the term loan and borrowed \$3 million and repaid \$9 million on the revolving loan under the MediaAlpha Bank Facility.

The MediaAlpha Bank Facility is secured by intellectual property and the common stock of MediaAlpha's subsidiaries, and contains various affirmative, negative and financial covenants that White Mountains considers to be customary for such borrowings, including a maximum leverage ratio.

Covenant Compliance

At December 31, 2018, White Mountains was in compliance with all of the covenants under all of its debt instruments.

NSM Bank Facility

The consolidated total leverage ratio in the NSM Bank Facility is determined by dividing NSM's debt by its EBITDA, both as defined in the NSM Bank Facility.

Debt is defined to include indebtedness for borrowed money, due and payable earnouts on permitted acquisitions and various other adjustments specified in the NSM Bank Facility, less unrestricted cash and cash equivalents ("Bank Debt"). NSM's Bank Debt was \$166 million as of December 31, 2018.

EBITDA is defined to include adjusted EBITDA (see **NON-GAAP FINANCIAL MEASURES** on page 55) plus additional adjustments to (i) exclude certain expenses, including program start up and shutdown expenses, mergers and acquisition expenses, terminations and various other adjustments specified in NSM's Bank Facility and (ii) include/exclude historical earnings of acquired/disposed companies ("Bank EBITDA"). NSM's Bank EBITDA was \$42 million for the trailing twelve months ended December 31, 2018.

The maximum consolidated total leverage ratio covenant as of December 31, 2018 was 5.5x. NSM's actual consolidated total leverage ratio was 4.0x.

Contractual Obligations and Commitments

The following table presents White Mountains's material contractual obligations and commitments as of December 31, 2018:

Millions	 e in Less One Year	 ue in One to Three Years	 e in Three Five Years	Due After Five Years	Total
Debt	\$ 5.2	\$ 10.4	\$ 9.4	\$ 171.9	\$ 196.9
Interest on debt	14.1	26.6	12.5	_	53.2
Long-term incentive compensation	17.0	30.7		_	47.7
Contingent consideration earnout liabilities (1)	20.2	_		_	20.2
Operating leases (2)	6.6	9.1	7.8	4.2	27.7
Total contractual obligations and commitments	\$ 63.1	\$ 76.8	\$ 29.7	\$ 176.1	\$ 345.7

⁽¹⁾ The contingent consideration earnout liabilities are related to NSM's previous acquisitions of Fresh Insurance and its other U.K.-based operations. Any future adjustments due after one year, which are based upon EBITDA, EBITDA projections, and present value factors for acquired entities, are not included in the table. See **Note 2** — "Significant Transactions" on page F-16.

⁽²⁾ Amounts include BAM's operating lease amounts of \$2.2, \$3.9, \$3.6 and \$4.2 that are due in less than one year, one to three years, three to five years, and due after five years, which are attributed to non-controlling interests.

The long-term incentive compensation balances included in the table above include amounts payable for performance shares and units. Exact amounts to be paid for performance shares cannot be predicted with certainty, as the ultimate amounts of these liabilities are based on the future performance of White Mountains and the market price of the Company's common shares at the time the payments are made.

The estimated payments reflected in the table are based on current accrual factors (including performance relative to targets and common share price) and assume that all outstanding balances were 100% vested as of December 31, 2018.

There are no provisions within White Mountains's operating leasing agreements that would trigger acceleration of future lease payments.

White Mountains does not finance its operations through the securitization of its trade receivables, through special purpose entities or through synthetic leases. Further, White Mountains has not entered into any material arrangements requiring it to guarantee payment of third-party debt or lease payments or to fund losses of an unconsolidated special purpose entity.

White Mountains also has future binding commitments to fund certain other long-term investments. These commitments, which totaled approximately \$170 million as of December 31, 2018, do not have fixed funding dates and, are therefore, excluded from the table above.

Share Repurchase Programs

White Mountains's board of directors has authorized the Company to repurchase its common shares from time to time, subject to market conditions. The repurchase authorizations do not have a stated expiration date. As of December 31, 2018, White Mountains may repurchase an additional 635,705 shares under these board authorizations. In addition, from time to time White Mountains has also repurchased its common shares through tender offers that were separately approved by its board of directors. On May 11, 2018, White Mountains completed a "modified Dutch auction" tender offer, through which it repurchased 575,068 of its common shares at a purchase price of \$875 per share for a total cost of approximately \$505 million, including expenses. Shares repurchased under this tender offer did not impact the remaining number of shares authorized for repurchase.

The following table presents common shares repurchased by the Company as well as the average price per share as a percent of adjusted book value per share. For 2018, the table also presents the average price per share as a percent of adjusted book value per share, including the estimated gain from the MediaAlpha transaction of \$55 per share.

					Average price per share as % of				
Year Ended	Shares Repurchased	Cost Iillions)	Average Price Per Share	Adjusted Book Value er Share	Adjusted Book Value Per Share	Adjusted Book Value Per Share, Including Estimated Gain From MediaAlpha Transaction			
December 31, 2018	592,458	\$ 519.4	\$ 876.69	\$ 887.85	99%	93%			
December 31, 2017	832,725	\$ 723.9	\$ 869.29	\$ 914.75	95%	N/A			
December 31, 2016	1,106,145	\$ 887.2	\$ 802.08	\$ 789.08	102%	N/A			

Cash Flows

Detailed information concerning White Mountains's cash flows during 2018, 2017 and 2016 follows:

Cash flows from continuing operations for the years ended 2018, 2017 and 2016

Net cash flows used for continuing operations was \$31 million, \$62 million and \$179 million for the years ended 2018, 2017 and 2016. Cash used from continuing operations was lower in 2018 compared to 2017, primarily due to \$28 million of payments made in 2017 related to the departures of the Company's former Chairman and CEO and former CFO. Cash used in 2016 included \$166 million in payments from the settlement of certain liabilities and transaction costs in connection with the Sirius Group and Tranzact sales. White Mountains does not believe that these trends will have a meaningful impact on its future liquidity or its ability to meet its future cash requirements. White Mountains has \$536 million of net unrestricted cash, short-term investments and fixed maturity investments, \$926 million of common equity securities and \$67 million of other long-term investments as of December 31, 2018.

Cash flows from investing and financing activities for the year ended December 31, 2018

Financing and Other Capital Activities

During 2018, the Company declared and paid a \$4 million cash dividend to its common shareholders.

During 2018, the Company repurchased and retired 592,458 of its common shares for \$519 million, which included 9,965 for \$8 million under employee benefit plans for statutory withholding tax payments.

During 2018, BAM received \$54 million in MSC.

During 2018, BAM repaid \$18 million of principal and \$5 million of accrued interest on the BAM Surplus Notes.

During 2018, NSM borrowed \$51 million under the NSM Bank Facility to fund the Fresh Insurance acquisition and \$30 million to fund the KBK acquisition.

During the period from May 11, 2018 through December 31, 2018, NSM repaid \$1 million on the term loans and \$2 million on the revolving credit loan under the NSM Banking Facility.

During 2018, MediaAlpha paid \$16 million of dividends to its shareholders, of which \$10 million was paid to White Mountains.

During 2018, MediaAlpha repaid \$4 million on the term loan and borrowed \$3 million and repaid \$9 million on the revolving loan under the MediaAlpha Bank Facility.

During 2018, Wobi borrowed 20 million Israeli New Shekels ("ILS") (approximately \$6 million) from White Mountains under an internal credit facility.

In August 2018, White Mountains contributed ILS 91 million (approximately \$25 million) to Wobi.

During 2018, Wobi repaid its internal credit facility to White Mountains consisting of ILS 88 million of principal and ILS 3 million of accrued interest (totaling approximately \$25 million).

In October 2018, White Mountains contributed an additional ILS 10 million (approximately \$3 million) to Wobi.

During 2018, Buzz borrowed GBP 3 million (approximately \$4 million) from White Mountains under a convertible loan note.

Acquisitions and Dispositions

On January 24, 2018, White Mountains paid \$42 million in connection with the DavidShield transaction.

On May 11, 2018, White Mountains closed its acquisition of 95% of NSM for a purchase price of \$274 million. White Mountains paid a purchase price adjustment of \$2 million in the fourth quarter of 2018.

On May 18, 2018, NSM acquired 100% of Fresh Insurance for a purchase price of GBP 37 million (approximately \$50 million).

On December 3, 2018, White Mountains acquired additional newly-issued units of NSM for \$29 million in connection with NSM's acquisition of KBK.

On December 3, 2018, NSM acquired all of the net assets of KBK for a purchase price of \$60 million.

During 2018, White Mountains made gross investments into the Enlightenment Capital Funds totaling \$3 million and received a total of \$1 million of distributions from these funds.

During 2018, White Mountains made gross investments into the Tuckerman Capital Funds totaling \$1 million and received a total of \$15 million of distributions from these funds.

Cash flows from investing and financing activities for the year ended December 31, 2017

Financing and Other Capital Activities

During 2017, the Company declared and paid a \$5 million cash dividend to its common shareholders.

During 2017, the Company repurchased and retired 832,725 of its common shares for \$724 million, which included 10,993 for \$9 million under employee benefit plans for statutory withholding tax payments.

During 2017, the Company borrowed and repaid \$350 million under the WTM Bank Facility.

During 2017, BAM received \$37 million in MSC.

During 2017, BAM repaid \$4 million of principal and \$1 million of accrued interest on the BAM Surplus Notes.

During 2017, MediaAlpha paid \$5 million of dividends, of which \$3 million was paid to White Mountains.

During 2017, MediaAlpha borrowed \$20 million on the term loan and \$6 million on the revolving loan under the MediaAlpha Bank Facility. During 2017, MediaAlpha repaid \$13 million under the previous MediaAlpha Bank Facility and \$2 million on the term loan under the MediaAlpha Bank Facility.

During 2017, Wobi borrowed ILS 68 million (approximately \$19 million) from White Mountains under an internal credit facility.

During 2017, White Mountains received \$45 million of dividends from OneBeacon, which is reported as discontinued operations.

Acquisitions and Dispositions

On August 1, 2017, White Mountains purchased 37,409 newly-issued preferred shares of Buzz for GBP 4 million (approximately \$5 million) and 5,808 common shares from the company founders for GBP 0.5 million (approximately \$0.7 million).

On September 28, 2017, OneBeacon closed its definitive merger agreement with Intact and White Mountains received proceeds of \$1,299 million, or \$18.10 per OneBeacon common share.

On October 5, 2017, White Mountains purchased 131,579 newly-issued Class A common units of MediaAlpha for \$13 million.

On October 5, 2017, MediaAlpha acquired certain assets associated with the Health, Life and Medicare insurance business of Healthplans.com for an aggregate purchase price of \$28 million.

During 2017, White Mountains made gross investments into the Enlightenment Capital Funds totaling \$13 million and received a total of \$24 million of distributions from these funds.

During 2017, White Mountains made gross investments into the Tuckerman Capital Funds totaling \$17 million and received a total of \$2 million of distributions from these funds.

Cash flows from investing and financing activities for the year ended December 31, 2016

Financing and Other Capital Activities

During 2016, the Company declared and paid a \$5 million cash dividend to its common shareholders.

During 2016, the Company repurchased and retired 1,106,145 of its common shares for \$887 million, which included 8,022 common shares repurchased under employee benefit plans.

During 2016, the Company borrowed a total of \$350 million and repaid a total of \$400 million under the WTM Bank Facility.

During 2016, HG Global raised \$6 million of additional capital through the issuance of preferred shares, 97% of which were purchased by White Mountains. HG Global used \$3 million of the proceeds to repay and cancel an internal credit facility with White Mountains.

During 2016, BAM received \$38 million in MSC.

During 2016, Media Alpha paid \$3 million of dividends, of which \$2 million was paid to White Mountains.

During 2016, MediaAlpha repaid \$2 million of the term loan portion and borrowed \$3 million and repaid \$3 million under the revolving loan portion of the previous MediaAlpha bank facility.

During 2016, White Mountains Life Reinsurance (Bermuda) Ltd. returned \$73 million of capital to White Mountains.

During 2016, White Mountains received \$60 million of dividends from OneBeacon, which is reported as discontinued operations.

Acquisitions and Dispositions

On January 7, 2016, Wobi settled its acquisition of the remaining share capital of Cashboard for NIS 16 million (approximately \$4 million).

On February 1, 2016, Symetra closed its merger agreement with Sumitomo Life and White Mountains received proceeds of \$658 million, or \$32.00 per Symetra common share.

On February 26, 2016, White Mountains paid \$8 million in settlement of the contingent purchase adjustment for its acquisition of MediaAlpha in 2014.

On April 18, 2016, White Mountains completed the sale of Sirius Group to CMI for approximately \$2.6 billion. Of this amount, \$162 million of this amount was used to purchase certain assets to be retained by White Mountains out of Sirius Group, including shares of OneBeacon.

On July 21, 2016, White Mountains completed the sale of Tranzact and received net proceeds of \$221 million at closing. On October 5, White Mountains received additional proceeds of \$1 million following the release of the post-closing purchase price adjustment escrow.

On August 4, 2016, White Mountains purchased 110,461 common shares of Buzz for GBP 4 million (approximately \$5 million) and 54,172 shares of newly issued convertible preferred shares of Buzz for GBP 2 million (approximately \$3 million).

During 2016, White Mountains increased its investment in Wobi through the purchase of newly-issued convertible preferred shares for a total of NIS 36 million (approximately \$10 million).

During 2016, White Mountains made gross investments into the Enlightenment Capital Funds totaling \$11 million and received a total of \$14 million of distributions from these funds.

During 2016, White Mountains made gross investments into the Tuckerman Capital Funds totaling \$10 million and received a total of \$4 million of distributions from these funds.

TRANSACTIONS WITH RELATED PERSONS

See **Note 17** — "**Transactions with Related Persons**" on page F-54 in the accompanying Consolidated Financial Statements.

NON-GAAP FINANCIAL MEASURES

This report includes four non-GAAP financial measures that have been reconciled with their most comparable GAAP financial measures.

Adjusted book value per share is a non-GAAP financial measure which is derived by adjusting (i) the GAAP book value per share numerator and (ii) the common shares outstanding denominator, as described below. Beginning in 2017, the GAAP book value per share numerator has been adjusted (i) to include a discount for the time value of money arising from the expected timing of cash payments of principal and interest on the BAM Surplus Notes and (ii) to add back the unearned premium reserve, net of deferred acquisition costs, at HG Global. Under GAAP, White Mountains is required to carry the BAM Surplus Notes, including accrued interest, at nominal value with no consideration for time value of money. Based on a debt service model that forecasts operating results for BAM through maturity of the BAM Surplus Notes, the present value of the BAM Surplus Notes, including accrued interest, was estimated to be \$146 million and \$162 million less than the nominal GAAP carrying values as of December 31, 2018 and December 31, 2017, respectively. The value of HG Global's unearned premium reserve, net of deferred acquisition costs, was \$106 million and \$82 million as of December 31, 2018 and December 31, 2017, respectively. White Mountains believes these adjustments are useful to management and investors in analyzing the intrinsic value of HG Global, including the value of the BAM Surplus Notes and the value of the in-force business at HG Re, HG Global's reinsurance subsidiary. For 2016, the numerator used in the calculation of adjusted book value per share also includes the dilutive effects of future proceeds from the outstanding non-qualified options for periods prior to January 20, 2017, the expiration date of the non-qualified options. The denominator used in the calculation of adjusted book value per share equals the number of common shares outstanding adjusted to exclude unearned restricted common shares, the compensation cost of which, at the date of calculation, has yet to be amortized. Restricted common shares are amortized on a straight-line basis over their vesting periods. For 2016, the denominator used in the calculation of adjusted book value per share also includes the dilutive effects of outstanding non-qualified options for periods prior to January 20, 2017, the expiration date of the non-qualified options. The reconciliation of GAAP book value per share to adjusted book value per share is included on page

Gross written premiums and MSC from new business is a non-GAAP financial measure, which is derived by adjusting gross written premiums and MSC collected to (i) include the present value of future installment MSC not yet collected and (ii) exclude gross written premium adjustments on existing installment policies closed in prior periods. White Mountains believes these adjustments are useful to investors in evaluating the pricing of new business closed during the period. The reconciliation of GAAP gross written premiums to gross written premiums and MSC from new business is included on page 35.

Adjusted EBITDA is a non-GAAP financial measure, which is defined as net income (loss) excluding interest expense on debt, income tax benefit (expense), depreciation and amortization, and certain adjustments at NSM and MediaAlpha. In the case of NSM, adjusted EBITDA also excludes the change in the fair value of NSM's contingent consideration earnout liabilities related to prior transactions. In the case of MediaAlpha, adjusted EBITDA also excludes non-cash equity-based compensation expense. White Mountains believes that adjusted EBITDA is useful to management and investors in analyzing NSM's and MediaAlpha's fundamental economic performance. White Mountains believes that investors commonly use adjusted EBITDA as a supplemental measurement to evaluate the overall operating performance of companies within the same industry. See page 39 for the reconciliation of NSM's GAAP net income (loss) to adjusted EBITDA and page 41 for the reconciliation of MediaAlpha's GAAP net income (loss) to adjusted EBITDA.

Total capital at White Mountains is comprised of White Mountains's common shareholders' equity, debt and non-controlling interests other than non-controlling interests attributable to BAM. Total adjusted capital is a non-GAAP financial measure, which is derived by adjusting total capital (i) to include a discount for the time value of money arising from the expected timing of cash payments of principal and interest on the BAM Surplus Notes and (ii) to add back the unearned premium reserve, net of deferred acquisition costs, at HG Global. The reconciliation of total capital to total adjusted capital is included on page 50.

CRITICAL ACCOUNTING ESTIMATES

Management's Discussion and Analysis of Financial Condition and Results of Operations discuss the Company's consolidated financial statements, which have been prepared in accordance with GAAP. The financial statements presented herein include all adjustments considered necessary by management to fairly present the financial condition, results of operations and cash flows of White Mountains.

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 as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Certain of these estimates are considered critical in that they involve a higher degree of judgment and are subject to a significant degree of variability. On an ongoing basis, management evaluates its estimates and bases its estimates on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources.

1. Fair Value Measurements

General

White Mountains records certain assets and liabilities at fair value in its consolidated financial statements, with changes therein recognized in current period earnings. In addition, White Mountains discloses estimated fair value for certain liabilities measured at historical or amortized cost. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants (an exit price) at a particular measurement date. Fair value measurements are categorized into a hierarchy that distinguishes between inputs based on market data from independent sources ("observable inputs") and a reporting entity's internal assumptions based upon the best information available when external market data is limited or unavailable ("unobservable inputs"). Quoted prices in active markets for identical assets have the highest priority ("Level 1"), followed by observable inputs other than quoted prices including prices for similar but not identical assets or liabilities ("Level 2"), and unobservable inputs, including the reporting entity's estimates of the assumptions that market participants would use, having the lowest priority ("Level 3").

Assets and liabilities carried at fair value include substantially all of the investment portfolio, derivative instruments, both exchange traded and over the counter instruments, and reinsurance assumed liabilities associated with variable annuity benefit guarantees. Valuation of assets and liabilities measured at fair value require management to make estimates and apply judgment to matters that may carry a significant degree of uncertainty. In determining its estimates of fair value, White Mountains uses a variety of valuation approaches and inputs. Whenever possible, White Mountains estimates fair value using valuation methods that maximize the use of observable prices and other inputs. Where appropriate, assets and liabilities measured at fair value have been adjusted for the effect of counterparty credit risk.

Invested Assets

White Mountains uses brokers and outside pricing services to assist in determining fair values. The outside pricing services White Mountains uses have indicated that they will only provide prices where observable inputs are available. As of December 31, 2018, approximately 87% of the investment portfolio was recorded at fair value as Level 1 or Level 2 measurements.

Level 1 Measurements

Investments valued using Level 1 inputs include fixed maturity investments, primarily investments in U.S. Treasuries and short-term investments, which include U.S. Treasury Bills and common equity securities. For investments in active markets, White Mountains uses the quoted market prices provided by outside pricing services to determine fair value.

Level 2 Measurements

Investments valued using Level 2 inputs include fixed maturity investments, which have been disaggregated into classes, including debt securities issued by corporations, mortgage and asset-backed securities, municipal obligations, and foreign government, agency and provincial obligations. Investments valued using Level 2 inputs also include certain passive ETFs that track U.S. stock indices such as the S&P 500 but are traded on foreign exchanges, which management values using the fund manager's published NAV to account for the difference in market close times.

In circumstances where quoted market prices are unavailable or are not considered reasonable, White Mountains estimates the fair value using industry standard pricing methodologies and observable inputs such as benchmark yields, reported trades, broker-dealer quotes, issuer spreads, benchmark securities, bids, offers, credit ratings, prepayment speeds, reference data including research publications and other relevant inputs. Given that many fixed maturity investments do not trade on a daily basis, the outside pricing services evaluate a wide range of fixed maturity investments by regularly drawing parallels from recent trades and quotes of comparable securities with similar features. The characteristics used to identify comparable fixed maturity investments vary by asset type and take into account market convention.

White Mountains's process to assess the reasonableness of the market prices obtained from the outside pricing sources covers substantially all of its fixed maturity investments and includes, but is not limited to, the evaluation of pricing methodologies and a review of the pricing services' quality control procedures on at least an annual basis, a comparison of its invested asset prices obtained from alternate independent pricing vendors on at least a semi-annual basis, monthly analytical reviews of certain prices and a review of the underlying assumptions utilized by the pricing services for select measurements on an ad hoc basis throughout the year. White Mountains also performs back-testing of selected sales activity to determine whether there are any significant differences between the market price used to value the security prior to sale and the actual sale price on an ad-hoc basis throughout the year. Prices provided by the pricing services that vary by more than 5% and \$0.5 million from the expected price based on these assessment procedures are considered outliers, as are prices that have not changed from period to period and prices that have trended unusually compared to market conditions. In circumstances where the results of White Mountains's review process does not appear to support the market price provided by the pricing services, White Mountains challenges the vendor provided price. If White Mountains cannot gain satisfactory evidence to support the challenged price, White Mountains will rely upon its own pricing methodologies to estimate the fair value of the security in question.

The valuation process described above is generally applicable to all of White Mountains's fixed maturity investments. The techniques and inputs specific to asset classes within White Mountains's fixed maturity investments for Level 2 securities that use observable inputs are as follows:

Debt Securities Issued by Corporations

The fair value of debt securities issued by corporations is determined from a pricing evaluation technique that uses information from market sources and integrates relative credit information, observed market movements, and sector news. Key inputs include benchmark yields, reported trades, broker-dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data including sector, coupon, credit quality ratings, duration, credit enhancements, early redemption features and market research publications.

Mortgage and Asset-Backed Securities:

The fair value of mortgage and asset-backed securities is determined from a pricing evaluation technique that uses information from market sources and leveraging similar securities. Key inputs include benchmark yields, reported trades, underlying tranche cash flow data, collateral performance, plus new issue data, as well as broker-dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data including issuer, vintage, loan type, collateral attributes, prepayment speeds, default rates, recovery rates, cash flow stress testing, credit quality ratings and market research publications.

Municipal Obligations:

The fair value of municipal obligations is determined from a pricing evaluation technique that uses information from market makers, brokers-dealers, buy-side firms, and analysts along with general market information. Key inputs include benchmark yields, reported trades, issuer financial statements, material event notices and new issue data, as well as broker-dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data including type, coupon, credit quality ratings, duration, credit enhancements, geographic location and market research publications.

Foreign Government, Agency and Provincial Obligations

The fair value of foreign government, agency and provincial obligations is determined from a pricing evaluation technique that uses feeds from data sources in each respective country, including active market makers and inter-dealer brokers. Key inputs include benchmark yields, reported trades, broker-dealer quotes, two-sided markets, benchmark securities, bids, offers, local exchange prices, foreign exchange rates and reference data including coupon, credit quality ratings, duration and market research publications.

Level 3 Measurements

Fair value estimates for investments that trade infrequently and have few or no observable market prices are classified as Level 3 measurements. Investments valued using Level 3 fair value estimates are based upon unobservable inputs and include investments in certain fixed maturity investments, equity securities and other long-term investments where quoted market prices are unavailable or are not considered reasonable.

Level 3 valuations are generated from techniques that use assumptions not observable in the market. These unobservable assumptions reflect White Mountains's assumptions that market participants would use in valuing the investment. Generally, certain securities may start out as Level 3 when they are originally issued but as observable inputs become available in the market, they may be reclassified to Level 2. Transfers between levels are based on investments held as of the beginning of the period.

The following table presents White Mountains's fair value measurements and the percentage of Level 3 investments as of December 31, 2018. The major security types were based on the legal form of the securities. White Mountains has disaggregated its fixed maturity investments based on the issuing entity type, which impacts credit quality, with debt securities issued by U.S. government entities carrying minimal credit risk, while the credit and other risks associated with other issuers, such as debt securities issued by corporations, foreign governments, municipalities or entities issuing mortgage and assetbacked securities vary depending on the nature of the issuing entity type.

	1		De	ecember 31,	2018
\$ in Millions		Fair Value			Level 3 Inputs as a % of Total Fair Value
U.S. Government and agency obligations	\$	153.2	\$		<u>%</u>
Debt securities issued by corporations		510.5			_
Municipal obligations		280.3			_
Mortgage and asset-backed securities		133.5			_
Fixed maturity investments		1,077.5			_
Short-term investments		214.2			_
Common equity securities		925.6			_
Other long-term investments — NAV		186.9			_
Other long-term investments — level 3		138.7		138.7	100 %
Total investments	\$	2,542.9	\$	138.7	5%

Other Long-Term Investments

White Mountains maintains a portfolio of other long-term investments that primarily consists of unconsolidated entities, private equity funds and hedge funds. White Mountains's portfolio of other long-term investments are generally valued at fair value, using level 3 measurements or net asset value "NAV" as a practical expedient. Investments for which fair value is measured at NAV using the practical expedient are not classified within the fair value hierarchy.

Unconsolidated Entities

White Mountains's portfolio of other long-term investments includes unconsolidated entities, including non-controlling interests in certain private common equity securities, limited liability companies and convertible preferred securities. White Mountains portfolio of unconsolidated entities are generally valued using level 3 inputs. The determination of the fair value of unconsolidated entities may involve significant management judgment, the use of valuation models and assumptions that are inherently subjective.

On an ongoing basis, White Mountains considers qualitative changes in facts and circumstances which may impact the valuation of unconsolidated entities, including economic changes of relevant industries and changes to the investee capital structure, business strategy and significant changes in key personnel. On an annual basis, or when facts and circumstances suggest a quantitative valuation analysis is necessary, White Mountains, with the assistance of a third-party valuation firm, completes a valuation analysis of significant unconsolidated entities. White Mountains considers the following fair value approaches:

Income Approach: The income approach converts future amounts to a single current discounted amount, based on expected future cash flows that a company will generate, along with expected proceeds from disposition. The cash flows are discounted to their present value using a discount rate that incorporates the risk-free rate for the use of funds, the expected rate of inflation, and risks associated with the particular investment.

Market Approach: The market approach uses prices and other relevant information generated by market transactions involving identical or comparable businesses, such as recent sales or offerings of comparable assets.

Cost Approach: The cost approach reflects the amount that would be required currently to replace the service capacity of an asset, or the current replacement cost. When applied to the valuation of equity interests in businesses, value is based on the net aggregate fair market value of the entity's underlying individual assets.

Valuation of White Mountains's investment in PassportCard/DavidShield

In the fourth quarter of 2018, White Mountains completed a valuation analysis of its investment in PassportCard/DavidShield, which represents White Mountains's most significant unconsolidated entity. White Mountains used an income approach to valuation based on discounted cash flows. The valuation model included key inputs of expected future cash flows, a discount rate, and a terminal premium and other revenue exit multiple. The expected future cash flows were based on management judgment, considering current performance along with budgets and projected future results. The discount rate reflected the weighted average cost of capital, considering comparable public company data, adjusted for risks specific to the investee and industry. The exit multiple was based on expectations of a premium and other revenue multiple for the investee in an exit year, considering comparable companies and similar transaction multiple data. Once a range of values was determined, White Mountains concluded that a discount rate of approximately 18% and a terminal exit multiple of 1 times premium and other revenue was appropriate for the valuation of its investment in PassportCard/DavidShield. A 15% liquidity discount was also applied for lack of marketability and White Mountains's lack of control over the unconsolidated investee. As a result, the carrying value of White Mountains's investment in PassportCard/DavidShield was \$75 million as of December 31, 2018.

With an income approach, small changes to inputs in a valuation model may result in significant changes to fair value. The following table presents the estimated effect on the fair value of White Mountains's investment in PassportCard/DavidShield as of December 31, 2018, resulting from changes in key inputs to the discounted cash flow analysis, including the discount rate and terminal exit multiple:

\$ in Millions		Discount Rate										
Exit Multiple	1	16% 17%				18%		19%		20%		
1.25	\$	93	\$	89	\$	84	\$	81	\$	77		
1.00	\$	83	\$	79	\$	75	\$	72	\$	69		
0.75	\$	73	\$	70	\$	67	\$	64	\$	61		

Private Equity Funds and Hedge Funds

White Mountains's portfolio of other long-term investments includes investments in private equity funds and hedge funds. White Mountains employs a number of procedures to assess the reasonableness of the fair value measurements for its private equity funds and hedge funds, including obtaining and reviewing periodic and audited annual financial statements as well as discussing each fund's pricing with the fund manager throughout the year. However, since the fund managers do not provide sufficient information to evaluate the pricing methods and inputs for each underlying investment, White Mountains considers the inputs to be unobservable. The fair value of White Mountains's private equity fund and hedge fund investments has generally been determined using the fund manager's NAV. In the event that White Mountains believes the fair value of a private equity fund or hedge fund differs from the NAV reported by the fund manager due to illiquidity or other factors, White Mountains will adjust the reported NAV to more appropriately represent the fair value of its investment in the private equity fund or hedge fund. As of December 31, 2018 and 2017, White Mountains did not adjust the reported NAV of its investments in private equity funds and hedge funds.

Sensitivity Analysis of Likely Returns on Other Long-Term Investments

The underlying investments of private equity funds and hedge funds are typically publicly-traded and private securities and, as such, are subject to market risks that are similar to White Mountains's common equity securities. The following table presents the estimated effect on fair values as of December 31, 2018 resulting from a 10% change and a 30% change in the market value of other long-term investments:

			Change in Fair Value at									
	Carry	December 31, 2018										
Millions	Decem	ber 31, 2018	10%	Decline	10%	Increase	30% Decline		30% Increase			
Unconsolidated entities — level 3	\$	124.9	\$	(12.5)	\$	12.5	\$	(37.5)	\$	37.5		
Unconsolidated entities — NAV		40.8		(4.1)		4.1		(12.3)		12.3		
Private equity funds — NAV		91.8		(9.2)		9.2		(27.5)		27.5		
Hedge fund — NAV		54.3		(5.4)		5.4		(16.3)		16.3		
Other — level 3		13.8		(1.4)		1.4		(4.1)		4.1		
Total other long-term investments	\$	325.6	\$	(32.6)	\$	32.6	\$	(97.7)	\$	97.7		

See Note 3 — "Investment Securities" on page F-18 for tables that summarize the changes in White Mountains's fair value measurements by level for the years ended December 31, 2018 and 2017 and for amount of total gains (losses) included in earnings attributable to net unrealized investment gains (losses) for Level 3 investments for years ended December 31, 2018, 2017 and 2016.

2. Surplus Note Valuation

BAM Surplus Notes

As of December 31, 2018, White Mountains owned \$481 million of BAM Surplus Notes and has accrued \$144 million in interest due thereon. During the year ended December 31, 2018, with approval of the NYDFS, BAM paid \$23 million to White Mountains for amounts owed under the BAM Surplus Notes. During the year ended December 31, 2017, with approval of the NYDFS, BAM paid \$5 million to White Mountains for amounts owed under the BAM Surplus Notes. Because BAM is consolidated in White Mountains's financial statements, the BAM Surplus Notes and accrued interest are classified as intercompany notes, carried at face value and eliminated in consolidation. However, the BAM Surplus Notes and accrued interest are carried as assets at HG Global, of which White Mountains owns 97% of the preferred equity, while the BAM Surplus Notes are carried as liabilities at BAM, which White Mountains has no ownership interest in and is completely attributed to non-controlling interests.

Any write down of the carried amount of the BAM Surplus Notes and/or the accrued interest thereon could adversely impact White Mountains's results of operations and financial condition. See Item 1A., Risk Factors, "If BAM does not pay some or all of the principal and interest due on the BAM Surplus Notes, it could materially adversely affect our results of operations and financial condition." on page 20.

Periodically, White Mountains's management reviews the recoverability of amounts recorded from the BAM Surplus Notes. As of December 31, 2018, White Mountains believes such notes and interest thereon to be fully recoverable.

White Mountains's review is based on a debt service model that forecasts operating results for BAM, and related payments on the BAM Surplus Notes, through maturity of the BAM Surplus Notes in 2042. The model depends on assumptions regarding future trends for the issuance of municipal bonds, interest rates, credit spreads, insured market penetration, competitive activity in the market for municipal bond insurance and other factors affecting the demand for and price of BAM's municipal bond insurance. Assumptions regarding future trends for these factors are a matter of significant judgment. White Mountains expects both par insured and total premiums to increase gradually over the next six years and to flatten thereafter. White Mountains continues to project that the BAM Surplus Notes will be fully repaid approximately nine years prior to final maturity, which is consistent with the previous forecast as of December 31, 2017.

The model assumptions are based on historical trends, current conditions and expected future developments. Whether actual results will follow forecast is subject to a number of risks and uncertainties.

No payment of interest or principal on the BAM Surplus Notes may be made without the approval of the NYDFS. BAM has stated its intention to seek regulatory approval to pay interest and principal on its surplus notes to the extent that its remaining qualified statutory capital and other capital resources continue to support its outstanding obligations, its business plan and its "AA/stable" rating from Standard & Poor's.

Interest payments on the BAM Surplus Notes are due quarterly but are subject to deferral, without penalty or default and without compounding, for payment in the future. Payments made to the BAM Surplus Notes are applied pro rata between outstanding principal and interest. Deferred interest is due on the stated maturity date in 2042.

3. Goodwill and Other Intangible Assets

As of December 31, 2018, goodwill and other intangible assets recognized in connection with business and asset acquisitions totaled \$538 million, of which \$497 million was attributable to White Mountains's common shareholders. Goodwill and other intangible assets are recorded at their acquisition date fair values. The determination of the acquisition date fair values of goodwill and other intangible assets involves significant management judgment, the use of valuation models and assumptions that are inherently subjective. Goodwill and indefinite-lived intangible assets are not amortized but rather reviewed for potential impairment at least annually. Finite-lived intangible assets, which are amortized over their estimated economic lives, are reviewed for impairment only when events occur or there are changes in circumstances indicating that their carrying value may exceed fair value. Impairment exists when the carrying value of goodwill or other intangible assets exceeds fair value.

White Mountains's annual review for potential impairment first assesses whether qualitative factors indicate that the carrying value of goodwill or other intangible assets may be greater than fair value. If White Mountains determines based on this qualitative review that it is more likely than not that an impairment may exist, then White Mountains performs a quantitative analysis to compare the fair value of a reporting unit with its carrying value. If the carrying value exceeds the estimated fair value, then an impairment charge is recognized through current period pre-tax income. Both the annual qualitative assessment of potential impairment as well as the quantitative comparison of carrying value to estimated fair value involve management judgment, the use of discounted cash flow projections and other valuation techniques and assumptions that are inherently subjective.

A significant portion of the goodwill and other identifiable intangible assets on White Mountains's balance sheet arose from White Mountains's acquisition of NSM in May 2018 and NSM's subsequent acquisitions of Fresh Insurance and KBK. White Mountains believes that all of the goodwill and intangible assets recorded in respect of these acquisitions is fully recoverable. Because of the timing of these acquisitions, all of which are still within the one-year measurement period following the acquisition date, these amounts have not yet been subject to White Mountains's annual review for potential impairment. See Item 1A., Risk Factors, "If we are required to write down goodwill and other intangible assets, it could materially adversely affect our results of operations and financial condition." on page 20.

FORWARD-LOOKING STATEMENTS

This report may contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements, other than statements of historical facts, included or referenced in this report which address activities, events or developments which White Mountains expects or anticipates will or may occur in the future are forward-looking statements. The words "will", "believe", "intend", "expect", "anticipate", "project", "estimate", "predict" and similar expressions are also intended to identify forward-looking statements. These forward-looking statements include, among others, statements with respect to White Mountains's:

- change in adjusted book value per share or return on equity;
- business strategy:
- financial and operating targets or plans;
- incurred loss and loss adjustment expenses and the adequacy of its loss and loss adjustment expense reserves;
- projections of revenues, income (or loss), earnings (or loss) per share, dividends, market share or other financial forecasts;
- · expansion and growth of its business and operations; and
- future capital expenditures.

These statements are based on certain assumptions and analyses made by White Mountains in light of its experience and perception of historical trends, current conditions and expected future developments, as well as other factors believed to be appropriate in the circumstances. However, whether actual results and developments will conform to its expectations and predictions is subject to a number of risks and uncertainties that could cause actual results to differ materially from expectations, including:

- the risks associated with Item 1A of this Report on Form 10-K;
- business opportunities (or lack thereof) that may be presented to it and pursued;
- actions taken by ratings agencies from time to time, such as financial strength or credit ratings downgrades or placing ratings on negative watch;
- · the continued availability of capital and financing;
- general economic, market or business conditions;
- competitive forces, including the conduct of other insurers;
- changes in domestic or foreign laws or regulations, or their interpretation, applicable to White Mountains, its competitors or its customers;
- an economic downturn or other economic conditions adversely affecting its financial condition; and
- other factors, most of which are beyond White Mountains's control.

Consequently, all of the forward-looking statements made in this report are qualified by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by White Mountains will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, White Mountains or its business or operations. White Mountains assumes no obligation to publicly update any such forward-looking statements, whether as a result of new information, future events or otherwise.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

White Mountains's consolidated balance sheet includes a substantial amount of assets and liabilities whose fair values are subject to market risk. The term market risk refers to the risk of loss arising from adverse changes in interest rates, credit spreads, equity markets prices and other relevant market rates and prices. Due to the size of White Mountains's investment portfolio, market risk could have a significant effect on White Mountains's consolidated financial condition, results of operations and cash flows.

Interest Rate and Credit Spread Risk

White Mountains invests in interest rate sensitive securities. White Mountains generally manages the interest rate risk associated with its portfolio of fixed maturity investments by monitoring the average duration of the portfolio. As of December 31, 2018, White Mountains's fixed maturity investments are comprised primarily of debt securities issued by corporations, U.S. Government and agency obligations, mortgage and asset-backed securities and municipal obligations.

Increases and decreases in prevailing interest rates generally translate into decreases and increases in fair values of fixed maturity investments, respectively. Additionally, fair values of interest rate sensitive instruments may be affected by the creditworthiness of the issuer, prepayment options, relative values of alternative investments, the liquidity of the instrument and various other market factors.

The following table presents the estimated effects of hypothetical increases and decreases in market interest rates on White Mountains's fixed maturity investments:

\$ in Millions	ir Value at nber 31, 2018	Assumed Change in Relevant Interest Rate	Aft	ated Fair Value er Change in iterest Rate	Pre-Tax Increase (Decrease) in Fair Value		
Fixed maturity investments	\$ 1,077.5	100 bps decrease	\$	1,121.4	\$	43.9	
		50 bps decrease		1,099.5		22.0	
		50 bps increase		1,055.4		(22.1)	
		100 bps increase		1,033.4		(44.0)	

The magnitude of the fair value decrease in rising interest rate scenarios may be more significant than the fair value increase in comparable falling interest rate scenarios. This can occur because (i) the analysis floors interest rates at a de minimis level in falling interest rate scenarios, muting price increases, (ii) portions of the fixed maturity investment portfolio may be callable, muting price increases in falling interest rate scenarios and/or (iii) portions of the fixed maturity investment portfolio may experience cash flow extension in higher interest rate environments, which generally results in lower prices.

White Mountains's overall strategy for fixed maturity investments is to purchase securities that are attractively priced in relation to their investment risks. Widening and tightening of credit spreads translate into decreases and increases in fair values of fixed maturity investments, respectively.

The following table presents the estimated pre-tax effects of hypothetical widening and tightening of credit spreads on White Mountains's fixed maturity investments by asset class:

	December 31, 2018									
Millions	Fa	Fair Value		n 50	Tighten 25		Widen 25	Widen 50		
J.S. Government and agency obligations		153.2	\$		\$		<u> </u>	<u>\$</u>		
			Tighten	100	Tighte	n 50	Widen 50	Widen 100		
Agency mortgage-backed securities		115.4		2.8		2.1	(2.5)	(5.1)		
Other asset-backed securities		18.1		0.1		0.1	(0.1)	(0.2)		
			Tighten	200	Tighter	100	Widen 100	Widen 200		
Debt securities issued by corporations		510.5		25.1	-	18.3	(20.6)	(41.3)		
Municipal obligations		280.3		13.0		12.4	(16.0)	(31.9)		

The magnitude of the fair value decrease in wider credit spread scenarios may be more significant than the fair value increase in comparable tighter credit spread scenarios. This can occur because the analysis limits the credit spread tightening in order to floor yields of non-government bonds above yields of short government bonds, thereby muting price increases.

Common Equity Securities and Other Long-Term Investments Price Risk

The carrying values of White Mountains's common equity securities and other long-term investments are based on quoted market prices or management's estimates of fair value as of the balance sheet date. Market prices of common equity securities, in general, are subject to fluctuations, which could cause the amount realized upon sale or exercise of these instruments to differ significantly from the current reported value. The fluctuations may result from perceived changes in the underlying economic characteristics of the investment, the relative price of alternative investments, supply and demand imbalances for a particular security or various other market factors. Assuming a hypothetical 10% and 30% increase or decrease in the value of White Mountains's common equity securities and other long-term investments as of December 31, 2018, the carrying value of White Mountains's common equity securities and other long-term investments would have increased or decreased by approximately \$125 million and \$375 million pre-tax, respectively.

Long-Term Obligations

White Mountains records its financial instruments at fair value with the exception of the NSM Bank Facility and the Media Alpha Bank Facility, which are recorded as debt at face value less unamortized original issue discount.

The following tables presents the fair value and carrying value of these financial instruments as of December 31, 2018 and December 31, 2017:

		December 31, 2018			December 31, 2017			
Millions		Fair Value		Carrying Value		Fair Value		Carrying Value
NSM Bank Facility	\$	176.1	\$	176.6	\$	_	\$	_
MediaAlpha Bank Facility	\$	14.6	\$	14.2	\$	23.9	\$	23.8

The fair value estimates for the NSM Bank Facility and the MediaAlpha Bank Facility have been determined based on a discounted cash flows approach and are considered to be Level 3 measurements.

Foreign Currency Exposure

As of December 31, 2018, White Mountains had foreign currency exposure on \$244 million of net assets primarily relating to common equity securities managed by Silchester and Highclere, NSM's U.K. operations, Buzz, Wobi and certain unconsolidated entities.

White Mountains may enter into foreign currency forward contracts from time to time in order to mitigate its foreign currency exposure on certain invested assets. In the fourth quarter of 2017, White Mountains closed the foreign currency forward contracts associated with the investment assets managed by Silchester and Highclere. In conjunction with the liquidation of the GBP investment grade corporate bond mandate in the first quarter of 2018, White Mountains closed the associated foreign currency forward contract.

The following table presents the fair value of White Mountains's foreign denominated net assets as of December 31, 2018:

Currency (1) \$ in Millions	Fa	ir Value	% of Common Shareholders' Equity		
GBP	\$	76.0	2.7 %		
EUR		54.0	1.9		
JPY		49.9	1.8		
All other		63.9	2.2		
Total	\$	243.8	8.6%		

⁽¹⁾ Includes net assets of NSM's U.K. operations, Wobi and Buzz.

Item 8. Financial Statements and Supplementary Data

The financial statements and supplementary data have been filed as a part of this Annual Report on Form 10-K as indicated in the Index to Consolidated Financial Statements and Financial Statement Schedules appearing on page 69 of this report.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

The Principal Executive Officer ("PEO") and the Principal Financial Officer ("PFO") of White Mountains have evaluated the effectiveness of its disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) as of December 31, 2018. Based on that evaluation, the PEO and PFO have concluded that White Mountains's disclosure controls and procedures are adequate and effective.

The PEO and the PFO of White Mountains have evaluated the effectiveness of its internal control over financial reporting as of December 31, 2018. Based on that evaluation, the PEO and PFO have concluded that White Mountains's internal control over financial reporting is effective. Management's annual report on internal control over financial reporting is included on page F-61 of this report. The attestation report on the effectiveness of our internal control over financial reporting by PricewaterhouseCoopers LLP is included on page F-62 of this report.

There has been no change in White Mountains's internal controls over financial reporting that occurred during the fourth quarter of 2018 that has materially affected, or is reasonably likely to materially affect White Mountains's internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Reported under the captions "The Board of Directors", "Section 16(a) Beneficial Ownership Reporting Compliance" and "Corporate Governance—Committees of the Board—Audit Committee" in the Company's 2019 Proxy Statement, herein incorporated by reference, and under the caption "Executive Officers of the Registrant" of this Annual Report on Form 10-K.

The Company's Code of Business Conduct, which applies to all directors, officers and employees in carrying out their responsibilities to and on behalf of the Company, is available at www.whitemountains.com and is also included as Exhibit 14 on the Form 10-K. The Company's Code of Business Conduct is also available in print free of charge to any shareholder upon request.

There have been no material changes to the procedures by which shareholders may recommend nominees to the Company's Board of Directors. The procedures for shareholders to nominate directors are reported under the caption "Corporate Governance—Committees of the Board—Nominating and Governance Committee" in the Company's 2019 Proxy Statement, herein incorporated by reference.

Item 11. Executive Compensation

Reported under the captions "Executive Compensation" and "Corporate Governance—Compensation Committee Interlocks and Insider Participation" in the Company's 2019 Proxy Statement, herein incorporated by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Reported under the captions "Voting Securities and Principal Holders Thereof" and "Equity Compensation Plan Information" in the Company's 2019 Proxy Statement, herein incorporated by reference.

Item 13. Certain Relationships, Related Transactions and Director Independence

Reported under the caption "Transactions with Related Persons, Promoters and Certain Control Persons" and "Corporate Governance—Director Independence" in the Company's 2019 Proxy Statement, herein incorporated by reference.

Item 14. Principal Accountant Fees and Services

Reported under the caption "Principal Accountant Fees and Services" in the Company's 2019 Proxy Statement, herein incorporated by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

a. Documents Filed as Part of the Report

The financial statements and financial statement schedules and reports of independent auditors have been filed as part of this Annual Report on Form 10-K as indicated in the Index to Consolidated Financial Statements and Financial Statement Schedules appearing on page 69 of this report. A listing of exhibits filed as part of the report appear on pages 66 through 67 of this report.

b. Exhibits

Exhibit Number	Name
2	Plan of Reorganization (incorporated by reference herein to the Company's Registration Statement on S-4 (No. 333-87649) dated September 23, 1999)
3.1	Memorandum of Continuance of the Company (incorporated by reference herein to Exhibit (3)(i) of the Company's Current Report on Form 8-K dated November 1, 1999)
3.2	Amended and Restated Bye-Laws of the Company (incorporated by reference herein to Exhibit 3 of the Company's Report on Form 10-Q dated May 2, 2017)
10.1	White Mountains Long-Term Incentive Plan, as amended (incorporated by reference to Appendix A of the Company's Notice of 2013 Annual General Meeting of Members and Proxy Statement dated April 10, 2013)
10.2	White Mountains Bonus Plan (incorporated by reference herein to Exhibit 10.10 of the Company's 2015 Annual Report on Form 10-K)
10.3	Regulation 114 Trust Agreement by and among Build America Mutual Assurance Company, HG Re Ltd. and The Bank of New York Mellon, dated as of July 20, 2012 (incorporated by reference herein to Exhibit 10.2 of the Company's Report on 10-Q dated October 30, 2012)
10.4	Second Amended and Restated Surplus Note Purchase Agreement between Build America Mutual Assurance Company, as Issuer and HG Holdings Ltd. and HG Re Ltd. as Purchasers, dated August 14, 2017 (incorporated by reference herein and filed as Exhibit 99.(d)(7) of the Company's Schedule TO dated April 10, 2018)
10.5	Unit Purchase Agreement, dated as of March 31, 2018, by and among NSM Acquisition Holdings, LLC, AIG Property Casualty U.S., Inc, each management seller, NSM Insurance HoldCo, LLC, White Mountains Catskill Holdings, Inc., the Company, and ABRY Partners VIII, L.P. (incorporated by reference herein to Exhibit 10 of the Company's Report on Form 10-Q dated May 2, 2018)
10.6	Credit Agreement Dated as of May 11, 2018 among NSM Insurance Group, LLC, as the Borrower, NSM Insurance Holdco, LLC, as Holdings, Ares Capital Corporation, as Administrative Agent, and the Lenders and L/C Issuers Party Hereto from Time to Time (incorporated by reference herein to Exhibit 10 of the Company's Report on Form10-Q dated August 7, 2018)
10.7	Second Amended and Restated Supplemental Trust Agreement by and among Build America Mutual Assurance Company, HG Re Ltd. and The Bank of New York Mellon, dated December 4, 2018 (*)
11	Statement Re Computation of Per Share Earnings (**)

Exhibit Number	Name
12	Statement Re Computation of Ratio of Earnings to Fixed Charges (*)
14	The Company's Code of Business Conduct, which applies to all directors, officers and employees in carrying out their responsibilities to and on behalf of the Company (incorporated by reference herein to Exhibit 14 of the Company's 2015 Annual Report on Form 10-K)
21	Subsidiaries of the Registrant (*)
23	Consent of PricewaterhouseCoopers LLP (*)
24	Powers of Attorney (*)
31.1	Principal Executive Officer Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934 (*)
31.2	Principal Financial Officer Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934 (*)
32.1	Principal Executive Officer Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (*)
32.2	Principal Financial Officer Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (*)
101.1	The following financial information from White Mountains's Annual Report on Form 10-K for the year ended December 31, 2018 formatted in XBRL: (i) Consolidated balance sheets as of December 31, 2018 and December 31, 2017; (ii) Consolidated statements of operations and comprehensive income for each of the years ended December 31, 2018, 2017 and 2016; (iii) Consolidated statements of shareholders' equity for each of the years ended December 31, 2018, 2017 and 2016; (iv) Consolidated statements of cash flows for each of the years ended December 31, 2018, 2017 and 2016; and (v) Notes to consolidated financial statements (*).

- (*) Included herein.
- (**) Not included herein as the information is contained elsewhere within report. See Note 9 "Earnings Per Share" on page F-43.

c. Financial Statement Schedules

The financial statement schedules and report of independent registered public accounting firm have been filed as part of this Annual Report on Form 10-K as indicated in the Index to Consolidated Financial Statements and Financial Statement Schedules appearing on page 69 of this report.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

WHITE MOUNTAINS INSURANCE GROUP, LTD.

Date: February 27, 2019 By: /s/ J. BRIAN PALMER

J. Brian Palmer

Managing Director and Chief Accounting Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Company and in the capacities and on the dates indicated.

Signature	Title	Date
YVES BROUILLETTE*	Director	February 27, 2019
Yves Brouillette	-	
/s/ REID T. CAMPBELL	Executive Vice President and Chief Financial Officer	February 27, 2019
Reid T. Campbell	- (Principal Financial Officer)	
MARY C. CHOKSI*	Director	February 27, 2019
Mary C. Choksi	-	
MORGAN W. DAVIS*	Chairman	February 27, 2019
Morgan W. Davis	-	
PHILIP A. GELSTON*	Director	February 27, 2019
Philip A. Gelston	-	
EDITH E. HOLIDAY*	Director	February 27, 2019
Edith E. Holiday	-	
/s/ J. BRIAN PALMER	Managing Director and Chief Accounting Officer	February 27, 2019
J. Brian Palmer	(Principal Accounting Officer)	
/s/ G. MANNING ROUNTREE	Chief Executive Officer (Principal Executive Officer)	February 27, 2019
G. Manning Rountree	-	
LOWNDES A. SMITH*	Director	February 27, 2019
Lowndes A. Smith	-	
DAVID A. TANNER*	Director	February 27, 2019
David A. Tanner	-	

^{*} B_{V} : /s/ G. MANNING ROUNTREE

G. Manning Rountree, Attorney-in-Fact

WHITE MOUNTAINS INSURANCE GROUP, LTD. Index to Consolidated Financial Statements and Financial Statement Schedules

		Form 10-K Page(s)
Consol	idated financial statements:	
Consol	idated balance sheets at December 31, 2018 and 2017	F - 1
	idated statements of operations for each of the years ended mber 31, 2018, 2017 and 2016	F - 3
	idated statements of comprehensive income for each of the years ended mber 31, 2018, 2017 and 2016	F - 4
	idated statements of shareholders' equity for each of the years ended mber 31, 2018, 2017 and 2016	F - 6
Consol	idated statements of cash flows for each of the years ended December 31, 2018, 2017 and 2016	F - 6
Notes t	o consolidated financial statements	F - 7
Other	financial information:	
Manag	ement's annual report on internal control over financial reporting	F - 61
Report	of independent registered public accounting firm	F - 62
Selecte	d quarterly financial data (unaudited)	F - 64
Financ	ial statement schedules:	
I.	Summary of investments—other than investments in related parties as of December 31, 2018	FS - 1
II.	Condensed financial information of the Registrant as of December 31, 2018 and 2017 and for each of the years ended December 31, 2018, 2017 and 2016	FS - 2
III.	Supplementary insurance information as of December 31, 2018 and 2017 and for each of the years ended December 31, 2018, 2017 and 2016	FS - 5
IV.	Reinsurance for each of the years ended December 31, 2018, 2017 and 2016	FS - 6

CONSOLIDATED BALANCE SHEETS

	Decem	ber 31,	
Millions, Except Share and Per Share Amounts	2018	2017	
Assets			
Financial Guarantee (HG Global/BAM)			
Fixed maturity investments, at fair value	\$ 701.4	\$ 623.6	
Short-term investments, at fair value	66.9	69.8	
Total investments	768.3	693.4	
Cash	12.5	25.6	
Insurance premiums receivable	6.4	4.5	
Deferred acquisition costs	19.0	14.8	
Accrued investment income	4.9	3.4	
Accounts receivable on unsettled investment sales	_	_	
Other assets	5.1	5.7	
Total Financial Guarantee assets	816.2	747.4	
Specialty Insurance Distribution (NSM)			
Short-term investments, at fair value	1.7	_	
Cash (restricted \$50.0)	66.2	_	
Premium and commission receivable	44.0	_	
Goodwill and other intangible assets	486.2	_	
Other assets	28.9	_	
Total Specialty Insurance Distribution assets	627.0		
Marketing Technology (MediaAlpha)			
Cash	5.7	9.1	
Goodwill and other intangible assets	43.4	53.7	
Accounts receivable from publishers and advertisers	37.0	32.4	
Other assets	2.3	1.3	
Total Marketing Technology assets	88.4	96.5	
Other			
Fixed maturity investments, at fair value	376.1	1,506.1	
Short-term investments, at fair value	145.6	106.3	
Common equity securities, at fair value	925.6	866.1	
Other long-term investments	325.6	208.8	
Total investments	1,772.9	2,687.3	
Cash	25.9	62.4	
Accrued investment income	5.5	13.9	
Accounts receivable on unsettled investment sales	_	20.9	
Goodwill and other intangible assets	7.9	8.4	
Other assets	15.5	19.1	
Assets held for sale	3.3	3.3	
Total Other assets	1,831.0	2,815.3	
Total assets	\$ 3,362.6	\$ 3,659.2	

See Notes to Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEETS (CONTINUED)

	December 31, 2018 2017						
Millions, Except Share and Per Share Amounts		2017					
Liabilities							
Financial Guarantee (HG Global/BAM)							
Unearned insurance premiums	\$	176.0	\$	136.8			
Accounts payable on unsettled investment purchases		2.2		.6			
Other liabilities		34.3		29.6			
Total Financial Guarantee liabilities		212.5		167.0			
Specialty Insurance Distribution (NSM)							
Debt		178.5		_			
Premiums payable		77.2		_			
Contingent consideration earnout liabilities		20.2		_			
Other liabilities		38.9		_			
Total Specialty Insurance Distribution liabilities		314.8		_			
Marketing Technology (MediaAlpha)							
Debt		14.2		23.8			
Amounts due to publishers and advertisers		27.0		31.6			
Other liabilities		5.7		4.4			
Total Marketing Technology liabilities		46.9		59.8			
Other							
Accrued incentive compensation		38.9		60.6			
Accounts payable on unsettled investment purchases		5.0		_			
Other liabilities		26.3		11.0			
Total Other liabilities		70.2		71.6			
Total liabilities		644.4		298.4			
Equity							
White Mountains's common shareholders' equity							
White Mountains's common shares at \$1 par value per share—authorized 50,000,000 shares; issued and outstanding 3,173,115 and 3,750,171 shares		3.2		3.8			
Paid-in surplus		580.8		666.8			
Retained earnings		2,264.9		2,823.2			
Accumulated other comprehensive loss, after-tax:							
Net unrealized foreign currency translation losses and interest rate swap	_	(5.8)	_	(1.3)			
Total White Mountains's common shareholders' equity		2,843.1		3,492.5			
Non-controlling interests		(124.9)		(131.7)			
Total equity		2,718.2		3,360.8			
Total liabilities and equity	\$	3,362.6	\$	3,659.2			

See Notes to Consolidated Financial Statements including **Note 11** Common Shareholders' Equity and Non-controlling Interests and **Note 18** for Commitments and Contingencies.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year E	nded December 3		
Millions	2018	2017	2016	
Revenues:				
Financial Guarantee (HG Global/BAM)				
Earned insurance premiums	\$ 13.9 S	9.4 \$	5.9	
Net investment income	16.7	12.3	9.0	
Net realized and unrealized investment (losses) gains	(7.5)	.6	.7	
Other revenues	1.2	1.0	1.1	
Total Financial Guarantee revenues	24.3	23.3	16.7	
Specialty Insurance Distribution (NSM)	2.4			
Commission revenues	94.7	_	_	
Other revenues Total Consister Incomes Distribution revenues	$\frac{6.9}{101.6}$			
Total Specialty Insurance Distribution revenues Marketing Technology (Media Alpha)	101.0			
Marketing Technology (MediaAlpha)	295.5	162.2	116.5	
Advertising and commission revenues Other revenues	1.6	163.2	116.5	
Total Marketing Technology revenues	297.1	163.2	116.5	
Other	257.1	103.2	110.5	
Earned insurance premiums		1.0	7.5	
Net investment income	42.3	43.7	23.1	
Net realized and unrealized investment (losses) gains	(100.8)	132.7	(28.1)	
Advertising and commission revenues	4.1	3.8	1.8	
Other revenues	.5	6.1	20.2	
Total Other revenues	(53.9)	187.3	24.5	
Total revenues	369.1	373.8	157.7	
Expenses:				
Financial Guarantee (HG Global/BAM)				
Insurance acquisition expenses	5.3	4.0	3.4	
Other underwriting expenses	.4	.4	.4	
General and administrative expenses	48.0	42.9	39.6	
Total Financial Guarantee expenses	53.7	47.3	43.4	
Specialty Insurance Distribution (NSM)				
General and administrative expenses	61.6	_	_	
Broker commission expense	28.9	_	_	
Amortization of other intangible assets	8.3	_	_	
Interest expense Total Specialty Ingurance Distribution expenses	$\frac{8.0}{106.8}$ -			
Total Specialty Insurance Distribution expenses Marketing Technology (MediaAlpha)	100.8			
Cost of sales	245.0	135.9	97.8	
General and administrative expenses	31.7	16.2	11.8	
Amortization of other intangible assets	10.3	10.5	10.1	
Interest expense	1.2	1.0	.9	
Total Marketing Technology expenses	288.2	163.6	120.6	
Other				
Loss and loss adjustment expenses	_	1.1	8.0	
Insurance acquisition expense	_	.1	2.2	
Cost of sales	3.7	3.5	4.2	
General and administrative and other expenses	94.4	148.9	124.1	
Amortization of other intangible assets	.2	.2	.4	
Interest expense	3	1.3	2.1	
Total Other expenses	98.6	155.1	141.0	
Total expenses	547.3	366.0	305.0	
Pre-tax (loss) income from continuing operations	(178.2)	7.8	(147.3)	
Income tax benefit	4.0	7.8	32.9	
Net (loss) income from continuing operations	(174.2)	15.6	(114.4)	
Gain from sale of OneBeacon, net of tax	_	554.5		
Gain from sale of Tranzact, net of tax	(17.2)	3.2	51.9	
(Loss) gain from sale of Sirius Group, net of tax	(17.2)	(.7) 20.5	363.2 108.3	
Net income from discontinued operations, net of tax Net (loss) income	(191.4)	593.1	409.0	
Net loss (income) attributable to non-controlling interests	50.2	34.1	(7.2)	
Net (loss) income attributable to White Mountains's common shareholders	\$ (141.2) S			
1100 (1055) mediate attributable to 11 mile filodatams 5 Common Shareholders	φ (171.2)	y <u>041.4</u> \$	701.0	

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year Ended December 31,							
Millions	2018		2017	2016				
Net (loss) income attributable to White Mountains's common shareholders	\$ (141.2)	\$	627.2	\$	401.8			
Other comprehensive (loss) income, net of tax:								
Other comprehensive (loss) income, net of tax	(4.8)		.3		(.7)			
Comprehensive income from discontinued operations, net of tax	_		3.2		146.3			
Comprehensive (loss) income	(146.0)		630.7		547.4			
Comprehensive income (loss) attributable to non-controlling interests	.3		(.2)		(.3)			
Comprehensive (loss) income attributable to White Mountains's common shareholders	\$ (145.7)	\$	630.5	\$	547.1			

See Notes to Consolidated Financial Statements.

EARNINGS PER SHARE

	Year	End	ed Decembe	er 31,	
	 2018		2017		2016
Basic (loss) earnings per share					
Continuing operations	\$ (36.67)	\$	11.56	\$	(24.26)
Discontinued operations	(5.09)		134.50		104.37
Total consolidated operations	\$ (41.76)	\$	146.06	\$	80.11
Diluted (loss) earnings per share					
Continuing operations	\$ (36.67)	\$	11.56	\$	(24.26)
Discontinued operations	(5.09)		134.50		104.32
Total consolidated operations	\$ (41.76)	\$	146.06	\$	80.06
Dividends declared and paid per White Mountains's common share	\$ 1.00	\$	1.00	\$	1.00

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

			untains's Co	mm	on S	Shareholder	s' E	quity				
Millions	Shar Pai	nmon es and d-in plus	Retained Earning			AOCL, After-tax		Total		Non- ntrolling nterests	Tot	al Equity
Balances at December 31, 2015	\$	978.2	\$ 3,073	5.0	\$	(149.9)	\$	3,903.3	\$	454.3	\$	4,357.6
Net income		_	40	8.				401.8		7.2		409.0
Net change in foreign currency translation		_		_		31.4		31.4		.3		31.7
Net change in pension liability and other accumulated						112.0		112.0				112.0
comprehensive items Comprehensive income			40	0		113.9		113.9 547.1	_	7.5		113.9 554.6
Dividends declared on common shares		_		5.4)		143.3		(5.4)		7.3		(5.4
Dividends to non-controlling interests			(.	,. +)				(3.4)		(22.7)		(22.7
Issuances of common shares		9.1						9.1		(22.7)		9.1
Repurchases and retirements of common shares		(192.4)	(694	1.81				(887.2)				(887.2
Capital contributions from BAM members, net of tax		(1)2.4)	(0)-	r.o <i>)</i>				(887.2)		27.3		27.3
Deconsolidation of non-controlling interests associated with the sale of Sirius Group		_		_		_		_		(250.0)		(250.0
Deconsolidation of non-controlling interests associated with the sale of Tranzact		_		_		_		_		(78.4)		(78.4
Acquisition of noncontrolling interest		(2.7)		_		_		(2.7)		(8.8)		(11.5
Acquisition of subsidiary		_		_		_		_		3.3		3.3
Amortization of restricted share and option awards		18.5		_		_		18.5		.8		19.3
Balances at December 31, 2016	_	810.7	2,770	5.6		(4.6)		3,582.7		133.3		3,716.0
Net income (loss)			62	7.2				627.2		(34.1)		593.1
Net change in foreign currency translation		_		_		.4		.4		.1		.5
Net change in pension liability and other accumulated comprehensive items		_		_		2.9		2.9				2.9
Comprehensive income (loss)			62	7.2		3.3		630.5		(34.0)		596.5
Dividends declared on common shares		_	(4	1.6)		_		(4.6)		_		(4.6
Dividends to non-controlling interests		_		_		_		_		(19.3)		(19.3)
Issuances of common shares		1.7		_		_		1.7		_		1.7
Repurchases and retirements of common shares		(147.9)	(570	6.0)		_		(723.9)		(5.2)		(729.1)
Issuance of shares of non-controlling interests		(4.1)		_		_		(4.1)		5.2		1.1
Net contributions from non-controlling interests		(4.6)		_		_		(4.6)		3.0		(1.6
Capital contributions from BAM members, net of tax		_		_		_		_		27.2		27.2
Deconsolidation of non-controlling interests associated with the sale of OneBeacon		_		_		_		_		(238.3)		(238.3)
Deconsolidation of non-controlling interests associated with the sale of Star & Shield		_		_		_		_		(4.4)		(4.4)
Amortization of restricted share and option awards	_	14.8		_				14.8		.8		15.6
Balances at December 31, 2017		670.6	2,82	3.2		(1.3)		3,492.5		(131.7)		3,360.8
Net loss			(14	1.2)				(141.2)		(50.2)		(191.4
Net change in foreign currency translation and interest rate swap				_		(4.5)		(4.5)		(.3)		(4.8)
Comprehensive loss		_	(14)			(4.5)		(145.7)		(50.5)		(196.2)
Dividends declared on common shares		_	(3	3.8)		_		(3.8)		_		(3.8)
Dividends to non-controlling interests		_		_		_		_		(8.0)		(8.0)
Issuances of common shares		2.0		_		_		2.0		_		2.0
Repurchases and retirements of common shares		(105.8)	(41.	3.3)		_		(519.1)		_		(519.1)
Capital contributions from BAM members, net of tax		_		_		_		_		45.0		45.0
Recognition of compensation costs for equity-based units of subsidiary		7.4		_		_		7.4		4.3		11.7
Dilution from equity units of subsidiary		(1.5)		_		_		(1.5)		1.5		_
Acquisition of subsidiary		(1.7)		_		_		(1.7)		_		(1.7
Acquisition from non-controlling interests		_		_		_		_		14.5		14.5
Amortization of restricted share and option awards		13.0		_				13.0				13.0
Balances at December 31, 2018	\$	584.0	\$ 2,26	1.9	\$	(5.8)	\$	2,843.1	\$	(124.9)	\$	2,718.2

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

		ar Ended December	
Millions	2018	2017	2016
Cash flows from operations:	o (101.4)	0 502.1	ф. 400 O
Net (loss) income Charges (anality) to proposile not income to not each provided from (good feet) expections.	\$ (191.4)	\$ 593.1	\$ 409.0
Charges (credits) to reconcile net income to net cash provided from (used for) operations: Net realized and unrealized investment losses (gains)	108.3	(122.2)	27.4
·- ·	108.3	(133.3) 14.8	27.4 18.5
Amortization of restricted share and option awards	25.7	22.4	20.4
Amortization and depreciation			
Deferred income tax benefit Not income from discontinued enerations	(8.4)	(11.4) (20.5)	(12.5) (108.3)
Net income from discontinued operations Net loss (gain) on sale of discontinued operations	17.2	(557.0)	(415.1)
Other operating items:	17,2	(337.0)	(413.1)
Net change in unearned insurance premiums	39.2	54.5	31.7
Net change in deferred acquisition costs	(4.2)		(3.7)
Net change in restricted cash	(3.4)	` /	(5.7)
Net change in other assets and liabilities, net	(27.1)		(146.1)
Net cash used for continuing operations	(31.1)		(178.7)
Net cash provided from discontinued operations (Note 19)	(31.1)	157.0	23.6
Net cash (used for) provided from operations	(31.1)		(155.1)
Cash flows from investing activities:	(31.1)	74.0	(133.1)
Net change in short-term investments	(39.0)	(1.7)	(27.2)
Sales of fixed maturity and convertible investments	1,848.5	2,124.4	2,605.8
Maturities, calls and paydowns of fixed maturity and convertible investments	141.0	2,124.4	253.4
Sales of common equity securities	169.9	424.1	815.9
Distributions and redemptions of other long-term investments	5.0	29.4	17.3
Sales of unconsolidated affiliates and consolidated subsidiaries, net of cash sold	5.0		
, , , , , , , , , , , , , , , , , , ,	_	1,131.0	2,646.2 (141.6)
Proceeds paid to non-controlling common shareholders from the sale of consolidated subsidiaries	(05.0)	(84.1)	` ′
Purchases of other long-term investments	(95.9)	` ′	(38.5)
Net settlement of investment cash flows and contributions with discontinued operations	(328.3)	167.7	(402.0)
Purchases of common equity securities	` ′	` /	(278.3)
Purchases of fixed maturity and convertible investments	(970.2)		(4,407.0)
Purchases of consolidated subsidiaries, net of cash acquired of \$90.9, including \$53.4 of restricted cash	(295.2) 27.6	, ,	(13.4)
Net change in unsettled investment purchases and sales	(4.2)	(14.7)	4.9
Other investing activities, net	459.2	715.5	1,035.4
Net cash provided from investing activities — continuing operations Net cash provided from investing activities — discontinued operations (Note 19)	439.2	3.0	241.4
Net cash provided from investing activities — discontinued operations (Note 19)	459.2	718.5	1,276.8
Cash flows from financing activities:	459.2	/18.3	1,270.8
Draw down of debt and revolving line of credit	84.1	376.0	352.5
Repayment of debt and revolving line of credit	(15.4)		(404.6)
Cash dividends paid to the Company's common shareholders	, ,	` ′	
1 1 7	(3.8)	` ′	(5.4)
Acquisitions of additional shares from non-controlling interest	(1.7)	(.7) 45.2	57.2
Distributions from discontinued operations	(511.0)		57.2
Common shares repurchased Proceeds from issuances of common shares	(511.9)	(714.6)	(881.3)
	1.3	.5	3.7
Capital contributions from non-controlling interest shareholders			(1.1)
Distributions to non-controlling interest shareholders	(6.0)	` /	(1.1)
Payments to contingent considerations related to purchases of consolidated subsidiaries	(2.6)		(7.8)
Capital contributions from BAM members	53.8	37.4	38.0
Fidus Re premium payment	(3.7)		(5.0)
Other financing activities, net	(8.4)		(5.8)
Net cash used for financing activities — continuing operations	(414.3)	` /	(854.6)
Net cash used for financing activities — discontinued operations (Note 19)		(61.9)	(93.8)
Net cash used for financing activities	(414.3)	·	(948.4)
Effect of exchange rate changes on cash	(.6)		
Net change in cash during the period - continuing operations	13.2	16.0	2.1
Cash balance at beginning of year (includes restricted cash balances of \$0.0, \$0.0, \$5.8 and excludes held for sale and discontinued operations cash balances of \$0.0, \$70.5, and \$245.4)	97.1	80.2	77.8
Add: cash held for sale at the beginning of period		.9	1.2
Less: cash held for sale at the end of period			.9
Cash balance at end of year (includes restricted cash balances of \$50.0, \$0.0, \$0.0 and excludes held for sale and discontinued operations cash balances of \$0.0, \$0.0, \$70.5)	s 110.3	\$ 97.1	\$ 80.2

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Basis of Presentation and Significant Accounting Policies

Basis of Presentation

The Company is an exempted Bermuda limited liability company whose principal businesses are conducted through its insurance subsidiaries and other affiliates. The Company's headquarters is located at 26 Reid Street, Hamilton, Bermuda HM 11, its principal executive office is located at 80 South Main Street, Hanover, New Hampshire 03755-2053 and its registered office is located at Clarendon House, 2 Church Street, Hamilton, Bermuda HM 11.

The accompanying consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP") and include the accounts of White Mountains Insurance Group, Ltd. (the "Company" or the "Registrant"), its subsidiaries (collectively with the Company, "White Mountains") and other entities required to be consolidated under GAAP. Under GAAP, the Company is required to consolidate any entity in which it holds a controlling financial interest. A controlling financial interest is usually in the form of an investment representing the majority of the subsidiary's voting interests. However, a controlling financial interest may also arise from a financial interest in a variable interest entity ("VIE") through arrangements that do not involve ownership of voting interests. The Company consolidates a VIE if it determines that it is the primary beneficiary. The primary beneficiary is defined as the entity who holds a variable interest that gives it both the power to direct the VIE's activities that most significantly impact its economic performance and the obligation to absorb losses of, or the right to receive returns from, the VIE that could potentially be significant to the VIE. See **Note 15**— "Variable Interest Entities".

Intercompany transactions have been eliminated in consolidation. Certain amounts in the prior period financial statements have been reclassified to conform to the current presentation.

Use of 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 as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Reportable Segments

White Mountains has determined its reportable segments based on the nature of the underlying businesses, the manner in which the Company's subsidiaries and affiliates are organized and managed and the organization of the financial information provided to the chief operating decision maker to assess performance and make decisions regarding allocation of resources. White Mountains's reportable segments are HG Global/BAM, NSM, MediaAlpha and Other Operations. See **Note 13**—"Segment Information".

The HG Global/BAM segment consists of HG Global Ltd. and its wholly-owned subsidiaries ("HG Global") and the consolidated results of Build America Mutual Assurance Company ("BAM") (collectively, "HG Global/BAM"). BAM is the first and only mutual municipal bond insurance company in the United States. By insuring the timely payment of principal and interest, BAM provides market access to, and lowers interest expense for, issuers of municipal bonds used to finance essential public purposes such as schools, utilities and transportation facilities. BAM is owned by and operated for the benefit of its members, the municipalities that purchase BAM's insurance for their debt issuances. HG Global was established to fund the startup of BAM and, through its reinsurance subsidiary HG Re Ltd. ("HG Re"), to provide up to 15%-of-par, first loss reinsurance protection for policies underwritten by BAM. For capital appreciation bonds, par is adjusted to the estimated equivalent par value for current interest paying bonds. HG Global, together with its subsidiaries, funded the initial capitalization of BAM through the purchase of \$503.0 million of surplus notes issued by BAM, consisting of \$203.0 million of Series A Notes and \$300.0 million of Series B Notes (the "BAM Surplus Notes"). As of December 31, 2018 and 2017, White Mountains owned 96.9% of HG Global's preferred equity and 88.4% of its common equity. White Mountains does not have an ownership interest in BAM. However, White Mountains is required to consolidate BAM's results in its financial statements because BAM is a VIE for which White Mountains is the primary beneficiary. BAM's results are attributed to non-controlling interests.

The NSM segment consists of NSM Insurance HoldCo, LLC and its wholly-owned subsidiaries (collectively, "NSM"). NSM is a full-service managing general underwriting agency ("MGU") and program administrator for specialty property and casualty insurance. The company places insurance in niche sectors such as specialty transportation, social services and real estate. On behalf of its insurance carrier partners, NSM manages all aspects of the placement process, including product development, marketing, underwriting, policy issuance and claims. NSM earns commissions based on the volume and profitability of the insurance that it places. NSM does not take insurance risk. As of December 31, 2018, White Mountains owned 95.5% of NSM. The NSM segment also includes White Mountains Catskill Holdings, Inc., the immediate holding company of NSM. See Note 2 — "Significant Transactions".

The MediaAlpha segment consists of QL Holdings LLC and its wholly-owned subsidiary QuoteLab, LLC (collectively "MediaAlpha"). MediaAlpha is a leading marketing technology company that enables the programmatic buying and selling of vertical-specific, performance-based media between advertisers (buyers of advertising inventory) and publishers (sellers of advertising inventory) through cost-per-click, cost-per-call and cost-per-lead pricing models. MediaAlpha's media buying platform enables advertisers to create and automate data-driven bidding strategies designed to improve the efficiency and enhance the overall performance of their marketing campaigns. MediaAlpha has developed distinctive platform solutions for a range of insurance verticals, including auto, motorcycle, home, renter, health and life, and non-insurance verticals, including travel, education and personal finance.

White Mountains's Other Operations segment consists of the Company and its wholly-owned subsidiary, White Mountains Capital, Inc. ("WM Capital"), its other intermediate holding companies, its wholly-owned investment management subsidiary, White Mountains Advisors LLC ("WM Advisors"), investment assets managed by WM Advisors, its interests in PassportCard Limited ("PassportCard") and DavidShield Life Insurance Agency (2000) Ltd. ("DavidShield") (collectively, "PassportCard/DavidShield") and Kudu Investment Management, LLC ("Kudu"), certain other consolidated and unconsolidated entities ("Other Operating Businesses") and certain other strategic investments ("Strategic Investments"). The consolidated entities include Wobi Insurance Agency Ltd. ("Wobi") and Removal Stars Ltd. ("Buzz"). White Mountains's Other Operations segment also included its variable annuity reinsurance business, White Mountains Life Reinsurance (Bermuda) Ltd. ("Life Re Bermuda"), which completed its runoff with all of its contracts fully matured on June 30, 2016 and was liquidated in the third quarter of 2017, and its U.S.-based service provider, White Mountains Financial Services LLC, which was liquidated in the second quarter of 2017 (collectively, "WM Life Re").

Discontinued Operations and Assets and Liabilities Held for Sale

On September 28, 2017, Intact Financial Corporation completed its previously announced acquisition of OneBeacon Insurance Group, Ltd. ("OneBeacon") in an all-cash transaction for \$18.10 per share (the "OneBeacon Transaction"). On July 21, 2016, White Mountains completed its sale of Tranzact Holdings, LLC ("Tranzact") to an affiliate of Clayton, Dubilier & Rice, LLC. On April 18, 2016, White Mountains completed its sale of Sirius International Insurance Group, Ltd. ("Sirius Group") to CM International Pte. Ltd. and CM Bermuda Limited (collectively "CMI"), the Singapore-based investment arm of China Minsheng Investment Corp., Ltd. White Mountains has presented the results of OneBeacon, Tranzact and Sirius Group as discontinued operations in the statement of operations and comprehensive income and their assets and liabilities as held for sale in the balance sheet for all periods prior to the completion of each transaction.

On March 7, 2017, White Mountains completed the sale of Star & Shield Services LLC, Star & Shield Risk Management LLC, and Star & Shield Claims Services LLC (collectively "Star & Shield") and its investment in Star & Shield Insurance Exchange ("SSIE") surplus notes to K2 Insurance Services, LLC. White Mountains was required to consolidate SSIE in its GAAP financial statements until White Mountains completed the sale. White Mountains has presented Star & Shield's and SSIE's assets and liabilities as held for sale as of December 31, 2016. See **Note 19** — "Held for Sale and Discontinued Operations".

As of December 31, 2017, White Mountains has classified its Guilford, Connecticut property, which consists of an office building and adjacent land, as held for sale. The property has been measured at its estimated fair value, net of disposal costs of \$3.3 million. The related write down of \$3.7 million was recorded within other expenses during 2017.

Significant Accounting Policies

Cash

Cash includes amounts on hand and demand deposits with banks and other financial institutions. Amounts presented in the statement of cash flows are shown net of balances acquired and sold in the purchase or sale of the Company's consolidated subsidiaries and exclude changes in amounts of restricted cash. See **Note 7** — "**Derivatives**".

Short-Term Investments

Short-term investments consist of interest-bearing money market funds and other securities, which at the time of purchase, mature or become available for use within one year. Short-term investments are carried at amortized or accreted cost, which approximated fair value as of December 31, 2018 and 2017.

Investment Securities

As of December 31, 2018, White Mountains's invested assets consisted of securities and other investments held for general investment purposes. White Mountains's portfolio of fixed maturity investments, common equity securities and other long-term investments held for general investment purposes are classified as trading securities and are reported at fair value as of the balance sheet date. Changes in net unrealized investment gains (losses) are reported pre-tax in revenues. Realized investment gains (losses) are accounted for using the specific identification method and are reported pre-tax in revenues. Premiums and discounts on all fixed maturity investments are amortized and accreted to income over the anticipated life of the investment.

White Mountains's invested assets that are measured at fair value include fixed maturity investments, common equity securities and other long-term investments, including unconsolidated entities, private equity funds and hedge funds. In determining its estimates of fair value, White Mountains uses a variety of valuation approaches and inputs. Whenever possible, White Mountains estimates fair value using valuation methods that maximize the use of quoted prices and other observable inputs.

Fair value measurements are categorized into a hierarchy that distinguishes between inputs based on market data from independent sources ("observable inputs") and a reporting entity's internal assumptions based upon the best information available when external market data is limited or unavailable ("unobservable inputs"). Quoted prices in active markets for identical assets have the highest priority ("Level 1"), followed by observable inputs other than quoted prices including prices for similar but not identical assets or liabilities ("Level 2"), and unobservable inputs, including the reporting entity's estimates of the assumptions that market participants would use, having the lowest priority ("Level 3").

White Mountains uses brokers and outside pricing services to assist in determining fair values. The outside pricing services White Mountains uses have indicated that they will only provide prices where observable inputs are available. As of December 31, 2018, approximately 87% of the investment portfolio recorded at fair value as Level 1 or Level 2 measurements.

Level 1 Measurements

Investments valued using Level 1 inputs include fixed maturity investments, primarily investments in U.S. Treasuries and short-term investments, which include U.S. Treasury Bills and common equity securities. For investments in active markets, White Mountains uses the quoted market prices provided by outside pricing services to determine fair value.

Level 2 Measurements

Investments valued using Level 2 inputs include fixed maturity investments, which have been disaggregated into classes, including debt securities issued by corporations, mortgage and asset-backed securities, municipal obligations, and foreign government, agency and provincial obligations. Investments valued using Level 2 inputs also include certain passive exchange traded funds ("ETFs") that track U.S. stock indices such as the S&P 500 but are traded on foreign exchanges, which management values using the fund manager's published NAV to account for the difference in market close times.

In circumstances where quoted market prices are unavailable or are not considered reasonable, White Mountains estimates the fair value using industry standard pricing methodologies and observable inputs such as benchmark yields, reported trades, broker-dealer quotes, issuer spreads, benchmark securities, bids, offers, credit ratings, prepayment speeds, reference data including research publications and other relevant inputs. Given that many fixed maturity investments do not trade on a daily basis, the outside pricing services evaluate a wide range of fixed maturity investments by regularly drawing parallels from recent trades and quotes of comparable securities with similar features. The characteristics used to identify comparable fixed maturity investments vary by asset type and take into account market convention.

White Mountains's process to assess the reasonableness of the market prices obtained from the outside pricing sources covers substantially all of its fixed maturity investments and includes, but is not limited to, the evaluation of pricing methodologies and a review of the pricing services' quality control procedures on at least an annual basis, a comparison of its invested asset prices obtained from alternate independent pricing vendors on at least a semi-annual basis, monthly analytical reviews of certain prices and a review of the underlying assumptions utilized by the pricing services for select measurements on an ad hoc basis throughout the year. White Mountains also performs back-testing of selected sales activity to determine whether there are any significant differences between the market price used to value the security prior to sale and the actual sale price on an ad-hoc basis throughout the year. Prices provided by the pricing services that vary by more than 5% and \$0.5 million from the expected price based on these assessment procedures are considered outliers, as are prices that have not changed from period to period and prices that have trended unusually compared to market conditions. In circumstances where the results of White Mountains's review process does not appear to support the market price provided by the pricing services, White Mountains challenges the vendor provided price. If White Mountains cannot gain satisfactory evidence to support the challenged price, White Mountains will rely upon its own pricing methodologies to estimate the fair value of the security in question.

The valuation process described above is generally applicable to all of White Mountains's fixed maturity investments. The techniques and inputs specific to asset classes within White Mountains's fixed maturity investments for Level 2 securities that use observable inputs are as follows:

Debt Securities Issued by Corporations

The fair value of debt securities issued by corporations is determined from a pricing evaluation technique that uses information from market sources and integrates relative credit information, observed market movements, and sector news. Key inputs include benchmark yields, reported trades, broker-dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data including sector, coupon, credit quality ratings, duration, credit enhancements, early redemption features and market research publications.

Mortgage and Asset-Backed Securities

The fair value of mortgage and asset-backed securities is determined from a pricing evaluation technique that uses information from market sources and leveraging similar securities. Key inputs include benchmark yields, reported trades, underlying tranche cash flow data, collateral performance, plus new issue data, as well as broker-dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data including issuer, vintage, loan type, collateral attributes, prepayment speeds, default rates, recovery rates, cash flow stress testing, credit quality ratings and market research publications.

Municipal Obligations

The fair value of municipal obligations is determined from a pricing evaluation technique that uses information from market makers, brokers-dealers, buy-side firms, and analysts along with general market information. Key inputs include benchmark yields, reported trades, issuer financial statements, material event notices and new issue data, as well as broker-dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data including type, coupon, credit quality ratings, duration, credit enhancements, geographic location and market research publications.

Foreign Government, Agency and Provincial Obligations

The fair value of foreign government, agency and provincial obligations is determined from a pricing evaluation technique that uses feeds from data sources in each respective country, including active market makers and inter-dealer brokers. Key inputs include benchmark yields, reported trades, broker-dealer quotes, two-sided markets, benchmark securities, bids, offers, local exchange prices, foreign exchange rates and reference data including coupon, credit quality ratings, duration and market research publications.

Level 3 Measurements

Fair value estimates for investments that trade infrequently and have few or no observable market prices are classified as Level 3 measurements. Investments valued using Level 3 fair value estimates are based upon unobservable inputs and include investments in certain fixed maturity investments, equity securities and other long-term investments where quoted market prices are unavailable or are not considered reasonable.

Level 3 valuations are generated from techniques that use assumptions not observable in the market. These unobservable assumptions reflect White Mountains's assumptions that market participants would use in valuing the investment. Generally, certain securities may start out as Level 3 when they are originally issued but as observable inputs become available in the market, they may be reclassified to Level 2. Transfers between levels are based on investments held as of the beginning of the period.

Other Long-Term Investments

White Mountains maintains a portfolio of other long-term investments that primarily consists of unconsolidated entities, private equity funds and hedge funds. White Mountains's portfolio of other long-term investments are generally valued at fair value, using level 3 measurements or net asset value "NAV" as a practical expedient. Investments for which fair value is measured at NAV using the practical expedient are not classified within the fair value hierarchy.

Unconsolidated Entities

White Mountains's portfolio of other long-term investments includes certain unconsolidated entities, including non-controlling interests in certain private common equity securities, limited liability companies and convertible preferred securities. White Mountains portfolio of unconsolidated entities are generally valued using level 3 inputs. The determination of the fair value of unconsolidated entities may involve significant management judgment, the use of valuation models and assumptions that are inherently subjective.

On an ongoing basis, White Mountains considers qualitative changes in facts and circumstances which may impact the valuation of unconsolidated entities, including economic changes of relevant industries and changes to the investee capital structure, business strategy and significant changes in key personnel. On an annual basis, or when facts and circumstances suggest a quantitative valuation analysis is necessary, White Mountains, with the assistance of a third-party valuation firm, completes a valuation analysis of significant unconsolidated entities. One of the following fair value approaches is applied:

<u>Income Approach:</u> The income approach converts future amounts to a single current discounted amount, based on expected future cash flows that a company will generate, along with expected proceeds from disposition. The cash flows are discounted to their present value using a discount rate that incorporates the risk-free rate for the use of funds, the expected rate of inflation, and risks associated with the particular investment.

<u>Market Approach</u>: The market approach uses prices and other relevant information generated by market transactions involving identical or comparable businesses, such as recent sales or offerings of comparable assets.

<u>Cost Approach</u>: The cost approach reflects the amount that would be required currently to replace the service capacity of an asset, or the current replacement cost. When applied to the valuation of equity interests in businesses, value is based on the net aggregate fair market value of the entity's underlying individual assets.

Private Equity Funds and Hedge Funds

White Mountains's portfolio of other long-term investments includes investments in private equity funds and hedge funds. White Mountains employs a number of procedures to assess the reasonableness of the fair value measurements for its private equity funds and hedge funds, including obtaining and reviewing periodic and audited annual financial statements as well as discussing each fund's pricing with the fund manager throughout the year. However, since the fund managers do not provide sufficient information to evaluate the pricing methods and inputs for each underlying investment, White Mountains considers the inputs to be unobservable. The fair value of White Mountains's private equity fund and hedge fund investments has generally been determined using the fund manager's NAV. In the event that White Mountains believes the fair value of a private equity fund or hedge fund differs from the NAV reported by the fund manager due to illiquidity or other factors, White Mountains will adjust the reported NAV to more appropriately represent the fair value of its investment in the private equity fund or hedge fund. As of December 31, 2018 and 2017, White Mountains did not adjust the reported NAV of its investments in private equity funds and hedge funds.

Derivatives

Financial Instruments

White Mountains holds from time to time a variety of derivative financial instruments for risk management purposes. White Mountains recognizes all derivatives as either other assets or other liabilities, aside from the foreign currency forward contracts which are recognized within other long-term investments, measured at fair value, in the consolidated balance sheets. Changes in the fair value of derivative instruments are recognized in current period pre-tax income.

From time to time, White Mountains holds warrants that it has received in the restructuring of certain of its common equity securities and fixed maturity investments. White Mountains accounts for its investments in warrants as derivatives.

Variable Annuity Reinsurance

In 2016, White Mountains completed the run-off of WM Life Re as all of its contracts matured as of June 30, 2016. WM Life Re entered into agreements to reinsure death and living benefit guarantees associated with certain variable annuities in Japan. The accounting for benefit guarantees differs depending on whether or not the guarantee is classified as a derivative or an insurance liability. The liability for guaranteed minimum death benefits was classified as a derivative and measured at fair value. The liability for guaranteed minimum accumulation benefits was classified as an insurance liability, and was measured using assumptions for interest rates, equity markets, foreign exchange rates and market volatilities at the valuation date, as well as annuitant-related actuarial assumptions, including surrender and mortality rates.

WM Life Re entered into derivative contracts that were designed to economically hedge against changes in the fair value of living and death benefit liabilities associated with its variable annuity reinsurance arrangements. All WM Life Re's derivative financial instruments were recorded as assets or liabilities at fair value on the balance sheet within other assets. These derivative financial instruments did not meet the criteria for hedge accounting treatment, and accordingly, changes in fair value were recognized in the appropriate period as gains or losses in the income statement within other revenues.

Receivables

BAM's receivables consist primarily of premiums receivable from customers for municipal bond insurance policies. NSM's receivables consist of insurance premiums receivable from customers and commissions receivable from insurance carriers, net of a provision for amounts estimated to be uncollectible. MediaAlpha receivables consist of advertising fee receivables from publishers and advertisers.

Incentive Compensation

White Mountains's Long-Term Incentive Plan (the "WTM Incentive Plan") provides for grants of various types of share-based and non-share-based incentive awards to key employees of White Mountains. Non-share based awards are recognized over the related service periods based on management's best estimate of the amounts at which the awards are expected to be paid. Share-based compensation which is typically settled in cash, such as performance shares or performance units, is classified as a liability-type award. The compensation cost for liability-classified awards is measured initially at the grant date fair value and remeasured each reporting period until settlement. The compensation cost for equity-classified awards expected to be settled in shares, such as options and restricted shares, is measured at the original grant date fair value of the award. The compensation cost for all awards is recognized for the vested portion of the awards over the related service periods. See **Note** 10 — "Employee Share-Based Incentive Compensation Plans".

Goodwill and Other Intangible Assets

Goodwill represents the excess of the amount paid to acquire subsidiaries over the fair value of identifiable net assets at the date of acquisition. Other intangible assets consist primarily of trademarks, URL and online names, customer relationships, information technology and insurance licenses.

Goodwill is not amortized, but rather is evaluated for impairment on an annual basis, or whenever indications of potential impairment exist. In the absence of any indications of potential impairment, the evaluation of goodwill is performed during the fourth quarter of each year. White Mountains initially evaluates goodwill using a qualitative approach (step zero) to determine whether it is more likely than not that the fair value of goodwill is greater than its carrying value. If the results of the qualitative evaluation indicate that it is more likely than not that the carrying value of goodwill exceeds its fair value, White Mountains performs the two-step quantitative test for impairment.

Other intangible assets with finite lives are measured at their acquisition date fair values, are amortized over their economic lives and presented net of accumulated amortization on the balance sheet. Other intangible assets with finite lives are evaluated for impairment at least annually and when events or changes in circumstances indicate that it is more likely than not that the asset is impaired.

A significant portion of the goodwill and other identifiable intangible assets at December 31, 2018 arose from White Mountains's acquisition of NSM in May 2018 and NSM's subsequent acquisitions of Fresh Insurance and KBK. White Mountains believes that all of the goodwill and intangible assets recorded in respect of these acquisitions is fully recoverable. Because of the timing of these acquisitions, all of which are still within the one-year measurement period following the acquisition date, these amounts have not yet been subject to White Mountains's annual review for potential impairment.

White Mountains evaluated the recoverability of goodwill and other intangible assets other than the portion associated with the NSM acquisitions and did not recognize any impairment losses for any of the years ended December 31, 2018, 2017 and 2016. See **Note 4** — "Goodwill and Other Intangible Assets".

Municipal Bond Guarantee Insurance

All of the contracts issued by BAM are accounted for as insurance contracts under ASC 944-605, *Financial Guarantee Insurance Contracts*. Premiums are generally received upfront and an unearned premium revenue liability, equal to the amount of the premium received, is established at contract inception. Installment premiums are measured at the present value of contractual premiums, discounted at the risk free rate, which is set at the inception of the insurance contract.

Premium revenues are recognized in revenue over the period of the contracts in proportion to the amount of insurance protection provided using a constant rate. The constant rate is calculated based on the relationship between the par outstanding in a given reporting period compared with the sum of each of the par amounts outstanding for all periods.

Deferred acquisition costs represent commissions, premium taxes, excise taxes and other costs which are directly attributable to and vary with the production of business. These costs are deferred and amortized to the extent they relate to successful contract acquisitions over the applicable premium recognition period as acquisition expenses. Deferred acquisition costs are limited to the amount expected to be recovered from future earned premiums and anticipated investment income.

BAM's obligation for outstanding contracts consists of the unearned premium reserve and any loss reserves. Loss reserves are recorded only to the extent that the present value of the expected amount of any losses to be paid, net of any expected recoveries, exceeds the associated unearned premium reserve. As of December 31, 2018 and 2017, BAM did not have any loss or LAE reserves.

Revenue Recognition

MediaAlpha recognizes advertising and publishing fee revenues based on the contractual amount of the fees, adjusted for any amounts expected to be refunded or uncollectible, when it has satisfied its contractual performance obligations, which is generally at the time each transaction is executed. For transactions where MediaAlpha acts as the principal, such as the Open exchange, revenue amounts are reported gross. For transactions where MediaAlpha acts as an agent facilitating transactions between third parties, revenue amounts are reported at the net fee billed.

Agent and commission revenues are measured based on the contractual rates with insurance carriers, net of any amounts expected to be uncollectible and any amounts associated with expected policy cancellations adjustments, and are recognized when contractual performance obligations have been fulfilled.

Cost of Sales and Broker Commission Expense

MediaAlpha's cost of sales consists primarily of revenue sharing payments to publisher partners and traffic acquisition costs to top tier search engines. Cost of sales are measured based on contract terms and recognized when the related revenue transactions are executed.

NSM's broker commission expense consists of commissions paid to sub-agents and brokers. Broker commission expense is measured in accordance with contractual terms and recognized when incurred, which is generally at the policy issuance date.

Other Operations's cost of sales consists of salaries and related expenses, professional services and marketing and advertising expenses directly related to sales generation. These expenses are recognized as incurred.

Federal and Foreign Income Taxes

A number of White Mountains's subsidiaries file consolidated tax returns in the United States. Income earned or losses generated by companies outside the United States are generally subject to an overall effective tax rate lower than that imposed by the United States.

Deferred tax assets and liabilities are recorded when a difference between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts for tax purposes exists, and for other temporary differences. The deferred tax asset or liability is recorded based on tax rates expected to be in effect when the difference reverses. The deferred tax asset is recognized when it is more likely than not that it will be realized.

Foreign Currency Exchange

The functional currency for White Mountains's non-U.S. based subsidiaries are measured, in most instances, using functional currencies other than the U.S. dollar. Net foreign exchange gains and losses arising from the translation of functional currencies are generally reported in shareholders' equity, in accumulated other comprehensive income or loss.

White Mountains also invests in securities denominated in foreign currencies. Assets and liabilities recorded in these foreign currencies are translated into U.S. dollars at exchange rates in effect at the balance sheet date, and revenues and expenses are converted using the weighted average exchange rates for the period.

As of December 31, 2018 and 2017, White Mountains had unrealized foreign currency translation losses of \$3.9 million and \$1.3 million recorded in accumulated other comprehensive income on its consolidated balance sheet.

Non-controlling Interests

Non-controlling interests consist of the ownership interests of non-controlling shareholders in consolidated subsidiaries, and are presented separately on the balance sheet. The portion of comprehensive income attributable to non-controlling interests is presented net of related income taxes in the statement of operations and comprehensive income. See **Note 11**—"Common Shareholders' Equity and Non-controlling Interests".

Recently Adopted Changes in Accounting Principles

Revenue Recognition

On January 1, 2018, White Mountains adopted ASU 2014-09, *Revenue from Contracts with Customers* (ASC 606), which modifies the guidance for revenue recognition. Under ASU 2014-09, revenue is recognized at an amount that reflects the consideration to which an entity expects to be entitled once it fulfills its performance obligations under the terms of its contract with the customer. The scope of the new guidance includes agent commissions and other non-insurance revenues. Adoption of ASU 2014-09 did not have any impact on White Mountains's financial statements.

Share-Based Compensation

On January 1, 2018, White Mountains adopted ASU 2017-09, *Stock Compensation: Scope of Modification Accounting* (ASC 718), which narrows the scope of transactions subject to modification accounting to changes in the terms of an award that result in a change in the award's fair value, vesting conditions or classification. Adoption of ASU 2017-09 did not have any impact on White Mountains's financial statements.

On January 1, 2017, White Mountains adopted ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting (ASC 718)* which simplifies certain aspects of the accounting for share-based compensation. The new guidance provides an accounting policy election to account for forfeitures by either applying an assumption, as required under existing guidance, or by recognizing forfeitures when they actually occur. At adoption, White Mountains did not change its accounting policy for forfeitures, which is to apply an assumed forfeiture rate. The new guidance also changed the threshold for partial cash settlement to settle statutory withholding requirements for equity classified awards, increasing the threshold up to the maximum statutory tax rate. As a result of adoption, White Mountains reported \$8.4 million and \$9.2 million of statutory withholding tax payments made in connection with the settlement of restricted shares as financing cash flows for the year ended December 31, 2018 and 2017. Such payments were classified as operating cash flows prior to adoption. In addition, the new guidance changed the treatment for excess tax benefits that arise from the difference between the deduction for tax purposes and the compensation costs recognized for financial reporting. Under the new guidance, a reporting entity recognizes excess tax benefits or expense in current period earnings.

Business Combinations

On January 1, 2018, White Mountains adopted ASU 2017-01, *Business Combinations: Clarifying the Definition of a Business* (ASC 805), which clarifies the definition of a business and affects the determination of whether acquisitions or disposals are accounted for as assets or as a business. Under the new guidance, when substantially all of the fair value of the assets is concentrated in a single identifiable asset or group of similar assets, it is not a business. Adoption of ASU 2017-01 did not have any impact on White Mountains's financial statements.

Cash Flow Statement

On January 1, 2018, White Mountains adopted ASU 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments* (ASC 230), which addresses the classification and presentation of certain items, including debt prepayment and extinguishment costs, contingent consideration payments made after a business combination and distributions received from equity method investees, for which there was diversity in practice prior to the issuance of ASU 2016-15. Also on January 1, 2018, White Mountains adopted ASU 2016-18, *Statement of Cash Flows: Restricted Cash* (ASC 230), which modifies the guidance for the treatment of restricted cash amounts in the cash flow statement. The new guidance requires restricted cash to be included in the reconciliation of beginning and end-of-period amounts presented on the statement of cash flows and requires a description of the nature of the changes in restricted cash during the periods presented. Adoption of ASU 2016-15 and ASU 2016-18 did not have any impact on White Mountains's statement of cash flows.

Financial Instruments - Recognition and Measurement

On January 1, 2018, White Mountains adopted ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities* (ASC 825-10), which modifies the guidance for financial instruments, including investments in equity securities. Under the new guidance, all equity securities with readily determinable fair values are required to be measured at fair value with changes therein recognized through current period earnings. In addition, the new ASU requires a qualitative assessment for equity securities without readily determinable fair values to identify impairment, and for impaired equity securities to be measured at fair value. White Mountains measures its portfolio of investment securities at fair value with changes therein recognized through current period earnings and, accordingly, adoption of ASU 2016-01 did not have any impact on White Mountains's financial statements.

Recently Issued Accounting Pronouncements

Premium Amortization on Callable Debt Securities

In March 2017, the Financial Accounting Standards Board ("FASB") issued ASU 2017-08, *Premium Amortization on Purchased Callable Debt Securities* (ASC 310-20), which changes the amortization period for certain purchased callable debt securities. Under the new guidance, for investments in callable debt securities held at a premium, the premium will be amortized over the period to the earliest call date. The new guidance does not change the amortization period for callable debt securities held at a discount. The new guidance is effective for annual periods beginning after December 15, 2018. White Mountains does not expect adoption to have any effect on its financial statements.

Goodwill

In January 2017, the FASB issue ASU 2017-04, *Simplifying the Test for Goodwill Impairment* (ASC 350), which changes the guidance on goodwill impairment testing. Under the new guidance, the qualitative assessment of the recoverability of goodwill remains the same. However, the second step required under the existing guidance has been eliminated. Goodwill is considered impaired if the carrying value exceeds the estimated fair value. The new guidance is effective for fiscal years beginning after December 15, 2019.

Credit Losses

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments* (ASC 326), which establishes new guidance for the recognition of credit losses for financial assets measured at amortized cost. The new ASU requires reporting entities to estimate the credit losses expected over the life of a credit exposure using historical information, current information and reasonable and supportable forecasts that affect the collectability of the financial asset. This differs from current GAAP, which delays recognition until it is probable a loss has been incurred. The new guidance is expected to accelerate recognition of credit losses. The types of assets within the scope of the new guidance include loans and trade receivables such as premium receivables and reinsurance recoverables on paid losses. ASU 2016-13 is effective for annual periods beginning after January 1, 2020, including interim periods. White Mountains measures its portfolio of investment securities at fair value with changes therein recognized through current period earnings and accordingly does not expect adoption to have any effect on its financial statements.

Leases

In February 2016, the FASB issued ASU 2016-02, *Leases* (ASC 842). The new guidance requires lessees to recognize lease assets and liabilities on the balance sheet for both operating and financing leases, with the exception of leases with an original term of 12 months or less. Under existing guidance recognition of lease assets and liabilities is not required for operating leases. The lease liabilities will be measured initially based on the present value of the lease payments. The lease asset will be measured as the sum of the lease liabilities, adjusted for initial direct costs. White Mountains will be adopting the new guidance effective January 1, 2019, and will use the optional transition method that permits prospective adoption with recognition of a cumulative effect adjustment to the opening balance of retained earnings. White Mountains will not apply the new guidance to comparative periods presented in the year of adoption. White Mountains plans to elect available practical expedients permitted under ASC 842, which will allow White Mountains to carry forward its historical lease classification and not reassess leases for the definition of a lease under the new guidance. White Mountains has estimated that it will recognize lease right-of-use assets and lease liabilities of approximately \$24.5 million. White Mountains does not expect the cumulative effect adjustment to opening retained earnings to be material.

Financial Instruments - Recognition and Measurement

In January 2016, the FASB issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities* (ASC 825-10). The new ASU modifies the guidance for financial instruments, including investments in equity securities. Under the new guidance, all equity securities with readily determinable fair values are required to be measured at fair value with changes therein recognized through current period earnings. In addition, the new ASU requires a qualitative assessment for equity securities without readily determinable fair values to identify impairment, and for impaired equity securities to be measured at fair value. ASU 2016-01 is effective for fiscal years beginning after December 15, 2017, with early adoption permitted. White Mountains measures its portfolio of investment securities at fair value with changes therein recognized through current period earnings and accordingly, does not expect adoption to have any effect on its financial statements.

Note 2. Significant Transactions

Acquisitions

NSM

On May 11, 2018, White Mountains closed its acquisition of 95% of NSM's equity for cash consideration of \$274.2 million. During the third quarter of 2018, White Mountains recorded a purchase price adjustment of \$2.1 million. White Mountains recognized total assets acquired related to NSM of \$495.2 million, including \$383.0 million of goodwill and other intangible assets, total liabilities assumed of \$204.6 million, including contingent consideration earnout liabilities related to NSM's previous acquisitions of its U.K.-based operations, of \$10.2 million, and non-controlling interest of \$14.4 million reflecting acquisition date fair values. In connection with the acquisition, White Mountains incurred transaction costs of \$6.3 million, which were expensed in 2018.

On May 18, 2018, NSM acquired 100% of Fresh Insurance Group Limited ("Fresh Insurance") for upfront cash consideration of \$49.6 million. During the third quarter of 2018, NSM recorded a purchase price adjustment of \$0.7 million. The purchase price is subject to additional adjustments based upon growth in EBITDA during two earnout periods ending in February 2020 and February 2022. NSM recognized total assets acquired related to Fresh Insurance of \$72.6 million, including \$54.6 million of goodwill and other intangible assets, and total liabilities assumed of \$22.3 million, reflecting acquisition date fair values. In connection with the acquisition, NSM recorded a contingent consideration earnout liability of \$7.5 million.

On December 3, 2018, NSM acquired all the net assets of KBK for upfront cash consideration of \$60.0 million and recognized \$59.4 million of goodwill and other intangible assets, reflecting acquisition date fair values. The relative fair values of goodwill and other intangible assets recognized in connection with the acquisitions of KBK had not yet been determined at December 31, 2018. The purchase price is subject to additional adjustments based upon growth in EBITDA during three earnout periods ending in December 2019, December 2020 and December 2021. In connection to the KBK acquisition, NSM expects to record a contingent consideration earnout liability in the first quarter of 2019. White Mountains acquired 16,694,869 additional newly-issued units of NSM for \$29 million in connection with NSM's acquisition of KBK.

The contingent consideration earnout liabilities related to these acquisitions are subject to adjustment based upon EBITDA, EBITDA projections, and present value factors for acquired entities. For the period from May 11, 2018 through December 31, 2018, NSM recognized pre-tax expense of \$2.7 million for the change in the fair value of its contingent consideration earnout liabilities for Fresh Insurance and its other U.K.-based operations. Any future adjustments to contingent consideration earnout liabilities under the agreements will also be recognized through pre-tax income. As of December 31, 2018, NSM recorded contingent consideration earnout liabilities of \$20.2 million.

DavidShield

On January 24, 2018, White Mountains acquired 50% of DavidShield, its joint venture partner in PassportCard. DavidShield is a managing general agency that is the leading provider of expatriate medical insurance in Israel and uses the same card-based delivery system as PassportCard. As part of the transaction, White Mountains reorganized its equity stake in PassportCard so that White Mountains and its partner in DavidShield would each own 50% of both businesses. To facilitate the transaction, White Mountains provided financing to its partner in the form of a non-interest bearing loan that is secured by the partner's equity in PassportCard and DavidShield. The gross purchase price for the 50% of DavidShield was \$41.8 million, or \$28.3 million net of the financing provided for the restructuring.

Kudu

On February 5, 2018, White Mountains entered into an agreement to fund up to \$125.0 million in Kudu, a capital provider to asset management and wealth management firms. As of December 31, 2018, White Mountains owned 49.5% of Kudu. Kudu specializes in providing capital solutions to asset managers and registered investment advisers for purposes including generational ownership transfers, management buyouts, acquisition and growth finance and legacy partner liquidity. Kudu also provides strategic assistance to investees from time to time. Kudu's capital solutions typically are structured as long-term or permanent revenue shares.

Kudu closed its first three transactions in 2018 deploying \$63.0 million of capital in total, of which \$31.5 million was from White Mountains. White Mountains has determined that Kudu is a VIE, but that White Mountains is not the primary beneficiary. White Mountains has elected to take the fair value option for its investment in Kudu. As of December 31, 2018, White Mountains had funded \$31.5 million of its \$125 million commitment, plus an additional \$3.8 million for working capital.

On February 14, 2019, White Mountains entered into a definitive agreement to buy all of the interests in Kudu held by certain funds managed by Oaktree Capital Management, L.P. ("Oaktree"). See **Note 20** — "Subsequent Events".

Buzz.

On August 4, 2016, White Mountains acquired a 70.9% ownership share in Buzz for a purchase price of British Pound Sterling ("GBP") 6.1 million (approximately \$8.1 million based upon the foreign exchange spot rate at the date of acquisition). White Mountains recognized total assets acquired related to Buzz of \$11.5 million, including \$7.6 million of goodwill and \$1.1 million of other intangible assets, and total liabilities assumed of \$0.1 million, reflecting acquisition date fair values.

On August 1, 2017, White Mountains acquired 37,409 newly-issued preferred shares of Buzz for GBP 4.0 million (approximately \$5.0 million based upon the foreign exchange spot rate at the date of acquisition) and 5,808 common shares from the company founders for GBP 0.5 million (approximately \$0.7 million based upon the spot rate at the date of acquisition). As of December 31, 2018 and 2017, White Mountains's ownership share in Buzz was 77.1%.

MediaAlpha

On January 15, 2016, MediaAlpha acquired certain assets from Oversee.net for an aggregate purchase price of \$3.9 million. The majority of assets acquired, which are included in other intangible assets, consists of customer relationships, a customer contract, a non-compete agreement from the seller, domain names and technology.

On October 5, 2017, MediaAlpha acquired certain assets associated with the Health, Life and Medicare insurance business of Healthplans.com for an aggregate purchase price of \$28.0 million. The majority of assets acquired, which are included in other intangible assets, consists of customer relationships, a non-compete agreement from the seller and domain names. See **Note 4**— "Goodwill and Other Intangibles Assets".

On October 5, 2017, White Mountains acquired 131,579 newly-issued Class A common units of MediaAlpha for \$12.5 million. As of December 31, 2018 and 2017, White Mountains's ownership share in MediaAlpha was 61.0% and 64.4%.

Dispositions

OneBeacon

On September 28, 2017, White Mountains received \$1.3 billion in cash proceeds from the OneBeacon Transaction and recorded a net gain of \$554.6 million, net of transaction costs, and other comprehensive income of \$2.9 million. As a result of the OneBeacon Transaction, OneBeacon's results have been reported as discontinued operations within White Mountains's GAAP financial statements. See **Note 19** — "Held for Sale and Discontinued Operations".

Tranzact

On July 21, 2016, White Mountains completed the sale of Tranzact to an affiliate of Clayton, Dubilier & Rice, LLC and received net proceeds of \$221.3 million. In connection with the sale of Tranzact, the purchaser directly repaid \$56.3 million for the portion of Tranzact's debt attributable to White Mountains's common shareholders. On October 5, 2016, White Mountains received additional proceeds of \$1.2 million following the release of the post-closing purchase price adjustment escrow.

White Mountains recorded a \$51.9 million gain from the sale of Tranzact in discontinued operations, which included a \$30.2 million tax expense for the reversal of a tax valuation allowance that is offset by a tax benefit recorded in continuing operations. See **Note 6** — "**Income Taxes**". The increase to White Mountains's book value from the sale of Tranzact was \$82.1 million.

The following table presents a reconciliation of the gain reported in discontinued operations to the impact to White Mountains's book value:

Millions	Year ended December 31, 2			
Gain from sale of Tranzact reported in discontinued operations	\$	51.9		
Add back reclassification from continuing operations for the release of a tax valuation allowance		30.2		
Increase to White Mountains's book value from sale of Tranzact	\$	82.1		

Through July 21, 2016, Tranzact's results of operations are reported as discontinued operations and assets and liabilities held for sale within White Mountains's GAAP financial statements. See **Note 19** — "Held for Sale and Discontinued Operations".

During 2017, White Mountains recorded a \$3.2 million increase to the gain from sale of Tranzact in discontinued operations as a result of a change in state tax expense.

Sirius Group

On April 18, 2016, White Mountains completed the sale of Sirius Group to CMI for approximately \$2.6 billion. Of this amount, \$161.8 million was used to purchase certain assets retained by White Mountains out of Sirius Group, including shares of OneBeacon. The amount paid at closing was based on an estimate of Sirius Group's closing date tangible common shareholder's equity. During the third quarter of 2016, there was a final true-up to Sirius Group's tangible common shareholder's equity that resulted in a \$4.0 million reduction to the gain. During 2016, White Mountains recorded \$363.2 million of gain from sale of Sirius Group in discontinued operations and \$113.3 million in other comprehensive income from discontinued operations from Sirius Group.

During 2017, White Mountains recorded a \$0.7 million reduction to the gain from sale of Sirius Group as a result of a change to the valuation of the accrued incentive compensation payable to Sirius Group employees.

During 2018, White Mountains recorded a loss of \$17.3 million within net (loss) gain on sale of discontinued operations for a contingency related to the sale of Sirius Group. See **Note 18**— "Commitments and Contingencies".

Through April 18, 2016, Sirius Group's results are reported as discontinued operations and assets and liabilities held for sale within White Mountains's GAAP financial statements. See **Note 19**— "Held for Sale and Discontinued Operations".

Note 3. Investments Securities

White Mountains's portfolio of investment securities held for general investment purposes consists of fixed maturity investments, short-term investments, common equity securities and other long-term investments, which are all classified as trading securities. Trading securities are reported at fair value as of the balance sheet date. Net realized and unrealized investment gains (losses) on trading securities are reported in pre-tax revenues.

White Mountains's fixed maturity investments are generally valued using industry standard pricing methodologies. Key inputs include benchmark yields, benchmark securities, reported trades, issuer spreads, bids, offers, credit ratings and prepayment speeds. Income on mortgage and asset-backed securities is recognized using an effective yield based on anticipated prepayments and the estimated economic life of the securities. When actual prepayments differ significantly from anticipated prepayments, the estimated economic life is recalculated and the remaining unamortized premium or discount is amortized prospectively over the remaining economic life.

Realized investment gains (losses) resulting from sales of investment securities are accounted for using the specific identification method. Premiums and discounts on all fixed maturity investments are amortized or accreted to income over the anticipated life of the investment. Short-term investments consist of interest-bearing money market funds and other securities, which at the time of purchase, mature or become available for use within one year. Short-term investments are carried at amortized or accreted cost, which approximated fair value as of December 31, 2018 and 2017.

Other long-term investments consist primarily of unconsolidated entities, private equity funds and hedge funds.

Net Investment Income

White Mountains's net investment income is comprised primarily of interest income associated with White Mountains's fixed maturity investments and short-term investments and dividend income from its common equity securities and other long-term investments.

The following table presents pre-tax net investment income for 2018, 2017 and 2016:

	Year Ended December 31,								
Millions	2	2018		2017	2016				
Fixed maturity investments	\$	35.1	\$	44.9	\$	28.5			
Short-term investments		8.0		1.8		.9			
Common equity securities		15.1		10.6		4.0			
Other long-term investments		3.8		1.2		1.1			
Total investment income		62.0		58.5		34.5			
Third-party investment expenses		(3.0)		(2.5)		(2.4)			
Net investment income, pre-tax	\$	59.0	\$	56.0	\$	32.1			

Net Realized and Unrealized Investment Gains (Losses)

The following table presents net realized and unrealized investment gains (losses) for 2018, 2017 and 2016:

	Year Ended December 31,									
Millions		2018	2017		2016					
Net realized investment (losses) gains, pre-tax	\$	(12.9)	\$ 24.1	\$	270.0					
Net unrealized investment (losses) gains, pre-tax		(95.4)	109.2		(297.4)					
Net realized and unrealized investment (losses) gains, pre-tax		(108.3)	133.3		(27.4)					
Income tax benefit (expense) attributable to net realized and unrealized investment (losses) gains		18.2	(12.9)		2.7					
Net realized and unrealized investment (losses) gains, after-tax	\$	(90.1)	\$ 120.4	\$	(24.7)					

For the years ended December 31, 2018, 2017 and 2016, all of White Mountains's net realized and unrealized investment gains (losses) were recorded in the statements of operations. There were no investments gains (losses) recorded in other comprehensive income.

Net Realized Investment Gains (Losses)

The following tables present net realized investment gains (losses) for 2018, 2017 and 2016:

	Yea	ır Ende	d December	31, 2018	
Millions	Realized ses) Gains	Exch	t Foreign ange Gains Losses)	(Los	Net Realized ses) Gains ed in Earnings
Fixed maturity investments	\$ (29.8)	\$	18.2	\$	(11.6)
Short-term investments	(.8)		_		(.8)
Common equity securities	6.6		_		6.6
Other long-term investments	.1		(7.2)		(7.1)
Net realized investment (losses) gains, pre-tax	(23.9)		11.0		(12.9)
Income tax benefit attributable to net realized investment (losses) gains	9.1		_		9.1
Net realized investment (losses) gains, after-tax	\$ (14.8)	\$	11.0	\$	(3.8)

	Year Ended December 31, 2017								
Millions		Realized ses) Gains	Exch	t Foreign ange Gains Losses)	Total Net Realized Gains (Losses) Reflected in Earnings				
Fixed maturity investments	\$	(1.6)	\$	4.1	\$	2.5			
Short-term investments		(.3)				(.3)			
Common equity securities		18.1		6.0		24.1			
Other long-term investments		19.1		(21.3)		(2.2)			
Net realized investment gains (losses), pre-tax		35.3		(11.2)		24.1			
Income tax expense attributable to net realized investment gains (losses)		(8.9)				(8.9)			
Net realized investment gains (losses), after-tax	\$	26.4	\$	(11.2)	\$	15.2			

		Yea	Year Ended December 31, 2016								
Millions		Realized ses) Gains		oreign ge Gains	(Loss	Total Net Realized (Losses) Gains Reflected in Earnings					
Fixed maturity investments	\$	(1.9)	\$.3	\$	(1.6)					
Short-term investments		.4				.4					
Common equity securities		268.5		_		268.5					
Other long-term investments		2.7		_		2.7					
Net realized investment gains, pre-tax		269.7		.3		270.0					
Income tax expense attributable to net realized investment gains		(45.6)		_		(45.6)					
Net realized investment gains, after-tax	\$	224.1	\$.3	\$	224.4					

Net Unrealized Investment Gains (Losses)

The following tables present net unrealized investment gains (losses) and changes in the carrying value of investments measured at fair value for the years ended 2018, 2017 and 2016:

		Yea	r Ende	d December	31, 2018	
Millions		Unrealized sses) Gains	Ex	Foreign schange ses) Gains	(Los	et Unrealized ses) Gains d in Earnings
Fixed maturity investments	\$	(8.3)	\$	(14.8)	\$	(23.1)
Common equity securities		(105.5)		_		(105.5)
Other long-term investments		30.2		3.0		33.2
Net unrealized investment losses, pre-tax		(83.6)		(11.8)		(95.4)
Income tax benefit attributable to net unrealized investment losses		9.1				9.1
Net unrealized investment losses, after-tax	\$	(74.5)	\$	(11.8)	\$	(86.3)

		Yea	ır En	ded December	31, 2017		
Millions		Unrealized as (Losses)		let Foreign change Gains (Losses)	Total Net Unrealiz Gains (Losses) Reflected in Earni		
Fixed maturity investments	\$	13.8	\$	12.7	\$	26.5	
Common equity securities		99.3		_		99.3	
Other long-term investments		(15.6)		(1.0)		(16.6)	
Net unrealized investment gains, pre-tax		97.5		11.7		109.2	
Income tax expense attributable to net unrealized investment gains		(4.0)				(4.0)	
Net unrealized investment gains, after-tax	\$	93.5	\$	11.7	\$	105.2	

		Yea	r Ended	December	31, 2016	
Millions	U	Net nrealized Losses	Exchar	Foreign nge Gains osses)	Losses	t Unrealized Reflected in arnings
Fixed maturity investments	\$	(14.6)	\$	2.1	\$	(12.5)
Common equity securities		(257.4)		(3.3)		(260.7)
Other long-term investments		(22.7)		(1.5)		(24.2)
Net unrealized investment losses, pre-tax		(294.7)		(2.7)		(297.4)
Income tax benefit attributable to net unrealized investment losses		48.3		_		48.3
Net unrealized investment losses, after-tax	\$	(246.4)	\$	(2.7)	\$	(249.1)

White Mountains recognized gross realized investment gains of \$49.4 million, \$61.5 million and \$283.7 million and gross realized investment losses of \$62.3 million, \$37.4 million and \$13.7 million on sales of investment securities during 2018, 2017 and 2016.

The following table presents total gains (losses) included in earnings attributable to unrealized investment gains (losses) for Level 3 investments for the years ended December 31, 2018, 2017 and 2016:

	Year Ended December 31,								
Millions		2018		2017		2016			
Fixed maturity investments	\$	_	\$	_	\$	0.1			
Other long-term investments		22.6		(15.4)		(14.3)			
Total net unrealized investment gains (losses), pre-tax - Level 3 investments	\$	22.6	\$	(15.4)	\$	(14.2)			

Investment Holdings

The following tables present the cost or amortized cost, gross unrealized investment gains (losses), net foreign currency gains, and carrying values of White Mountains's fixed maturity investments as of December 31, 2018 and 2017.

	December 31, 2018												
Millions		Cost or mortized Cost	Uni	Gross realized Gains	Un	Gross realized Losses	Cu	Foreign rrency Sains	(Carrying Value			
U.S. Government and agency obligations	\$	154.0	\$.1	\$	(.9)	\$	_	\$	153.2			
Debt securities issued by corporations		519.0		1.0		(9.5)		_		510.5			
Municipal obligations		279.0		2.4		(1.1)		_		280.3			
Mortgage and asset-backed securities		136.1		.1		(2.7)		_		133.5			
Total fixed maturity investments	\$	1,088.1	\$	3.6	\$	(14.2)	\$		\$	1,077.5			

]	Dece	mber 31, 201'	7			
Millions	A	Cost or Amortized Cost	1	Gross Unrealized Gains	υ	Gross Inrealized Losses		et Foreign Currency Gains	(Carrying Value
U.S. Government and agency obligations	\$	297.8	\$	_	\$	(1.3)	\$	_	\$	296.5
Debt securities issued by corporations		867.6		2.9		(4.3)		14.7		880.9
Mortgage and asset-backed securities		697.2		1.6		(4.1)				694.7
Municipal obligations		252.0		3.7		(.8)				254.9
Foreign government, agency and provincial obligations		2.6						.1		2.7
Total fixed maturity investments	\$	2,117.2	\$	8.2	\$	(10.5)	\$	14.8	\$	2,129.7

The weighted average duration of White Mountains's fixed income portfolio was approximately 3.4 years when including short-term investments and approximately 4.0 years when excluding short-term investments as of December 31, 2018.

The following table presents the cost or amortized cost and carrying value of White Mountains's fixed maturity investments by contractual maturity as of December 31, 2018. Actual maturities could differ from contractual maturities because borrowers may have the right to call or prepay certain obligations with or without call or prepayment penalties.

	December 31, 2018										
Millions	Cost or A	Amortized Cost		Carrying Value							
Due in one year or less	\$	84.8	\$	84.4							
Due after one year through five years		500.8		496.2							
Due after five years through ten years		222.4		218.0							
Due after ten years		144.0		145.4							
Mortgage and asset-backed securities		136.1		133.5							
Total	\$	1,088.1	\$	1,077.5							

The following tables present the cost or amortized cost, gross unrealized investment gains (losses), net foreign currency losses, and carrying values of White Mountains's common equity securities and other long-term investments as of December 31, 2018 and 2017:

					Decen	nber 31, 2018				
Millions		Cost or tized Cost		Unrealized Gains	Gros	s Unrealized Losses	Foreign ency Losses	Carrying Value		
Common equity securities	<u> </u>	904.7	\$	51.0	\$	(30.1)	\$ 	\$	925.6	
Other long-term investments	\$	330.3	\$	52.2	\$	(54.9)	\$ (2.0)	\$	325.6	

	 December 31, 2017									
Millions	Cost or Amortized Cost Gains Gross Unrealized Cost			Gr	oss Unrealized Losses	Net Foreign Currency Losses			Carrying Value	
Common equity securities	\$ 739.7	\$	129.4	\$	(3.0)	\$	_	\$	866.1	
Other long-term investments	\$ 246.6	\$	6.8	\$	(39.7)	\$	(4.9)	\$	208.8	

Proceeds from the sales and maturities of investments, excluding short-term investments, totaled \$2.2 billion, \$2.8 billion and \$3.7 billion for the years ended December 31, 2018, 2017 and 2016.

Investments Held on Deposit or as Collateral

As of December 31, 2018 and 2017, investments of \$254.3 million and \$204.6 million, were held in trusts required to be maintained in relation to HG Global's reinsurance agreements with BAM. White Mountains's insurance subsidiaries are required to maintain deposits with certain insurance regulatory agencies in order to maintain their insurance licenses. The fair value of such deposits, which represent BAM's state deposits and are included within the investment portfolio, totaled \$6.1 million and \$6.0 million as of December 31, 2018 and 2017.

Fair Value Measurements as of December 31, 2018

Fair value measurements are categorized into a hierarchy that distinguishes between inputs based on market data from independent sources ("observable inputs") and a reporting entity's internal assumptions based upon the best information available when external market data is limited or unavailable ("unobservable inputs"). Quoted prices in active markets for identical assets or liabilities have the highest priority ("Level 1"), followed by observable inputs other than quoted prices, including prices for similar but not identical assets or liabilities ("Level 2") and unobservable inputs, including the reporting entity's estimates of the assumptions that market participants would use, having the lowest priority ("Level 3"). As of December 31, 2018 and 2017, White Mountains used quoted market prices or other observable inputs to determine fair value for approximately 87% and 94% of the investment portfolio. See **Note 1** — "**Basis of Presentation and Significant Accounting Policies".**

Fair Value Measurements by Level

The following tables present White Mountains's fair value measurements for investments as of December 31, 2018 and 2017 by level. The major security types were based on the legal form of the securities. White Mountains has disaggregated its fixed maturity investments based on the issuing entity type, which impacts credit quality, with debt securities issued by U.S. government entities carrying minimal credit risk, while the credit and other risks associated with other issuers, such as corporations, foreign governments, municipalities or entities issuing mortgage and asset-backed securities vary depending on the nature of the issuing entity type. White Mountains further disaggregates debt securities issued by corporations and common equity securities by industry sector because investors often reference commonly used benchmarks and their subsectors to monitor risk and performance. Accordingly, White Mountains has further disaggregated these asset classes into subclasses based on the similar sectors and industry classifications it uses to evaluate investment risk and performance against commonly used benchmarks, such as the Bloomberg Barclays U.S. Intermediate Aggregate and S&P 500 indices.

	Decembe	r 31,	2018					
Millions	F	air Value		Level 1		Level 2		Level 3
Fixed maturity investments:								
U.S. Government and agency obligations	\$	153.2	\$	153.2	\$	_	\$	_
Debt securities issued by corporations:								
Financials		143.4		_		143.4		_
Consumer		68.5		_		68.5		_
Technology		60.5		_		60.5		_
Energy		57.6		_		57.6		_
Healthcare		55.0		_		55.0		_
Industrial		47.6		_		47.6		_
Communications		31.8		_		31.8		
Materials		26.3		_		26.3		_
Utilities		19.8				19.8		
Total debt securities issued by corporations		510.5		_		510.5		
Mortgage and asset-backed securities		133.5		_		133.5		_
Municipal obligations		280.3				280.3		
Total fixed maturity investments		1,077.5		153.2		924.3		_
Short-term investments (1)		214.2		204.4		9.8		_
Common equity securities:								
Exchange traded funds (2)		675.3		617.0		58.3		_
Healthcare		14.0		14.0				_
Financials		13.5		13.5				_
Communications		12.7		12.7				_
Industrial		11.4		11.4				_
Technology		7.4		7.4		_		_
Consumer		6.2		6.2		_		_
Energy		4.1		4.1		_		_
Materials		3.1		3.1		_		_
Other (3)		177.9		_		177.9		_
Total common equity securities		925.6		689.4		236.2		
Other long-term investments		138.7		_		_		138.7
Other long-term investments — NAV ⁽⁴⁾		186.9						
Total investments	\$	2,542.9	\$	1,047.0	\$	1,170.3	\$	138.7

⁽¹⁾ Short-term investments are measured at amortized cost, which approximates fair value.

⁽²⁾ ETFs traded on foreign exchanges are priced using the fund's published NAV to account for the difference in market close times and are therefore designated a level 2 measurement.

⁽³⁾ Consists of two investments in unit trusts that primarily invest in international equities.

⁽⁴⁾ Consists of unconsolidated entities, private equity funds and one hedge fund for which fair value is measured at NAV using the practical expedient. Investments for which fair value is measured at NAV are not classified within the fair value hierarchy.

	December 31, 2017							
Millions	F	air Value		Level 1	Level 2			Level 3
Fixed maturity investments:								
U.S. Government and agency obligations	\$	296.5	\$	296.5	\$		\$	_
Debt securities issued by corporations:								
Consumer		185.1				185.1		
Communications		127.8				127.8		
Financials		114.8				114.8		
Utilities		108.9				108.9		
Materials		95.5				95.5		
Healthcare		94.3				94.3		
Technology		80.5				80.5		
Energy		48.1				48.1		
Industrial		25.9				25.9		
Total debt securities issued by corporations		880.9		_		880.9		_
Mortgage and asset-backed securities		694.7				694.7		
Municipal obligations		254.9				254.9		
Foreign government, agency and provincial obligations		2.7				2.7		_
Total fixed maturity investments		2,129.7		296.5		1,833.2		_
Short-term investments (1)		176.1		151.0		25.1		
Common equity securities:								
Exchange traded funds (2)		569.7		508.1		61.6		
Healthcare		17.1		17.1		_		
Financials		16.3		16.3		_		
Technology		15.1		15.1		_		
Industrial		11.9		11.9		_		
Communications		10.9		10.9		_		_
Consumer		10.7		10.7		_		
Energy		3.8		3.8		_		
Other (3)		210.6		_		210.6		
Total common equity securities		866.1		593.9		272.2	_	
Other long-term investments (4)		77.2		_		_		77.2
Other long-term investments — NAV ⁽⁵⁾		135.3						
Total investments	\$	3,384.4	\$	1,041.4	\$	2,130.5	\$	77.2

⁽¹⁾ Short-term investments are measured at amortized cost, which approximates fair value.
(2) ETFs traded on foreign exchanges are priced using the fund's published NAV to account for the difference in market close times and are therefore designated a level 2 measurement.
(3) Consists of two investments in unit trusts that primarily invests in international equities.
(4) Excludes carrying value of \$(3.7) related to foreign currency forward contracts.
(5) Consists of unconsolidated entities, private equity funds and one hedge funds for which fair value is measured at NAV using the practical expedient. Investments for which fair value is measured at NAV are not classified within the fair value hierarchy.

Debt Securities Issued by Corporations

The following table presents the ratings of debt securities issued by corporations held in White Mountains's investment portfolio as of December 31, 2018 and 2017:

	Fa	ir Value at	Decei	mber 31,
Millions			2017	
AAA	\$	8.9	\$	1.6
AA		88.7		42.6
A		270.5		192.5
BBB		142.4		465.2
BB		_		161.7
В		_		17.3
Debt securities issued by corporations (1)	\$	510.5	\$	880.9

⁽¹⁾ Credit ratings are based upon issuer credit ratings provided by Standard & Poor's Financial Services LLC ("Standard & Poor's"), or if unrated by Standard & Poor's, long term obligation ratings provided by Moody's Investor Service, Inc.

Mortgage and Asset-backed Securities

The following table presents the fair value of White Mountains's mortgage and asset-backed securities as of December 31, 2018 and 2017:

		D	ecem	ber 31, 20	18			De	ecember 31, 20	17	
Millions	Fai	ir Value	I	Level 2		Level 3		ir Value	Level 2	Le	vel 3
Mortgage-backed securities:											
Agency:											
FNMA	\$	53.6	\$	53.6	\$	_	\$	84.5	\$ 84.5	\$	
FHLMC		38.1		38.1		_		62.0	62.0		
GNMA		23.7		23.7		_		46.3	46.3		_
Total agency (1)		115.4		115.4				192.8	192.8		
Non-agency:											
Commercial				_		_		70.5	70.5		
Total non-agency		_		_		_		70.5	70.5		
Total mortgage-backed securities	_	115.4		115.4				263.3	263.3		
Other asset-backed securities:											
Vehicle receivables		9.2		9.2		_		142.4	142.4		
Credit card receivables		8.9		8.9		_		206.0	206.0		
Other				_		_		83.0	83.0		_
Total other asset-backed securities		18.1		18.1				431.4	431.4		
Total mortgage and asset-backed securities	\$	133.5	\$	133.5	\$		\$	694.7	\$ 694.7	\$	

⁽¹⁾ Represents publicly traded mortgage-backed securities which carry the full faith and credit guaranty of the U.S. Government (i.e., GNMA) or are guaranteed by a government sponsored entity (i.e., FNMA, FHLMC).

White Mountains considers sub-prime mortgage-backed securities as those that have underlying loan pools that exhibit weak credit characteristics, or those that are issued from dedicated sub-prime shelves or dedicated second-lien shelf registrations (i.e., White Mountains considers investments backed primarily by second-liens to be sub-prime risks regardless of credit scores or other metrics). As of December 31, 2018, White Mountains did not hold any mortgage-backed securities categorized as sub-prime.

White Mountains considers mortgage-backed securities as "non-prime" (also called "Alt A" or "A-") if they are backed by collateral that has overall credit quality between prime and sub-prime based on White Mountains's review of the characteristics of their underlying mortgage loan pools, such as credit scores and financial ratios. As of December 31, 2018, White Mountains did not hold any mortgage-backed securities classified as non-prime.

Other Long-Term Investments

The following table presents the carrying values of White Mountains's other long-term investments as of December 31, 2018 and 2017:

	Carr	ying Value	at Decem	ber 31,
Millions	201	8		2017
PassportCard/DavidShield (1)	<u> </u>	75.0	\$	21.0
Kudu		30.7		
Other unconsolidated entities (1)(2)		60.0		62.2
Total unconsolidated entities(1)(2)		165.7		83.2
Private equity funds and hedge funds		146.1		125.3
Foreign currency forward contracts		_		(3.7)
Other		13.8		4.0
Total other long-term investments	\$	325.6	\$	208.8

⁽¹⁾ See Fair Value Measurements by Level table.

Private Equity Funds and Hedge Funds

White Mountains invests in private equity funds and hedge funds, which are included in other long-term investments. The fair value of these investments is generally estimated using the NAV of the funds. As of December 31, 2018, White Mountains held investments in 12 private equity funds and one hedge fund. The largest investment in a single fund was \$54.3 million as of December 31, 2018 and \$54.9 million as of December 31, 2017.

The following table presents investments in private equity funds and hedge funds by investment objective and sector as of December 31, 2018 and 2017:

		Decembe	r 31, 201	8	December 31, 2017						
Millions		Fair Value		Unfunded Commitments		air Value	Unfunded Commitment				
Private equity funds											
Manufacturing/Industrial	\$	42.9	\$	10.5	\$	43.3	\$	10.4			
Aerospace/Defense/Government		27.6		34.9		15.8		12.9			
Direct lending		13.0		17.7		7.1		23.1			
Financial services		8.3		13.6		4.2		11.7			
Total private equity funds		91.8		76.7		70.4		58.1			
Hedge funds											
Long/short banks and financial		54.3		_		54.9		_			
Total hedge funds		54.3		_		54.9					
Total private equity funds and hedge funds included in other long-term investments	\$	146.1	\$	76.7	\$	125.3	\$	58.1			

⁽²⁾ Includes White Mountains's non-controlling interests in certain private common equity securities, limited liability companies and convertible preferred securities.

Investments in private equity funds are generally subject to a lock-up period during which investors may not request a redemption. Distributions prior to the expected termination date of the fund may be limited to dividends or proceeds arising from the liquidation of the fund's underlying investments. In addition, certain private equity funds have the option to extend the lock-up period.

The following table presents investments in private equity funds that were subject to lock-up periods as of December 31, 2018:

Millions	1 – 3	3 years	3 –	5 years	5 – 3	10 years	>1	0 years	Total
Private equity funds — expected lock-up period remaining	\$	1.8	\$	5.5	\$	63.2	\$	21.3	\$ 91.8

Investors in private equity funds are generally subject to indemnification obligations outside of the capital commitment period and prior to the winding up of the fund. As of December 31, 2018 and 2017, White Mountains is not aware of any indemnification claims relating to its investments in private equity funds.

Redemption of investments in most hedge funds is subject to restrictions including lock-up periods where no redemptions or withdrawals are allowed, restrictions on redemption frequency and advance notice periods for redemptions. Amounts requested for redemptions remain subject to market fluctuations until the redemption effective date, which generally falls at the end of the defined redemption period. As of December 31, 2018, White Mountains held one active hedge fund with a fair value of \$54.3 million. The hedge fund is subject to a semi-annual restriction on redemptions and an advance notice period requirement of 45 days.

Rollforward of Fair Value Measurements by Level

White Mountains uses quoted market prices where available as the inputs to estimate fair value for its investments in active markets. Such measurements are considered to be either Level 1 or Level 2 measurements, depending on whether the quoted market price inputs are for identical securities (Level 1) or similar securities (Level 2). Level 3 measurements for fixed maturity investments, common equity securities and other long-term investments as of December 31, 2018 and 2017 consist of securities for which the estimated fair value has not been determined based upon quoted market price inputs for identical or similar securities.

The following tables present the changes in White Mountains's fair value measurements by level for the years ended December 31, 2018 and 2017:

Millions	Level 1	In	Level 2	Other Long-term Investments	Entir Equit He	onsolidated ties, Private y Funds and dge Funds red at NAV ⁽³⁾	Total
Balance at December 31, 2017	\$ 890.4	\$	2,105.4	\$ 77.2	\$	135.3	\$ 3,208.3 (1)(2)
Net realized and unrealized (losses) gains	(64.9)		(64.4)	16.2		13.3	(99.8) (4)
Amortization/accretion	.2		(2.7)			_	(2.5)
Purchases	514.7		783.8	45.3		50.5	1,394.3
Sales	(497.8)		(1,661.6)			(12.2)	(2,171.6)
Transfers in	_		_			_	_
Transfers out	_		_	_		_	_
Balance at December 31, 2018	\$ 842.6	\$	1,160.5	\$ 138.7	\$	186.9	\$ 2,328.7 (2)

⁽¹⁾ Excludes carrying value of \$(3.7) as of December 31, 2017 associated with foreign currency forward contracts.

⁽²⁾ Excludes carrying value of \$214.2 and \$176.1 as of December 31, 2018 and 2017 classified as short-term investments.

⁽³⁾ Investments for which fair value is measured at NAV using the practical expedient are no longer classified within the fair value hierarchy. See Note 1— "Basis of Presentation and Significant Accounting Policies".

⁽⁴⁾ Excludes realized and unrealized losses associated with foreign currency forward contracts, foreign currency on cash and open trades and short-term investments of \$3.5, \$4.2 and \$0.8 for the year ended December 31, 2018.

					Level 3 In	vest	tments	Unconsolidated	
Millions	Level 1 vestments	Ir	Level 2 Fixed Maturity Investments		laturity		ther Long- term vestments	Entities, Private Equity Funds and Hedge Funds Measured at NAV (3)	Total
Balance at December 31, 2016	\$ 279.5	\$	2,093.8	\$		\$	91.4	\$ 82.6	\$ 2,547.3 (5)
Net realized and unrealized gains (losses)	82.7		69.6				(15.3)	20.4	157.4 (4)
Amortization/accretion			(9.1)					_	(9.1)
Purchases	1,209.3		2,007.9		31.2		3.1	81.0	3,332.5
Sales	(681.1)		(2,070.3)		(12.5)		(2.0)	(48.7)	(2,814.6)
Deconsolidation of SSIE			(5.2)					_	(5.2)
Transfers in			18.7					_	18.7
Transfers out	 				(18.7)				(18.7)
Balance at December 31, 2017	\$ 890.4	\$	2,105.4	\$		\$	77.2	\$ 135.3	\$ 3,208.3 (1)(2)

⁽¹⁾ Excludes carrying value of \$(3.7) and \$(1.2) as of December 31, 2017 and 2016 associated with foreign currency forward contracts.

Fair Value Measurements — Transfers Between Levels - For Years Ended December 31, 2018 and 2017

Transfers between levels are recorded using the fair value measurement as of the end of the quarterly period in which the event or change in circumstance giving rise to the transfer occurred.

During 2018, there were no fixed maturity investments or other long-term investments classified as Level 3 measurements in the prior period that were transferred to Level 2 measurements.

During 2017, three fixed maturity investments classified as a Level 3 measurement in the prior period were transferred to Level 2 measurement because quoted market prices for similar securities that were considered reliable and could be validated against an alternative source were available as of December 31, 2017. These measurements comprise "Transfers out" of Level 3 and "Transfers in" to Level 2 of \$18.7 million for the period ended December 31, 2017.

⁽²⁾ Excludes carrying value of \$176.1 and \$175.0 as of December 31, 2017 and 2016 classified as short-term investments, of which \$0.1 is classified as held for sale at December 31, 2016.

⁽³⁾ Investments for which fair value is measured at NAV using the practical expedient are no longer classified within the fair value hierarchy. See Note 1 — "Basis of Presentation and Significant Accounting Policies".

⁽⁴⁾ Excludes realized and unrealized losses associated with foreign currency forward contracts and short-term investments of \$23.8 and \$0.3 for the year ended December 31, 2017.

⁽⁵⁾ Includes carrying value of \$6.6 of fixed maturity investments at December 31, 2016 that is classified as assets held for sale related to SSIE.

Significant Unobservable Inputs

The following tables present significant unobservable inputs used in estimating the fair value of other long-term investments, other than private equity funds and hedge funds, classified within Level 3 as of December 31, 2018 and 2017. The fair value of investments in certain unconsolidated entities, private equity funds and hedge funds are generally estimated using the NAV of the funds.

\$ in Millions, Except Share Price		December 31, 2018	
Description	Valuation Technique(s)	Fair Value (1)	Unobservable Input
PassportCard/DavidShield	Discounted cash flow	\$75.0	Discount rate - 18.0%
			Exit multiple - 1.00
Compare.com	Discounted cash flow	\$16.9	Discount rate - 22.0%
			Exit multiple - 2.75
YOUSURE Tarifvergleich GmbH ("durchblicker")	Discounted cash flow	\$15.5	Discount rate - 23.0%
			Exit multiple - 2.25
Captricity, Inc.	Discounted cash flow	\$14.5	Discount rate - 23.0%
			Exit multiple - 3.75
Galvanic Applied Sciences	Multiple of EBITDA	\$3.1	EBITDA multiple - 6.00
Private debt instrument	Discounted cash flow	\$10.0	Discount rate - 9.62%

⁽¹⁾ Includes the net unrealized investment gains (losses) associated with foreign currency; foreign currency effects based on observable inputs.

\$ in Millions, Except Share Price		December 31, 2017	
Description	Valuation Technique(s)	Fair Value (1)	Unobservable Input
PassportCard	Discounted cash flow	\$21.0	Discount rate - 25.0%
			Exit multiple - 1.00
Compare.com	Discounted cash flow	\$22.1	Discount rate - 35.0%
			Exit multiple - 1.75
durchblicker	Discounted cash flow	\$11.3	Discount rate - 21.0%
			Exit multiple - 1.75
Captricity, Inc.	Discounted cash flow	\$14.5	Discount rate - 30.0%
			Exit multiple - 3.50
Galvanic Applied Sciences	Multiple of EBITDA	\$0.6	EBITDA multiple - 6.00
OneTitle Holdings LLC	Share price of most recent transaction	\$3.6	Share price - \$2.52

⁽¹⁾ Includes the net unrealized investment gains (losses) associated with foreign currency; foreign currency effects based on observable inputs.

Note 4. Goodwill and Other Intangible Assets

White Mountains has recognized goodwill and other intangible assets at the acquisition date fair values in connection with its purchases of subsidiaries.

The following table presents the economic lives, acquisition date values, accumulated amortization and net carrying values for other intangible assets and goodwill, by company:

	Weighted			Decem	ber 31, 201	8				Decemb	er 31, 201	.7	
\$ in Millions	Average Economic Life (in Years)	Acquisition Date Fair Value			mulated rtization		Net arrying Value	Dai	uisition te Fair 'alue		mulated tization	Ca	Net rrying Value
Goodwill:													
NSM (1)(2)	N/A	\$	354.3	\$	_	\$	354.3	\$	_	\$	_	\$	_
MediaAlpha	N/A		18.3		_		18.3		18.3		_		18.3
Buzz (3)	N/A		7.3		_		7.3		7.6		_		7.6
Total goodwill			379.9				379.9		25.9		_		25.9
Other intangible assets:													
NSM (1)													
Customer relationships	9		85.3		6.0		79.3		_		_		_
Trade names	20		51.2		1.8		49.4		_		_		_
Information technology	5		3.7		.5		3.2						_
Subtotal			140.2		8.3		131.9		_		_		_
MediaAlpha													
Customer relationships	9		26.8		4.9		21.9		26.8		2.4		24.4
Information technology	5		33.3		30.9		2.4		33.3		24.3		9.0
Other	3		9.8		9.0		.8		9.8		7.8		2.0
Subtotal			69.9		44.8		25.1		69.9		34.5		35.4
Buzz													
Trademark	7		.6		.2		.4		.6		.1		.5
Information technology	5		.5		.3		.2		.5		.2		.3
Subtotal			1.1		.5		.6		1.1		.3		.8
Total other intangible assets			211.2		53.6		157.6		71.0		34.8		36.2
Total goodwill and other intangible assets		\$	591.1	\$	53.6	\$	537.5	\$	96.9	\$	34.8	\$	62.1
Goodwill and other intangible a attributed to non-controlling in							(40.6)						(21.1)
Goodwill and other intangible a included in White Mountains shareholders' equity						\$	496.9					\$	41.0

⁽¹⁾ Includes the effect of foreign currency translation from the date of acquisition of \$(2.2) for goodwill and \$(0.7) for other intangible assets.

The goodwill recognized for the above acquisitions is attributed to expected future cash flows. The acquisition date fair values of other intangible assets with finite lives are estimated using income approach techniques, which use future expected cash flows to develop a discounted present value amount.

The multi-period-excess-earnings method estimates fair value using the present value of the incremental after-tax cash flows attributable solely to the other intangible asset over its remaining life. This approach was used to estimate the fair value of other intangible assets associated with trademarks, brand names, customer relationships and contracts and information technology.

⁽²⁾ The relative fair values of goodwill and other intangible assets recognized in connection with the acquisition of KBK had not yet been determined at December 31, 2018. See Note 2 — "Significant Transactions".

⁽³⁾ Includes the effect of foreign currency translation from the date of acquisition of \$(0.3) for goodwill.

The relief-from-royalty method was used to estimate fair value for other intangible assets that relate to rights that could be obtained via a license from a third-party owner. Under this method, the fair value is estimated using the present value of license fees avoided by owning rather than leasing the asset. This technique was used to estimate the fair value of domain names, certain trademarks and brand names.

The with-or-without method estimates the fair value of another intangible asset that provides an incremental benefit. Under this method, the fair value of the other intangible asset is calculated by comparing the value of the entity with and without the other intangible asset. This approach was used to estimate the fair value of favorable lease terms.

The following table presents the change in goodwill and other intangible assets:

				Decem	ber 3	1,		
Millions		20		20	17			
	G	oodwill	In	Other tangible Assets	G	oodwill	Other Intangible Assets	
Beginning balance	\$	25.9	\$	36.2	\$	25.9	\$	19.3
Acquisitions of businesses (1)		356.5		140.9				
Acquisitions of asset groups (2)				_				27.6
Foreign currency translation		(2.5)		(.7)				
Acquisitions of other intangible assets				_				
Amortization				(18.8)				(10.7)
Ending balance	\$	379.9	\$	157.6	\$	25.9	\$	36.2

⁽¹⁾ During 2018, amounts include acquisitions related to NSM, Fresh Insurance and KBK. See Note 2 — "Significant Transactions".

Amortization expense was \$18.8 million, \$10.7 million and \$10.5 million for the years ended December 31, 2018, 2017 and 2016.

White Mountains expects to recognize amortization expense in each of the next five years as the following table presents:

Millions	Amortiz	ation Expense
2019	\$	18.1
2020		16.0
2021		16.0
2022		15.8
2023 and years after		89.5
Total	\$	155.4

⁽²⁾ During 2017, amounts include certain assets associated with the Health, Life and Medicare insurance business of Healthplans.com for an aggregate purchase price of \$28.0. See **Note 2**—"**Significant Transactions**".

Note 5. Debt

The following table presents White Mountains's debt outstanding as of December 31, 2018 and 2017:

Millions	Dec	ember 31, 2018	Effective Rate (1)	De	cember 31, 2017	Effective Rate (1)
WTM Bank Facility	\$		N/A	\$		N/A
NSM Bank Facility		180.4	7.4%			
Unamortized issuance cost		(3.8)				
NSM Bank Facility, carrying value		176.6				
MediaAlpha Bank Facility		14.3	7.1%		23.9	5.6%
Unamortized issuance cost		(.1)			(.1)	
MediaAlpha Bank Facility, carrying value		14.2			23.8	
Other NSM debt, carrying value		1.9				
Total debt	\$	192.7		\$	23.8	

⁽¹⁾ Effective rate considers the effect of the debt issuance costs.

The following table presents a schedule of contractual repayments of White Mountains's debt as of December 31, 2018:

Millions	December 31, 2018			
Due in one year or less	\$	5.2		
Due in two to three years		10.4		
Due in four to five years	9.4			
Due after five years		171.9		
Total	\$	196.9		

WTM Bank Facility

White Mountains had a revolving credit facility with a syndicate of lenders administered by Wells Fargo Bank, N.A., which had a total commitment of \$425.0 million (the "WTM Bank Facility"). White Mountains terminated the WTM Bank Facility on May 8, 2018.

White Mountains recorded \$0.3 million, \$0.6 million, and \$1.2 million of interest expense on the WTM Bank Facility for the years ended December 31, 2018, 2017 and 2016.

NSM Bank Facility

On May 11, 2018, NSM entered into a secured credit facility (the "NSM Bank Facility") with Ares Capital Corporation in order to refinance NSM's existing debt and to fund the acquisitions of subsidiaries. The NSM Bank Facility is comprised of a term loan of \$100.0 million, two delayed-draw term loans of \$51.0 million, to fund the Fresh Insurance acquisition, and \$30.1 million, to fund the KBK acquisition, and a revolving credit loan commitment of \$10.0 million, under which NSM initially borrowed \$2.0 million. The term loans under the NSM Bank Facility mature on May 11, 2024, and the revolving loan under the NSM Bank Facility matures on May 11, 2023. During the period from May 11, 2018 through December 31, 2018, NSM repaid \$0.8 million on the term loans and \$2.0 million on the revolving credit loan. As of December 31, 2018, \$180.4 million of the term loans were outstanding and the revolving credit loan was undrawn.

Interest on the NSM Bank Facility accrues at a floating interest rate equal to the three month LIBOR or the Prime Rate, as published by the Wall Street Journal plus, in each case, an applicable margin. The margin over LIBOR may vary between 4.25% and 4.75%, and the margin over the Prime Rate may vary between 3.25% and 3.75%, in each case, depending on the consolidated total leverage ratio of the borrower.

On June 15, 2018, NSM entered into an interest rate swap agreement to hedge its exposure to interest rate risk on \$151.0 million of its variable rate term loans. Under the terms of the swap agreement, NSM pays a fixed rate of 2.97% and receives a variable rate, which is reset monthly, based on the then-current LIBOR. As of December 31, 2018, the variable rate received by NSM under the swap agreement was 2.52%. As of December 31, 2018, the effective interest rate for the outstanding term loans of \$150.2 million that are hedged by the swap was 7.47%. The effective interest on the outstanding term loans of \$30.0 million that are unhedged was 6.85%. The effective interest rate on the total outstanding term loans under the NSM Bank Facility of \$180.4 million was 7.42%. See **Note 7** — "**Derivatives** — **NSM Interest Rate Swap**".

NSM recorded \$8.0 million of interest expense on the NSM Bank Facility for the 2018 ownership period.

The NSM Bank Facility is secured by all property of the loan parties and contains various affirmative, negative and financial covenants that White Mountains considers to be customary for such borrowings, including a maximum consolidated total leverage ratio covenant.

MediaAlpha Bank Facility

On May 12, 2017, MediaAlpha entered into a secured credit facility (the "MediaAlpha Bank Facility") with Western Alliance Bank, which had a total commitment of \$20.0 million and had a maturity date of May 12, 2020. On October 5, 2017, MediaAlpha refinanced the MediaAlpha Bank Facility in order to fund the acquisition of certain assets associated with the Health, Life and Medicare insurance business of Healthplans.com. The total commitment of the MediaAlpha Bank Facility was increased to \$28.4 million and has a maturity date of October 6, 2020. The MediaAlpha Bank Facility consists of a \$18.4 million term loan facility, which has an outstanding balance of \$14.3 million as of December 31, 2018, and a revolving loan facility for \$10.0 million, which was undrawn as of December 31, 2018. The MediaAlpha Bank Facility replaced MediaAlpha's previous credit facility with Opus Bank, which had a total commitment of \$20.0 million.

The MediaAlpha Bank Facility carries a variable interest rate that is based on the Prime Rate, as published by the Wall Street Journal, plus a spread of 1.5% on the term loan facility and 0.25% on the revolving credit facility as of December 31, 2018.

During 2018, under the MediaAlpha Bank Facility, MediaAlpha repaid \$3.6 million on the term loan and borrowed \$3.0 million and repaid \$9.0 million on the revolving loan. In 2017, under the MediaAlpha Bank Facility, MediaAlpha borrowed \$20.0 million and repaid \$2.1 million on the term loan and borrowed \$6.0 million on the revolving loan. During 2017, under the previous MediaAlpha Bank Facility, MediaAlpha repaid \$12.9 million.

MediaAlpha recorded \$1.2 million, \$1.0 million, \$0.9 million of interest expense on the MediaAlpha Bank Facility for the years ended December 31, 2018, 2017 and 2016.

The MediaAlpha Bank Facility is secured by intellectual property and the common stock of MediaAlpha's subsidiaries, and contains various affirmative, negative and financial covenants that White Mountains considers to be customary for such borrowings, including a fixed charge coverage ratio and an asset coverage ratio.

Other NSM Debt

On December 12, 2016, in connection with the acquisition of a wholly-owned subsidiary, NSM assumed a secured term loan facility with Ageas Insurance Limited, which has a maturity date of May 11, 2024. As of December 31, 2018, the secured term loan facility has an outstanding balance of \$2.2 million. The carrying value of the debt includes a purchase accounting adjustment of \$(0.3) million to reflect the debt at its acquisition date fair value. The \$(0.3) million is being amortized over the remaining term of the loan.

Debt Covenants

As of December 31, 2018, White Mountains was in compliance with all of the covenants under all of its debt facilities.

Interest

Total interest expense incurred by White Mountains for its indebtedness was \$9.5 million, \$2.3 million and \$3.0 million for the periods ended December 31, 2018, 2017 and 2016. Total interest paid by White Mountains for its indebtedness was \$8.8 million, \$1.4 million, and \$2.1 million for the periods ended December 31, 2018, 2017 and 2016.

Note 6. Income Taxes

The Company and its Bermuda domiciled subsidiaries are not subject to Bermuda income tax under current Bermuda law. In the event there is a change in the current law such that taxes are imposed, the Company and its Bermuda domiciled subsidiaries would be exempt from such tax until March 31, 2035, pursuant to the Bermuda Exempted Undertakings Tax Protection Act of 1966. The Company has subsidiaries and branches that operate in various other jurisdictions around the world that are subject to tax in the jurisdictions in which they operate. The jurisdictions in which the Company's subsidiaries and branches are subject to tax are Barbados, Ireland, Israel, Luxembourg, the United Kingdom and the United States.

The following table presents the total income tax benefit for the years ended December 31, 2018, 2017 and 2016:

	Year Ended December 31,									
Millions		2018		2017	2016					
Current income tax (expense) benefit:										
U.S. federal	\$	(.1)	\$	(.3)	\$	21.4				
State		(1.4)		(1.3)		(.7)				
Non-U.S.		(2.9)		(2.0)		(.3)				
Total current income tax (expense) benefit		(4.4)		(3.6)		20.4				
Deferred income tax benefit:										
U.S. federal		8.3		11.4		12.5				
Non-U.S.		.1								
Total deferred income tax benefit		8.4		11.4		12.5				
Total income tax benefit	\$	4.0	\$	7.8	\$	32.9				

Effective Rate Reconciliation

The following table presents a reconciliation of taxes calculated for 2018 using the 21% U.S. federal statutory rate and for 2017 and 2016 using the 35% U.S. federal statutory rate (the tax rate at which the majority of White Mountains's worldwide operations are taxed) to the income tax benefit (expense) on pre-tax (loss) income:

	Year Ended December 31,							
Millions		2018		2017	2016			
Tax benefit (expense) at the U.S. statutory rate	\$	37.4	\$	(2.7) \$	51.6			
Differences in taxes resulting from:								
Change in valuation allowance		(31.0)		42.6	6.9			
State taxes		4.0		.6	(1.2)			
Non-U.S. earnings, net of foreign taxes		(2.9)		21.5	(19.2)			
Withholding tax		(2.7)		(2.0)	(.2)			
Member's surplus contributions ("MSC")		(2.6)		(3.0)	(2.3)			
Tax rate changes		1.7		(44.3)	(3.9)			
Tax reserve adjustments		(.8)		(.3)	_			
Tax exempt interest and dividends		.6		.5	.1			
Officer compensation		_		(4.1)	_			
Other, net		.3		(1.0)	1.1			
Total income tax benefit on pre-tax (loss) income	\$	4.0	\$	7.8 \$	32.9			

The non-U.S. component of pre-tax (loss) income was \$(30.1) million, \$71.3 million and \$(66.3) million for the years ended December 31, 2018, 2017 and 2016.

Tax Payments and Receipts

Net income tax payments to national governments (primarily the United States) totaled \$3.5 million, \$2.0 million, and \$0.3 million for the years ended December 31, 2018, 2017 and 2016.

Deferred Tax Assets and Liabilities

Deferred taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts for tax purposes.

The following table presents an outline of the significant components of White Mountains's U.S. federal, state and non-U.S. deferred tax assets and liabilities:

	December 31,						
Millions		2017					
Deferred tax assets related to:							
U.S. federal and state net operating and capital loss carryforwards	\$	95.5	\$	73.0			
Non-U.S. net operating loss carryforwards		36.6		33.9			
Incentive compensation		14.1		20.4			
Investment basis difference		11.1		4.9			
Net unrealized investment losses		9.5					
Tax credit carryforwards		4.2		1.3			
Deferred acquisition costs		3.5		2.0			
Other items		5.8		1.6			
Total gross deferred tax assets		180.3		137.1			
Less: valuation allowances		139.9		109.6			
Total net deferred tax assets		40.4		27.5			
Deferred tax liabilities related to:							
MSC		32.8		24.1			
Purchase accounting		4.2		.2			
Net unrealized investment gains				1.0			
Other items		1.2		.9			
Total deferred tax liabilities		38.2		26.2			
Net deferred tax asset	\$	2.2	\$	1.3			

White Mountains's deferred tax assets are net of U.S. federal, state and non-U.S. valuation allowances and, to the extent they relate to non-U.S. jurisdictions, they are shown at year-end exchange rates.

Tax Cuts and Jobs Act of 2017

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the "TCJA") was enacted. Substantially all of the provisions of the TCJA are effective for taxable years beginning after December 31, 2017. The TCJA includes significant changes to the Internal Revenue Code of 1986 (the "Code"), including amendments which significantly change the taxation of individuals and business entities. The more significant changes in the TCJA that impact White Mountains are reductions in the corporate federal income tax rate from 35% to 21% and several technical provisions including, among others, limiting the utilization of net operating losses arising after December 31, 2017 to 80% of taxable income with an indefinite carryforward.

The TCJA did not have a material impact on White Mountains's financial statements in 2017 due to a full valuation allowance previously having been recorded against its U.S. deferred tax assets. Under U.S. GAAP, specifically ASC Topic 740, *Income Taxes*, the tax effects of changes in tax laws must be recognized in the period in which the law is enacted, or December 22, 2017 for the TCJA. ASC 740 also requires deferred tax assets and liabilities to be measured at the enacted tax rate expected to apply when temporary differences are to be realized or settled. Thus, at the date of enactment, White Mountains's deferred taxes were re-measured based upon the new tax rate. For White Mountains, a change in deferred taxes was recorded as an adjustment to our deferred tax provision for \$43.1 million of federal tax expense, which was offset by a change in the valuation allowance.

The staff of the U.S. Securities and Exchange Commission has recognized the complexity of reflecting the impacts of the TCJA and on December 22, 2017 issued guidance in Staff Accounting Bulletin 118 ("SAB 118") which clarifies accounting for income taxes under ASC 740 if information is not yet available or complete and provides for up to a one-year period in which to complete the required analyses and accounting (the measurement period). SAB 118 describes three scenarios associated with a company's status of accounting for income tax reform: (1) a company is complete with its accounting for certain effects of tax reform, (2) a company is able to determine a reasonable estimate for certain effects of tax reform and records that estimate as a provisional amount, or (3) a company is not able to determine a reasonable estimate and therefore continues to apply ASC 740, based on the provisions of the tax laws that were in effect immediately prior to the TCJA being enacted. White Mountains completed its accounting for the effects of the TCJA, which have been reflected in the December 31, 2017 financial statements.

Valuation Allowance

White Mountains records a valuation allowance against deferred tax assets if it becomes more likely than not that all or a portion of a deferred tax asset will not be realized. Changes in valuation allowances from period to period are included in income tax expense in the period of change. In determining whether or not a valuation allowance, or change therein, is warranted, White Mountains considers factors such as prior earnings history, expected future earnings, carryback and carryforward periods and strategies that if executed would result in the realization of a deferred tax asset. It is possible that certain planning strategies or projected earnings in certain subsidiaries may not be sufficient to utilize the entire deferred tax asset, which could result in material changes to White Mountains's deferred tax assets and tax expense.

Of the \$139.9 million valuation allowance as of December 31, 2018, \$102.6 million related to deferred tax assets on net operating losses in U.S. subsidiaries and other federal and state deferred tax benefits, \$21.1 million related to deferred tax assets on net operating losses and net investment unrealized gains and losses in Luxembourg subsidiaries, \$14.5 million related to net operating losses and other deferred tax benefits in Israeli subsidiaries and \$1.7 million related to net operating losses and other deferred tax benefits in U.K. subsidiaries. Of the \$109.6 million valuation allowance as of December 31, 2017, \$74.8 million related to deferred tax assets on net operating losses in U.S. subsidiaries and other federal and state deferred tax benefits, \$20.3 million related to deferred tax assets on net operating losses and net investment unrealized gains and losses in Luxembourg subsidiaries, \$13.5 million related to net operating losses in Israeli subsidiaries and \$1.0 million related to net operating losses in a U.K. subsidiary.

United States

During 2018 and 2017, White Mountains recorded income tax expense (benefit) of \$22.7 million to establish and \$(21.5) million to release a valuation allowance against deferred tax assets of Guilford Holdings, Inc. and subsidiaries ("Guilford"). Guilford consists of MediaAlpha, various service companies and certain investments and other assets that are included in the Other Operations segment. The TCJA reduced the U.S. federal income tax rate from 35% to 21%, which reduced the deferred tax assets of Guilford by \$20.4 million. In 2017, White Mountains recorded a \$20.4 million tax expense for the reduction, which was offset with a tax benefit due to the release in the valuation allowance against the deferred tax assets. During 2018 and 2017, Guilford continued to have a full valuation allowance recorded against its deferred tax assets as White Mountains management is unsure it will generate sufficient taxable income to utilize the deferred tax assets.

During 2018 and 2017, White Mountains recorded income tax expense (benefit) of \$1.5 million to establish and \$(18.4) million to release a valuation allowance against deferred tax assets of BAM. The reduction in the U.S. federal income tax rate under the TCJA reduced the deferred tax assets of BAM by \$22.7 million. In 2017, White Mountains recorded a \$22.7 million income tax expense for the reduction, which was offset with an income tax benefit due to the release in the valuation allowance against the deferred tax assets. Also during 2018 and 2017, BAM had income in equity that was available to offset its loss from continuing operations. As a result, BAM recorded an income tax benefit of \$8.7 million and \$10.1 million, in continuing operations, with an offsetting tax expense in paid-in surplus. During 2018 and 2017, BAM continued to have a full valuation allowance recorded against its deferred tax assets as White Mountains management is unsure it will generate sufficient taxable income to utilize the deferred tax assets.

During 2018, White Mountains recorded income tax expense of \$2.8 million to establish a valuation allowance against a deferred tax asset related to foreign tax credits at White Mountains Catskill Holdings, Inc. as White Mountains management is unsure it will generate sufficient taxable income to utilize the deferred tax asset.

Non-U.S. Jurisdictions

During 2018, White Mountains recorded income tax expense of \$1.2 million to establish a full valuation allowance against deferred tax assets which primarily related to unrealized losses on investments held in Luxembourg-domiciled subsidiaries.

During 2017, White Mountains recorded an income tax benefit of \$6.4 million in Luxembourg to reduce a full valuation allowance against deferred tax assets due to the recapture of previously deducted losses offset by a loss on the write down of Wobi.

During 2018 and 2017, White Mountains recorded income tax expense of \$2.1 million and \$3.0 million to establish a full valuation allowance against deferred tax assets at certain Israel-domiciled subsidiaries, as White Mountains management does not currently anticipate sufficient taxable income to utilize the deferred tax assets.

During 2018 and 2017, White Mountains recorded income tax expense of \$0.7 million and \$0.7 million to establish a full valuation allowance against deferred tax assets at certain U.K.-domiciled subsidiaries, as White Mountains management does not currently anticipate sufficient taxable income to utilize the deferred tax assets.

Net Operating Loss and Capital Loss Carryforwards

The following table presents net operating loss and capital loss carryforwards as of December 31, 2018, the expiration dates and the deferred tax assets thereon:

	December 31, 2018									
Millions	Uni	ted States	Lux	Luxembourg United Kingdom		Israel		Total		
2019-2023	\$.4	\$		\$	_	\$		\$.4
2024-2028										
2029-2038		342.8		47.0						389.8
No expiration date		81.5		29.8		14.9		61.1		187.3
Total	\$	424.7	\$	76.8	\$	14.9	\$	61.1	\$	577.5
Gross deferred tax asset		89.7		20.0		2.6		14.0		126.3
Valuation allowance		(87.3)		(20.0)		(1.8)		(14.0)		(123.1)
Net deferred tax asset	\$	2.4	\$		\$.8	\$		\$	3.2

Included in the U.S. net operating loss carryforwards are losses of \$3.7 million subject to an annual limitation on utilization under Internal Revenue Code Section 382. These loss carryforwards will begin to expire in 2032. Also included in the U.S. net operating loss carryforwards are losses of \$6.8 million due to additional deductions related to equity compensation. These loss carryforwards will begin to expire in 2032. As of December 31, 2018, there are U.S. alternative minimum tax credit carryforwards of \$0.7 million, which are refundable under provisions of the TCJA.

Uncertain Tax Positions

Recognition of the benefit of a given tax position is based upon whether a company determines that it is more likely than not that a tax position will be sustained upon examination based upon the technical merits of the position. In evaluating the more-likely-than-not recognition threshold, White Mountains must presume that the tax position will be subject to examination by a taxing authority with full knowledge of all relevant information. If the recognition threshold is met, then the tax position is measured at the largest amount of benefit that is more than 50% likely of being realized upon ultimate settlement. There were no uncertain tax positions for the year ended December 31, 2016.

The following table presents a reconciliation of the beginning and ending amount of unrecognized tax benefits for 2018 and 2017:

Millions	nanent rences ⁽¹⁾	Temporary Interest and Penalties (3)		Total		
Balance at January 1, 2017	\$ _	\$		\$	 \$	_
Changes in prior year tax positions	.1					.1
Tax positions taken during the current year	.2					.2
Balance at December 31, 2017	.3					.3
Changes in prior year tax positions	 .8					.8
Balance at December 31, 2018	\$ 1.1	\$		\$	 \$	1.1

⁽¹⁾ Represents the amount of unrecognized tax benefits that, if recognized, would impact the effective tax rate.

⁽²⁾ Represents the amount of unrecognized tax benefits that, if recognized, would create a temporary difference between the reported amount of an item in White Mountains's Consolidated Balance Sheet and its tax basis.

⁽³⁾ Net of tax benefit.

White Mountains classifies all interest and penalties on unrecognized tax benefits as part of income tax expense. During the years ended December 31, 2018, 2017 and 2016, White Mountains did not recognize any net interest (income) expense. There was no accrued interest as of December 31, 2018 and December 31, 2017.

Tax Examinations

With few exceptions, White Mountains is no longer subject to U.S. federal, state, or non-U.S. income tax examinations by tax authorities for years before 2013.

In the second quarter of 2016, White Mountains recorded an increase in deferred tax assets of \$0.6 million and a corresponding increase in valuation allowance of \$0.6 million related to the settlement of the IRS audit of Guilford for tax year 2012.

In the first quarter of 2018, the Israeli Tax Authority commenced an examination of the 2013 to 2016 income tax returns for Wobi. White Mountains does not expect the resolution of this examination to result in a material change to its financial condition, results of operations and cash flows.

Note 7. Derivatives

Variable Annuity Reinsurance

White Mountains entered into agreements to reinsure death and living benefit guarantees associated with certain variable annuities in Japan. During the third quarter of 2015, the variable annuity contracts reinsured by WM Life Re began to mature and were fully runoff by June 30, 2016. The reinsurance agreement was commuted in December 2016. WM Life Re was liquidated in the third quarter of 2017.

The following table presents the pre-tax operating results of WM Life Re for the year ended December 31, 2016:

Millions	Year Ended December 31, 2016				
Fees, included in other revenue	\$	1.2			
Change in fair value of variable annuity liability, included in other revenue		(.3)			
Change in fair value of derivatives, included in other revenue		(2.0)			
Foreign exchange, included in other revenue		1.3			
Total revenues		.2			
Death benefit claims paid, included in general and administrative expenses		(.3)			
General and administrative expenses		(2.6)			
Pre-tax loss	\$	(2.7)			

The following table presents realized and unrealized derivative gains (losses) recognized in other revenue for the year ended December 31, 2016 by type of instrument:

Millions	Yea	s (Losses) r Ended per 31, 2016
Fixed income/interest rate	\$	1.8
Foreign exchange		(4.8)
Equity		1.0
Total	\$	(2.0)

The following tables present the changes in White Mountains's variable annuity reinsurance liabilities and derivative instruments for the year ended December 31, 2016:

		ole Annuity abilities				Derivative I	nstrum	ents	
Millions	Level 3		Le	Level 3 (1) Le		vel 2 (1)(2)	Level 1 (3)		Total
Balance at January 1, 2016	\$.3	\$	2.7	\$	16.5	\$.9	\$ 20.1
Purchases		_							
Realized and unrealized (losses) gains		(.3)		2.9		(.7)		(4.2)	(2.0)
Transfers in		_				_		_	
Sales/settlements		_		(5.6)		(15.8)		3.3	(18.1)
Balance at December 31, 2016	\$		\$		\$		\$		\$ _

⁽¹⁾ Consists of over-the-counter instruments.

All of White Mountains's variable annuity reinsurance liabilities were classified as Level 3 measurements. The fair value of White Mountains's variable annuity reinsurance liabilities were estimated using actuarial and capital market assumptions related to the projected discounted cash flows over the term of the reinsurance agreement. Actuarial assumptions regarding future policyholder behavior, including surrender and lapse rates, were generally unobservable inputs and significantly impacted the fair value estimates. White Mountains used derivative instruments to mitigate the risks associated with changes in the fair value of the reinsured variable annuity guarantees. The types of inputs used to estimate the fair value of these derivative instruments, with the exception of actuarial assumptions regarding policyholder behavior and risk margins, were generally the same as those used to estimate the fair value of variable annuity liabilities.

Foreign Currency Forward Contracts

White Mountains's investment portfolio includes investments denominated in GBP, Euros, Japanese Yen and other foreign currencies. White Mountains previously entered into foreign currency forward contracts to manage its foreign currency exposure related to certain of these investments. The foreign currency forward contracts did not meet the criteria to be accounted for as a hedge. Mismatches between currency driven movements in foreign denominated investments and foreign currency forward contracts may result in net foreign currency positions being outside pre-defined ranges and/or may result in net foreign currency gains (losses). White Mountains's foreign currency forward contracts were traded over-the-counter. The fair value of the foreign currency forward contracts were estimated using OTC quotes for similar instruments and accordingly, the measurements were classified as Level 2 measurements.

During the fourth quarter of 2017, White Mountains closed the foreign currency forward contracts associated with certain non-U.S. common equity securities. In conjunction with the liquidation of the GBP investment grade corporate bond mandate in the first quarter of 2018, White Mountains closed the associated foreign currency forward contract.

As of December 31, 2018, White Mountains no longer has any open foreign currency forward contracts. As of December 31, 2017, White Mountains held \$206.3 million (GBP 152.0 million) total gross notional value of a foreign currency forward contract.

The derivative (losses) recognized in net realized and unrealized investment gains (losses) for the years ended December 31, 2018, 2017 and 2016 were \$(3.5) million, \$(23.8) million and \$(1.2) million. White Mountains's foreign currency forward contracts were subject to a master netting agreement. As of December 31, 2017 and 2016, the gross liability amount offset under the master netting agreement and the net amount recognized in other long-term investments was \$(3.7) million and \$(1.2) million.

White Mountains did not hold or provide any collateral under its foreign currency forward contract.

The following table presents the gross notional amounts and carrying values associated with the foreign currency forward contracts as of December 31, 2017:

	<u> </u>	December 31, 2017							
Millions	Notion	nal Amount	Standard & Poor's Rating (1)						
Barclays Bank PLC	\$	206.3	\$ (3.7)		A				

^{(1) &}quot;A" is the sixth highest of 23 credit ratings assigned by Standard & Poor's.

⁽²⁾ Consists of interest rate swaps, total return swaps, foreign currency forward contracts, and bond forwards. Fair value measurement based upon bid/ask pricing quotes for similar instruments that are actively traded, where available. Swaps for which an active market does not exist have been priced using observable inputs including the swap curve and the underlying bond index.

⁽³⁾ Consists of exchange traded equity index, foreign currency and interest rate futures. Fair value measurements based upon quoted prices for identical instruments that are actively traded.

NSM Interest Rate Swap

On May 11, 2018, NSM entered into the NSM Bank Facility. Interest on the NSM Bank Facility accrues at a floating interest rate equal to the three month LIBOR or the Prime Rate, as published by the Wall Street Journal plus, in each case, an applicable margin. The margin over LIBOR may vary between 4.25% and 4.75%, and the margin over the Prime Rate may vary between 3.25% and 3.75%, in each case, depending on the consolidated total leverage ratio of the borrower.

On June 15, 2018, NSM entered into an interest rate swap agreement to hedge its exposure to interest rate risk on \$151.0 million of its variable rate term loans. Under the terms of the swap agreement, NSM pays a fixed rate of 2.97% and receives a variable rate, which is reset monthly, based on the then-current LIBOR. As of December 31, 2018, the variable rate received by NSM under the swap agreement was 2.52%. Over the term of the swap, the notional amount decreases in accordance with the principal repayments NSM expects to make on its term loans. As of December 31, 2018, the effective interest rate for the outstanding term loans of \$150.2 million that are hedged by the swap was 7.47%. NSM's obligations under the swap are secured by the same collateral securing the NSM Bank Facility on a *pari passu* basis. NSM does not currently hold any collateral deposits from or provide any collateral deposits to the swap counterparty.

NSM evaluated the effectiveness of the swap to hedge its interest rate risk associated with its variable rate debt and concluded at the swap inception date that the swap was highly effective in hedging that risk. NSM will evaluate the effectiveness of the hedging relationship on an ongoing basis.

For the period from May 11, 2018 through December 31, 2018, NSM recognized net interest expense of \$0.7 million for the periodic net settlement payments on the swap. As of December 31, 2018, the estimated fair value of the swap and the accrual of the periodic net settlement payments recorded in other liabilities was \$2.7 million. There was no ineffectiveness in the hedge for the period from May 11, 2018 through December 31, 2018. The \$(2.7) million change in the fair value of the swap for the period from May 11, 2018 through December 31, 2018 is included within accumulated other comprehensive income (loss).

Note 8. Municipal Bond Guarantee Insurance

In 2012, HG Global was capitalized with \$594.5 million from White Mountains and \$14.5 million from non-controlling interests to fund the initial capitalization of BAM, a newly formed mutual municipal bond insurer. As of December 31, 2018, White Mountains owned 96.9% of HG Global's preferred equity and 88.4% of its common equity. HG Global, together with its subsidiaries, provided the initial capitalization of BAM through the purchase of \$503.0 million of BAM Surplus Notes. At inception, BAM and HG Re also entered into a first loss reinsurance treaty ("FLRT"). HG Re provides first loss protection up to 15%-of-par outstanding on each municipal bond insured by BAM. For capital appreciation bonds, par is adjusted to the estimated equivalent par value for current interest paying bonds. In return, BAM cedes 60% of the risk premium charged for insuring the municipal bond, net of a ceding commission. During 2017, HG Global and BAM made certain changes to the ceding commission arrangements under the FLRT. These changes serve to accelerate growth in BAM's statutory capital but do not impact the net risk premium ceded from BAM to HG Re.

HG Re's obligations under the FLRT are limited to the assets in two collateral trusts: a Regulation 114 Trust and a supplemental collateral trust (the "Supplemental Trust" and together with the Regulation 114 Trust, the "Collateral Trusts"). Losses required to be reimbursed under the FLRT are subject to an aggregate limit equal to the assets held in the Collateral Trusts at any point in time.

Effective January 1, 2014, HG Global and BAM agreed to change the interest rate on the BAM Surplus Notes for the five years ending December 31, 2018 from a fixed rate of 8.0% to a variable rate equal to the one-year U.S. treasury rate plus 300 basis points, set annually, which was 3.78%, 4.60% and 5.70% for 2017, 2018 and 2019. In 2018, BAM exercised its option to extend the variable rate period for an additional three years. At the end of the variable rate period, the interest rate will be fixed at the higher of the then current variable rate or 8.0%. No payment of interest or principal on the BAM Surplus Notes may be made without the approval of the New York State Department of Financial Services ("NYDFS"). BAM has stated its intention to seek regulatory approval to pay interest and principal on its surplus notes to the extent that its remaining qualified statutory capital and other capital resources continue to support its outstanding obligations, its business plan and its "AA/stable" rating from Standard & Poor's. BAM repaid \$17.7 million of the BAM Surplus Notes and \$5.3 million of accrued interest during the year ended December 31, 2018. BAM repaid \$4.0 million of the BAM Surplus Notes and \$1.0 million of accrued interest during the year ended December 31, 2017.

At inception, the Supplemental Trust contained the original \$300 million of Series B Notes and \$100 million of cash and fixed income securities. During 2017, in order to further support BAM's long-term capital position and business prospects, HG Global agreed to contribute the original \$203.0 million of Series A Notes into the Supplemental Trust. At the same time HG Global and BAM also changed the payment terms of the Series B Notes, so that payments will reduce principal and accrued interest on a pro rata basis, consistent with the payment terms on the Series A Notes. The terms of the Series B Notes had previously stipulated that payments would first reduce interest owed, then reduce principal owed once all accrued interest had been paid. The NYDFS approved the change during 2017. In connection with the contribution and change in payment terms of the Series B Notes, the Series A Notes were merged into the Series B Notes to become the Series S-1 Surplus Notes.

On December 3, 2018, the Series S-1 Surplus Notes were exchanged for Series S-2 Surplus Notes, which reflect all of the unpaid principal and accrued interest from the Series S-1 Surplus Notes. The Series S-2 Surplus Notes are held in an HG Re sponsored vehicle within the Supplemental Trust.

The Regulation 114 Trust target balance is equal to gross ceded unearned premiums and unpaid ceded loss and LAE expenses, if any. The Supplemental Trust target balance is equal to \$603.0 million. As the BAM Surplus Notes are repaid over time, the BAM Surplus Notes will be replaced in the Supplemental Trust by cash and fixed income securities. The Collateral Trust balances must be at target levels before excess funds can be distributed out of the Supplemental Trust.

Under GAAP, if the terms of a debt instrument are amended, unless there is a greater than 10% change in the expected discounted future cash flows of such instrument, a change in the instrument's carrying value is not permitted. White Mountains has determined that the impact of the changes made during 2017 to the terms of the BAM Surplus Notes on the expected discounted future cash flows was not greater than 10%.

As of December 31, 2018 and 2017, the Collateral Trusts held assets of \$757.4 million and \$715.1 million, which included \$481.3 million and \$499.0 million of BAM Surplus Notes. As of December 31, 2018 and 2017, HG Global has accrued \$143.7 million and \$126.0 million of interest receivable on the BAM Surplus Notes.

The following table presents a schedule of BAM's insured obligations as of December 31, 2018 and 2017:

	Dec	ember 31, 2018	De	cember 31, 2017
Contracts outstanding		7,525	•	6,371
Remaining weighted average contract period (in years)		10.7		10.9
Contractual debt service outstanding (in millions):				
Principal	\$	52,201.6	\$	42,090.6
Interest and capital appreciation		26,560.3		21,057.1
Total debt service outstanding	\$	78,761.9	\$	63,147.7
Gross unearned insurance premiums	\$	176.0	\$	136.8

The following table presents a schedule of BAM's future premium revenues as of December 31, 2018:

Millions	December 31, 2018			
January 1, 2019 - March 31, 2019	\$	4.1		
April 1, 2019 - June 30, 2019		4.0		
July 1, 2019 - September 30, 2019		4.0		
October 1, 2019 - December 31, 2019		3.8		
		15.9		
2020		15.0		
2021		14.0		
2022		13.2		
2023		12.3		
2024 and thereafter		105.6		
Total gross unearned insurance premiums	\$	176.0		

The following table presents a schedule of net written premiums and net earned premiums included in White Mountains's HG Global/BAM segment for the years ended December 31, 2018, 2017 and 2016:

Millions	December 31, 2018		Decem	ber 31, 2017	December 31, 2016		
Written premiums:							
Direct	\$	44.8	\$	63.2	\$	38.6	
Assumed		8.1				_	
Net written premiums	\$	52.9	\$	63.2	\$	38.6	
Earned premiums:							
Direct	\$	13.6	\$	9.4	\$	5.9	
Assumed		.3		_		_	
Net earned premiums	\$	13.9	\$	9.4	\$	5.9	

In April 2018, BAM entered into a collateralized financial guarantee excess of loss reinsurance agreement with Fidus Re, Ltd. ("Fidus Re"), a Bermuda based special purpose insurer created solely to provide reinsurance protection to BAM. Fidus Re was capitalized by the issuance of \$100.0 million of insurance linked securities. The proceeds from issuance were placed in a collateral trust supporting Fidus Re's obligations to BAM. The insurance linked securities were issued by Fidus Re with an initial term of twelve years and are callable five years after the date of issuance. Under the agreement, BAM retains the first \$165.0 million of aggregate losses, before giving effect to HG's reinsurance coverage, on the ceded business. Fidus Re reinsures 90% of aggregate losses exceeding \$165.0 million on a portion of BAM's financial guarantee portfolio up to a total reimbursement of \$100 million. The aggregate loss limit under the agreement is \$276.1 million. The agreement is accounted for using deposit accounting and any related financing expenses are recorded in general and administrative expenses as the agreement does not meet the risk transfer requirements necessary to be accounted for as reinsurance.

In November 2018, BAM entered into a 100% quota share facultative reinsurance agreement under which it assumed a portfolio of municipal bond guarantee contracts with a par value of \$2.2 billion. None of the contracts assumed were non-performing and no loss reserves have been established for any of the contracts, either at the transaction date or subsequent thereto. The agreement, which covers future claims exposure only, meets the risk transfer criteria under ASC 944-20, *Insurance Activities* and accordingly has been accounted for as reinsurance.

Note 9. Earnings Per Share

White Mountains calculates earnings per share using the two-class method, which allocates earnings between common shares and unvested restricted common shares. Both classes of shares participate equally in dividends and earnings on a per share basis. Basic earnings per share amounts are based on the weighted average number of common shares outstanding adjusted for unvested restricted common shares.

The following table presents the Company's computation of earnings per share from continuing operations for the years ended December 31, 2018, 2017 and 2016. See **Note 19**—"**Held for Sale and Discontinued Operations**".

	Year Ended December 31,					
		2018		2017		2016
Basic and diluted earnings per share numerators (in millions):						
Net (loss) income attributable to White Mountains's common shareholders	\$	(141.2)	\$	627.2	\$	401.8
Less: total (loss) income from discontinued operations, net of tax		(17.2)		577.5		523.4
Net (loss) income from continuing operations attributable to White Mountains's common shareholders		(124.0)		49.7		(121.6)
Allocation of earnings (losses) to participating restricted common shares (1)		1.4		(.7)		1.5
Basic and diluted (losses) earnings per share numerators	\$	(122.6)	\$	49.0	\$	(120.1)
Basic earnings per share denominators (in thousands):						
Total average common shares outstanding during the period		3,382.5		4,293.8		5,014.9
Average unvested restricted common shares (2)		(40.1)		(54.3)		(64.8)
Basic (losses) earnings per share denominator		3,342.4		4,239.5		4,950.1
Diluted earnings per share denominator (in thousands):						
Total average common shares outstanding during the period		3,382.5		4,293.8		5,018.1
Average unvested restricted common shares (2)		(40.1)		(54.3)		(64.8)
Diluted (losses) earnings per share denominator (3)		3,342.4		4,239.5		4,953.3
Basic and diluted earnings per share (in dollars) - continuing operations:						
Distributed earnings - dividends declared and paid	\$	1.00	\$	1.00	\$	1.00
Undistributed (losses) earnings	\$	(37.67)	\$	10.56	\$	(25.26)
Basic and diluted (losses) earnings per share	\$	(36.67)	\$	11.56	\$	(24.26)

⁽¹⁾ Restricted shares issued by White Mountains receive dividends, and therefore, are considered participating securities.

The following table presents the undistributed net earnings (losses) from continuing operations for the years ended December 31, 2018, 2017 and 2016. See Note 19 — "Held for Sale and Discontinued Operations".

	Year Ended December 31,								
Millions		2018		2017		2016			
Undistributed net earnings - continuing operations:									
Net (loss) income attributable to White Mountains's common shareholders, net of restricted common share amounts	\$	(122.6)	\$	49.0	\$	(120.1)			
Dividends declared, net of restricted common share amounts (1)		(3.7)		(4.5)		(5.4)			
Total undistributed net (losses) earnings, net of restricted common share amounts	\$	(126.3)	\$	44.5	\$	(125.5)			

⁽¹⁾ Restricted shares issued by White Mountains receive dividends, and therefore, are considered participating securities.

⁽²⁾ Restricted shares outstanding vest either in equal annual installments or upon a stated date. See Note 10 — "Employee Share-Based Incentive Compensation Plans".

⁽³⁾ The diluted earnings (loss) per share denominator for the year ended December 31, 2016, includes the impact of 40,000 common shares issuable upon exercise of the non-qualified options outstanding, which resulted in 3,217 incremental shares outstanding over the period.

Note 10. Employee Share-Based Incentive Compensation Plans

White Mountains's share-based incentive compensation plans are designed to incentivize key employees to maximize shareholder value over long periods of time. White Mountains believes that this is best pursued by utilizing a pay-for-performance program that closely aligns the financial interests of management with those of its shareholders. White Mountains accomplishes this by emphasizing highly variable long-term compensation that is contingent on performance over a number of years rather than entitlements. White Mountains expenses all its share-based compensation. As a result, White Mountains's calculation of its owners' returns includes the expense of all outstanding share-based compensation awards.

Incentive Compensation Plans

White Mountains's Long-Term Incentive Plan (the "WTM Incentive Plan") provides for grants of various types of share-based and non-share-based incentive awards to key employees and directors of White Mountains. The WTM Incentive Plan was adopted by the Board, was approved by the Company's sole shareholder in 1985 and was subsequently amended by its shareholders in 1995, 2001, 2003, 2005, 2010 and 2013. Share-based incentive awards that may be granted under the plan include performance shares, restricted shares, incentive stock options and non-qualified stock options ("Non-Qualified Options").

Performance Shares

Performance shares are designed to reward employees for meeting company-wide performance targets. Performance shares are conditional grants of a specified maximum number of common shares or an equivalent amount of cash. Awards generally vest at the end of a three-year service period, are subject to the attainment of pre-specified performance goals, and are valued based on the market value of common shares at the time awards are paid. Performance shares earned under the WTM Incentive Plan are typically paid in cash but may be paid in common shares. Compensation expense is recognized for the vested portion of the awards over the related service periods. The level of payout ranges from zero to two times the number of shares initially granted, depending on White Mountains's financial performance. Performance shares become payable at the conclusion of a performance cycle (typically three years) if pre-defined financial targets are met. The performance measures used for determining performance share payouts are growth in White Mountains's adjusted book value per share and intrinsic value per share. Intrinsic value per share is generally calculated by adjusting adjusted book value per share for differences between the adjusted book value of certain assets and liabilities and White Mountains's estimate of their underlying intrinsic values.

The following table presents performance share activity for the years ended December 31, 2018, 2017 and 2016 for performance shares granted under the WTM Incentive Plan:

	Year Ended December 31,											
	20	18		20		2016						
\$ in Millions	Target Performance Shares Outstanding		Accrued Expense	Target Performance Shares Outstanding		Accrued Expense	Target Performance Shares Outstanding		Accrued Expense			
Beginning of period	50,515	\$	45.8	80,353	\$	42.4	93,654	\$	57.7			
Shares paid or expired (1)	(23,186)		(28.4)	(30,838)		(21.9)	(36,294)		(41.0)			
New grants	14,105		_	17,710		_	22,615					
Forfeitures (2)	(818)		.1	(16,710)		(9.3)	378		.5			
Expense recognized			14.2	_		34.6	_		25.2			
End of period (3)	40,616	\$	31.7	50,515	\$	45.8	80,353	\$	42.4			

WTM performance share payments in 2018 for the 2015-2017 performance cycle, which were paid in March 2018 ranged from 145% to 147% of target. WTM performance share payments in 2017 for the 2014-2016 performance cycle, which were paid in March 2017 ranged from 34% to 76% of target. WTM performance shares payments in 2016 for the 2013-2015 performance cycle ranged from 140% to 142% of target.

⁽²⁾ Amounts include changes in assumed forfeitures, as required under GAAP.

Outstanding performance share awards as of December 31, 2018, 2017 and 2016 exclude 0, 2,195 and 7,315 unvested performance shares awards for employees of discontinued operations.

For the 2015-2017 and 2014-2016 performance cycle, all performance shares earned were settled in cash. For the performance shares earned in the 2013-2015 performance cycle, the Company issued 5,000 common shares and settled the remainder in cash. If the outstanding performance shares had vested on December 31, 2018, the total additional compensation cost to be recognized would have been \$13.8 million, based on accrual factors as of December 31, 2018 (common share price and payout assumptions).

The following table presents performance shares outstanding and accrued expense for performance shares awarded under the WTM Incentive Plan as of December 31, 2018 for each performance cycle:

\$ in Millions	Target Performance Shares Outstanding	Accrued Expense		
Performance cycle:				
2018 - 2020	13,450	\$ 3.8		
2017 – 2019	14,070	11.9		
2016 – 2018	13,715	16.5		
Sub-total	41,235	32.2		
Assumed forfeitures	(619)	(.5)		
Total	40,616	\$ 31.7		

For the 2018-2020 performance cycle, the targeted performance goal for full payment of outstanding performance shares granted under the WTM Incentive Plan is 6% average growth in adjusted book value per share and intrinsic value per share. Average growth of 2% or less would result in no payout and average growth of 10% or more would result in a payout of 200%.

For the 2017-2019 performance cycle, the targeted performance goal for full payment of outstanding performance shares granted under the WTM Incentive Plan to non-investment personnel is 5% average growth in adjusted book value per share and intrinsic value per share. Average growth of 1% or less would result in no payout and average growth of 9% or more would result in a payout of 200%.

For the 2016-2018 performance cycle, the targeted performance goal for full payment of outstanding performance shares granted under the WTM Incentive Plan to non-investment personnel is 4% average growth in adjusted book value per share and intrinsic value per share. Average growth of 0% or less would result in no payout and average growth of 8% or more would result in a payout of 200%.

For investment personnel, for the periods ended December 31, 2016 and 2017, the targeted performance goals for full payment of outstanding performance shares granted under the WTM Incentive Plan are based one-third on average growth in adjusted book value per share and intrinsic value per share (as described above) and two-thirds on achieving a total return on invested assets as measured against metrics based on the 10-year U.S. Treasury Note. For periods after December 31, 2017, the targeted performance goals for full payment of outstanding performance shares granted under the WTM Incentive Plan are based on the same performance goals described above for non-investment personnel.

Restricted Shares

Restricted shares are grants of a specified number of common shares that generally vest at the end of a three-year service period. The following table presents the unrecognized compensation cost associated with the outstanding restricted share awards under the WTM Incentive Plan for the years ended December 31, 2018, 2017 and 2016:

				Year Ended I	Decem	ber 31,			
	20	18		20	17		20	16	
\$ in Millions	Restricted Shares		amortized e Date Fair Value	Restricted Shares		amortized e Date Fair Value	Restricted Shares		amortized e Date Fair Value
Non-vested,									
Beginning of period	53,755	\$	14.3	70,620	\$	19.7	70,675	\$	15.7
Issued	14,105		11.4	17,985		16.3	25,365		20.2
Vested	(25,381)		_	(28,846)			(24,620)		
Forfeited	(969)		(.2)	(6,004)		(3.5)	(800)		(.3)
Expense recognized	_		(13.0)	_		(18.2)	_		(15.9)
End of period (1)	41,510	\$	12.5	53,755	\$	14.3	70,620	\$	19.7

⁽¹⁾ Outstanding restricted share awards as of December 31, 2018, 2017 and 2016 include 0, 2,195, and 5,235 unvested restricted shares for employees of Sirius Group.

During 2018, White Mountains issued 13,450 restricted shares that vest on January 1, 2021, 290 restricted shares that vest on January 1, 2020 and 365 restricted shares that vest on January 1, 2019. During 2017, White Mountains issued 17,485 restricted shares that vest on January 1, 2020, 250 restricted shares that vest on January 1, 2019 and 250 restricted shares that vest on January 1, 2018. During 2016, White Mountains issued 24,615 restricted shares that vest on January 1, 2019 and 750 restricted shares that vest on January 1, 2018. The unrecognized compensation cost as of December 31, 2018 is expected to be recognized ratably over the remaining vesting periods.

Non-Qualified Options

As of January 20, 2017, the 125,000 Non-Qualified Options issued to the Company's former Chairman and CEO had been exercised. During the first quarter of 2017, 40,000 Non-Qualified Options, with an intrinsic value of \$4.4 million, were exercised in exchange for 5,142 common shares with an equal total market value. During 2016, 5,000 Non-Qualified Options, with an intrinsic value of \$0.4 million, were exercised at \$742 per common share and 80,000 Non-Qualified Options, with an intrinsic value of \$8.4 million, were exercised in exchange for 9,930 common shares with an equal total market value. Intrinsic value represents the difference between the market price of the Company's common shares at the date of exercise and the fixed strike price of \$742 per common share. The Non-Qualified Options were fully amortized as of 2011.

MediaAlpha Class B Unit Awards

MediaAlpha has issued Class B unit awards to certain employees. The units entitle the award recipient to participate in distributions from MediaAlpha, subject to a cumulative distribution threshold, which is a performance condition, and a service period. The grant date fair value of the awards is determined when it is deemed probable that the distribution threshold will be met. The service period ranges from 36 months to 48 months. For 2018, MediaAlpha recognized \$11.7 million of compensation expense for the vested portion of the awards for which achievement of the performance award was deemed probable, and \$3.3 million of unearned compensation expense for unvested awards, which will be recognized over the remaining service periods of the awards.

Note 11. Common Shareholders' Equity and Non-controlling Interests

Common Shares Repurchased and Retired

During the past several years, White Mountains's board of directors authorized the Company to repurchase its common shares, from time to time, subject to market conditions. Shares may be repurchased on the open market or through privately negotiated transactions. The repurchase authorizations do not have a stated expiration date. As of December 31, 2018, White Mountains may repurchase an additional 635,705 shares under these board authorizations. In addition, from time to time White Mountains has also repurchased its common shares through tender offers that were separately authorized by its board of directors.

During 2018, the Company repurchased 592,458 common shares for \$519.4 million at an average share price of \$877, which were comprised of 582,493 common shares repurchased under the board authorizations for \$511.0 million at an average share price of \$877 and 9,965 common shares repurchased pursuant to employee benefit plans. Shares repurchased pursuant to employee benefit plans do not fall under the board authorizations referred to above.

During 2017, the Company repurchased 832,725 common shares for \$723.9 million at an average share price of \$869, which were comprised of 821,732 common shares repurchased under the board authorizations for \$713.1 million at an average share price of \$870 and 10,993 common shares repurchased pursuant to employee benefit plans.

During 2016, the Company repurchased 1,106,145 common shares for \$887.2 million at an average share price of \$802, which were comprised of 1,098,123 common shares repurchased under the board authorizations for \$881.4 million at an average share price of \$803 and 8,022 common shares repurchased pursuant to employee benefit plans.

Common Shares Issued

During 2018, the Company issued a total of 16,377 common shares, which consisted of 14,105 restricted shares to key personnel and 2,272 shares issued to directors of the Company.

During 2017, the Company issued a total of 25,086 common shares, which consisted of 17,985 restricted shares to key personnel, 5,142 shares issued to the Company's former Chairman and CEO as a result of exercised options, and 1,959 shares issued to directors of the Company.

During 2016, the Company issued a total of 47,030 common shares, which consisted of 25,365 restricted shares issued to key personnel, 14,930 shares issued to the Company's former Chairman and CEO as a result of exercised options, 5,000 shares issued in satisfaction of performance shares and 1,735 shares issued to directors of the Company.

Dividends on Common Shares

For the years ended December 31, 2018, 2017 and 2016, the Company declared and paid cash dividends totaling \$3.8 million, \$4.6 million and \$5.4 million (or \$1.00 per common share).

Non-controlling Interests

Non-controlling interests consist of the ownership interests of non-controlling shareholders in consolidated entities and are presented separately on the balance sheet.

The following table presents the balance of non-controlling interests included in White Mountains's total equity and the related percentage of each consolidated entity's total equity owned by non-controlling shareholders as of December 31, 2018 and 2017:

	December 3	31, 20	18	December 31, 2017				
\$ in Millions	Non-controlling Percentage	Non-controlling Equity		Non-controlling Percentage]	Non-controlling Equity		
Other, excluding BAM								
HG Global	3.1 %	\$	14.5	3.1 %	5 \$	15.9		
NSM	4.5		13.6	_				
MediaAlpha	39.0		16.2	35.7		13.1		
Buzz	22.9		1.1	22.9		2.5		
Other NSM	13.4		.3					
Total other, excluding BAM			45.7			31.5		
BAM	100.0		(170.6)	100.0		(163.2)		
Total non-controlling interests		\$	(124.9)		\$	(131.7)		

Note 12. Statutory Capital and Surplus

White Mountains's insurance operations are subject to regulation and supervision in each of the jurisdictions where they are domiciled and licensed to conduct business. Generally, regulatory authorities have broad supervisory and administrative powers over such matters as licenses, standards of solvency, premium rates, policy forms, investments, security deposits, methods of accounting, form and content of financial statements, minimum capital and surplus requirements, dividends and other distributions to shareholders, periodic examinations and annual and other report filings. In general, such regulation is for the protection of policyholders rather than shareholders.

The Insurance Act 1978 of Bermuda and related regulations, as amended ("Insurance Act"), regulates the insurance business of Bermuda-domiciled insurers. Under the Insurance Act, insurers are required to maintain available statutory capital and surplus at a level equal to or in excess of its enhanced capital requirement which is established by reference to either a Bermuda Solvency Capital Requirement ("BSCR") model or an approved internal capital model. Generally, the Bermuda Monetary Authority ("BMA") has broad supervisory and administrative powers over such matters as licenses, standards of solvency, investments, methods of accounting, form and content of financial statements, minimum capital and surplus requirements, and annual and other report filings.

HG Global/BAM

HG Re is a Special Purpose Insurer under Bermuda insurance regulations and is subject to regulation and supervision by the BMA. As of December 31, 2018, HG Re had statutory capital and surplus of \$698.9 million. As a Special Purpose Insurer, HG Re has a nominal minimum regulatory capital requirement of \$1.

BAM is domiciled in New York and is subject to regulation by the NYDFS. New York financial guarantee insurance law establishes single risk and aggregate limits with respect to insured obligations insured by financial guarantee insurers. BAM's statutory net loss for the years ended December 31, 2018, 2017 and 2016 was \$34.6 million, \$25.4 million and \$32.7 million. BAM's members' surplus, as reported to regulatory authorities as of December 31, 2018, was \$413.7 million, which exceeds the minimum members' surplus necessary for BAM to maintain its New York State financial guarantee insurance license of \$66.0 million.

Dividend Capacity

There are no restrictions under Bermuda law or the law of any other jurisdiction on the payment of dividends from retained earnings by White Mountains, provided that after the payment of any dividend, the Company would continue to be able to pay its liabilities as they become due and the realizable value of the Company's assets would remain greater that its liabilities. Following is a description of the dividend capacity of White Mountains's reinsurance and other operating subsidiaries:

HG Global/BAM

As of December 31, 2018, HG Global had \$619.0 million face value of preferred shares outstanding, of which White Mountains owned 96.9%. Holders of the HG Global preferred shares receive cumulative dividends at a fixed annual rate of 6.0% on a quarterly basis, when and if declared by HG Global. HG Global did not declare or pay any preferred dividends in 2018. As of December 31, 2018, HG Global has accrued \$288.1 million of dividends payable to holders of its preferred shares, \$278.5 million of which is payable to White Mountains and eliminated in consolidation. As of December 31, 2018, HG Global and its subsidiaries had \$2.2 million of cash outside of HG Re.

HG Re is a Special Purpose Insurer subject to regulation and supervision by the BMA, but does not require regulatory approval to pay dividends. However, HG Re's dividend capacity is limited to amounts held outside of the Collateral Trusts pursuant to the FLRT with BAM. As of December 31, 2018, HG Re had statutory capital and surplus of \$698.9 million, \$757.4 million of assets held in the Collateral Trusts pursuant to the FLRT with BAM and \$3.0 million of cash and investments outside the Collateral Trusts.

Effective January 1, 2014, HG Global and BAM agreed to change the interest rate on the BAM Surplus Notes for the five years ending December 31, 2018 from a fixed rate of 8.0% to a variable rate equal to the one-year U.S. treasury rate plus 300 basis points, set annually, which was 4.6% for 2018 and is 5.7% for 2019. During 2018, BAM exercised its option to extend the variable rate period on the BAM Surplus Notes for three years to December 31, 2021. At the end of the variable rate period, the interest rate will be fixed at the higher of the then current variable rate or 8.0%. BAM is required to seek regulatory approval to pay interest and principal on the BAM Surplus Notes only to the extent that its capital resources continue to support its outstanding obligations, business plan and rating. No payment of interest or principal on the BAM Surplus Notes may be made without the approval of the New York State Department of Financial Services ("NYDFS").

During 2017, HG Global and BAM agreed to change the payment terms of the Series B Notes, so that payments will reduce principal and accrued interest on a pro rata basis, consistent with the payment terms on the Series A Notes. The terms of the Series B Notes had previously stipulated that payments would first reduce interest owed, then reduce principal owed once all accrued interest had been paid. The NYDFS approved the change during the third quarter of 2017. During 2018 and 2017, BAM repaid \$17.7 million and \$4.0 million of the BAM Surplus Notes and \$5.3 million and \$1.0 million of accrued interest.

NSM

During the period from May 11, 2018, the date of White Mountains's acquisition of NSM, through December 31, 2018, NSM did not pay any dividends to its shareholders. As of December 31, 2018, NSM had \$16.2 million of net unrestricted cash.

MediaAlpha

During 2018, MediaAlpha paid \$15.9 million of dividends, of which \$9.8 million was paid to White Mountains. As of December 31, 2018, MediaAlpha had \$5.7 million of net unrestricted cash.

Other Operations

During 2018, White Mountains paid a \$3.8 million common share dividend. As of December 31, 2018, the Company and its intermediate holding companies held \$536.0 million of net unrestricted cash, short-term investments and fixed maturity investments, \$925.6 million of common equity securities and \$67.3 million of other long-term investments included in its Other Operations segment.

Note 13. Segment Information

White Mountains has determined that its reportable segments are HG Global/BAM, NSM, MediaAlpha and Other Operations.

As a result of the OneBeacon, Sirius Group and Tranzact transactions, the results of operations for OneBeacon and Sirius Group, previously reported in their own respective segments, and Tranzact, previously reported in the Other Operations segment, have been classified as discontinued operations and are now presented, net of related income taxes, as such in the statement of operations and comprehensive income. See **Note 19**—"**Held for Sale and Discontinued Operations**".

Beginning in the second quarter of 2017, MediaAlpha's results have been presented as a separate segment within White Mountains's consolidated financial statements. Prior year amounts have been reclassified to conform to the current period's presentation.

White Mountains has made its segment determination based on consideration of the following criteria: (i) the nature of the business activities of each of the Company's subsidiaries and affiliates; (ii) the manner in which the Company's subsidiaries and affiliates are organized; (iii) the existence of primary managers responsible for specific subsidiaries and affiliates; and (iv) the organization of information provided to the chief operating decision makers and the Board of Directors.

The HG Global/BAM segment consists of White Mountains's investment in HG Global and the consolidated results of BAM. BAM is a municipal bond insurer domiciled in New York that was established to provide insurance on municipal bonds issued to support essential U.S. public purposes such as schools, utilities, core governmental functions and existing transportation facilities. HG Global, together with its subsidiaries, provided the initial capitalization of BAM through the purchase of BAM Surplus Notes. HG Global also provides up to 15%-of-par, first loss reinsurance protection for policies underwritten by BAM. For capital appreciation bonds, par is adjusted to the estimated equivalent par value for current interest paying bonds. BAM's results are attributed to non-controlling interests.

NSM is a full-service MGU and program administrator for specialty property and casualty insurance. The company places insurance in niche sectors such as specialty transportation, social services and real estate. On behalf of its insurance carrier partners, NSM manages all aspects of the placement process, including product development, marketing, underwriting, policy issuance and claims. NSM earns commissions based on the volume and profitability of the insurance that it places. NSM does not take insurance risk.

MediaAlpha is a leading marketing technology company that develops technology that enables the programmatic buying and selling of vertical-specific, performance-based media between advertisers (buyers of advertising inventory) and publishers (sellers of advertising inventory) through cost-per-click, cost-per-call and cost-per-lead pricing models. MediaAlpha's media buying platform enables advertisers to create and automate data-driven bidding strategies designed to improve the efficiency and enhance overall performance of their marketing campaigns that target high-intent consumers at the time and place they are ready to purchase. MediaAlpha's publisher platform is used by publishers to sell their vertical-specific, performance-based media to advertisers through transparent, programmatic, auction-based marketplaces.

White Mountains's Other Operations segment consists of the Company and its wholly-owned subsidiary, WM Capital, its other intermediate holding companies, its investment management subsidiary, WM Advisors, investment assets managed by WM Advisors, its interests in PassportCard/DavidShield and Kudu, certain other consolidated and unconsolidated entities and certain other strategic investments. The consolidated entities consist of Wobi and Buzz. White Mountains's Other Operations segment also includes its variable annuity reinsurance business, WM Life Re.

Significant intercompany transactions among White Mountains's segments have been eliminated herein. The following tables present the financial information for White Mountains's segments:

Millions	HG BA	Global/ AM ⁽¹⁾	1	NSM	Me	diaAlpha	Other Operations		Total
Year Ended December 31, 2018									
Earned insurance premiums	\$	13.9	\$	_	\$	_	\$ _	\$	13.9
Net investment income		16.7		_		_	42.3		59.0
Net realized and unrealized investment losses		(7.5)		_		_	(100.8)		(108.3)
Advertising and commission revenues (2)				94.7		295.5	4.1		394.3
Other revenues		1.2		6.9		1.6	.5		10.2
Total revenues		24.3		101.6		297.1	(53.9)		369.1
Insurance acquisition expenses		5.3				_	_		5.3
Other underwriting expenses		.4				_	_		.4
Cost of sales		_				245.0	3.7		248.7
General and administrative expenses		48.0		61.6		31.7	94.4		235.7
Broker commission expense				28.9					28.9
Amortization of other intangible assets				8.3		10.3	.2		18.8
Interest expense				8.0		1.2	.3		9.5
Total expenses		53.7		106.8		288.2	98.6	_	547.3
Pre-tax (loss) income	\$	(29.4)	\$	(5.2)	\$	8.9	\$ (152.5)	\$	(178.2)

⁽¹⁾ BAM manages its affairs on a statutory accounting basis. BAM's statutory surplus includes the BAM Surplus Notes and is not reduced by accruals of interest expense on the BAM Surplus Notes. BAM's statutory surplus is reduced only after a payment of principal or interest has been approved by the NYDFS.

⁽²⁾ As of December 31, 2018, approximately 29% of MediaAlpha's advertising revenue was associated with one customer. As of December 31, 2018, approximately 33% of NSM's commission revenue was associated with one single carrier.

Millions	HG Glo	bal/BAM ⁽¹⁾	MediaAlpha	Other Operations	Total
Year Ended December 31, 2017					
Earned insurance premiums	\$	9.4	\$ —	\$ 1.0	\$ 10.4
Net investment income		12.3	_	43.7	56.0
Net realized and unrealized investment gains		.6	_	132.7	133.3
Advertising and commission revenues (2)		_	163.2	3.8	167.0
Other revenues		1.0	_	6.1	7.1
Total revenues		23.3	163.2	187.3	373.8
Losses and LAE		_	_	1.1	1.1
Insurance acquisition expenses		4.0	_	.1	4.1
Other underwriting expenses		.4			.4
Cost of sales		_	135.9	3.5	139.4
General and administrative expenses		42.9	16.2	148.9	208.0
Amortization of other intangible assets		_	10.5	.2	10.7
Interest expense		_	1.0	1.3	2.3
Total expenses		47.3	163.6	155.1	366.0
Pre-tax (loss) income	\$	(24.0)	\$ (.4)	\$ 32.2	\$ 7.8

⁽¹⁾ BAM manages its affairs on a statutory accounting basis. BAM's statutory surplus includes the BAM Surplus Notes and is not reduced by accruals of interest expense on the BAM Surplus Notes. BAM's statutory surplus is reduced only after a payment of principal or interest has been approved by the NYDFS.

⁽²⁾ As of December 31, 2017, approximately 27% of MediaAlpha's advertising revenue was associated with one customer.

Millions	HG Glo	bal/BAM ⁽¹⁾	Med	iaAlpha	-	ther rations	Total
Year Ended December 31, 2016							
Earned insurance premiums	\$	5.9	\$	_	\$	7.5	\$ 13.4
Net investment income		9.0		_		23.1	32.1
Net realized and unrealized investment gains (losses)		.7		_		(28.1)	(27.4)
Advertising and commission revenues (2)				116.5		1.8	118.3
Other revenues		1.1		_		20.2	21.3
Total revenues		16.7		116.5		24.5	157.7
Losses and LAE		_		_		8.0	8.0
Insurance acquisition expenses		3.4		_		2.2	5.6
Other underwriting expenses		.4		_		_	.4
Cost of sales				97.8		4.2	102.0
General and administrative expenses		39.6		11.8		124.1	175.5
Amortization of other intangible assets				10.1		.4	10.5
Interest expense				.9		2.1	3.0
Total expenses		43.4		120.6		141.0	305.0
Pre-tax loss	\$	(26.7)	\$	(4.1)	\$	(116.5)	\$ (147.3)

⁽¹⁾ BAM manages its affairs on a statutory accounting basis. BAM's statutory surplus includes the BAM Surplus Notes and is not reduced by accruals of interest expense on the BAM Surplus Notes. BAM's statutory surplus is reduced only after a payment of principal or interest has been approved by the NYDFS

⁽²⁾ As of December 31, 2016, approximately 24% of MediaAlpha's advertising revenue was associated with one customer.

Millions Selected Balance Sheet Data	Н	G Global/ BAM	NSM	Me	diaAlpha	Other Operations	Held for Sale	Total
December 31, 2018:								
Total investments	\$	768.3	\$ 1.7	\$	_	\$ 1,772.9	\$ —	\$ 2,542.9
Total assets	\$	816.2 (1)	\$ 627.0	\$	88.4	\$ 1,827.7 (2)	\$ 3.3	\$ 3,362.6
Total liabilities	\$	212.5 (2)	\$ 314.8	\$	46.9	\$ 70.2	\$ —	\$ 644.4
Total White Mountains's common shareholders' equity	\$	759.8 (2)	\$ 298.3	\$	25.3	\$ 1,756.4 (2)	\$ 3.3	\$ 2,843.1
Non-controlling interest	\$	(156.1)	\$ 13.9	\$	16.2	\$ 1.1	\$ —	\$ (124.9)
December 31, 2017:								
Total investments	\$	693.4	\$ _	\$	_	\$ 2,687.3	\$ —	\$ 3,380.7
Total assets	\$	747.4 (1)	\$ _	\$	96.5	\$ 2,812.0 (2)	\$ 3.3	\$ 3,659.2
Total liabilities	\$	167.0 (2)	\$ _	\$	59.8	\$ 71.6	\$ —	\$ 298.4
Total White Mountains's common shareholders' equity	\$	727.7 (2)	\$ _	\$	23.6	\$ 2,737.9 (2)	\$ 3.3	\$ 3,492.5
Non-controlling interest	\$	(147.3)	\$ _	\$	13.1	\$ 2.5	\$ —	\$ (131.7)

⁽¹⁾ As of December 2018 and 2017, BAM's total assets reflected the elimination of \$481.3 and \$499.0 of BAM Surplus Notes issued to HG Global and its subsidiaries, and \$143.7 and \$126.0 in accrued interest related to the BAM Surplus Notes.

⁽²⁾ HG Global preferred dividends payable to White Mountains's subsidiaries is eliminated in White Mountains's consolidated financial statements. For segment reporting, the HG Global preferred dividends payable to White Mountains's subsidiaries included within the HG Global/BAM segment are eliminated against the offsetting receivable included within the Other Operations segment and therefore added back to White Mountains's common shareholders' equity within the HG Global/BAM segment. As of December 31, 2018 and 2017, the HG Global preferred dividends payable to White Mountains's subsidiaries was \$278.5 and \$227.9.

Note 14. Investments in Unconsolidated Entities

White Mountains's investments in unconsolidated entities are included within other long-term investments and consist of investments in common equity securities or similar instruments, which give White Mountains the ability to exert significant influence over the investee's operating and financial policies ("equity method eligible unconsolidated entities"). Such investments may be accounted for under either the equity method or, alternatively, White Mountains may elect to account for them under the fair value option.

The following table presents the carrying values of investments in equity method eligible unconsolidated entities recorded within other long-term investments:

	December 31,								
Millions		2018		2017					
Equity method eligible unconsolidated entities, at fair value	<u> </u>	138.1	\$	58.0					
Investments accounted for under the equity method		1.3		4.6					
Total investments in equity method eligible unconsolidated entities		139.4		62.6					
Other unconsolidated investments (1)		186.2		146.2					
Total other long-term investments	\$	325.6	\$	208.8					

⁽¹⁾ Consists of other long-term investments that are not equity method eligible.

The following table presents White Mountains's investments in equity method eligible unconsolidated entities as of December 31, 2018 and 2017:

	Ownersh	ip Interest	_
Investee	December 31, 2018	December 31, 2017	Instrument Held
PassportCard/DavidShield (1)	50.0%	50% / 0%	Common shares
Kudu	49.5%	_	Units
durchblicker	45.0%	45.0%	Common shares
Tuckerman Capital Fund III, L.P.	18.5%	21.3%	Limited partnership interest
Compare.com	18.4%	22.1%	Common shares

⁽¹⁾ As of December 31, 2018, White Mountains's ownership interest in DavidShield comprised a 50% direct interest and White Mountains's ownership interest in PassportCard comprised a 25% direct ownership interest and a 25% indirect interest through DavidShield. As of December 31, 2017, White Mountains had no ownership in DavidShield and White Mountains's ownership interest in PassportCard comprised a 50% direct interest. See Note 2 — "Significant Transactions".

The following tables presents aggregated summarized financial information for White Mountains's investments in equity method eligible unconsolidated entities:

	December 31,								
Millions		2018							
Balance sheet data (1):									
Total assets	\$	218.8	\$	75.4					
Total liabilities	\$	46.7	\$	24.2					

⁽¹⁾ Financial data for durchblicker, Compare.com and Tuckerman Capital Fund III, L.P. is on a one-quarter lag.

	Year Ended December 31,										
Millions	2018			2017	2016						
Income statement data (1):											
Revenues	\$	134.1	\$	60.0	\$	32.9					
Expenses	\$	(110.1)	\$	(66.8)	\$	(76.4)					

⁽¹⁾ Financial data for durchblicker, Compare.com and Tuckerman Capital Fund III, L.P. is on a one-quarter lag.

Note 15. Variable Interest Entities

BAM

As a mutual insurance company, BAM is owned by its members. BAM charges an insurance premium on each municipal bond insurance policy it writes. A portion of the premium is a MSC and the remainder is a risk premium. In the event of a municipal bond refunding, the MSC from the original issuance can be reutilized, in effect serving as a credit against the total insurance premium on the refunding of the municipal bond. Issuers of debt insured by BAM are members of BAM so long as any of their BAM-insured debt is outstanding, and as members they have certain interests in BAM, including the right to vote for BAM's directors and to receive dividends in the future, if declared.

The equity at risk funded by BAM's members is not sufficient to fund its operations without the additional financial support provided by the BAM Surplus Notes and accordingly, BAM is considered to be a VIE.

At inception, BAM and HG Re also entered into the FLRT. HG Re provides first loss protection up to 15%-of-par outstanding on each municipal bond insured by BAM. For capital appreciation bonds, par is adjusted to the estimated equivalent par value for current interest paying bonds. In return, BAM cedes 60% of the risk premium charged for insuring the municipal bond, net of a ceding commission. HG Re's obligations under the FLRT are limited to the assets in the Regulation 114 Trust and the Supplemental Trust. Losses required to be reimbursed under the FLRT are subject to an aggregate limit equal to the assets held in the Collateral Trusts at any point in time. In addition, under the FLRT, HG Holdings Ltd, a subsidiary of HG Global, has the right to designate two directors for election to BAM's board of directors.

Since BAM is owned by its members, its equity and results of operations are included in non-controlling interests. However, White Mountains is required to consolidate BAM's results in its financial statements because BAM is a VIE for which White Mountains is the primary beneficiary.

Kudu

On February 5, 2018, White Mountains entered into an agreement to fund up to \$125.0 million in Kudu Investment Management, LLC ("Kudu"), a capital provider to asset management and wealth management firms. Kudu specializes in providing capital solutions to asset managers and registered investment advisers, for purposes including generational ownership transfers, management buyouts, acquisition and growth finance, and legacy partner liquidity.

White Mountains has determined that Kudu is a VIE but that White Mountains is not the primary beneficiary. White Mountains's ownership interest gives White Mountains the opportunity to exert significant influence over the significant financial and operating activities of Kudu. Accordingly, Kudu meets the criteria to be accounted for under the equity method. White Mountains has taken the fair value option for its investment in Kudu. White Mountains's investment in Kudu is measured at fair value using NAV as a practical expedient. Changes in the fair value of Kudu have been recorded in realized and unrealized investment gains. White Mountains's maximum loss in Kudu is limited to the amount invested. As of December 31, 2018, Kudu is recorded within other long-term investments at a carrying amount of \$30.7 million.

Note 16. Fair Value of Financial Instruments

White Mountains records its financial instruments at fair value with the exception of the NSM Bank Facility and the MediaAlpha Bank Facility, which are recorded as debt at face value less unamortized original issue discount.

The following tables presents the fair value and carrying value of these financial instruments as of December 31, 2018 and December 31, 2017:

	Decembe	r 31, 2	December 31, 2017				
Millions	Fair Value				Fair Value	Carrying Value	
NSM Bank Facility	\$ 176.1	\$	176.6	\$		\$	
MediaAlpha Bank Facility	\$ 14.6	\$	14.2	\$	23.9	\$	23.8

The fair value estimates for the NSM Bank Facility and the MediaAlpha Bank Facility have been determined based on a discounted cash flows approach and are considered to be Level 3 measurements.

Note 17. Transactions with Related Persons

During 2017, the Company repurchased shares from Franklin Mutual Advisers, a beneficial owner of the Company. On July 13, 2017, the Company repurchased 235,000 White Mountains common shares for \$850.00 per share, the market price at the time the agreement was reached.

During 2016, the Company repurchased shares from Franklin Mutual Advisers in two transactions. On April 19, 2016, the Company repurchased 325,000 White Mountains common shares for \$807.00 per share, the market price at the time the agreement was reached. On September 15, 2016, the Company repurchased 305,000 White Mountains common shares for \$820.00 per share, the market price at the time the agreement was reached.

Note 18. Commitments and Contingencies

White Mountains leases certain office spaces under non-cancellable operating leases that expire on various dates through 2022. Rental expense for all of White Mountains's locations was \$5.5 million, \$3.5 million and \$3.4 million for the years ended December 31, 2018, 2017 and 2016. White Mountains also has various other lease obligations that are immaterial in the aggregate. White Mountains's future annual minimum rental payments required under non-cancellable leases, which are primarily for office space, are \$6.6 million, \$4.9 million, \$4.2 million, and \$12.0 million for the years 2019, 2020, 2021 and 2022 and thereafter

White Mountains also has future binding commitments to fund certain other long-term investments. These commitments, which totaled \$170.2 million as of December 31, 2018, do not have fixed funding dates.

Legal Contingencies

White Mountains is subject to litigation and arbitration in the normal course of business. White Mountains considers the requirements of ASC 450 when evaluating its exposure to litigation and arbitration. ASC 450 requires that accruals be established for litigation and arbitration if it is probable that a loss has been incurred and it can be reasonably estimated. ASC 450 also requires that litigation and arbitration be disclosed if it is probable that a loss has been incurred or if there is a reasonable possibility that a loss may have been incurred. White Mountains does not have any current litigation that may have a material adverse effect on White Mountains's financial condition, results of operations or cash flows.

The following description presents significant legal contingencies, ongoing non-claims related litigation or arbitration as of December 31, 2018:

Esurance

On October 7, 2011, the Company completed the sale of its Esurance Holdings, Inc. and its subsidiaries and Answer Financial Inc. and its subsidiaries (collectively, "Esurance") to The Allstate Corporation ("Allstate") pursuant to a Stock Purchase Agreement dated as of May 17, 2011. Subject to specified thresholds and limits, the Company remains contingently liable to Allstate for specified matters related to the pre-closing period, including (a) losses of Esurance arising from extracontractual claims and claims in excess of policy limits, (b) certain corporate reorganizations effected to remove entities from Esurance that were not being sold in the transaction, and (c) certain tax matters, including certain net operating losses being less than stated levels.

Sirius Tax Contingency

A subsidiary of Sirius Group, which was sold by White Mountains in 2016, has been denied interest deductions by the Swedish Tax Authority ("STA") for tax years 2013-2016. In October 2018, the Swedish Administrative Court ruled against Sirius Group on its appeal of the Swedish Tax Agency's denial of certain interest deductions relating to periods prior to the sale of Sirius Group to CMI. In connection with the sale, White Mountains indemnified Sirius Group against the loss of certain tax attributes, including those related to these interest deductions. As a result, for the year ended December 31, 2018, White Mountains recorded a loss of \$17.3 million within net (loss) gain on sale of discontinued operations reflecting the value of these interest deductions. Sirius Group has appealed the decision to the Swedish Administrative Court of Appeal.

NSM Contingent Liability

In connection with White Mountains's acquisition of NSM, White Mountains and NSM entered into an agreement with American International Group, Inc. ("AIG") to facilitate a sale of NSM's U.S. collector car renewal rights owned by AIG to a third party by December 31, 2019. Under the terms of the agreement, if White Mountains and NSM are unable to facilitate a sale by December 31, 2019, AIG has the right to require NSM to purchase the renewal rights for \$82.5 million. The Company has guaranteed NSM's obligations under the agreement with AIG. The manner in which these obligations are ultimately discharged depends on a number of factors, including the market value of the renewal rights, the number of potential buyers and the current and prospective environment for U.S. collector car insurance. White Mountains believes that the estimated fair value of the renewal rights is equal to or greater than \$82.5 million and, accordingly, no accrual of a liability is necessary at December 31, 2018.

Note 19. Held for Sale and Discontinued Operations

OneBeacon

On September 28, 2017, Intact Financial Corporation completed its acquisition of OneBeacon in an all-cash transaction for \$18.10 per share. White Mountains received total proceeds of \$1.3 billion and recorded a gain of \$554.6 million, net of transaction costs. For 2017 through the closing date of the transaction, net income from discontinued operations related to OneBeacon was \$20.5 million. Net income from discontinued operations related to OneBeacon was \$108.6 million for the year ended December 31, 2016.

Star & Shield

On March 7, 2017, White Mountains completed the sale of Star & Shield and its investment in SSIE surplus notes to K2 Insurances LLC. White Mountains did not recognize any gain or loss on the sale.

Tranzact

On July 21, 2016, White Mountains completed the sale of Tranzact to an affiliate of Clayton, Dubilier & Rice, LLC and received net proceeds of \$221.3 million at closing. On October 5, 2016, White Mountains received additional proceeds of \$1.2 million following the release of the post-closing purchase price adjustment escrow. For the year ended December 31, 2016, White Mountains recorded \$51.9 million of gain from the sale of Tranzact in discontinued operations in the statement of operations.

Through July 21, 2016, Tranzact's results of operations are reported as discontinued operations and assets and liabilities held for sale within White Mountains's GAAP financial statements. For the year ended December 31, 2016, White Mountains recorded net income from discontinued operations of \$6.1 million from Tranzact. White Mountains recognized a \$21.4 million income tax benefit in continuing operations related to the reversal of a valuation allowance that resulted from the gain on the sale of Tranzact recognized within discontinued operations. This income tax benefit was recorded in continuing operations with an offsetting amount of net income tax expense recorded in discontinued operations, including \$30.2 million of income tax expense recorded to gain from sale of Tranzact in discontinued operations and \$8.8 million of income tax benefit recorded to net income from discontinued operations.

During 2017, White Mountains recorded a \$3.2 million increase to the gain from sale of Tranzact in discontinued operations as a result of state income tax expense.

Sirius Group

On April 18, 2016, White Mountains completed the sale of Sirius Group to CMI for approximately \$2.6 billion. Of this amount, \$161.8 million of this amount was used to purchase certain assets to be retained by White Mountains out of Sirius Group, including shares of OneBeacon. The amount paid at closing was based on an estimate of Sirius Group's closing date tangible common shareholder's equity. During 2016, White Mountains recorded \$363.2 million of gain from sale of Sirius Group in discontinued operations in the statement of operations and \$113.3 million in other comprehensive income from discontinued operations. During 2017, White Mountains recorded a \$0.7 million reduction to the gain from sale of Sirius Group as a result of a change to the valuation of the accrued incentive compensation payable to Sirius Group employees.

Through April 18, 2016, Sirius Group's results are reported as discontinued operations within White Mountains's GAAP financial statements. Net income (loss) from discontinued operations did not include investment gains (losses) from White Mountains's investment in OneBeacon and certain other investments that were held in the Sirius Group legal entities. For the year ended December 31, 2016, \$3.7 million of net investment income and net realized and unrealized investment gains (losses), net of related tax effects, that were included in the Sirius Group legal entities have been excluded from net income (loss) from discontinued operations. For the years ended December 31, 2016, White Mountains recorded \$4.3 million of net loss from discontinued operations and \$32.0 million of other comprehensive income from Sirius Group.

In October 2018, the Swedish Administrative Court ruled against Sirius Group on its appeal of the Swedish Tax Agency's denial of certain interest deductions relating to periods prior to the sale of Sirius Group to CMI. In connection with the sale, White Mountains indemnified Sirius Group against the loss of certain tax attributes, including those related to these interest deductions. As a result, for the year ended December 31, 2018, White Mountains recorded a \$17.3 million loss on sale of discontinued operations reflecting the value of these interest deductions. See **Note 18**—"Commitments and Contingencies".

Other

As of December 31, 2017, White Mountains has classified its Guilford, Connecticut property, which consists of an office building and adjacent land, as held for sale. As of December 31, 2018 and 2017, the property has been measured at its estimated fair value net of disposal costs of \$3.3 million. The related write down of \$3.7 million was recorded within other expenses during 2017.

Net Income (Loss) from Discontinued Operations

The following tables present the results of operations, including related income taxes associated with the business classified as discontinued operations. For the year ended December 31, 2017 and 2016, the amounts presented relate to OneBeacon, Sirius Group and Tranzact. The results of discontinued operations from Sirius Group and Tranzact up to the closing date of the transaction inure to White Mountains.

			Year En	ded De	cember 3	1, 2017	
Millions	On	eBeacon	Sirius (Group	Tran	zact	Total
Revenues							
Earned insurance premiums	\$	807.6	\$		\$		\$ 807.6
Net investment income		39.7					39.7
Net realized and unrealized investment gains		38.8					38.8
Other revenues		7.7					7.7
Total revenues		893.8				_	893.8
Expenses							
Loss and loss adjustment expenses		546.0					546.0
Insurance and reinsurance acquisition expenses		145.6					145.6
Other underwriting expenses		156.2					156.2
General and administrative expenses		21.2					21.2
Interest expense		10.0					10.0
Total expenses		879.0				_	879.0
Pre-tax income		14.8					14.8
Income tax benefit		5.7					5.7
Net income from discontinued operations		20.5				_	20.5
Gain (loss) from sale of discontinued operations, net of tax		554.5		(.7)		3.2	557.0
Total income (loss) from discontinued operations		575.0		(.7)		3.2	577.5
Change in foreign currency translation and other comprehensive income from discontinued operations, net of tax		.3		_			.3
Recognition of benefit plan assets and obligations from the sale of OneBeacon, net of tax		2.9		_		_	2.9
Comprehensive income (loss) from discontinued operations	\$	578.2	\$	(.7)	\$	3.2	\$ 580.7

			Year	r Ended Dec	cember 31, 2016	
Millions	O	neBeacon	Siri	us Group	Tranzact	Total
Revenues						
Earned insurance premiums	\$	1,100.6	\$	240.1	\$ —	\$ 1,340.7
Net investment income		50.6		14.4	_	65.0
Net realized and unrealized investment gains (losses)		37.7		(1.5)	_	36.2
Other revenues		5.5		.6	119.6	125.7
Total revenues		1,194.4		253.6	119.6	1,567.6
Expenses						
Loss and loss adjustment expenses		656.0		154.9	_	810.9
Insurance and reinsurance acquisition expenses		206.0		59.0	_	265.0
Other underwriting expenses		209.0		30.9		239.9
General and administrative expenses		14.2		10.4	116.7	141.3
Interest expense		13.1		7.9	3.2	24.2
Total expenses		1,098.3		263.1	119.9	1,481.3
Pre-tax income (loss)		96.1		(9.5)	(.3)	 86.3
Income tax benefit		12.5		3.1	6.4	22.0
Net income (loss) from discontinued operations		108.6		(6.4)	6.1	108.3
Gain from sale of discontinued operations, net of tax		_		363.2	51.9	415.1
Total income from discontinued operations		108.6		356.8	58.0	523.4
Change in foreign currency translation and other comprehensive income from discontinued operations, net of tax		1.0		32.0	_	33.0
Recognition of foreign currency translation from sale of Sirius Group, net of tax				113.3	_	113.3
Comprehensive income from discontinued operations	\$	109.6	\$	502.1	\$ 58.0	\$ 669.7

Net Change in Cash from Discontinued Operations

The transactions to purchase the investments in OneBeacon and other investments held by Sirius Group prior to the closing are presented in the statement of cash flows as net settlement of investment cash flows with discontinued operations. The following table presents the net change in cash associated with the businesses classified as discontinued operations:

	Year Ended December 31,							
Millions		2017		2016				
Net cash provided from operations	\$	157.0	\$	23.6				
Net cash provided from (used for) investing activities		3.0		241.4				
Net cash used for financing activities		(61.9)		(93.8)				
Net change in cash during the period		98.1		171.2				
Cash balances at beginning of period		70.5		245.4				
Net change in cash held for sale		(.9)		(.3)				
Cash sold as part of sale of consolidated subsidiaries		(167.7)		(345.8)				
Cash balances at end of period	\$		\$	70.5				

Earnings Per Share from Discontinued Operations

White Mountains calculates earnings per share using the two-class method, which allocates earnings between common and unvested restricted common shares. Both classes of shares participate equally in earnings on a per share basis. Basic earnings per share amounts are based on the weighted average number of common shares outstanding adjusted for unvested restricted common shares. Diluted earnings per share amounts are also impacted by the net effect of potentially dilutive common shares outstanding.

The following table presents the Company's computation of earnings per share for discontinued operations for the years ended December 31, 2018, 2017 and 2016:

	Year Ended December 31,						
	2018			2017		2016	
Basic and diluted earnings per share numerators (in millions):							
Net (loss) income attributable to White Mountains's common shareholders	\$	(141.2)	\$	627.2	\$	401.8	
Less: total (loss) income from continuing operations, net of tax		(124.0)		49.7		(121.6)	
Net (loss) income from discontinued operations attributable to White Mountains's common shareholders		(17.2)		577.5		523.4	
Allocation of earnings (losses) to participating restricted common shares (1)		0.2		(7.3)	(6.8		
Basic and diluted (losses) earnings per share numerators	\$	(17.0)	\$	570.2	\$	516.6	
Basic earnings per share denominators (in thousands):							
Total average common shares outstanding during the period	\$	3,382.5	\$	4,293.8	\$	5,014.9	
Average unvested restricted common shares (3)		(40.1)		(54.3)		(64.8)	
Basic earnings (losses) per share denominator	\$	3,342.4	\$	4,239.5	\$	4,950.1	
Diluted earnings per share denominator (in thousands):							
Total average common shares outstanding during the period	\$	3,382.5	\$	4,293.8	\$	5,018.1	
Average unvested restricted common shares (3)		(40.1)		(54.3)		(64.8)	
Diluted earnings (losses) per share denominator (4)	\$	3,342.4	\$	4,239.5	\$	4,953.3	
Basic (losses) earnings per share (in dollars) - discontinued operations:	\$	(5.09)	\$	134.50	\$	104.37	
Diluted (losses) earnings per share (in dollars) - discontinued operations:	\$	(5.09)	\$	134.50	\$	104.32	

⁽¹⁾ Restricted shares issued by White Mountains contain dividend participation features, and therefore, are considered participating securities.

⁽²⁾ Net earnings attributable to White Mountains's common shareholders, net of restricted share amounts, is equal to undistributed earnings for the years ended December 31, 2018, 2017 and 2016.

⁽³⁾ Restricted common shares outstanding vest either in equal annual installments or upon a stated date. See Note 10 — "Employee Share-Based Compensation Plans".

⁽⁴⁾ The diluted earnings per share denominator for the year ended December 31, 2016 includes the impact of 40,000 common shares issuable upon exercise of the non-qualified options outstanding, which resulted in 3,217 incremental shares outstanding over the period.

Note 20. Subsequent Events

MediaAlpha

On February 26, 2019, MediaAlpha completed the sale of a significant minority stake to Insignia Capital Group in connection with a recapitalization and cash distribution to existing equityholders. MediaAlpha also repurchased a portion of the holdings of existing equityholders. The transaction valued MediaAlpha at approximately \$350.0 million. White Mountains retained a 42% ownership interest in MediaAlpha on a fully-diluted basis, and received a net cash distribution of approximately \$88.0 million. As a result of the transaction, White Mountains also expects that it will no longer consolidate MediaAlpha in its financial statements and will mark its interest in MediaAlpha to fair value at the transaction closing date and in subsequent periods.

Kudu

On February 14, 2019, White Mountains entered into a definitive agreement to buy all of the interests in Kudu held by certain funds managed by Oaktree Capital Management, L.P. ("Oaktree") for approximately \$50.0 million. In connection with the transaction, White Mountains will assume all of Oaktree's unfunded capital commitments to Kudu, increasing White Mountains's total unfunded Kudu capital commitment to approximately \$167.0 million. If Kudu calls additional capital from Oaktree prior to the closing of the transaction, the purchase price would increase by the amount of the capital called, and White Mountains's assumed unfunded capital commitment would decrease by an equal amount.

As a result of the transaction, White Mountains's ownership of Kudu will increase from 49.5% to 99.0%, and it expects to consolidate Kudu in its financial statements after closing.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the financial statements included in this report. The financial statements have been prepared in conformity with GAAP in the United States. 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 as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

The Audit Committee of the Board, which is comprised entirely of independent, qualified directors, is responsible for the oversight of our accounting policies, financial reporting and internal control including the appointment and compensation of our independent registered public accounting firm. The Audit Committee meets periodically with management, our independent registered public accounting firm and our internal auditors to ensure they are carrying out their responsibilities. The Audit Committee is also responsible for performing an oversight role by reviewing our financial reports. Our independent registered public accounting firm and internal auditors have full and unlimited access to the Audit Committee, with or without management present, to discuss the adequacy of internal control over financial reporting and any other matters which they believe should be brought to their attention.

MANAGEMENT'S ANNUAL REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. There are inherent limitations in the effectiveness of any internal control over financial reporting, including the possibility of human error and the circumvention or overriding of internal control. Accordingly, even effective internal control over financial reporting can provide only reasonable assurance with respect to financial statement preparation. Further, an effective internal control environment as of a point in time may become inadequate in the future because of changes in conditions, or deterioration in the degree of compliance with the policies and procedures.

We assessed the effectiveness of White Mountains's internal control over financial reporting as of December 31, 2018. On May 11, 2018 White Mountains acquired NSM Insurance Group. Our assessment did not include an assessment of the internal control over financial reporting for NSM Insurance Group and its subsidiaries. NSM Insurance Group's total assets and total revenues excluded from our assessment of internal control over financial reporting represented 4.2% and 27.5%, respectively, of White Mountains's total consolidated assets and total consolidated revenues as of and for the year ended December 31, 2018. In making our assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013). Based on this assessment, we have concluded that White Mountains maintained effective internal control over financial reporting as of December 31, 2018.

PricewaterhouseCoopers LLP, the Company's independent registered public accounting firm, has audited the effectiveness of White Mountains's internal control over financial reporting as of December 31, 2018 as stated in their report which appears on page F-62.

February 27, 2019

Chief Executive Officer

(Principal Executive Officer)

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Executive Vice President and Chief Financial Officer (Principal Financial Officer)

Mil T. Sull

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of White Mountains Insurance Group, Ltd.:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of White Mountains Insurance Group, Ltd. and its subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations, statements of comprehensive income, statements of shareholders' equity and statements of cash flows for each of the three years in the period ended December 31, 2018, including the related notes and financial statement schedules listed in the accompanying index (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Management's Annual Report on Internal Control over Financial Reporting, management has excluded NSM Insurance Group and its subsidiaries from its assessment of internal control over financial reporting as of December 31, 2018 because it was acquired by the Company in a purchase business combination during 2018. We have also excluded NSM Insurance Group from our audit of internal control over financial reporting. NSM Insurance Group is a majority-owned subsidiary whose total assets and total revenues excluded from management's assessment and our audit of internal control over financial reporting represent 4.2% and 27.5%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2018.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Boston, Massachusetts

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February 27, 2019

We have served as the Company's auditor since 1999.

SELECTED QUARTERLY FINANCIAL DATA (Unaudited)

The following table presents selected quarterly financial data for 2018 and 2017. The quarterly financial data includes, in the opinion of management, all recurring adjustments necessary for a fair presentation of the results of operations for the interim periods. As a result of the OneBeacon, Sirius Group and Tranzact transactions, the results of operations for OneBeacon, Tranzact and Sirius Group have been classified as discontinued operations and are now presented, net of related income taxes, as such in the statement of comprehensive income. See **Note 19** — "Held for Sale and Discontinued Operations".

Prior year amounts have been reclassified to conform to the current period's presentation. Prior year amounts have also been adjusted for the impact of White Mountains's financial statement revisions.

	2018 Three Months Ended								2017 Three Months Ended							
Millions, Except Per Share Amounts	Dec. 31			Sept. 30		June 30		Mar. 31		Dec. 31		Sept. 30		June 30		ar. 31
Revenues	\$	6.0	\$	198.7	\$	122.3	\$	42.1	\$	114.0	\$	87.5	\$	83.5	\$	88.8
Expenses		150.1		154.4		134.7		108.1		108.8		79.1		85.7		92.4
Pre-tax income (loss)		(144.1)		44.3		(12.4)		(66.0)		5.2		8.4		(2.2)		(3.6)
Tax benefit (expense)		3.6		3.6		(2.5)		(.7)		2.5		4.0		1.0		0.3
Income (loss) from continuing operations		(140.5)		47.9		(14.9)		(66.7)		7.7		12.4		(1.2)		(3.3)
Income (loss) from discontinued operations, net of tax		_		(17.3)		_		.1		4.3		539.1		2.8		31.3
Non-controlling interest in consolidated subsidiaries		3.0		10.2		18.4		18.6		10.5		10.6		12.0		1.0
Income (loss) attributable to White Mountains's common shareholders	\$	(137.5)	\$	40.8	\$	3.5	\$	(48.0)	\$	22.5	\$	562.1	\$	13.6	\$	29.0
Income (loss) attributable to White Mountains's common shareholders per share:																
Basic																
Continuing operations	\$	(43.24)	\$	18.27	\$	1.02	\$	(12.85)	\$	4.85	\$	5.36	\$	2.36	\$	(0.52)
Discontinued operations		_		(5.44)		_		.03		1.15		125.45		.61		6.86
Total consolidated operations	\$	(43.24)	\$	12.83	\$	1.02	\$	(12.82)	\$	6.00	\$	130.81	\$	2.97	\$	6.34
Diluted	_		_								_					
Continuing operations	\$	(43.24)	\$	18.27	\$	1.02	\$	(12.85)	\$	4.85	\$	5.36	\$	2.36	\$	(0.52)
Discontinued operations		_		(5.44)		_		.03		1.15		125.45		.61		6.86
Total consolidated operations	\$	(43.24)	\$	12.83	\$	1.02	\$	(12.82)	\$	6.00	\$	130.81	\$	2.97	\$	6.34

SCHEDULE I

WHITE MOUNTAINS INSURANCE GROUP, LTD. SUMMARY OF INVESTMENTS—OTHER THAN INVESTMENTS IN RELATED PARTIES At December 31, 2018

Millions	Cost	(Carrying Value	Fair Value
Fixed maturity investments:				
U.S. Government and government agencies and authorities	\$ 154.0	\$	153.2	\$ 153.2
Debt securities issued by corporations	519.0		510.5	510.5
States, municipalities and political subdivisions	279.0		280.3	280.3
Mortgage and asset-backed securities	136.1		133.5	133.5
Total fixed maturity investments	1,088.1		1,077.5	1,077.5
Short-term investments	214.2		214.2	214.2
Common equity securities:				
Exchange traded funds	681.8		675.3	675.3
Banks, trust and insurance companies	11.8		13.5	13.5
Industrial, miscellaneous and other	211.1		236.8	236.8
Total common equity securities	904.7		925.6	925.6
Other long-term investments	330.3		325.6	325.6
Total investments	\$ 2,537.3	\$	2,542.9	\$ 2,542.9

SCHEDULE II

CONDENSED FINANCIAL INFORMATION OF THE REGISTRANT

CONDENSED BALANCE SHEETS(1)

	December 31,							
Millions		2018						
Assets:								
Cash	\$.7	\$	14.9				
Fixed maturity investments, at fair value		_		869.6				
Common equity securities, at fair value		335.6		641.8				
Other long-term investments (2)		_		(3.7)				
Short-term investments, at amortized cost		28.0		57.2				
Other assets		1.8		30.9				
Investments in consolidated subsidiaries		2,533.2		1,914.8				
Total assets	\$	2,899.3	\$	3,525.5				
Liabilities:								
Payable to subsidiary	\$	15.8	\$	11.8				
Other liabilities		25.9		21.2				
Total liabilities (3)		41.7		33.0				
White Mountains's common shareholders' equity		2,843.1		3,492.5				
Non-controlling interests		14.5		_				
Total liabilities and equity	\$	2,899.3	\$	3,525.5				

⁽¹⁾ These condensed unconsolidated financial statements reflect the results of operations, financial condition and cash flows for the Company. Investments in controlling subsidiaries are accounted for using the equity method. Under the equity method, investments in subsidiaries are recorded on the condensed balance sheets at the amount of the Company's ownership percentage of the subsidiary's GAAP book value. The income from subsidiaries is reported on a net of tax basis as equity in earnings from consolidated and unconsolidated subsidiaries on the condensed statements of operations and comprehensive income. Capital contributions to and distributions from subsidiaries are presented within investing activities on the condensed statements of cash flows.

⁽²⁾ As of December 31, 2017, other long-term investments includes \$(3.7) related to foreign currency forward contracts. See Note 7 — "Derivatives—Foreign Currency Forward Contracts".

⁽³⁾ As of December 31, 2018, White Mountains other liabilities includes \$17.3 related to the Sirius tax contingency. See Note 18 — "Commitments and Contingencies".

CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME⁽¹⁾

	Year Ended December 31,								
Millions		2018		2017		2016			
Revenues (loss) (including realized and unrealized gains and losses)	\$	(47.7)	\$	27.3	\$	(1.0)			
Expenses		45.9		99.7		68.2			
Pre-tax loss		(93.6)		(72.4)		(69.2)			
Income tax expense		(2.5)		(1.4)		(.5)			
Net loss		(96.1)		(73.8)		(69.7)			
Net loss from discontinued operations, net of tax (2)		(17.2) (2)		(3)		(4)			
Equity in earnings from consolidated and unconsolidated subsidiaries, net of tax		(27.4)		701.0 (3)		471.5 (4)			
Net loss (income) attributable to non-controlling interests		(.5)		_		_			
Net (loss) income attributable to White Mountains's common shareholders		(141.2)		627.2		401.8			
Other comprehensive (loss) income items, net of tax		(4.5)		3.3		145.3			
Comprehensive (loss) income attributable to White Mountains's common shareholders	\$	(145.7)	\$	630.5	\$	547.1			

⁽¹⁾ These condensed unconsolidated financial statements reflect the results of operations, financial condition and cash flows for the Company. Investments in which White Mountains holds a controlling financial interest are accounted for using the equity method. Under the equity method, investments in subsidiaries are recorded on the condensed balance sheets at the amount of the Company's ownership percentage of the subsidiary's GAAP book value. The income from subsidiaries is reported on a net of tax basis as equity in earnings of subsidiaries on the condensed statements of operations and comprehensive income. Capital contributions to and distributions from subsidiaries are presented within investing activities on the condensed statements of cash flows.

⁽²⁾ During 2018, net loss from discontinued operations includes \$17.3 arising from the tax contingency on the sale of Sirius Group. See Note 18—
"Commitments and Contingencies".

⁽³⁾ Equity in earnings from consolidated subsidiaries for the year ended December 31, 2017 includes \$577.5 of income from discontinued operations associated primarily with the dispositions of OneBeacon, Sirius Group and Tranzact. See Note 19 — "Held for Sale and Discontinued Operations".

⁽⁴⁾ Equity in earnings from consolidated subsidiaries for the year ended December 31, 2016 includes \$523.4 of income from discontinued operations associated primarily with the dispositions of OneBeacon, Sirius Group and Tranzact. See Note 19 — "Held for Sale and Discontinued Operations".

CONDENSED STATEMENTS OF CASH FLOWS (1)(2)

_	Year I	Ended Decemb	nber 31,			
Millions	2018	2017	2016			
Net income attributable to White Mountains's common shareholders	(141.2)	\$ 627.2	\$ 401.8			
Charges (credits) to reconcile net income to net cash from operations:						
Net realized and unrealized investment (gains) losses on sales of investments	57.8	(18.5)	1.1			
Undistributed earnings from subsidiaries	27.4	(701.0)	(471.5)			
Net loss on sale of other discontinued operations (3)	17.2	_	_			
Other non-cash reconciling items, primarily amortization of restricted share and option awards (4)	34.6	31.1	17.9			
Accumulated earnings distributed from subsidiary in cash (5)	_	1,256.7	_			
Net change in other assets and liabilities (6)	16.7	(4.9)	(5.6)			
Net cash provided from (used for) operations	12.5	1,190.6	(56.3)			
Cash flows from investing activities:						
Net change in short-term investments ⁽⁷⁾	134.0	(24.7)	10.9			
Purchases of investment securities (8)	(321.2)	(474.7)	_			
Sales and maturities of investment securities ⁽⁹⁾	967.6	367.1	_			
Issuance of debt (to) from subsidiaries (10)	(55.2)	382.0	992.0			
Repayment of debt to (from) subsidiaries ⁽¹¹⁾	31.0	_	(5.0)			
(Contributions to) distributions from subsidiaries (12)(13)	(258.2)	(700.0)				
Net cash provided from (used for) investing activities	498.0	(450.3)	997.9			
Cash flows from financing activities:						
Draw down of revolving line of credit (14)	_	350.0	350.0			
Repayment of revolving line of credit (14)	_	(350.0)	(400.0)			
Proceeds from issuances of common shares	_	_	3.7			
Repurchases and retirement of common shares (10)	(510.9)	(714.6)	(881.3)			
Dividends paid on common shares	(3.8)	(4.6)	(5.4)			
Payments of restricted shares withholding taxes	(10.0)	(9.3)	(5.8)			
Net cash used for financing activities	(524.7)	(728.5)	(938.8)			
Net (decrease) increase in cash during the year	(14.2)	11.8	2.8			
Cash balance at beginning of year	14.9	3.1	.3			
Cash balance at end of year	.7	\$ 14.9	\$ 3.1			
Supplemental cash flow information: interest paid		\$ (.6)	\$ (1.2)			

- (1) These condensed unconsolidated financial statements reflect the results of operations, financial condition and cash flows for the Company. Investments in which White Mountains holds a controlling financial interest are accounted for using the equity method. Under the equity method, investments in subsidiaries are recorded on the condensed balance sheets at the amount of the Company's ownership percentage of the subsidiarry's GAAP book value. The income from subsidiaries is reported on a net of tax basis as equity in earnings of subsidiaries on the condensed statements of operations and comprehensive income. Capital contributions to and distributions from subsidiaries are presented within investing activities on the condensed statements of cash flows.
- During 2017, Lone Tree Holdings, Ltd. ("LTH"), a wholly-owned subsidiary of the Company, merged into the Company. The merger was treated as a liquidation for financial statement purposes. As part of the liquidation, significant non-cash balances that were transferred from LTH to the Company included ending net equity of \$2,810.4, intercompany balances of \$1,863.1, investments in its subsidiaries of \$964.4, short-term investments of \$13.0 and other liabilities of \$14.1.
- Ouring 2018, Net loss from discontinued operations includes \$17.3 arising from the tax contingency on the sale of Sirius Group. See Note 18— "Commitments and Contingencies".
- (4) For the years ended December 31, 2018, 2017 and 2016, amortization of restricted share and option awards was \$13.0, \$14.8 and \$18.5.
- (5) During 2017, as part of its liquidation into the Company, LTH transferred \$1,256.7 of cash, which included \$1,037.6 of the proceeds from the sale of OneBeacon, to the Company.
- (6) For 2018, 2017 and 2016, net change in other assets and liabilities also included a \$4.0, \$11.6, and \$0.2 net change in payables to the Company's subsidiaries.
- ⁽⁷⁾ During 2018, the Company had non-cash (purchases) and sales of short-term investments of (\$284.6) and \$179.2.
- (8) During 2018, the Company had non-cash purchases of investment securities of \$603.9, which included \$170.5 of fixed maturity securities, \$148.8 of common equity securities and \$22.7 of other long term investments.
- (9) During 2018, the Company had non-cash sales of investment securities of \$1,065.4, which included \$373.4 of fixed maturity securities, \$490.1 of common equity securities and \$22.7 of other long term investments.
- (10) During 2018, the Company had non-cash issuance of debt of \$349.5 to its wholly-owned subsidiary, Guilford Holding, Inc. ("GHI"). Proceeds of the debt, which included \$170.4 of fixed maturity securities and \$179.2 of short-term investments, were transferred to GHI. During 2017, the Company had non-cash issuance of debt from LTH of \$94.2. During 2017 and 2016, the Company used cash proceeds received from the issuance of debt from LTH, primarily to fund repurchases of its common shares.
- (11) During 2018, the Company received non-cash repayments of \$22.7 from its wholly-owned subsidiary, Bridge Holdings ("Bridge") in the form of other long term investments.
- (12) During 2018, the Company made non-cash contributions of \$350.0 by transferring intercompany debt receivable from GHI to Bridge. Also during 2018, the Company made a non-cash contribution of \$1.0 by transferring intercompany debt receivable from White Mountains Investment (Luxembourg), a wholly-owned subsidiary of Bridge, to Bridge. During 2018, the Company made cash contributions of \$255.3 and \$2.9 to its wholly-owned subsidiaries, Bridge and White Mountains Investment, Ltd. During 2017, the Company contributed \$700.0 to its wholly-owned subsidiary, GHI.
- (13) During 2017, the Company received non-cash distributions of \$1,238.9 from LTH, prior to its liquidation. The distribution was completed through the transfer of fixed maturity investments and common equity securities. During 2016, the Company received a non-cash distribution of \$80.0 from LTH. The distribution was completed through the transfer of fixed maturity investments.
- (14) The WTM Bank Facility was a direct obligation of the Registrant as of December 31, 2017 and was terminated on May 8, 2018. See **Note 5** "**Debt"**. Schedules of the Registrant should be read in conjunction with the Consolidated Financial Statements and Notes.

SCHEDULE III

WHITE MOUNTAINS INSURANCE GROUP, LTD. SUPPLEMENTARY INSURANCE INFORMATION (1)

Column A	C	olumn B	Colu	ımn C	C	olumn D		umn E	Co	olumn F	(Column G	C	olumn H	Column I			umn J	lumn K
Millions																Amortization of Deferred Policy Acquisition Costs			
Segment	A	eferred .cqui- ition Costs	Po Ben Lo Cla and	ture dicy defits, sses, aims Loss enses		earned emiums	Po Cla ai Ben	ther licy nims nd nefits vable		emiums arned		Net vestment ncome ⁽²⁾	C Los Set	enefits, laims, sses and tlement penses	of			ther rating enses	miums ritten
Years ended:																			
December 31, 2018																			
HG Global/ BAM	\$	19.0	\$	_	\$	176.0	\$	_	\$	13.9	\$	16.7	\$	_	\$	5.3	\$.4	\$ 52.9
Other Operations		_		_		_		_		_		_		_		_		_	_
December 31, 2017																			
HG Global/ BAM		14.8		_		136.8		_		9.4		12.3		_		4.0		.4	63.2
Other Operations ⁽³⁾		_		_		_		_		1.0		_		1.1		.1		_	.9
December 31, 2016																			
HG Global/ BAM		10.6		_		82.9		_		5.9		9.0		_		3.4		.4	38.6
Other Operations ⁽³⁾		_		_		_		_		7.5		.2		8.0		2.2		.1	6.5

⁽¹⁾ Schedule excludes activity related to OneBeacon and Sirius Group for the years ended December 31, 2017 and 2016. See Note 19 — "Held for Sale and Discontinued Operations".

⁽²⁾ The amounts shown exclude net investment income relating to non-insurance operations of \$0.0, \$43.7 and \$22.9 for the twelve months ended December 31, 2018, 2017 and 2016, respectively.

⁽³⁾ The Other Operations amounts shown relate to SSIE. White Mountains completed the sale of SSIE on March 7, 2017. See Note 19 — "Held for Sale and Discontinued Operations".

SCHEDULE IV

WHITE MOUNTAINS INSURANCE GROUP, LTD. REINSURANCE $^{(1)}$

Column A	Col	lumn B	Co	lumn C	Co	olumn D	Col	lumn E	Column F
\$ in Millions Premiums Earned	Gross	s Amount		d to Other		med from Companies	Net	Amount	Percentage of Amount Assumed to Net
Year ended:									
December 31, 2018									
HG Global/BAM	\$	13.6	\$		\$.3	\$	13.9	2.2%
Other Operations								_	
December 31, 2017									
HG Global/BAM		9.4						9.4	
Other Operations (2)		1.0				_		1.0	
December 31, 2016									
HG Global/BAM		5.9		_		_		5.9	
Other Operations (2)		15.2		(7.7)				7.5	

⁽¹⁾ Schedule excludes activity related to OneBeacon and Sirius Group for the years ended December 31, 2017 and 2016. See **Note 19** — "Held for Sale and Discontinued Operations".

⁽²⁾ The Other Operations amounts shown relate to SSIE. White Mountains completed the sale of SSIE on March 7, 2017. See Note 19 — "Held for Sale and Discontinued Operations".

PRINCIPAL EXECUTIVE OFFICER CERTIFICATION PURSUANT TO RULE 13a-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934

I, G. Manning Rountree, Chief Executive Officer of White Mountains Insurance Group, Ltd., certify that:

I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2018 of White Mountains Insurance Group, Ltd.;

Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:

- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 27, 2019

By:

Chief Executive Officer

(Principal Executive Officer)

s. maning Rounts

PRINCIPAL FINANCIAL OFFICER CERTIFICATION PURSUANT TO RULE 13a-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934

I, Reid T. Campbell, Executive Vice President & Chief Financial Officer of White Mountains Insurance Group, Ltd. certify that:

I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2018 of White Mountains Insurance Group, Ltd.;

Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)) and 15d-15(f)) for the registrant and have:

- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:

- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 27, 2019

Mil T. Sull

By:

Executive Vice President and Chief Financial Officer

(Principal Financial Officer)

PRINCIPAL EXECUTIVE OFFICER CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of White Mountains Insurance Group, Ltd. (the "Company"), for the period ending December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, G. Manning Rountree, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (a) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and,
- (b) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of and for the periods presented in the Report.

s. maning Rounts

Chief Executive Officer (Principal Executive Officer)

February 27, 2019

PRINCIPAL FINANCIAL OFFICER CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of White Mountains Insurance Group, Ltd. (the "Company"), for the period ending December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Reid T. Campbell, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (a) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and,
- (b) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of and for the periods presented in the Report.

Mil T. Sull

Executive Vice President and Chief Financial Officer (Principal Financial Officer)

February 27, 2019





