

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, 2019
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
(State or other jurisdiction of incorporation or organization)

94-2708455
(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	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, par value \$1.00 per share	WTM	New York Stock Exchange Bermuda Stock Exchange

Securities registered pursuant 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 reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes No

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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 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 No

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, 2019, was \$3,169,884,560.

As of February 28, 2020, 3,193,509 common shares, par value of \$1.00 per share, were outstanding (which includes 43,105 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 21, 2020 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. The Company’s website is located at www.whitemountains.com. The information contained on White Mountains’s website is not incorporated by reference into, and is not a part of, this report.

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, capital solutions for asset management firms, 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 provides capital solutions for asset management firms through its subsidiary Kudu Investment Management, LLC and its subsidiaries (collectively, “Kudu”). White Mountains’s other operations consist 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, and certain other consolidated and unconsolidated entities and certain other strategic investments. As of December 31, 2019, White Mountains’s reportable segments were HG Global/BAM, NSM, Kudu and Other Operations.

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 non-controlling 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, a portion of the MSC from 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 65 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, which is 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 changed the payment terms of the Series B Notes, so that payments 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.

On a monthly basis, BAM deposits cash equal to ceded premiums, net of ceding commissions, due to HG Re under the FLRT directly into the Regulation 114 Trust. The Regulation 114 Trust target balance is equal to gross ceded unearned premiums and unpaid ceded loss and LAE expenses, if any. If, at the end of any quarter, the Regulation 114 Trust balance is below the target balance, funds will be withdrawn from the Supplemental Trust and deposited into the Regulation 114 Trust in an amount equal to the shortfall. If, at the end of any quarter, the Regulation 114 Trust balance is above 102% of the target balance, funds will be withdrawn from the Regulation 114 Trust and deposited into the Supplemental Trust.

The Supplemental Trust target balance is \$603 million, less the amount of cash and securities in the Regulation 114 Trust in excess of its target balance (the “Supplemental Trust Target Balance”). If, at the end of any quarter, the Supplemental Trust balance exceeds the Supplemental Trust Target Balance, such excess may be distributed to HG Re. The distribution will be made first as an assignment of accrued interest on the BAM Surplus Notes and second in cash and/or fixed income securities. 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.

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. As described below, in January 2020 the initial term of the FLRT was extended to the end of 2022. The FLRT can be amended after the initial term and after each subsequent five-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 five 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 55% of BAM’s portfolio of financial guaranty policies issued through December 31, 2019.

In January 2020, HG Global and BAM agreed to amend the BAM Surplus Notes to extend the end of the variable interest rate period from 2021 to 2024, to extend the initial 10-year term of the FLRT to the end of 2022 and to enter into an excess of loss reinsurance agreement (the “XOLT”). Under the XOLT, HG Re provides last dollar protection for exposures on municipal bonds insured by BAM in excess of NYDFS single issuer limits. The XOLT is subject to an aggregate limit equal to the lesser of \$75 million or the assets held in the Supplemental Trust at any point in time. At inception, BAM ceded exposure on one covered risk to HG Re under the XOLT. Additional cessions under the XOLT are subject to approval by HG Re.

In connection with the actions described in the preceding paragraph, in January 2020, BAM made a \$65 million special cash payment of principal and interest on the BAM Surplus Notes. As of January 20, 2020, subsequent to the special cash payment, the BAM Surplus Notes had a principal balance of \$410 million and accrued interest outstanding of \$147 million.

As of December 31, 2019 and 2018, White Mountains reported \$999 million and \$926 million of total assets, and \$494 million and \$496 million of total equity related to HG Global. As of December 31, 2019 and 2018, White Mountains owned 96.9% of HG Global’s preferred equity and 88.4% of its common equity. As of December 31, 2019 and 2018, White Mountains reported \$14 million and \$15 million of non-controlling interests related to HG Global.

As of December 31, 2019 and 2018, White Mountains reported \$593 million and \$555 million of total assets, and \$(147) million and \$(171) million of non-controlling interests 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 and 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, 2019 and 2018:

Millions	December 31, 2019		December 31, 2018	
	Gross Par Outstanding	Average Standard & Poor's Credit Rating ⁽¹⁾	Gross Par Outstanding	Average Standard & Poor's Credit Rating ⁽¹⁾
General Obligation	\$ 36,173.8	A	\$ 30,627.0	A
Utility	7,344.0	A	6,451.0	A
Dedicated Tax	7,024.4	A	6,263.8	A
General Fund	5,550.2	A	4,858.5	A
Public Higher Education	3,788.3	A-	2,406.6	A-
Transportation	1,935.0	A	1,293.6	A
Other Public Finance	434.8	BBB+	301.1	A-
Total gross par outstanding	\$ 62,250.5	A	\$ 52,201.6	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, 2019 and 2018:

\$ in Millions	December 31, 2019		
	Gross Par Outstanding ⁽²⁾	Percent of Total Gross Par Outstanding ⁽²⁾	Standard & Poor's Credit Rating ⁽¹⁾
State of Illinois	\$ 385.3	0.6%	BBB-
New Jersey Transportation Trust Fund Authority, System & Program Bonds, NJ, Gas Tax ⁽²⁾	356.1	0.6	BBB+
Municipal Authority of Westmoreland County, PA, Water	329.1	0.5	A+
Metropolitan Transit Authority (MTA), NY, Mass Transit - Farebox ⁽²⁾	323.7	0.5	A
City of Philadelphia, PA (Philadelphia County) ⁽²⁾	307.0	0.5	A
Compton USD, CA (Los Angeles County) ⁽²⁾	302.6	0.5	A
Suffolk County, NY	287.1	0.5	A-
City of Bridgeport, CT (Fairfield County)	282.5	0.5	A
City of Yonkers, NY (Westchester County)	272.5	0.4	A
City of Chicago, IL (Cook County)	265.5	0.4	BBB+
Total of top ten exposures	\$ 3,111.4	5.0%	

⁽¹⁾ "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.

⁽²⁾ For capital appreciation bonds, the amounts shown equal the estimated equivalent par value had the bonds been current interest paying bonds.

\$ in Millions	December 31, 2018		
	Gross Par Outstanding ⁽²⁾	Percent of Total Gross Par Outstanding ⁽²⁾	Standard & Poor's Credit Rating ⁽¹⁾
New Jersey Transportation Trust Fund Authority, System & Program Bonds, NJ, Gas Tax ⁽²⁾	\$ 349.4	0.6%	BBB+
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-
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 County, 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	A
Total of top ten exposures	\$ 2,690.5	5.0%	

⁽¹⁾ "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.

⁽²⁾ For capital appreciation bonds, the amounts shown equal the estimated equivalent par value had the bonds been current interest paying bonds.

The following table presents the geographic distribution of BAM's insured portfolio as of December 31, 2019 and 2018:

\$ in Millions	December 31, 2019			December 31, 2018		
	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	683	\$ 14,354.7	23.1%	621	\$ 12,044.6	23.1%
Texas	740	8,656.2	13.9	643	7,015.4	13.4
Pennsylvania	440	7,800.5	12.5	417	6,460.1	12.4
Illinois	337	4,939.9	7.9	290	4,342.0	8.3
New York	324	3,718.5	6.0	312	3,234.9	6.2
New Jersey	135	2,886.7	4.6	118	2,429.1	4.7
Ohio	139	1,597.5	2.6	126	1,436.2	2.8
Alabama	125	1,523.0	2.4	106	1,180.9	2.3
Louisiana	65	1,400.3	2.2	55	1,208.5	2.3
Michigan	123	1,361.2	2.2	97	1,236.0	2.4
Florida	64	1,355.4	2.2	55	1,145.0	2.2
Arizona	65	1,343.1	2.2	62	1,314.2	2.5
Other States	788	11,313.5	18.2	663	9,154.7	17.4
Total insured portfolio	4,028	\$ 62,250.5	100.0%	3,565	\$ 52,201.6	100.0%

The following table presents BAM's insured portfolio by issue size of exposure as of December 31, 2019 and 2018:

\$ in Millions Original Par Amount Per Issue ⁽¹⁾	December 31, 2019			December 31, 2018		
	Number of Risks	Gross Par Outstanding	Percent of Total Gross Par Outstanding	Number of Risks	Gross Par Outstanding	Percent of Total Gross Par Outstanding
Less than \$10 million	2,388	\$ 9,594.1	15.4%	2,159	\$ 8,938.3	17.1%
\$10 to \$50 million	1,370	27,125.7	43.6	1,182	23,567.3	45.1
\$50 to \$100 million	187	11,695.3	18.8	164	10,335.0	19.8
\$100 to \$200 million	56	7,224.9	11.6	46	5,972.5	11.4
\$200 to \$300 million	22	4,996.4	8.0	12	2,728.8	5.2
\$300 to \$400 million	5	1,614.1	2.6	2	659.7	1.4
Total insured portfolio	4,028	\$ 62,250.5	100.0%	3,565	\$ 52,201.6	100.0%

⁽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, 2019, BAM did not have any credits assigned to surveillance category 3 or surveillance category 4.

NSM

On May 11, 2018, White Mountains acquired a 95.0% ownership interest in NSM (83.6% on a fully diluted, fully converted basis) 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 and pet).

As of December 31, 2019, NSM had approximately 100 insurance carrier partners. NSM expands its programs when market conditions are attractive and shrinks and/or shuts 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, 2019, the five largest carrier partners accounted for approximately 56% of total premiums placed by NSM, with the largest carrier partner accounting for approximately 17%.

NSM’s primary competitors are typically specialty insurance carriers and their agents. Competitors are differentiated based on price, conditions of coverage, loss ratio performance, quality of service, technology and other factors.

Historically, NSM has grown both organically and inorganically through acquisitions. Since its inception in 1990, NSM has completed over 20 acquisitions, including three 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 offers 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. (“KBK”). KBK is a specialty MGU focused on the towing and transportation space. On April 1, 2019, NSM acquired 100% of Embrace Pet Insurance (“Embrace”). Embrace is a U.S. nationwide provider of pet health insurance for dogs and cats.

On June 28, 2019, NSM acquired the renewal rights on its U.S. collector car business (the “Renewal Rights”) from American International Group, Inc. (“AIG”) for \$83 million. The acquisition satisfied NSM’s contingent obligation to acquire the Renewal Rights from AIG. See **Note 19 — “Commitments and Contingencies”**.

As of December 31, 2019 and 2018, White Mountains reported \$825 million and \$624 million of total assets and \$424 million and \$309 million of total equity related to NSM. As of December 31, 2019 and 2018, White Mountains owned 96.4% and 95.5% of NSM (88.4% and 85.0% on a fully diluted, fully converted basis) and reported \$15 million and \$14 million of non-controlling interests related to NSM.

Verticals

NSM’s business consists of a number of active programs that are broadly categorized into six market verticals. The following table presents the controlled premium and commission and other revenues by vertical for the years ended December 31, 2019, 2018 and 2017:

Millions	Year Ended December 31,					
	2019		2018 ⁽²⁾		2017 ⁽²⁾	
	Controlled Premium ⁽¹⁾	Commission and Other Revenue	Controlled Premium ⁽¹⁾	Commission and Other Revenue	Controlled Premium ⁽¹⁾	Commission and Other Revenue
Specialty Transportation	\$ 290.2	\$ 77.6	\$ 136.8	\$ 43.0	\$ 112.6	\$ 32.9
Real Estate	157.2	34.7	135.7	30.3	106.8	22.2
Social Services	102.7	25.9	94.0	23.8	111.6	28.8
Pet	67.6	30.0	—	—	—	—
United Kingdom	155.5	45.9	108.8	34.9	46.0	16.1
Other	124.5	19.0	119.4	19.8	113.4	18.6
Total	\$ 897.7	\$ 233.1	\$ 594.7	\$ 151.8	\$ 490.4	\$ 118.6

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

⁽²⁾ Includes results prior to White Mountains’s ownership of NSM.

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 offering insurance coverages for towing businesses (e.g., tow truck operators, dealers, 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 offers insurance coverage (e.g., property, general liability and 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 offers 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 offers insurance coverages to addiction treatment providers and mental healthcare facilities, and (iii) Sports & Wellness Insurance, which offers insurance coverages to a broad range of sports and wellness organizations such as fitness centers, yoga studios and university sponsored recreational programs and groups.

Pet

During the second quarter of 2019, NSM acquired Embrace. Embrace offers comprehensive accident and illness insurance plans for dogs and cats in the United States. Embrace also offers Wellness Rewards, an optional preventative care product that reimburses routine veterinary visits, grooming, vaccinations, training, and other services.

United Kingdom

The United Kingdom vertical consists of all of NSM's U.K.-based programs. The U.K. business primarily consists of Vantage Insurance Services ("Vantage"), Fresh Insurance and First Underwriting Limited ("First Underwriting"). Vantage offers 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 offers non-standard auto insurance and buildings and content insurance for non-standard properties. First Underwriting is a specialty MGA launched in the fourth quarter of 2018 offering motor, household and surety coverages in the U.K. market.

Other

The other vertical consists of approximately 10 other programs, offering 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.

KUDU

On February 5, 2018, White Mountains entered into an agreement to fund up to \$125 million in Kudu in exchange for a 49.5% ownership interest in Kudu (42.7% on a fully diluted, fully converted basis). On April 4, 2019, White Mountains acquired the ownership interests in Kudu held by certain funds managed by Oaktree Capital Management, L.P. (“Oaktree”) for cash consideration of \$81 million. In addition, White Mountains assumed all of Oaktree’s unfunded capital commitments to Kudu, increasing White Mountains’s total capital commitment to \$250 million (the “Kudu Transaction”). As a result of the Kudu Transaction, White Mountains’s ownership of Kudu increased from 49.5% to 99.1% (42.7% to 85.4% on a fully diluted, fully converted basis) and White Mountains began consolidating Kudu as a reportable segment in its financial statements in the second quarter of 2019. During the fourth quarter of 2019, White Mountains increased its total capital commitment to Kudu by an additional \$100 million to \$350 million, of which \$129 million was undrawn as of December 31, 2019. Also during the fourth quarter of 2019, Kudu obtained a committed \$125 million credit facility, of which \$68 million was undrawn as of December 31, 2019.

Kudu provides capital solutions for boutique asset managers for a variety of 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 minority preferred equity stakes with distribution rights, typically tied to gross revenues and designed to generate immediate strong, stable cash yields.

As of December 31, 2019, White Mountains reported \$291 million of total assets, \$234 million of total equity and \$2 million of non-controlling interests related to Kudu. As of December 31, 2019, White Mountains owned 99.1% of Kudu (85.4% on a fully diluted, fully converted basis).

Portfolio

As of December 31, 2019, Kudu has deployed \$266 million in nine asset management firms with combined assets under management (“AUM”) of over \$33 billion, spanning a range of asset classes, including real estate, real assets, wealth management, hedge funds and alternative credit strategies. The average cash yield to Kudu at inception for the \$266 million of deployed capital was 10.6%.

Kudu’s philosophy is to partner with asset management firms that exhibit strong cash flow generation and growth and that have high conviction around the long-term success of their businesses. Kudu seeks to provide its solutions across a diverse mix of investment strategies and asset classes in the middle market.

Kudu’s average capital solution to date has been \$29 million, with a range from \$19 million to \$61 million. Apportioned by manager type, Kudu’s portfolio is deployed 34% in private capital, 18% in wealth management and 48% in liquid alternatives segments. Kudu seeks diversity across asset classes. Kudu also prioritizes the private capital segment given the underlying clients of these firms tend to be locked-up for an extended period, which can provide stability of revenues in a potential market downturn.

Kudu does not expect greater than 25% of the total firm revenues to come from any individual manager. Kudu expects that, as more capital is deployed, the reliance on any single manager will decrease. Additionally, Kudu seeks to diversify geographically. Its portfolio currently includes seven asset management firms headquartered in five different states in the United States and two investment firms headquartered in the United Kingdom.

OTHER OPERATIONS

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

MediaAlpha

In March 2014, White Mountains acquired a controlling ownership interest in 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 (the "MediaAlpha Transaction"). MediaAlpha also repurchased a portion of the holdings of existing equityholders. White Mountains reduced its ownership interest to 48.3% of MediaAlpha (42.0% on a fully diluted, fully converted basis) as a result of the MediaAlpha Transaction. Through December 31, 2019, White Mountains has invested approximately \$48 million in MediaAlpha and received cash distributions, including the proceeds from the MediaAlpha Transaction, of \$124 million.

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 300 million transactions annually, representing more than \$550 million in aggregate media spend.

White Mountains deconsolidated MediaAlpha as a result of the MediaAlpha Transaction and it was no longer a reportable segment. White Mountains's non-controlling equity interest in MediaAlpha is accounted for at fair value within other long-term investments. As of December 31, 2019, the fair value of White Mountains's interest in MediaAlpha totaled \$180 million.

PassportCard/DavidShield

In April 2015, White Mountains acquired a 50% ownership interest in PassportCard for \$21 million. PassportCard is a U.K.-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 receives commissions for placing policies with its insurance carrier partners and licensing fees for use of its card-based technology. PassportCard distributes its products through the broker channel and on a direct-to-consumer basis, and also franchises its solutions in certain markets to major travel insurance and medical assistance companies.

On January 24, 2018, White Mountains acquired a 50% ownership interest in 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. DavidShield receives structured commissions for placing policies with its insurance carrier partners and licensing fees for use of its card-based technology.

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 both originally launched in the Israeli marketplace and are now each focused on international expansion. In the second quarter of 2018, PassportCard launched in Australia (under the "TravelCard" brand). DavidShield continues to offer its product in Germany and the European Union through select distribution channels.

White Mountains's non-controlling equity interests in PassportCard/DavidShield are accounted for at fair value within other long-term investments. As of December 31, 2019 and 2018, the fair value of White Mountains's interests in PassportCard/DavidShield totaled \$90 million and \$75 million.

Elementum

On May 31, 2019, White Mountains acquired a 30.0% limited partnership interest in Elementum, a third-party registered investment adviser specializing in natural catastrophe insurance-linked securities (“ILS”), for \$55 million (the “Elementum Transaction”). Elementum manages separate accounts and pooled investment vehicles across various ILS sectors, including catastrophe bonds, collateralized reinsurance investments and industry loss warranties, on behalf of third-party clients. As part of the Elementum Transaction, White Mountains also committed to invest \$50 million in ILS funds managed by Elementum. As of December 31, 2019, White Mountains had approximately \$41 million invested in these funds.

White Mountains’s non-controlling equity interest in Elementum is accounted for at fair value within other long-term investments. As of December 31, 2019, the fair value of this interest totaled \$55 million.

Other Operating Businesses

White Mountains has controlling equity interests in various other operating businesses, which are consolidated. As of December 31, 2019 and 2018, White Mountains reported \$47 million and \$14 million of total assets related to these businesses. As of December 31, 2019 and 2018, White Mountains reported \$31 million and \$11 million of total equity (net of intercompany eliminations), and non-controlling interests of \$(2) million and \$1 million, related to these businesses.

White Mountains also has non-controlling equity interests in and private debt instruments with various other operating businesses, which are generally accounted for at fair value within other long-term investments. As of December 31, 2019 and 2018, the fair value of these interests totaled \$40 million and \$50 million, respectively.

Strategic Investments

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 Co-investment Fund. As of December 31, 2019 and 2018, the fair value of White Mountains’s investment in Tuckerman Capital and the Tuckerman Capital Funds totaled \$58 million and \$47 million, respectively.

Enlightenment Capital

White Mountains owns 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, 2019 and 2018, the fair value of White Mountains’s investments in Enlightenment Capital and the Enlightenment Capital Funds totaled \$34 million and \$28 million, respectively.

Other

White Mountains maintains various other non-controlling equity interests and private debt instruments in strategic investments accounted for at fair value within other long-term investments. As of December 31, 2019 and 2018, the fair value of these interests totaled \$27 million and \$18 million, respectively.

WM Advisors

WM Advisors manages substantially all of White Mountains’s investment portfolio, with the exception of non-controlling equity interests in the form of revenue and earnings participation contracts (“Kudu’s Participation Contracts”), which are managed by Kudu, and BAM’s investment portfolio, which is managed by an outside third-party investment manager. White Mountains’s investment portfolio consists primarily 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. 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. 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 other long-term investments include unconsolidated entities, Kudu's Participation Contracts, private equity funds, hedge funds, ILS funds and private debt instruments.

White Mountains 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, 2019, the fixed income portfolio duration, including short-term investments, was 2.8 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 48.

DISCONTINUED OPERATIONS

Over the past five years, White Mountains has disposed of a number of its principal operating businesses and recorded large transaction gains. 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.

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 operations 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, 2019, BAM was in compliance with the single and aggregate risk limits.

No payment of principal or interest 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.

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. In 2019, NYDFS commenced and conducted its examination of BAM for the five-year period ending December 31, 2018; its Report on Examination had not been issued as of the date of this filing. BAM does not expect any significant regulatory issues from the NYDFS examination.

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. Although BAM has no ownership relationship with HG Re or HG Global, BAM agreed with the NYDFS to submit any agreements, or amendments thereto, among BAM and HG Re, HG Global and their affiliated entities or controlling persons to the NYDFS as if they were subject to Article 15 of the New York Insurance Law, which relates to transactions with holding companies.

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 60 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. As of December 31, 2019, 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.

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 and options, warrants, receipts, rights over loan notes and other debt instruments to persons resident and non-resident of Bermuda for exchange control purposes.

The Economic Substance Act 2018, as amended (“ESA”) came into effect in Bermuda in December 2018 and impacts every Bermuda registered entity engaged in a “relevant activity”, requiring impacted entities to maintain a substantial economic presence in Bermuda and to satisfy economic substance requirements. Under the ESA, insurance or holding entity activities (both as defined in the ESA and the Economic Substance Regulations 2018, as amended) are relevant activities. To the extent that the ESA applies to any of our Bermuda entities, we are required to demonstrate compliance with economic substance requirements by filing an annual economic substance declaration with the Bermuda Registrar of Companies. Any entity that must satisfy economic substance requirements but fails to do so could face automatic disclosure to competent authorities in the EU of the information filed by the entity with the Bermuda Registrar of Companies in connection with the economic substance requirements. Additionally, a company may also face penalties, restriction or regulation of its business activities and may be struck off as a registered entity in Bermuda for failure to satisfy economic substance requirements. The Company believes it satisfies these requirements.

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, consumers and ceding companies.

As of February 28, 2020, BAM was 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, 2019, White Mountains employed 1,262 people (consisting of 64 people at the Company, WM Capital, its other intermediate holding companies, WM Advisors and HG Global, 80 people at BAM, 891 people at NSM, 11 people at Kudu, and 214 people at the consolidated Other Operating Businesses). 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 67 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. 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 (i) fluctuations in equity market levels, interest rates, debt market levels and foreign currency exchange rates, (ii) public health crises, natural disasters, terrorist attacks and other outside events, and (iii) 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. In addition to causing declines in the value of securities that we own in our investment portfolio, public health crises, natural disasters, terrorist attacks and other outside events can adversely affect general commercial activity and the economies of many countries, which could materially adversely affect the business, financial condition and results of operations of the entities in which we have invested. For example, reductions of travel, including due to travel restrictions and bans imposed by governments, due to the coronavirus (COVID-19) outbreak are negatively impacting revenues at PassportCard/DavidShield in the first quarter of 2020 and are expected to do so until travel volumes return to normal levels. 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, Kudu’s Participation Contracts, private equity funds, hedge funds, ILS funds and private debt instruments 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.

Our investment portfolio includes securities that do not have readily observable market prices. We use valuation methodologies that are inherently subjective and uncertain to value these securities. The values of securities established using these methodologies may never be realized, which could materially adversely affect our results of operations and financial condition.

As of December 31, 2019, White Mountains owned \$654 million in securities, including our investments in MediaAlpha and PassportCard/DavidShield, and Kudu’s Participation Contracts, that are not actively traded in public markets, do not have readily observable market prices, and are classified as Level 3 investments in the GAAP fair value hierarchy. On a quarterly basis, we make a good faith determination of the fair value of our Level 3 investments in our GAAP financial statements using valuation techniques that are inherently subjective and uncertain.

In determining the GAAP fair value of these securities, we use judgment in selecting the fair value methodology and the significant inputs that are employed by that methodology for each such investment. See **“Level 3 Measurements”** under **CRITICAL ACCOUNTING ESTIMATES** on pages 62 - 64 for a description of the methodologies we use to determine GAAP fair value of our investments without a readily observable market price. Given the inherent subjectivity and uncertainty in the methodologies we use to determine the fair value of our investments without a readily observable market price, the values of such investments established using these methodologies may never be realized, which 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's financial strength rating was placed on credit watch negative 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. On December 18, 2019, Standard & Poor's concluded its most recent review and affirmed BAM's "AA/stable" financial strength rating. 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, 2019, White Mountains owned \$458 million in BAM Surplus Notes and had accrued \$163 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 December 2019, the NYDFS approved a \$32 million cash payment of principal and interest on the BAM Surplus Notes. In January 2020, the NYDFS approved an additional \$65 million special cash payment of principal and interest on the BAM Surplus Notes. 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 arrangements between BAM and HG Re, which could materially adversely affect our results of operations and financial condition.

Our reinsurance subsidiary, HG Re, reinsures (i) losses on the first 15%-of-par outstanding on each municipal bond insured by BAM and (ii) certain municipal bonds insured by BAM on an excess of loss basis. 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, 2019, we had total goodwill and other intangible assets of \$655 million on our consolidated balance sheet, most of which relate to our acquisition of NSM and NSM's subsequent acquisitions of Fresh Insurance, KBK, Embrace and the Renewal Rights from AIG. As of December 31, 2019, goodwill and other intangible assets related to NSM were \$623 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 cyclical nature 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 cyclical nature 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 17% of its business with its single largest carrier during the year ended December 31, 2019. NSM placed approximately 56% of its business with its five largest carriers during the year ended December 31, 2019. 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.

Kudu's financial performance is dependent upon its clients' asset and performance-based fees, which are subject to a variety of economic, market and other risks.

Through our subsidiary Kudu, we provide capital solutions for asset management firms through non-controlling equity interests in the form of revenue and earnings participation contracts. Kudu's clients generate their revenues and earnings by charging asset based fees, which are typically a percentage of the value of the assets they manage for their clients, and/or performance based fees, which are typically a portion of actual returns achieved for their clients above a target return. The revenue that Kudu generates from its clients is subject to the same general economic and market risks that may affect our investment portfolio. See ***"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."*** on page 17.

Additionally, Kudu's clients participate in a highly competitive, highly regulated industry that subjects their operations to a number of other risks that are out of our control and could materially adversely affect our results of operations and financial condition, including (i) changes in investor preference from the actively-managed investments offered by Kudu's clients to passively-managed investments; (ii) the ability of Kudu's clients to successfully attract new clients and retain existing ones; (iii) the ability of Kudu's clients to avoid fee compression; (iv) the reliance of Kudu's clients on a small number of key personnel; and (v) future changes to regulations that make Kudu's clients' businesses more cumbersome and expensive to operate.

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, we believe that White Mountains should not be treated as a PFIC, based on the income and assets of White Mountains and, under applicable "look-through" rules per current law, the income and assets of its subsidiaries.

In July 2019, however, the Department of the Treasury issued proposed regulations that, if finalized, could affect the applicability of the "look-through" rules. If the proposed regulations are finalized in their current form in calendar year 2020, and, further, if White Mountains's assets, income and business operations are unchanged from their current form, then White Mountains could become a PFIC for a shareholder's taxable year ending in 2020.

There is no assurance that White Mountains will not otherwise become a PFIC at some future time as a result of changes in regulations or changes in our assets, income or business operations. Nor is there 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 of 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. For example, as a result of various state, federal and international regulatory efforts to modernize and harmonize insurer solvency regulations, 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. Likewise, data privacy regulations have recently been enacted in various jurisdictions in the United States and throughout the world. These regulations address numerous aspects related to the security of personal information that is stored in our information systems, networks and facilities. Failure to comply with these regulations could result in reputational damage and significant penalties, 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 Bermuda 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, a Bermuda court would ordinarily be expected to permit a shareholder to commence an action that alleges 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 a professional office in Guilford, Connecticut, which houses its corporate finance and investment functions, and in Boston, Massachusetts, which houses its corporate accounting, reporting and internal audit functions.

HG Global's headquarters are located in Hamilton, Bermuda. BAM's and Kudu's headquarters are located in New York, New York. NSM's headquarters are located in Conshohocken, Pennsylvania.

The Company's headquarters, registered office, principal executive office, and corporate accounting, reporting and internal audit offices are leased. The various offices and facilities of the consolidated Other Operating Businesses are owned or 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.

Information About Our Executive Officers (As of March 2, 2020)

Name	Position	Age	Executive Officer Since
G. Manning Rountree	Chief Executive Officer	47	2009
Reid T. Campbell	Executive Vice President and Chief Financial Officer	52	2007
Frank R. Bazos	Executive Vice President and Head of M&A at WM Capital	52	2019
J. Brian Palmer	Managing Director and Chief Accounting Officer	47	2001
Robert L. Seelig	Executive Vice President and General Counsel	51	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. Bazos is Executive Vice President and Head of M&A at WM Capital. Prior to joining WM Capital in 2019, Mr. Bazos was with the private equity firm Century Equity Partners and previous work experience includes TA Associates and North Atlantic Capital.

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.

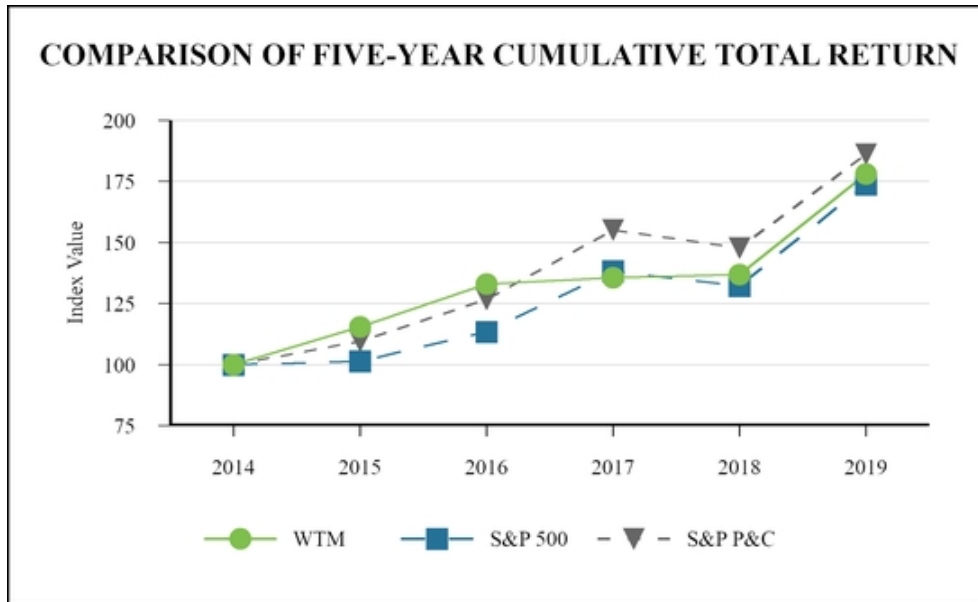
Mr. Seelig is Executive Vice President and General Counsel of the Company. Prior to joining White Mountains in 2002, Mr. Seelig was with the law firm of Cravath, Swaine & Moore.

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 28, 2020, there were 232 registered holders of White Mountains common shares, par value \$1.00 per share. 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 71.

The following graph presents the five-year cumulative total return for a shareholder who invested \$100 in common shares as of December 31, 2014, assuming re-investment of dividends. Cumulative returns for the five-year period ended December 31, 2019 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

No common shares were repurchased by the Company during the fourth quarter of 2019.

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, 2019:

\$ in Millions, Except Share and Per Share Amounts	Year Ended December 31,				
	2019	2018	2017	2016	2015
Income Statement Data:					
Revenues ^(a)	\$ 893	\$ 369	\$ 374	\$ 158	\$ 440
Expenses ^(b)	488	547	366	305	311
Pre-tax income (loss)	405	(178)	8	(147)	129
Income tax (expense) benefit	(29)	4	8	33	(13)
Net loss (income) attributable to non-controlling interests ^(c)	38	50	34	(7)	19
Equity in earnings of unconsolidated affiliates	—	—	—	—	25
Discontinued operations, net of tax ^(d)	1	(17)	577	523	135
Net income (loss) attributable to White Mountains's common shareholders	\$ 415	\$ (141)	\$ 627	\$ 402	\$ 295
Income (loss) attributable to White Mountains's common shareholders per share:					
Basic — continuing operations	\$ 130.02	\$ (36.67)	\$ 11.56	\$ (24.26)	\$ 27.22
Basic — discontinued operations	.25	(5.09)	134.50	104.37	22.98
Total basic income (loss) per share	\$ 130.27	\$ (41.76)	\$ 146.06	\$ 80.11	\$ 50.20
Diluted — continuing operations	\$ 130.02	\$ (36.67)	\$ 11.56	\$ (24.26)	\$ 27.22
Diluted — discontinued operations	.25	(5.09)	134.50	104.32	22.98
Total diluted income (loss) per share	\$ 130.27	\$ (41.76)	\$ 146.06	\$ 80.06	\$ 50.20
Balance Sheet Data:					
Total assets ^(e)	\$ 3,983	\$ 3,363	\$ 3,659	\$ 6,520	\$ 10,271
Debt ^(f)	284	193	24	13	65
Non-controlling interests ^(g)	(117)	(125)	(132)	133	454
White Mountains's common shareholders' equity	3,262	2,843	3,493	3,583	3,903
Book value per share	\$ 1,023.91	\$ 896.00	\$ 931.30	\$ 785.01	\$ 694.06
Adjusted book value per share ^(h)	\$ 1,018.41	\$ 887.85	\$ 914.75	\$ 789.08	\$ 697.16
Share Data:					
Cash dividends paid per common share	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
Ending common shares (000's) ⁽ⁱ⁾	3,185	3,173	3,750	4,564	5,624

^(a) In 2019, White Mountains recognized a total of \$182 of realized and unrealized gains from the MediaAlpha Transaction. MediaAlpha recognized revenues of \$49 in 2019, prior to the date of the MediaAlpha Transaction, compared to \$297 and \$163 in 2018 and 2017, and NSM, which was acquired during 2018, recognized revenues of \$233 in 2019, compared to \$102 in 2018. Kudu, which was consolidated in 2019, recognized revenues of \$21 in 2019. Other Operations recognized net realized and unrealized investment gains (losses) of \$285, \$(101), \$133 and \$(28) in 2019, 2018, 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.

^(b) MediaAlpha recognized cost of sales of \$41 in 2019, prior to the date of the MediaAlpha Transaction, compared to \$245 and \$136 in 2018 and 2017. NSM recognized expenses of \$235 in 2019, compared to \$107 in 2018 for the period owned by White Mountains.

^(c) White Mountains reported \$34 of non-controlling interest loss related to BAM in 2019, compared to \$52 and \$40 in 2018 and 2017. Amounts also include non-controlling interests in OneBeacon, Sirius Group and Tranzact prior to their sales.

^(d) As a result of the sales 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 2019, discontinued operations, net of tax, includes a gain from sale of Sirius Group \$1 related to foreign currency on a contingent liability. In 2018, discontinued operations, net of tax, includes a loss from sale of Sirius Group of \$17 for the recognition of a contingent liability related to the sale. 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 Group and Tranzact of \$(1) and \$3. In 2016, discontinued operations, net of tax, includes a gain from sale of Sirius Group 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 net income of \$117 and a gain from sale of Esurance of \$18. See **Note 20 — "Held for Sale and Discontinued Operations"** on page F-60.

^(e) White Mountains's total assets increased in 2019, compared to 2018, as a result of NSM's acquisitions of Embrace and the Renewal Rights from AIG and the Kudu Transaction in 2019. White Mountains's total assets decreased as a result of share repurchases in 2018, 2017, 2016 and 2015, and the sales of OneBeacon in 2017 and Sirius Group in 2016.

^(f) White Mountains's total debt increased as a result of borrowings under the NSM Bank Facility and the Kudu Bank Facility. See **Note 5 — "Debt"** on page F-34. As of December 31, 2015, White Mountains had \$50 outstanding under its credit facility, which was repaid in April 2016.

^(g) White Mountains's non-controlling interests includes the policyholders' surplus of BAM. White Mountains's non-controlling interests decreased as a result of the deconsolidation of MediaAlpha in 2019 and the sale of OneBeacon in 2017 and Sirius Group in 2016. See **Note 12 — "Common Shareholders' Equity and Non-controlling Interests"** on page F-49 for a detailed breakdown of non-controlling interests by consolidated entity.

^(h) Adjusted book value per share is a non-GAAP measure. See **"NON-GAAP FINANCIAL MEASURES"** on page 58.

⁽ⁱ⁾ During 2019, 2018, 2017, 2016, and 2015, White Mountains repurchased 5,679, 592,458, 832,725, 1,106,145, and 387,495 respectively, of its common shares through a combination of tender offers, open market transactions and other transactions. See **"LIQUIDITY AND CAPITAL RESOURCES"** on page 51.

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 67 for specific important factors that could cause actual results to differ materially from those contained in forward-looking statements.

The following discussion also includes nine non-GAAP financial measures (i) adjusted book value per share, (ii) underlying growth in adjusted book value per share, (iii) gross written premiums and MSC from new business, (iv) adjusted capital, (v) NSM’s earnings before interest, taxes, depreciation and amortization (“EBITDA”), (vi) NSM’s adjusted EBITDA, (vii) total consolidated portfolio returns excluding the MediaAlpha Transaction, (viii) common equity securities and other long-term investments returns excluding the MediaAlpha Transaction and (ix) other long-term investments return excluding the MediaAlpha Transaction, that have been reconciled from their most comparable GAAP financial measures on page 58. 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, 2019, 2018 AND 2017

Overview—Year Ended December 31, 2019 versus Year Ended December 31, 2018

White Mountains ended 2019 with book value per share of \$1,024 and adjusted book value per share of \$1,018, an increase of 14.4% and 14.8% for the year, including dividends. Comprehensive income attributable to common shareholders was \$413 million in 2019 compared to comprehensive loss attributable to common shareholders of \$146 million in 2018. The results for 2019 were driven primarily by investment results and the \$182 million gain from the MediaAlpha Transaction. The results for 2018 were driven primarily by investment results, which were adversely impacted by the sharp decline in equity markets in the fourth quarter of 2018.

On February 26, 2019, MediaAlpha completed the MediaAlpha Transaction. The transaction resulted in a gain of \$55 to each of White Mountains’s book value per share and adjusted book value per share. See “**MediaAlpha**” on page 43.

Including the \$55 per share net gain from the MediaAlpha Transaction as if it had closed on December 31, 2018, book value per share would have been \$951 and adjusted book value per share would have been \$943 as of December 31, 2018. Had the MediaAlpha Transaction closed on December 31, 2018, White Mountains’s book value per share would have increased 7.8% and adjusted book value per share would have increased 8.1% in 2019, including dividends.

During 2019, White Mountains repurchased and retired \$5 million of its common shares. During 2019, White Mountains deployed roughly \$435 million in new business opportunities, ending the year with approximately \$1.0 billion of undeployed capital.

Gross written premiums and MSC collected in the HG Global/BAM segment totaled \$107 million in both 2019 and 2018. BAM insured municipal bonds with par value of \$12.8 billion in 2019, compared to \$12.0 billion in 2018. During 2019, BAM completed assumed reinsurance transactions to insure municipal bonds with a par value of \$1.1 billion and, during 2018, BAM completed assumed reinsurance transactions to insure municipal bonds with a par value of \$2.2 billion. Total pricing was 83 basis points in 2019, compared to 93 basis points in 2018.

In December 2019, BAM made a \$32 million cash payment of principal and interest on the BAM Surplus Notes held by HG Global. In January 2020, BAM made an additional \$65 million special cash payment of principal and interest on the BAM Surplus Notes. During 2018, BAM made a \$23 million cash payment of principal and interest on the BAM Surplus Notes. BAM’s total claims paying resources were \$938 million as of December 31, 2019, compared to \$871 million as of December 31, 2018. The increase in claims paying resources was driven by positive cash flow from operations.

During the fourth quarter of 2019, White Mountains updated its debt service model for the BAM Surplus Notes to reflect (i) the cash payments of principal and interest on the BAM Surplus Notes made in December 2019 and January 2020, (ii) the amendments made to the terms of the BAM Surplus Notes in January 2020, including an extension of the variable interest rate period, and (iii) in light of the current interest rate environment, a more conservative forecast of future operating results for BAM. This has resulted in slower modeled future payments on the BAM Surplus Notes and, in turn, a \$20 million increase to the time value of money discount on the BAM Surplus Notes as reflected in adjusted book value per share as of December 31, 2019.

NSM reported pre-tax loss of \$2 million, adjusted EBITDA of \$48 million, and commission and other revenues of \$233 million in the year ended December 31, 2019. For the period from May 11, 2018, the date White Mountains acquired NSM, to December 31, 2018, NSM reported pre-tax loss of \$5 million, adjusted EBITDA of \$18 million, and commission and other revenues of \$102 million. Results for the year ended December 31, 2019 include the results, from the date of acquisition, of Embrace, a nationwide provider of pet health insurance for dogs and cats, which NSM acquired on April 1, 2019, and KBK, a specialized MGU focused on the towing and transportation space, which NSM acquired on December 3, 2018.

On April 4, 2019, White Mountains completed the Kudu Transaction. For the twelve months ended December 31, 2019, Kudu deployed \$203 million, including transaction costs, in seven asset management firms and has now deployed a total of \$266 million, including transaction costs, in nine asset management firms with combined assets under management of over \$33 billion, spanning a range of asset classes, including real estate, real assets, wealth management, hedge funds and alternative credit strategies. For the period from April 4, 2019, the date of the Kudu Transaction, through December 31, 2019, Kudu reported total revenues of \$21 million and pretax income of \$11 million.

White Mountains's pre-tax total return on invested assets was 20.4% for 2019, which included a \$115 million pre-tax unrealized investment gain from the MediaAlpha Transaction. Excluding the MediaAlpha Transaction, White Mountains's pre-tax total return on invested assets was 15.5% for 2019, compared to -1.7% for 2018. Investment returns for 2019 benefited from the decision to increase White Mountains's equity exposure during the equity rout at the end of 2018, the strong rally in equity markets over the course of the year, and strong other long-term investments results. The strong other long-term investment results were driven primarily by a \$65 million increase in the fair value of White Mountains's investment in MediaAlpha resulting from increases in profitability metrics since the MediaAlpha Transaction. Investment returns for 2018 were adversely impacted by the sharp decline in equity markets in the fourth quarter.

White Mountains's portfolio of common equity securities and other long-term investments returned 36.9% for 2019, which included the \$115 million pre-tax unrealized investment gain from the MediaAlpha Transaction. Excluding the MediaAlpha Transaction, White Mountains's portfolio of common equity securities and other long-term investments returned 25.7% for 2019, compared to -3.6% for 2018.

White Mountains's fixed income portfolio returned 6.1% for 2019, compared to 1.2% for 2018.

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 results for 2018 were driven primarily by investment results, which were adversely impacted by the sharp decline in equity markets in the fourth quarter of 2018. The results for 2017 were driven primarily by the \$557 million gain from the OneBeacon Transaction.

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. Had the MediaAlpha Transaction closed on December 31, 2018, White Mountains's book value per share would have increased 2.2% and adjusted book value per share would have increased 3.2% in 2018, including dividends.

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 of \$55 per share from the MediaAlpha Transaction and adjusted book value per share including the estimated gain from the MediaAlpha Transaction. During 2018, White Mountains deployed roughly \$300 million in 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. During 2018, BAM completed assumed reinsurance transactions to insure municipal bonds with a par value of \$2.2 billion. Total pricing was 93 basis points in 2018, compared to 99 basis points in 2017. During 2018, BAM made a \$23 million cash payment of principal and interest on the BAM Surplus Notes held by HG Global. During 2017, BAM made a \$5 million cash payment of principal and interest on the BAM Surplus Notes. 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.

On May 11, 2018, White Mountains acquired a 95.0% ownership interest in NSM (83.6% on a fully diluted, fully converted basis), 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. NSM reported adjusted EBITDA of \$16 million and revenues of \$102 million from May 11, 2018 through December 31, 2018.

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. 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.

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 fixed income portfolio returned 1.2% for 2018, compared to 3.5% for 2017.

Adjusted Book Value Per Share

The following table presents White Mountains's adjusted book value per share, a non-GAAP financial measure, as of December 31, 2019, 2018 and 2017 and reconciles this non-GAAP measure to book value per share, the most comparable GAAP measure. See "NON-GAAP FINANCIAL MEASURES" on page 58.

	December 31,		
	2019	2018	2017
Book value per share numerators (in millions):			
White Mountains's common shareholders' equity	\$ 3,261.5	\$ 2,843.1	\$ 3,492.5
Time-value of money discount on expected future payments on the BAM Surplus Notes ⁽¹⁾	(151.6)	(141.2)	(157.0)
HG Global's unearned premium reserve ⁽¹⁾	156.7	136.9	103.9
HG Global's net deferred acquisition costs ⁽¹⁾	(41.5)	(34.6)	(24.3)
Adjusted book value per share numerator	<u>\$ 3,225.1</u>	<u>\$ 2,804.2</u>	<u>\$ 3,415.1</u>
Book value per share denominators (in thousands of shares):			
Common shares outstanding	3,185.4	3,173.1	3,750.2
Unearned restricted shares	(18.5)	(14.6)	(16.8)
Adjusted book value per share denominator	<u>3,166.9</u>	<u>3,158.5</u>	<u>3,733.4</u>
GAAP book value per share	\$ 1,023.91	\$ 896.00	\$ 931.30
Adjusted book value per share	\$ 1,018.41	\$ 887.85	\$ 914.75
Dividends paid per share	\$ 1.00	\$ 1.00	\$ 1.00

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

The following tables presents goodwill and other intangible assets that are included in White Mountains's adjusted book value as of December 31, 2019, 2018 and 2017:

Millions	December 31,		
	2019	2018	2017
Goodwill:			
NSM ⁽¹⁾	\$ 381.6	\$ 354.3	\$ —
Kudu	7.6	—	—
MediaAlpha	—	18.3	18.3
Other Operations	5.5	7.3	7.6
Total goodwill	394.7	379.9	25.9
Other intangible assets:			
NSM ⁽¹⁾	241.4	131.9	—
Kudu	2.0	—	—
MediaAlpha	—	25.1	35.4
Other Operations	16.6	.6	.8
Total other intangible assets	260.0	157.6	36.2
Total goodwill and other intangible assets ⁽²⁾	654.7	537.5	62.1
Total goodwill and other intangible assets attributed to non-controlling interests	(23.4)	(40.6)	(21.1)
Total goodwill and other intangible assets included in White Mountains's common shareholders' equity	\$ 631.3	\$ 496.9	\$ 41.0

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

⁽²⁾ See Note 4 — “Goodwill and Other Intangible Assets” on page F-31 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, 2019, 2018 and 2017:

Millions	Year Ended December 31,		
	2019	2018	2017
Revenues			
Financial Guarantee revenues	\$ 66.6	\$ 24.3	\$ 23.3
Specialty Insurance Distribution revenues	233.1	101.6	—
Asset Management revenues	21.2	—	—
Marketing Technology revenues	48.8	297.1	163.2
Other Operations revenues	523.7	(53.9)	187.3
Total revenues	893.4	369.1	373.8
Expenses			
Financial Guarantee expenses	56.6	53.7	47.3
Specialty Insurance Distribution expenses	235.2	106.8	—
Asset Management expenses	10.4	—	—
Marketing Technology expenses	54.9	288.2	163.6
Other Operations expenses	131.2	98.6	155.1
Total expenses	488.3	547.3	366.0
Pre-tax income (loss)			
Financial Guarantee pre-tax income (loss)	10.0	(29.4)	(24.0)
Specialty Insurance Distribution pre-tax loss	(2.1)	(5.2)	—
Asset Management, pre-tax income	10.8	—	—
Marketing Technology pre-tax (loss) income	(6.1)	8.9	(.4)
Other Operations pre-tax income (loss)	392.5	(152.5)	32.2
Total pre-tax income (loss)	405.1	(178.2)	7.8
Income tax (expense) benefit	(29.3)	4.0	7.8
Net income (loss) from continuing operations	375.8	(174.2)	15.6
Gain (loss) on sale of discontinued operations, net of tax	0.8	(17.2)	557.0
Net income from discontinued operations, net of tax	—	—	20.5
Net income (loss)	376.6	(191.4)	593.1
Net loss attributable to non-controlling interests	37.9	50.2	34.1
Net income (loss) attributable to White Mountains's common shareholders	414.5	(141.2)	627.2
Other comprehensive (loss) income, net of tax	(1.4)	(4.8)	.3
Comprehensive income from discontinued operations, net of tax	—	—	3.2
Comprehensive income (loss)	413.1	(146.0)	630.7
Comprehensive income (loss) attributable to non-controlling interests	—	.3	(.2)
Comprehensive income (loss) attributable to White Mountains's common shareholders	\$ 413.1	\$ (145.7)	\$ 630.5

I. Summary of Operations By Segment

As of December 31, 2019, White Mountains conducted its operations through four segments: (1) HG Global/BAM, (2) NSM, (3) Kudu and (4) Other Operations. In addition, MediaAlpha was consolidated as a reportable segment until the date of the MediaAlpha Transaction. 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 14 — "Segment Information"** on page F-52.

As a result of the Kudu Transaction, White Mountains began consolidating Kudu in its financial statements in the second quarter of 2019. White Mountains's segment disclosures for the year ended December 31, 2019 include Kudu's results of operations for the period from April 4, 2019, the date of the Kudu Transaction, to December 31, 2019. See **Note 2 — "Significant Transactions"** on page F-17.

As a result of the MediaAlpha Transaction, White Mountains no longer consolidated MediaAlpha, and consequently it was no longer a reportable segment. White Mountains's segment disclosures for the year ended December 31, 2019 include MediaAlpha's results of operations for the period from January 1, 2019 to February 26, 2019, the date of the MediaAlpha Transaction. See **Note 2 — "Significant Transactions"** on page F-17.

As a result of the OneBeacon Transaction, the results of operations for OneBeacon for the year ended December 31, 2017 have been classified as discontinued operations, and are now presented separately, net of related income taxes, in the statement of comprehensive income. See **Note 20 — "Held for Sale and Discontinued Operations"** on page F-60.

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, 2019, 2018 and 2017:

Millions	December 31, 2019			
	HG Global	BAM	Eliminations	Total
Direct written premiums	\$ —	\$ 28.1 ⁽²⁾	\$ —	\$ 28.1
Assumed written premiums	33.6	10.6	(33.6)	10.6
Gross written premiums	33.6	38.7	(33.6)	38.7
Ceded written premiums	—	(33.6) ⁽²⁾	33.6	—
Net written premiums	\$ 33.6	\$ 5.1	\$ —	\$ 38.7
Earned insurance and reinsurance premiums	\$ 13.1	\$ 3.2	\$ —	\$ 16.3
Net investment income	7.5	14.1	—	21.6
Net investment income - BAM Surplus Notes	27.4	—	(27.4)	—
Net realized and unrealized investment gains	11.0	16.1	—	27.1
Other revenues	—	1.6	—	1.6
Total revenues	59.0	35.0	(27.4)	66.6
Insurance and reinsurance acquisition expenses	3.3	2.4	—	5.7
Other underwriting expenses	—	.4	—	.4
General and administrative expenses	1.6	48.9	—	50.5
Interest expense - BAM Surplus Notes	—	27.4	(27.4)	—
Total expenses	4.9	79.1	(27.4)	56.6
Pre-tax income (loss)	\$ 54.1	\$ (44.1)	\$ —	\$ 10.0
Supplemental information:				
MSC collected ⁽¹⁾⁽²⁾	\$ —	\$ 68.0	\$ —	\$ 68.0

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

⁽²⁾ During 2019, BAM issued policy endorsements for certain policies issued in periods prior to the second quarter of 2018. The impact of the policy endorsements for the year ended December 31, 2019 was a decrease to BAM's gross written premiums of \$13.4 and an increase to MSC collected of \$13.4.

Millions	December 31, 2018			
	HG Global	BAM	Eliminations	Total
Direct written premiums	\$ —	\$ 44.8	\$ —	\$ 44.8
Assumed written premiums	45.0	8.1	(45.0)	8.1
Gross written premiums	45.0	52.9	(45.0)	52.9
Ceded written premiums	—	(45.0)	45.0	—
Net written premiums	\$ 45.0	\$ 7.9	\$ —	\$ 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.

Millions	December 31, 2017			
	HG Global	BAM	Eliminations	Total
Direct written premiums	\$ —	\$ 63.2	\$ —	\$ 63.2
Assumed written premiums	53.6	—	(53.6)	—
Gross written premiums	53.6	63.2	(53.6)	63.2
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.

HG Global/BAM Results—Year Ended December 31, 2019 versus Year Ended December 31, 2018

BAM charges an insurance premium on each municipal bond insurance policy it writes. A portion of the premium is MSC and the remainder is a risk premium. In the event of a municipal bond refunding, a portion of the MSC from 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 both 2019 and 2018. BAM insured \$12.8 billion of municipal bonds, \$10.4 billion of which were in the primary market in 2019, compared to \$12 billion of municipal bonds, \$8.8 billion of which were in the primary market, in 2018. During 2019 and 2018, BAM completed assumed reinsurance transactions to insure municipal bonds with a par value of \$1.1 billion and \$2.2 billion, respectively.

Total pricing, which reflects both gross written premiums and MSC from new business, decreased to 83 basis points in 2019, compared to 93 basis points in 2018. See “**NON-GAAP FINANCIAL MEASURES**” on page 58. The decrease in total pricing was driven primarily by a decrease in pricing in the primary market. Pricing in the primary market decreased to 51 basis points in 2019, compared to 71 basis points in 2018, driven primarily by lower interest rates and tighter credit spreads. Pricing in the assumed reinsurance and secondary markets, which is more transaction-specific than pricing in the primary market, increased to 219 basis points in 2019, compared to 150 basis points in 2018, partially offsetting the decline in pricing in the primary market.

The following table presents the gross par value of primary and secondary market policies issued, the gross par value of assumed reinsurance, the gross written premiums and MSC collected and total pricing for the twelve months ended December 31, 2019 and 2018:

\$ in Millions	Year Ended December 31,	
	2019	2018
Gross par value of primary market policies issued	\$ 10,405.1	\$ 8,779.9
Gross par value of assumed reinsurance	1,130.7	2,235.8
Gross par value of secondary market policies issued	1,311.8	959.6
Total gross par value of market policies issued	\$ 12,847.6	\$ 11,975.3
Gross written premiums	\$ 38.7 ⁽²⁾	\$ 52.9
MSC collected	68.0 ⁽²⁾	53.8
Total gross written premiums and MSC collected	\$ 106.7	\$ 106.7
Present value of future installment MSC collections	.3	3.1
Gross written premium adjustments on existing installment policies	(.1)	1.1
Gross written premiums and MSC from new business ⁽¹⁾	\$ 106.9	\$ 110.9
Total pricing	83 bps	93 bps

⁽¹⁾ See “**NON-GAAP FINANCIAL MEASURES**” on page 58.

⁽²⁾ During 2019, BAM issued policy endorsements for certain policies issued in periods prior to the second quarter of 2018. The impact of the policy endorsements for the year ended December 31, 2019 was a decrease to BAM’s gross written premiums of \$13.4 and an increase to MSC collected of \$13.4.

HG Global reported GAAP pre-tax income of \$54 million in 2019, compared to \$32 million in 2018. The increase in pre-tax income was driven primarily by higher returns in HG Global’s investment portfolio. HG Global’s results in 2019 included \$27 million of interest income on the BAM Surplus Notes, compared to \$23 million in 2018.

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 GAAP pre-tax losses from BAM of \$44 million in 2019, compared to \$61 million in 2018. The decrease in the pre-tax loss was driven primarily by higher returns in BAM’s investment portfolio. BAM’s results included \$27 million of interest expense on the BAM Surplus Notes and \$49 million of general and administrative expenses in 2019, compared to \$23 million of interest expense on the BAM Surplus Notes and \$47 million of general and administrative expenses in 2018.

In December 2019, BAM made a \$32 million cash payment of principal and interest on the BAM Surplus Notes held by HG Global. Of this payment, \$24 million was a repayment of principal held in the Supplemental Trust and \$8 million was a payment of accrued interest held outside the Supplemental Trust. In January 2020, BAM made an additional \$65 million special cash payment of principal and interest on the BAM Surplus Notes. Of this payment, \$48 million was a repayment of principal held in the Supplemental Trust, \$1 million was a payment of accrued interest held in the Supplemental Trust and \$16 million was a payment of accrued interest held outside the Supplemental Trust. During 2018, BAM made a \$23 million cash payment of principal and interest on the BAM Surplus Notes. Of this payment, \$18 million was a repayment of principal held in the Supplemental Trust, \$1 million was a payment of accrued interest held in the Supplemental Trust and \$4 million was a payment of accrued interest held outside the Supplemental Trust.

During the fourth quarter of 2019, White Mountains updated its debt service model for the BAM Surplus Notes to reflect (i) the cash payments of principal and interest on the BAM Surplus Notes made in December 2019 and January 2020, (ii) the amendments made to the terms of the BAM Surplus Notes in January 2020, including the extension of the variable interest rate period and (iii) in light of the current interest rate environment, a more conservative forecast of future operating results for BAM. This has resulted in slower modeled future payments on the BAM Surplus Notes and, in turn, a \$20 million increase to the time value of money discount on the BAM Surplus Notes as reflected in adjusted book value per share as of December 31, 2019.

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

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 \$12.0 billion of municipal bonds, \$8.8 billion of which were in the primary market in 2018, compared to \$10.4 billion, \$9.6 billion of which were in the primary market, in 2017. During 2018, BAM completed an assumed reinsurance transaction to insure municipal bonds with a par value of \$2.2 billion.

Total pricing, which reflects both gross written premiums and MSC from new business, decreased to 93 basis points in 2018, compared to 99 basis points in 2017. See “**NON-GAAP FINANCIAL MEASURES**” on page 58. Pricing in the primary market decreased to 71 basis points in 2018, compared to 74 basis points in 2017. Pricing in the assumed reinsurance and secondary markets decreased to 150 basis points in 2018, compared to 410 basis points in 2017.

The following table presents the gross par value of primary and secondary market policies issued, the gross par value of assumed reinsurance, the gross written premiums and MSC collected and total pricing for the twelve months ended December 31, 2018 and 2017:

\$ in Millions	Year Ended December 31,	
	2018	2017
Gross par value of primary market policies issued	\$ 8,779.9	\$ 9,633.5
Gross par value of assumed reinsurance	2,235.8	—
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 58.

HG Global reported GAAP pre-tax income of \$32 million in 2018, compared to \$26 million in 2017. HG Global's results in 2018 included \$23 million of interest income on the BAM Surplus Notes, compared to \$19 million in 2017.

White Mountains reported GAAP pre-tax losses from BAM of \$61 million 2018, compared to \$50 million in 2017. BAM's results included \$23 million of interest expense on the BAM Surplus Notes and \$47 million of general and administrative expenses in 2018, compared to \$19 million of interest expense on the BAM Surplus Notes and \$42 million of general and administrative expenses in 2017. 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 made a \$23 million cash payment of principal and interest on the BAM Surplus Notes held by HG Global. Of this payment, \$18 million was a repayment of principal held in the Supplemental Trust, \$1 million was a payment of accrued interest held in the Supplemental Trust and \$4 million was a payment of accrued interest held outside the Supplemental Trust. During 2017, BAM made a \$5 million cash payment of principal and interest on the BAM Surplus Notes. Of this payment, \$4 million was a repayment of principal held in the Supplemental Trust and \$1 million was a payment of accrued interest held outside the Supplemental Trust.

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.

The following table presents BAM's total claims paying resources as of December 31, 2019, 2018 and 2017:

Millions	December 31, 2019	December 31, 2018	December 31, 2017
Policyholders' surplus	\$ 402.4	\$ 413.7	\$ 427.3
Contingency reserve	68.2	50.3	34.8
Qualified statutory capital	470.6	464.0	462.1
Net unearned premiums	39.3	36.2	30.5
Present value of future installment premiums and MSC	13.7	12.9	9.0
HG Re Collateral Trusts at statutory value	314.0	258.3	206.8
Fidus Re collateral trust at statutory value	100.0	100.0	—
Claims paying resources	\$ 937.6	\$ 871.4	\$ 708.4

BAM's claims paying resources increased to \$938 million as of December 31, 2019 from \$871 million as of December 31, 2018. The increase was driven primarily by \$68 million of MSC collected and a \$56 million increase in the invested assets of the HG Re Collateral Trusts, partially offset by BAM's 2019 statutory net loss of \$38 million.

BAM's claims paying resources increased to \$871 million as of December 31, 2018 from \$708 million as of December 31, 2017. 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.

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, 2019 and 2018:

Millions	December 31, 2019			
	HG Global	BAM	Eliminations and Segment Adjustment	Total Segment
Assets				
Fixed maturity investments	\$ 304.2	\$ 495.1	\$ —	\$ 799.3
Short-term investments	15.7	30.6	—	46.3
Total investments	319.9	525.7	—	845.6
Cash	9.8	14.4	—	24.2
BAM Surplus Notes	457.6	—	(457.6)	—
Accrued interest receivable on BAM Surplus Notes	162.7	—	(162.7)	—
Deferred acquisition costs	42.8	22.1	(42.8)	22.1
Insurance premiums receivable	4.2	6.7	(4.2)	6.7
Accrued investment income	1.7	3.7	—	5.4
Other assets	—	20.2	(.2)	20.0
Total assets	\$ 998.7	\$ 592.8	\$ (667.5)	\$ 924.0
Liabilities				
BAM Surplus Notes ⁽¹⁾	\$ —	\$ 457.6	\$ (457.6)	\$ —
Accrued interest payable on BAM Surplus Notes ⁽²⁾	—	162.7	(162.7)	—
Preferred dividends payable to White Mountains's subsidiaries ⁽³⁾	330.3	—	—	330.3
Preferred dividends payable to non-controlling interests	11.4	—	—	11.4
Unearned insurance premiums	161.7	36.7	—	198.4
Other liabilities	1.7	82.5	(47.2)	37.0
Total liabilities	505.1	739.5	(667.5)	577.1
Equity				
White Mountains's common shareholders' equity ⁽³⁾	479.2	—	—	479.2
Non-controlling interests	14.4	(146.7)	—	(132.3)
Total equity	493.6	(146.7)	—	346.9
Total liabilities and equity	\$ 998.7	\$ 592.8	\$ (667.5)	\$ 924.0

⁽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.

Millions	December 31, 2018			
	HG Global	BAM	Eliminations and Segment Adjustment	Total Segment
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	—	(481.3)	—
Accrued interest receivable on BAM Surplus Notes	143.7	—	(143.7)	—
Deferred acquisition costs	35.7	19.0	(35.7)	19.0
Insurance premiums receivable	4.0	6.4	(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	\$ (665.0)	\$ 816.2
Liabilities				
BAM Surplus Notes ⁽¹⁾	\$ —	\$ 481.3	\$ (481.3)	\$ —
Accrued interest payable on BAM Surplus Notes ⁽²⁾	—	143.7	(143.7)	—
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)	24.7
Total liabilities	430.5	725.5	(665.0)	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	\$ (665.0)	\$ 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.

NSM

The following table presents the components of GAAP net loss and adjusted EBITDA included in White Mountains's NSM segment for the year ended December 31, 2019 and the for the period of May 11, 2018 to December 31, 2018:

Millions	Year Ended December 31, 2019	May 11, 2018 to December 31, 2018
Commission revenues	\$ 193.4	\$ 89.6
Broker commission expense	64.8	28.4
Gross profit	128.6	61.2
Other revenues	39.7	12.0
General and administrative expenses	132.2	59.4
Change in fair value of contingent consideration earnout liabilities	2.1	2.7
Amortization of other intangible assets	19.4	8.3
Interest expense	16.7	8.0
GAAP pre-tax loss	(2.1)	(5.2)
Income tax benefit	(.6)	—
GAAP net loss	(1.5)	(5.2)
Add back:		
Interest expense	16.7	8.0
Income tax benefit	(.6)	—
General and administrative expenses — depreciation	2.8	1.7
Amortization of other intangible assets	19.4	8.3
EBITDA ⁽¹⁾	36.8	12.8
Add back:		
Change in fair value of contingent consideration earnout liabilities	2.1	2.7
Acquisition-related transaction expenses	5.6	1.0
Fair value purchase accounting adjustment for deferred revenue	.9	—
Investments made in the development of new business lines	.3	1.8
Restructuring expenses	2.3	.1
Adjusted EBITDA ⁽¹⁾	\$ 48.0	\$ 18.4

⁽¹⁾ See "NON-GAAP FINANCIAL MEASURES" on page 58.

NSM Results—Year ended December 31, 2019 versus the Period from May 11, 2018 to December 31, 2018

For the year ended December 31, 2019, NSM reported GAAP pre-tax loss of \$2 million, adjusted EBITDA of \$48 million, and commission and other revenues of \$233 million. For the period from May 11, 2018, the date White Mountains acquired NSM, to December 31, 2018, NSM reported pre-tax loss of \$5 million, adjusted EBITDA of \$18 million, and commission and other revenues of \$102 million. NSM’s pre-tax loss included interest expense of \$17 million and amortization of other intangible assets of \$19 million in 2019, compared to \$8 million and \$8 million, respectively, for the period from May 11, 2018 to December 31, 2018.

Broker commission expenses and general and administrative expenses were \$65 million and \$132 million for 2019, compared to \$28 million and \$59 million, respectively, for the period from May 11, 2018 to December 31, 2018. NSM’s general and administrative expenses for 2019 included a \$2 million impairment of intangible assets related to Fresh Insurance.

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 a number of active programs that are broadly categorized into six market verticals. The following table presents the controlled premium and commission and other revenues by vertical for the years ended December 31, 2019, 2018 and 2017:

\$ in Millions	Year Ended December 31,					
	2019		2018 ⁽²⁾		2017 ⁽²⁾	
	Controlled Premium ⁽¹⁾	Commission and Other Revenue	Controlled Premium ⁽¹⁾	Commission and Other Revenue	Controlled Premium ⁽¹⁾	Commission and Other Revenue
Specialty Transportation	\$ 290.2	\$ 77.6	\$ 136.8	\$ 43.0	\$ 112.6	\$ 32.9
Real Estate	157.2	34.7	135.7	30.3	106.8	22.2
Social Services	102.7	25.9	94.0	23.8	111.6	28.8
Pet	67.6	30.0	—	—	—	—
United Kingdom	155.5	45.9	108.8	34.9	46.0	16.1
Other	124.5	19.0	119.4	19.8	113.4	18.6
Total	\$ 897.7	\$ 233.1	\$ 594.7	\$ 151.8	\$ 490.4	\$ 118.6

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

⁽²⁾ Controlled premium and commission and other revenue includes results prior to White Mountains’s ownership of NSM.

Year Ended December 31, 2019 versus Year Ended December 31, 2018

Specialty Transportation: NSM’s specialty transportation controlled premium and commission and other revenues increased significantly in 2019, compared to 2018, driven primarily by the acquisition of KBK in the fourth quarter of 2018 and an increase in contingent commissions and fees in 2019. KBK contributed \$160 million of controlled premium and \$32 million of commission and other revenues in 2019.

Real Estate: NSM’s real estate controlled premium increased 16% in 2019, compared to 2018, driven primarily by organic growth in both rate and units. The organic growth was driven by rate increases in the CHAMP program, which offers insurance coverage for wind-exposed coastal condominium associations, combined with significant unit growth in NSM’s excess and surplus habitational program. NSM’s real estate commission and other revenues increased 15% in 2019, compared to 2018, driven primarily by the increase in controlled premium, increases in rate and an increase in associated fee revenues.

Social Services: NSM’s social services controlled premium and commission and other revenues both increased 9% in 2019, compared to 2018. The increase is primarily due to increases in rate and retention.

Pet: The pet program was added during the second quarter of 2019 with the acquisition of Embrace.

United Kingdom: NSM’s United Kingdom controlled premium and commission and other revenues increased 43% and 32% in 2019, respectively, compared to 2018, driven primarily by the acquisition of Fresh Insurance in May 2018 and the establishment of First Underwriting in the fourth quarter of 2018. Fresh Insurance’s controlled premium and commission and other revenues contributed \$62 million and \$18 million in 2019, respectively, compared to \$46 million and \$16 million, respectively, from the date of acquisition, May 11, 2018, to the end of 2018. First Underwriting contributed \$38 million of controlled premium and \$3 million of commission and other revenues in 2019.

Other: NSM’s other controlled premium increased 4% in 2019, compared to 2018, driven primarily by improvements in units and retention. Commissions and other revenues decreased 4% in 2019 from 2018 due to lower average commission rates resulting from a change in carrier in 2019.

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

Specialty Transportation: NSM's specialty transportation controlled premium and commission and other revenue growth in 2018 was due to organic growth in the collector car programs, and higher profit commissions 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.

Real Estate: NSM's real estate controlled premium and commission and other revenue growth in 2018 was primarily due to the CHAMP program, which increased penetration in the southeast U.S. market and benefited from customer goodwill arising from exceptional claims handling in the wake of the 2017 hurricanes.

Social Services: NSM's social services controlled premium and commission and other revenue experienced a decline in 2018 primarily due to the continued pull back of a key carrier partner. NSM established relationships with two new carrier partners in the Social Services vertical in 2019.

United Kingdom: NSM's United Kingdom controlled premium and commission and fee revenue grew significantly in 2018 due to the acquisition of Fresh Insurance. Fresh Insurance's controlled premium and commission and other revenues contributed \$46 million and \$16 million, respectively, from the date of acquisition, May 11, 2018, to the end of 2018.

Other: 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.

Kudu

On April 4, 2019, White Mountains completed the Kudu Transaction. For the twelve months ended December 31, 2019, Kudu deployed \$203 million, including transaction costs, in seven asset management firms and has now deployed a total of \$266 million, including transaction costs, in nine asset management firms with combined assets under management of over \$33 billion, spanning a range of asset classes, including real estate, real assets, wealth management, hedge funds and alternative credit strategies. The average cash yield to Kudu at inception for the \$266 million of deployed capital was 10.6%.

The following table presents a summary of White Mountains's financial results from its Kudu segment for the period of April 4, 2019 to December 31, 2019:

Millions	April 4, 2019 to December 31, 2019	
Net investment income	\$	14.7
Net realized and unrealized investment gains		6.3
Other revenues		.2
Total revenues		21.2
General and administrative expenses		10.1
Amortization of other intangible assets		.2
Interest expense		.1
Total expenses		10.4
Pre-tax income	\$	10.8

Kudu reported pre-tax income of \$11 million and revenues of \$21 million for the period from April 4, 2019, the date of the Kudu Transaction, to December 31, 2019. Kudu's pre-tax income and revenues were driven primarily by net investment income of \$15 million and net realized and unrealized gains of \$6 million from Kudu's Participation Contracts. Kudu's pre-tax income also included general and administrative expenses of \$10 million, driven primarily by employee compensation costs and transaction related expenses.

MediaAlpha

As a result of the MediaAlpha Transaction, White Mountains's reduced its ownership interest in MediaAlpha to 48.3% (42.0% on a fully diluted, fully converted basis). White Mountains's remaining ownership interest in MediaAlpha no longer meets the criteria for a controlling ownership interest and, accordingly, White Mountains deconsolidated MediaAlpha as of February 26, 2019. Subsequent to the MediaAlpha Transaction, White Mountains accounts for its investment in MediaAlpha at fair value within other long-term investments. See **Summary of Investment Results** on page 45.

The following table presents the components of GAAP pre-tax (loss) income included in White Mountains's MediaAlpha segment for the period of January 1, 2019 to February 26, 2019, and for the years ended December 31, 2018 and 2017:

Millions	January 1, 2019 to February 26, 2019	Year Ended December 31,	
		2018	2017
Advertising and commission revenues	\$ 48.8	\$ 295.5	\$ 163.2
Cost of sales	40.6	245.0	135.9
Gross profit	8.2	50.5	27.3
Other revenue	—	1.6	—
General and administrative expenses	5.7	31.7	16.2
General and administrative expenses - MediaAlpha Transaction related costs	6.8	—	—
Amortization of other intangible assets	1.6	10.3	10.5
Interest expense	.2	1.2	1.0
GAAP pre-tax (loss) income	\$ (6.1)	\$ 8.9	\$ (4)

MediaAlpha Results—For the Period from January 1, 2019 to February 26, 2019

MediaAlpha reported GAAP pre-tax loss of \$6 million and revenues of \$49 million from January 1, 2019 to February 26, 2019, the date of the MediaAlpha Transaction. During the period from January 1, 2019 to February 26, 2019, revenues were driven primarily by the P&C and Health, Medicare and Life verticals, which had revenues of \$26 million and \$17 million. During the period from January 1, 2019 to February 26, 2019, MediaAlpha recognized \$7 million of costs related to the MediaAlpha Transaction in general and administrative expenses.

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

MediaAlpha reported GAAP pre-tax income of \$9 million, compared to GAAP break-even pre-tax income 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 and revenues were driven primarily by growth in MediaAlpha's P&C vertical, driven by increased demand from advertisers, and growth in the Health, Medicare and Life vertical and including 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 Health, Medicare and Life 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.

Other Operations

The following table presents White Mountains's financial results from its Other Operations segment for the years ended December 31, 2019, 2018 and 2017:

Millions	Year Ended December 31,		
	2019	2018	2017
Earned insurance premiums	\$ —	\$ —	\$ 1.0
Net investment income	43.4	42.3	43.7
Net realized and unrealized investment gains (losses)	285.1	(100.8)	132.7
Realized gain and unrealized investment gain from the MediaAlpha Transaction	182.2	—	—
Advertising and commission revenues	6.9	4.1	3.8
Other revenues	6.1	.5	6.1
Total revenues	523.7	(53.9)	187.3
Loss and loss adjustment expenses	—	—	1.1
Insurance acquisition expense	—	—	.1
Cost of sales	7.5	3.7	3.5
General and administrative expenses	122.5	94.4	148.9
Amortization of other intangible assets	.6	.2	.2
Interest expense	.6	.3	1.3
Total expenses	131.2	98.6	155.1
Pre-tax income (loss)	\$ 392.5	\$ (152.5)	\$ 32.2

Other Operations Results—Year Ended December 31, 2019 versus Year Ended December 31, 2018

White Mountains's Other Operations segment reported pre-tax income of \$393 million in 2019, compared to pre-tax loss of \$153 million in 2018. The change was driven primarily by higher investment returns and \$182 million of total gains from the MediaAlpha Transaction. White Mountains's Other Operations segment reported net realized and unrealized investment gains, excluding the MediaAlpha Transaction, of \$285 million in 2019, compared to net realized and unrealized investment losses of \$101 million in 2018. See "Summary of Investment Results" on page 45. The Other Operations segment reported general and administrative expenses of \$123 million in 2019, compared to \$94 million in 2018. The increase was driven primarily by higher incentive compensation costs, driven primarily by an increase in both White Mountains's share price and the assumed harvest percentage on outstanding performance shares.

Share repurchases

For the year ended December 31, 2019, White Mountains repurchased and retired 5,679 of its common shares for \$5 million.

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 45. 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 \$55 per share estimated gain from the MediaAlpha Transaction and adjusted book value per share including the estimated gain from the MediaAlpha Transaction.

II. Summary of Investment Results

White Mountains's total investment results include results from all segments. 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.

The following table presents the pre-tax investment return for White Mountains's consolidated portfolio for the years ended December 31, 2019, 2018 and 2017:

Gross Investment Returns and Benchmark Returns ⁽¹⁾

	Year Ended December 31,		
	2019	2018	2017
Common equity securities	29.1%	(7.7)%	20.1 %
Other long-term investments	52.4%	10.0 %	(5.8)%
Other long-term investments - excluding MediaAlpha Transaction	15.2%	10.0 %	(5.8)%
Total common equity securities and other long-term investments	36.9%	(3.6)%	12.7 %
Total common equity securities and other long-term investments - excluding MediaAlpha Transaction	25.7%	(3.6)%	12.7 %
S&P 500 Index (total return)	31.5%	(4.4)%	21.8 %
Fixed income investments	6.1%	1.2 %	3.5 %
Bloomberg Barclays U.S. Intermediate Aggregate Index	6.7%	0.9 %	2.3 %
Total consolidated portfolio	20.4%	(1.7)%	5.6 %
Total consolidated portfolio - excluding MediaAlpha Transaction	15.5%	(1.7)%	5.6 %

⁽¹⁾ For 2019 and 2018, investment returns are calculated using a daily weighted average of investments held. For 2017, investment returns are calculated using a quarterly weighted average of investments held.

Investment Returns—Year Ended December 31, 2019 versus Year Ended December 31, 2018

White Mountains's pre-tax total return on invested assets was 20.4% for 2019, which included a \$115 million pre-tax unrealized investment gain from the MediaAlpha Transaction. Excluding the MediaAlpha Transaction, White Mountains's pre-tax total return on invested assets was 15.5% for of 2019, compared to -1.7% for 2018.

Investment returns for 2019 benefited from the decision to increase White Mountains's equity exposure during the equity rout at the end of 2018, the strong rally in equity markets over the course of the year, and strong other long-term investments results. The strong other long-term investment results were driven primarily by a \$65 million increase in the fair value of White Mountains's investment in MediaAlpha resulting from increases in profitability metrics since the MediaAlpha Transaction. Investment returns for 2018 were adversely impacted by the sharp decline in equity markets in the fourth quarter.

Common Equity Securities and Other Long-Term Investments Results

White Mountains's portfolio of common equity securities and other long-term investments was \$1.5 billion and \$1.3 billion as of December 31, 2019 and 2018. See **Note 3 — "Investment Securities"**. White Mountains's portfolio of common equity securities and other long-term investments represented approximately 52% and 49% of total invested assets as of December 31, 2019 and 2018.

White Mountains's portfolio of common equity securities and other long-term investments returned 36.9% for 2019, which included the \$115 million pre-tax unrealized investment gain from the MediaAlpha Transaction. Excluding the MediaAlpha Transaction, White Mountains's portfolio of common equity securities and other long-term investments returned 25.7% for 2019, compared to -3.6% for 2018.

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 common equity securities was \$684 million and \$926 million as of December 31, 2019 and 2018. White Mountains's portfolio of common equity securities returned 29.1% for 2019, underperforming the S&P 500 Index return of 31.5%. White Mountains's portfolio of common equity securities returned -7.7% for 2018, underperforming the S&P 500 Index return of -4.4%. The results in both periods were driven primarily by relative underperformance in White Mountains's international common equity portfolios.

White Mountains's portfolio of ETFs seeks to provide investment results that generally correspond to the performance of the S&P 500 Index. White Mountains's portfolio of ETFs was \$536 million and \$675 million as of December 31, 2019 and 2018. In 2019 and 2018, the ETF portfolio essentially earned the effective index return, before expenses, over the period in which White Mountains was invested in these funds.

White Mountains has maintained long-standing relationships with a small number of third-party registered investment advisers (the "actively managed common equity portfolio"), including Highclere International Investors ("Highclere"), who invests in small- and mid-cap equity securities listed in markets outside of the United States and Canada through a unit trust, and Silchester International Investors ("Silchester"), who invests in value-oriented non-U.S. equity securities through a unit trust. In the third quarter of 2019, White Mountains redeemed \$82 million from its Highclere and Silchester accounts in order to reduce its international exposure in the context of the size of its overall portfolio of common equity securities.

White Mountains's actively managed common equity portfolio was \$147 million and \$250 million as of December 31, 2019 and 2018. White Mountains's actively managed common equity portfolio returned 24.2% for 2019, underperforming the S&P 500 Index return of 31.5%. White Mountains's actively managed common equity portfolio returned -15.6% for 2018, underperforming the S&P 500 Index return of -4.4%. The results in both periods were driven primarily by relative underperformance in the international common equity portfolios managed by Highclere and Silchester.

White Mountains maintains a portfolio of other long-term investments that primarily consists of unconsolidated entities, Kudu's Participation Contracts, private equity funds, hedge funds, ILS funds and private debt instruments. White Mountains's portfolio of other long-term investments was \$856 million and \$326 million as of December 31, 2019 and 2018.

White Mountains's other long-term investments portfolio returned 52.4% for 2019, which included the \$115 million pre-tax unrealized investment gain from the MediaAlpha Transaction. Excluding the MediaAlpha Transaction, White Mountains's other long-term investments portfolio returned 15.2% for 2019, compared to 10.0% for 2018. Investment returns for 2019 were driven primarily by a \$65 million increase in the fair value of White Mountains's investment in MediaAlpha resulting from increases in profitability metrics since the MediaAlpha Transaction. In addition, the investment returns were also driven by net investment income from Kudu's Participation Contracts and a \$15 million increase in the fair value of White Mountains's investment in PassportCard/DavidShield resulting from increases in profitability metrics in its core businesses, partially offset by losses from certain unconsolidated entities. Investment results for 2018 were driven primarily by a \$26 million increase in the fair value of White Mountains's investment in PassportCard/DavidShield resulting from increases in profitability metrics in its core businesses, as well as strong private equity fund returns.

In the second quarter of 2019, White Mountains made an investment in three multi-investor ILS funds managed by Elementum, a third-party registered investment adviser specializing in natural catastrophe ILS. Elementum manages separate accounts and pooled investment vehicles across various ILS sectors, including catastrophe bonds, collateralized reinsurance investments and industry loss warranties, on behalf of third-party clients. As of December 31, 2019, White Mountains had approximately \$41 million invested in these three ILS funds and has committed an additional \$10 million to a fourth fund.

Fixed Income Results

White Mountains's fixed income portfolio, including short-term investments, was \$1.4 billion and \$1.3 billion as of December 31, 2019 and 2018. The duration of White Mountains's fixed income portfolio, including short-term investments, was 2.8 years and 3.4 years as of December 31, 2019 and 2018. White Mountains's fixed income portfolio includes fixed maturity investments and short-term investments in the Collateral Trusts of \$320 million and \$254 million as of December 31, 2019 and 2018.

White Mountains's fixed income portfolio returned 6.1% for 2019, underperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index returns of 6.7%. The short duration and high liquidity positioning of White Mountains's fixed income portfolio contributed to the underperformance relative to the benchmark as interest rates declined significantly during the period. White Mountains's fixed income portfolio returned 1.2% for 2018, outperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index returns of 0.9%. The short duration and high liquidity positioning of White Mountains's fixed income portfolio contributed to the outperformance relative to the benchmark as interest rates rose during the period.

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. Investment returns for 2017 include discontinued operations returns through the close of the OneBeacon Transaction.

Common Equity Securities and Other Long-Term Investments Results

White Mountains's portfolio of common equity securities and other long-term investments was \$1.3 billion and \$1.1 billion as of December 31, 2018 and 2017. See **Note 3 — "Investment Securities"**. 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. 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 was \$926 million and \$866 million as of December 31, 2018 and 2017. White Mountains's portfolio of common equity securities returned -7.7% for 2018, underperforming the S&P 500 Index return of -4.4%, driven primarily by relative underperformance in White Mountains's international common equity portfolios. 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 ETFs was \$675 million and \$570 million as of December 31, 2018 and 2017. In 2018 and 2017, White Mountains's portfolio of ETFs essentially earned the effective S&P 500 index return, before expenses, over the period in which White Mountains was invested in these funds. 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%, driven primarily by relative underperformance in the international 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.

White Mountains's other long-term investments portfolio returned 10.0% for 2018. The results were driven primarily by a \$26 million increase in the fair value of White Mountains's investment in PassportCard/DavidShield resulting from increases in profitability metrics in its core businesses, as well as 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 White Mountains's unconsolidated entities, 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.

Fixed Income Results

White Mountains's fixed income portfolio, including short-term investments, was \$1.3 billion and \$2.3 billion as of December 31, 2018 and 2017. The duration of White Mountains's fixed income portfolio, including short-term investments, was 3.4 years as of both December 31, 2018 and 2017. White Mountains's fixed income portfolio includes fixed maturity investments and short-term investments in the Collateral Trusts of \$254 million and \$204 million as of December 31, 2018 and 2017.

White Mountains's fixed income portfolio returned 1.2% for 2018, outperforming the Bloomberg Barclays U.S. Intermediate Aggregate Index return of 0.9%. The short duration and high liquidity positioning of White Mountains's fixed income portfolio contributed to the outperformance relative to the benchmark as interest rates rose during the period. 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.

Portfolio Composition

The following table presents the composition of White Mountains's total operations investment portfolio as of December 31, 2019 and 2018:

\$ in Millions	December 31, 2019		December 31, 2018	
	Carrying Value	% of Total	Carrying Value	% of Total
Fixed maturity investments	\$ 1,205.8	40.9%	\$ 1,077.5	42.4%
Short-term investments	201.2	6.8	214.2	8.4
Common equity securities	683.9	23.2	925.6	36.4
Other long-term investments	856.3	29.1	325.6	12.8
Total investments	\$ 2,947.2	100.0%	\$ 2,542.9	100.0%

The following table presents the breakdown of White Mountains's fixed maturity investments as of December 31, 2019 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:

\$ in Millions	December 31, 2019			
	Amortized Cost	% of Total	Carrying Value	% of Total
U.S. government and government-sponsored entities ⁽¹⁾	\$ 409.3	34.7%	\$ 412.4	34.1%
AAA/Aaa	67.9	5.8	69.5	5.8
AA/Aa	265.2	22.5	275.7	22.9
A/A	335.7	28.5	345.6	28.7
BBB/Baa	97.8	8.3	100.6	8.3
Other/not rated	2.0	0.2	2.0	0.2
Total fixed maturity investments	\$ 1,177.9	100.0%	\$ 1,205.8	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, 2019 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.

Millions	December 31, 2019	
	Amortized Cost	Carrying Value
Due in one year or less	\$ 190.0	\$ 190.8
Due after one year through five years	481.6	489.3
Due after five years through ten years	165.3	173.2
Due after ten years	134.4	143.5
Mortgage and asset-backed securities	206.6	209.0
Total fixed maturity investments	\$ 1,177.9	\$ 1,205.8

Foreign Currency Exposure

As of December 31, 2019, White Mountains had foreign currency exposure on \$191 million of net assets primarily related to common equity securities managed by Silchester and Highclere, NSM's U.K. operations and certain foreign consolidated and unconsolidated entities.

From time to time, White Mountains may enter into foreign currency forward contracts in order to mitigate its foreign currency exposure on certain invested assets. As of December 31, 2019, White Mountains does not have any open foreign currency forward contracts.

The following table presents the fair value of White Mountains's foreign denominated net assets as of December 31, 2019:

\$ in Millions		% of Common
Currency	Fair Value	Shareholders' Equity
GBP	\$ 70.4	2.2%
EUR	40.0	1.2
JPY	39.0	1.2
All other	41.2	1.2
Total	\$ 190.6	5.8%

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 and 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 and are subject to tax in the jurisdictions in which they operate.

White Mountains reported income tax expense of \$29 million in 2019 on pre-tax income from continuing operations of \$405 million. White Mountains's effective tax rate was different from the current U.S. federal statutory rate of 21% primarily due to income generated in jurisdictions with lower tax rates than the United States, state income taxes and a tax benefit recorded at BAM related to its MSC collected. Also, the effective tax rate for 2019 was different from the current U.S. federal statutory rate of 21% due to the release of a valuation allowance on the net deferred tax assets of the U.S. consolidated group Guilford Holdings, Inc. and subsidiaries ("Guilford"), which includes Kudu, White Mountains's investment in MediaAlpha, WM Capital, WM Advisors and certain other entities and investments that are included in the Other Operations segment. 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. See **Note 6 — "Income Taxes"** on page F-36.

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 the net deferred tax assets of Guilford, 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.

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 the net deferred tax assets of Guilford 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.

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 20 — “Held for Sale and Discontinued Operations”** on page F-60 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.

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 late 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 2016. In connection with the sale, White Mountains indemnified Sirius Group against the loss of 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. For the year ended December 31, 2019, White Mountains recognized a net foreign currency translation gain of \$1 million that is included within net gain from sale of Sirius Group in discontinued operations.

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 from its operating subsidiaries, net investment income, proceeds from sales, repayments and maturities of investments, capital raising activities and, from time to time, proceeds from sales of operating subsidiaries. The primary uses of cash are expected to be general and administrative expenses, purchases of investments, payments to tax authorities, 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, contributions to operating subsidiaries and, from time to time, purchases of operating subsidiaries and repurchases of the Company's common shares.

Operating Subsidiary Level

The primary sources of cash for White Mountains's operating subsidiaries are expected to be commissions, fees and premium collections, net investment income, proceeds from sales, repayments and maturities of investments, contributions from holding companies and capital raising activities. The primary uses of cash are expected to be general and administrative expenses, broker commission expenses, cost of sales, insurance acquisition expenses, loss payments, purchases of investments, payments to tax authorities, payments on and repurchases/retirements of its debt obligations, distributions made to holding companies, distributions to non-controlling interest holders 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's operating subsidiaries 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 operating 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, 2019, 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 declared and paid preferred dividends of \$2 million in 2019. As of December 31, 2019, HG Global had accrued \$342 million of dividends payable to holders of its preferred shares, \$330 million of which is payable to White Mountains and eliminated in consolidation. As of December 31, 2019, HG Global and its subsidiaries had \$3 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, 2019, HG Re had \$745 million of statutory capital and surplus and \$787 million of assets held in the Collateral Trusts pursuant to the FLRT with BAM.

On a monthly basis, BAM deposits cash equal to ceded premiums, net of ceding commissions, due to HG Re under the FLRT directly into the Regulation 114 Trust. The Regulation 114 Trust target balance is equal to gross ceded unearned premiums and unpaid ceded loss and LAE expenses, if any. If, at the end of any quarter, the Regulation 114 Trust balance is below the target balance, funds will be withdrawn from the Supplemental Trust and deposited into the Regulation 114 Trust in an amount equal to the shortfall. If, at the end of any quarter, the Regulation 114 Trust balance is above 102% of the target balance, funds will be withdrawn from the Regulation 114 Trust and deposited into the Supplemental Trust.

The Supplemental Trust Target Balance is \$603 million, less the amount of cash and securities in the Regulation 114 Trust in excess of its target balance. If, at the end of any quarter, the Supplemental Trust balance exceeds the Supplemental Trust Target Balance, such excess may be distributed to HG Re. The distribution will be made first as an assignment of accrued interest on the BAM Surplus Notes and second in cash and/or fixed income securities. 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.

As of December 31, 2019, HG Re had \$6 million of cash and investments and \$111 million of accrued interest on the BAM Surplus Notes held 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 2020, the interest rate will be 4.6%. In January 2020, HG Global and BAM agreed to amend the BAM Surplus Notes to extend the end of the variable interest rate period until December 31, 2024. 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 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. No payment of principal or interest on the BAM Surplus Notes may be made without the approval of the NYDFS.

In December 2019, BAM made a \$32 million cash payment of principal and interest on the BAM Surplus Notes held by HG Global. Of this payment, \$24 million was a repayment of principal held in the Supplemental Trust and \$8 million was a payment of accrued interest held outside the Supplemental Trust. In January 2020, BAM made an additional \$65 million special cash payment of principal and interest on the BAM Surplus Notes. Of this payment, \$48 million was a repayment of principal held in the Supplemental Trust, \$1 million was a payment accrued interest held in the Supplemental Trust and \$16 million was a payment of accrued interest held outside the Supplemental Trust.

NSM

During 2019, NSM did not make any distributions to unitholders. As of December 31, 2019, NSM had \$33 million of net unrestricted cash.

Kudu

In December 2019, Kudu entered into a secured credit facility to provide funding for distributions to unitholders and fund new investments and related transaction expenses. At closing, Kudu drew an initial term loan of \$57 million to pay transaction expenses and to distribute \$54 million to unitholders, of which \$53 million was paid to White Mountains. As of December 31, 2019, Kudu had \$6 million of net unrestricted cash and short-term investments.

Other Operations

During 2019, White Mountains paid a \$3 million common share dividend. As of December 31, 2019, the Company and its intermediate holding companies had \$603 million of net unrestricted cash, short-term investments and fixed maturity investments, \$684 million of common equity securities and \$202 million of private equity funds, hedge funds and ILS funds.

Financing

The following table summarizes White Mountains's capital structure as of December 31, 2019 and 2018:

\$ in Millions	December 31,	
	2019	2018
NSM Bank Facility, net of unamortized issuance costs	\$ 217.4	\$ 176.6
Other NSM debt	1.8	1.9
Kudu Bank Facility, net of unamortized issuance costs	53.6	—
MediaAlpha Bank Facility, net of unamortized issuance costs	—	14.2
Other Operations debt	10.7	—
Total debt	283.5	192.7
Non-controlling interests — other, excluding BAM	29.9	45.7
Total White Mountains's common shareholders' equity	3,261.5	2,843.1
Total capital	3,574.9	3,081.5
Time-value discount on expected future payments on the BAM Surplus Notes ⁽¹⁾	(151.6)	(141.2)
HG Global's unearned premium reserve ⁽¹⁾	156.7	136.9
HG Global's net deferred acquisition costs ⁽¹⁾	(41.5)	(34.6)
Total adjusted capital	\$ 3,538.5	\$ 3,042.6
Total debt to total adjusted capital	8.0%	6.3%

⁽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.

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 has a total commitment of \$234 million, which is comprised of term loans of \$224 million and a revolving credit loan of \$10 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 2019, NSM borrowed \$43 million of incremental term loans, which included \$20 million and \$23 million for the funding of the acquisitions of Embrace and the Renewal Rights from AIG, respectively, and repaid \$2 million of the term loans. Additionally, during 2019, NSM borrowed and repaid \$7 million of revolving credit loans under the NSM Bank Facility. As of December 31, 2019, the term loans had an outstanding balance of \$221 million and the revolving credit loans were 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 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 then-current LIBOR. As of December 31, 2019, the variable rate received by NSM under the swap agreement was 1.71%. As of December 31, 2019, the interest rate, including the effect of the swap, for the outstanding term loans of \$149 million that are hedged by the swap was 7.47%. The effective interest on the outstanding term loans of \$73 million that are unhedged was 6.21%. The effective interest rate on the total outstanding term loans under the NSM Bank Facility of \$221 million was 7.06%, excluding the effect of debt issuance costs.

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.

NSM also has a secured term loan related to its U.K.-based operations. As of December 31, 2019, the secured term loan had an outstanding balance of \$2 million and a maturity date of May 11, 2024.

On December 23, 2019, Kudu entered into a secured credit facility (the “Kudu Bank Facility”) with Monroe Capital Management Advisors, LLC to provide funding for distributions to unitholders and fund new investments and related transaction expenses. The Kudu Bank Facility has a maximum borrowing capacity of \$125 million, which is comprised of an initial term loan of \$57 million, a delayed-draw term loan of \$63 million and a revolving credit loan of \$5 million. The term loans and the revolving credit loans under the Kudu Bank Facility mature in 2025. During 2019, Kudu borrowed \$57 million in term loans under the Kudu Bank Facility and had no repayments. As of December 31, 2019, the term loans had an outstanding balance of \$57 million and the revolving loan was undrawn.

Interest on the Kudu Bank Facility accrues at a floating interest rate equal to the one-month LIBOR plus 1% or the Prime Rate plus, in each case, an applicable margin. The margin over LIBOR may vary between 5.50% and 6.25% and the margin over the Prime Rate may vary between 4.50% and 5.25%, depending on the consolidated total leverage ratio of the borrower.

The Kudu 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.

As of December 31, 2019, debt in White Mountains’s Other Operations segment consisted of a secured credit facility that had a term loan of \$11 million, a delayed-draw term loan of \$3 million and a revolving credit loan commitment of \$2 million, all with a maturity date of March 12, 2024.

Covenant Compliance

As of December 31, 2019, 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 \$190 million as of December 31, 2019.

EBITDA is defined to include adjusted EBITDA (see **NON-GAAP FINANCIAL MEASURES** on page 58) plus additional adjustments (i) to exclude certain expenses not already excluded from adjusted EBITDA as specified in NSM’s Bank Facility and (ii) to include/exclude historical earnings of acquired/disposed companies (“Bank EBITDA”). NSM’s Bank EBITDA was \$53 million for the trailing twelve months ended December 31, 2019.

The maximum consolidated total leverage ratio covenant was 5.5x. NSM’s actual consolidated total leverage ratio as of December 31, 2019 was 3.6x.

Contractual Obligations and Commitments

The following table presents White Mountains’s material contractual obligations and commitments as of December 31, 2019:

Millions	Due in Less Than One Year	Due in One to Three Years	Due in Three to Five Years	Due After Five Years	Total
Debt	\$ 2.8	\$ 7.0	\$ 226.2	\$ 55.2	\$ 291.2
Interest on debt	15.7	30.6	73.0	—	119.3
Long-term incentive compensation	29.6	37.0	—	—	66.6
Contingent consideration earnout liabilities ⁽¹⁾	20.6	—	—	—	20.6
Operating leases ⁽²⁾	7.1	11.8	9.6	8.8	37.3
Total contractual obligations and commitments	\$ 75.8	\$ 86.4	\$ 308.8	\$ 64.0	\$ 535.0

⁽¹⁾ The contingent consideration earnout liabilities are related to NSM’s previous acquisitions of Fresh Insurance, KBK 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-17.

⁽²⁾ Amounts include BAM’s operating lease amounts of \$2.1, \$3.6, \$3.6 and \$2.4 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. 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, 2019.

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 \$183 million as of December 31, 2019, 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, 2019, 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.

Year Ended	Shares Repurchased	Cost (Millions)	Average Price Per Share	Adjusted Book Value Per Share	Average Price Per Share as % of	
					Adjusted Book Value Per Share	Adjusted Book Value Per Share, Including Estimated Gain From MediaAlpha Transaction
December 31, 2019	5,679	\$ 4.9	\$ 857.69	\$ 1,018.41	84%	N/A
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

Cash Flows

Detailed information concerning White Mountains's cash flows during 2019, 2018 and 2017 follows:

Cash flows from continuing operations for the years ended 2019, 2018 and 2017

Net cash flows used for continuing operations was \$121 million, \$31 million and \$62 million for the years ended 2019, 2018 and 2017. Cash used from continuing operations was higher in 2019 compared to 2018, driven primarily by Kudu's deployments in asset management firms. 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. 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. The Company and its intermediate holding companies had \$603 million of net unrestricted cash, short-term investments and fixed maturity investments, \$684 million of common equity securities and \$202 million of private equity funds, hedge funds and ILS funds as of December 31, 2019.

Cash flows from investing and financing activities for the year ended December 31, 2019

Financing and Other Capital Activities

During 2019, the Company declared and paid a \$3 million cash dividend to its common shareholders.

During 2019, White Mountains repurchased and retired 5,679 of its common shares for \$5 million, all of which were repurchased under employee benefit plans for statutory withholding tax payments.

During 2019, BAM received \$55 million in MSC.

During 2019, BAM repaid \$24 million of principal and paid \$8 million of accrued interest on the BAM Surplus Notes.

During 2019, NSM borrowed \$43 million of term loans under the NSM Bank Facility, which included \$20 million and \$23 million for the funding of the acquisitions of Embrace and the Renewal Rights from AIG, and \$7 million of revolving credit loans. Additionally, during 2019 NSM repaid \$2 million of term loans and \$7 million of revolving credit loans under the NSM Bank Facility.

During 2019, Kudu borrowed \$57 million in term loans under the Kudu Bank Facility and distributed \$54 million to unitholders, of which \$53 million was paid to White Mountains. As of December 31, 2019, Kudu has not made any payment on the Kudu Bank Facility.

Acquisitions and Dispositions

On February 26, 2019, White Mountains received net cash proceeds of \$89 million from the MediaAlpha Transaction.

On April 1, 2019, White Mountains acquired additional newly-issued units of NSM for \$58 million in connection with NSM's acquisition of Embrace.

On April 1, 2019, NSM acquired 100% of Embrace for \$72 million, net of cash acquired.

On April 4, 2019, White Mountains completed the Kudu Transaction for \$81 million. In addition, White Mountains assumed all of Oaktree's unfunded capital commitments to Kudu, increasing White Mountains's total capital commitment to \$250 million. During the fourth quarter of 2019, White Mountains increased its total capital commitment to Kudu by an additional \$100 million to \$350 million, of which \$129 million is undrawn as of December 31, 2019. Also during the fourth quarter of 2019, Kudu obtained a committed \$125 million credit facility, of which \$68 million was undrawn as of December 31, 2019. During 2019, Kudu deployed \$203 million, including transaction costs, in seven asset management firms and has now deployed a total of \$266 million, including transaction costs, in nine asset management firms.

On May 31, 2019, White Mountains completed the Elementum Transaction for \$55 million. As part of the Elementum Transaction, White Mountains also committed to invest \$50 million in ILS funds managed by Elementum. As of December 31, 2019, White Mountains had invested \$40 million into Elementum-managed ILS funds.

On June 28, 2019, White Mountains acquired additional newly-issued units of NSM for \$59 million in connection with NSM's acquisition of the Renewal Rights from AIG.

On June 28, 2019, NSM acquired the Renewal Rights from AIG for \$83 million.

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 of common shares 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 paid \$5 million of accrued interest on the BAM Surplus Notes.

During 2018, NSM borrowed \$51 million of term loans under the NSM Bank Facility to fund the Fresh Insurance acquisition and \$30 million of term loans to fund the KBK acquisition. Additionally, during 2018, NSM repaid \$1 million on the term loans and \$2 million on the revolving credit loan under the NSM Bank Facility.

During 2018, MediaAlpha distributed \$16 million to unitholders, 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.

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 95.0% of NSM (83.6% on a fully diluted, fully converted basis) 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.

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 of common shares 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 paid \$1 million of accrued interest on the BAM Surplus Notes.

During 2017, MediaAlpha distributed \$5 million to unitholders, 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, White Mountains received \$45 million of dividends from OneBeacon, which is reported as discontinued operations.

Acquisitions and Dispositions

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 additional newly-issued 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.

TRANSACTIONS WITH RELATED PERSONS

See **Note 18 — "Transactions with Related Persons"** on page F-58 in the accompanying Consolidated Financial Statements.

NON-GAAP FINANCIAL MEASURES

This report includes nine 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.

The GAAP book value per share numerator is adjusted (i) to include a discount for the time value of money arising from the modeled 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 and using an 8.0% discount rate, was estimated to be \$157 million, \$146 million and \$162 million less than the nominal GAAP carrying values as of December 31, 2019, 2018 and 2017, respectively.

The value of HG Global's unearned premium reserve, net of deferred acquisition costs, was \$119 million, \$106 million and \$82 million as of December 31, 2019, 2018 and 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.

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 earned on a straight-line basis over their vesting periods. The reconciliation of GAAP book value per share to adjusted book value per share is included on page 30.

The underlying growth in adjusted book value per share on page 30 reflects the estimated gain from the MediaAlpha Transaction as if it had closed as of December 31, 2018. A reconciliation from GAAP to the reported percentage is as follows:

	As of December 31, 2019	As of December 31, 2018	Growth % ⁽¹⁾
GAAP book value per share	\$ 1,023.91	\$ 896.00	14.4%
Estimated gain from the MediaAlpha Transaction as of December 31, 2018	—	55.07	
GAAP book value per share including the estimated gain from the MediaAlpha Transaction as of December 31, 2018	1,023.91	951.07	7.8%
Adjustments to book value per share (see reconciliation on page 30)	(5.50)	(8.15)	
Adjusted book value per share including the estimated gain from the MediaAlpha Transaction as of December 31, 2018	\$ 1,018.41	\$ 942.92	8.1%

⁽¹⁾Growth includes \$1.00 per share dividend paid during the first quarter of 2019.

	As of December 31, 2018	As of December 31, 2017	Growth % ⁽¹⁾
GAAP book value per share	\$ 896.00	\$ 931.30	(3.7)%
Estimated gain from the MediaAlpha Transaction as of December 31, 2018	55.07	—	
GAAP book value per share including the estimated gain from the MediaAlpha Transaction as of December 31, 2018	951.07	931.30	2.2 %
Adjustments to book value per share (see reconciliation on page 30)	(8.15)	(16.55)	
Adjusted book value per share including the estimated gain from the MediaAlpha Transaction as of December 31, 2018	\$ 942.92	\$ 914.75	3.2 %

⁽¹⁾Growth includes \$1.00 per share dividend paid during the first quarter of 2018.

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 (i) to include the present value of future installment MSC not yet collected and (ii) to exclude the impact of gross written premium adjustments related to policies closed in prior periods. White Mountains believes these adjustments are useful to management and investors in evaluating the volume and pricing of new business closed during the period. The reconciliation from GAAP gross written premiums to gross written premiums and MSC from new business is included on page 35.

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 53.

NSM's EBITDA and adjusted EBITDA are non-GAAP financial measures. EBITDA is a non-GAAP financial measure that excludes interest expense on debt, income tax benefit (expense), depreciation and amortization from GAAP net income (loss). Adjusted EBITDA is a non-GAAP financial measure that excludes certain other items in GAAP net income (loss) in addition to those excluded from EBITDA. The adjustments relate to (i) change in fair value of contingent consideration earnout liabilities, (ii) acquisition-related transaction expenses, (iii) fair value purchase accounting adjustment for deferred revenue, (iv) investments made in the development of new business lines and (v) restructuring expenses. A description of each follows:

- *Change in fair value of contingent consideration earnout liabilities* - Earnout liabilities are amounts payable to the sellers of businesses purchased by NSM that are contingent on the earnings of such businesses in periods subsequent to their acquisition. Under GAAP, earnout liabilities are not capitalized as part of the purchase price. Earnout liabilities are recorded at fair value, with the periodic change in the fair value of these liabilities recorded as income or an expense.
- *Acquisition-related transaction expenses* - Represents costs directly related to NSM's transactions to acquire businesses, such as transaction-related compensation, impairments of intangible assets, banking, accounting and external lawyer fees, which are not capitalized and are expensed under GAAP.
- *Fair value purchase accounting adjustment for deferred revenue* - Represents the amount of deferred revenue that had already been collected but subsequently written down in connection with establishing the fair value of deferred revenue as part of NSM's purchase accounting for Embrace.
- *Investments made in the development of new business lines* - Represents the net loss related to the start-up of newly established lines of business, which NSM views as investments. For the periods presented, this adjustment relates primarily to NSM's investment expenditures, net of revenues generated, in the organic development of (i) its pet insurance line and (ii) its MGA in the United Kingdom. NSM recently decided to cease investment in the organic development of its pet insurance line and, instead, to acquire Embrace, which closed in April 2019.
- *Restructuring expenses* - Represents expenses associated with eliminating redundant work force and facilities that often arise as a result of NSM's post-acquisition integration strategies.

White Mountains believes that these non-GAAP financial measures are useful to management and investors in evaluating NSM's performance. See page 40 for the reconciliation of NSM's GAAP net income (loss) to EBITDA and adjusted EBITDA.

Total consolidated portfolio returns excluding the MediaAlpha Transaction, common equity securities and other long-term investment returns excluding the MediaAlpha Transaction are non-GAAP financial measures that remove the \$115 million pre-tax unrealized investment gain resulting from the MediaAlpha Transaction recognized in the first quarter of 2019. Subsequent to the MediaAlpha Transaction, White Mountains no longer consolidates MediaAlpha and accounts for its remaining investment in MediaAlpha at fair value. White Mountains believes these measures to be useful to management and investors by making the returns in the current period comparable to the prior periods. A reconciliation from GAAP to the reported percentages is as follows:

	For the Twelve Months Ended December 31, 2019		
	GAAP Returns	Remove MediaAlpha Transaction	Returns - Excluding MediaAlpha Transaction
Total consolidated portfolio returns	20.4 %	(4.9) %	15.5 %
Common equity securities and other long-term investments returns	36.9 %	(11.2) %	25.7 %
Other long-term investments returns	52.4 %	(37.2) %	15.2 %

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, and derivative instruments, both exchange traded and over the counter instruments. 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 quoted market prices or other observable 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 outside pricing services and brokers 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, 2019, approximately 71% of the investment portfolio recorded at fair value was priced based upon quoted market prices or other observable inputs.

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, municipal obligations and mortgage and asset-backed securities. Investments valued using Level 2 inputs also include certain passive ETFs that track U.S. stock indices such as the S&P 500 Index, but are traded on foreign exchanges, which White Mountains values using the fund manager's published net asset value per share ("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 investment 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 of the security on an ad-hoc basis throughout the year. Prices provided by the pricing services that vary by more than \$0.5 million and 5% 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 internal 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.

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.

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.

Level 3 Measurements

Fair value estimates for investments that trade infrequently and have few or no quoted market prices or other observable inputs 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, common equity securities and other long-term investments where quoted market prices or other observable inputs are unavailable or are not considered reliable or reasonable.

Level 3 valuations are generated from techniques that use assumptions not observable in the market. These unobservable inputs reflect White Mountains's assumptions of what market participants would use in valuing the investment. In certain circumstances, investment 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 of securities between levels are based on investments held as of the beginning of the period.

Other Long-Term Investments

As of December 31, 2019, White Mountains owned a portfolio of other long-term investments valued at \$856 million, including unconsolidated entities, Kudu's Participation Contracts, private equity funds, hedge funds, ILS funds and private debt instruments. As of December 31, 2019, \$654 million of White Mountains's other long-term investments, including unconsolidated entities, Kudu's Participation Contracts and private debt instruments were classified as Level 3 investments in the GAAP fair value hierarchy, were not actively traded in public markets and did not have readily observable market prices. The determination of the fair value of these securities involves significant management judgment, and the use of valuation models and assumptions that are inherently subjective and uncertain. See Item 1A. Risk Factors, **"Our investment portfolio includes securities that do not have readily observable market prices. We use valuation methodologies that are inherently subjective and uncertain to value these securities. The values of securities established using these methodologies may never be realized, which could materially adversely affect our results of operations and financial condition."** on page 17. As of December 31, 2019, \$202 million of White Mountains's other long-term investments, including private equity funds, hedge funds and ILS funds, were valued at fair value using 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.

White Mountains may use a variety of valuation techniques to determine fair value depending on the nature of the investment, including a discounted cash flow analysis, market multiple approach, cost approach and/or liquidation analysis. On an ongoing basis, White Mountains also considers qualitative changes in facts and circumstances, which may impact the valuation of unconsolidated entities, including economic and market changes in relevant industries, changes to the entity's capital structure, business strategy and key personnel, and any recent transactions relating to the unconsolidated entity. On a quarterly basis, White Mountains evaluates the most recent qualitative and quantitative information of the business and completes a fair valuation analysis for all Level 3 other long-term investments. Periodically, and at least on an annual basis, White Mountains uses a third-party valuation firm to complete an independent valuation analysis of significant unconsolidated entities.

As of December 31, 2019, White Mountains's most significant other long-term investments that are valued using Level 3 measurements include Kudu's Participation Contracts, MediaAlpha and PassportCard/DavidShield.

Valuation of Kudu's Participation Contracts

Kudu's Participation Contracts comprise non-controlling equity interests in the form of revenue and earnings participation contracts. On a quarterly basis, White Mountains values each of Kudu's Participation Contracts using discounted cash flow models. The valuation models include key inputs such as projections of future revenues and earnings of Kudu's clients, a discount rate and a terminal cash flow exit multiple. The expected future cash flows are based on management judgment, considering current performance, budgets and projected future results. The discount rates reflect the weighted average cost of capital, considering comparable public company data, adjusted for risks specific to the business and industry. The terminal exit multiple is generally based on expectations of annual cash flow to Kudu from each of its clients in the terminal year of the cash flow model. In determining fair value, White Mountains considers factors such as performance of underlying products and vehicles, expected client growth rates, new fund launches, fee rates by products, capacity constraints, operating cash flow of underlying manager and other qualitative factors, including the assessment of key personnel.

As of December 31, 2019, the combined fair value of Kudu's Participation Contracts was \$267 million. The inputs to each discounted cash flow analysis vary depending on the nature of each client. As of December 31, 2019, White Mountains concluded that discount rates in the range of 15% to 22%, and terminal cash flow exit multiples in the range of 6 to 12 times were appropriate for the valuations of Kudu's Participation Contracts.

With a discounted cash flow analysis, 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 Kudu's Participation Contracts as of December 31, 2019, resulting from increases and decreases to the discount rates and terminal cash flow exit multiples used in the discounted cash flow analysis:

\$ in Millions	Discount Rate				
	-2%	-1%	15% - 22%	+1%	+2%
Terminal Exit Multiple					
+2	\$ 315	\$ 298	\$ 281	\$ 266	\$ 252
+1	\$ 307	\$ 290	\$ 274	\$ 259	\$ 245
6x to 12x	\$ 298	\$ 282	\$ 267	\$ 253	\$ 240
-1	\$ 289	\$ 274	\$ 259	\$ 246	\$ 234
-2	\$ 281	\$ 266	\$ 253	\$ 240	\$ 229

Valuation of MediaAlpha and PassportCard/DavidShield

On a quarterly basis, White Mountains values its investments in MediaAlpha and PassportCard/DavidShield using discounted cash flow models. The discounted cash flow valuation models include key inputs such as projections of future revenues and earnings, a discount rate and a terminal revenue growth rate. The expected future cash flows are based on management judgment, considering current performance, budgets and projected future results. The discount rates reflect the weighted average cost of capital, considering comparable public company data, adjusted for risks specific to the business and industry. The terminal revenue growth rate is based on company, industry and macroeconomic expectations of perpetual revenue growth subsequent to the end of the discrete period in the discounted cash flow analysis.

When making its fair value selection, White Mountains considers all available information, including market multiples and multiples implied by recent transactions, facts and circumstances specific to MediaAlpha's and PassportCard/DavidShield's businesses and industries, and any infrequent or unusual results for the period.

MediaAlpha. White Mountains concluded that a discount rate of 15% and a terminal revenue growth rate of 4% was appropriate for the valuation of its investment in MediaAlpha as of December 31, 2019. Utilizing these assumptions, White Mountains determined that the fair value of its investment in MediaAlpha was \$180 million as of December 31, 2019.

With a discounted cash flow analysis, 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 MediaAlpha as of December 31, 2019 resulting from changes in the discount rate and terminal revenue growth rate, two key inputs to the discounted cash flow analysis:

\$ in Millions	Discount Rate				
	13%	14%	15%	16%	17%
Terminal Revenue Growth Rate					
4.5%	\$ 234	\$ 207	\$ 184	\$ 166	\$ 150
4.0%	\$ 226	\$ 201	\$ 180	\$ 163	\$ 148
3.5%	\$ 220	\$ 196	\$ 176	\$ 159	\$ 145

PassportCard/DavidShield. White Mountains concluded that a discount rate of 22% and a terminal revenue growth rate of 4% was appropriate for the valuation of its investment in PassportCard/DavidShield as of December 31, 2019. Utilizing these assumptions, White Mountains determined that the fair value of its investment in PassportCard/DavidShield was \$90 million as of December 31, 2019.

With a discounted cash flow analysis, 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, 2019, resulting from changes in key inputs to the discounted cash flow analysis, including the discount rate and terminal revenue growth rate:

\$ in Millions	Discount Rate				
	20%	21%	22%	23%	24%
Terminal Revenue Growth Rate					
4.5%	\$ 108	\$ 99	\$ 91	\$ 84	\$ 78
4.0%	\$ 106	\$ 98	\$ 90	\$ 83	\$ 77
3.5%	\$ 105	\$ 96	\$ 89	\$ 82	\$ 76

Other Long-term Investments - NAV

White Mountains's portfolio of other long-term investments includes investments in private equity funds, hedge funds and ILS funds. White Mountains employs a number of procedures to assess the reasonableness of the fair value measurements for its private equity funds, hedge funds and ILS 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, hedge fund and ILS fund investments are generally determined using the fund manager's NAV. In the event that White Mountains believes the fair value of a private equity fund, hedge fund or ILS 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, hedge fund or ILS fund.

Sensitivity Analysis of Likely Returns on Other Long-term Investments - NAV

The underlying investments of White Mountains's 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, 2019 resulting from a 10% change and a 30% change in the market value of private equity fund and hedge fund investments:

Millions	Carrying Value at December 31, 2019	Change in Fair Value at December 31, 2019			
		10% Decline	10% Increase	30% Decline	30% Increase
Private equity funds and hedge funds — NAV	\$ 161.1	\$ (16.1)	\$ 16.1	\$ (48.3)	\$ 48.3

The underlying investments of White Mountains's multi-investor ILS funds consist primarily of catastrophe bonds, collateralized reinsurance investments and industry loss warranties. In addition to catastrophe event risk, the underlying investments are also subject to a variety of other risks including modeling, liquidity, market, collateral credit quality, counterparty financial strength, interest rate and currency risks.

See **Note 3 — "Investment Securities"** on page F-19 for tables that summarize the changes in White Mountains's fair value measurements by level for the years ended December 31, 2019 and 2018 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, 2019, 2018 and 2017.

2. Surplus Note Valuation

BAM Surplus Notes

As of December 31, 2019, White Mountains owned \$458 million of BAM Surplus Notes and has accrued \$163 million in interest due thereon. In December 2019, BAM made a \$32 million cash payment of principal and interest on the BAM Surplus Notes held by HG Global. In January 2020, BAM made an additional \$65 million special cash payment of principal and interest on the BAM Surplus Notes. During 2018, BAM made a \$23 million cash payment of note principal and interest on 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 18.

Periodically, White Mountains's management reviews the recoverability of amounts recorded from the BAM Surplus Notes. As of December 31, 2019, 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.

During the fourth quarter of 2019, White Mountains updated its debt service model to reflect (i) the cash payments of principal and interest on the BAM Surplus Notes made in December 2019 and January 2020, (ii) the amendments made to the terms of the BAM Surplus Notes in January 2020, including an extension of the variable interest rate period, and (iii) in light of the current interest rate environment, a more conservative forecast of future operating results for BAM. The debt service model assumes both par insured and total pricing gradually increase over the next five years, and flatten thereafter. White Mountains models that the BAM Surplus Notes will be fully repaid approximately seven years prior to final maturity, which is two years later than previously modeled as of December 31, 2018. The changes to the debt service model resulted in a \$20 million increase to the time value of money discount on the BAM Surplus Notes as reflected in adjusted book value per share at December 31, 2019. Assumptions regarding future trends for these factors are a matter of significant judgment, and whether actual results will follow the model is subject to a number of risks and uncertainties.

BAM is required to seek regulatory approval to pay interest and principal on the BAM 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. No payment of principal or interest on the BAM Surplus Notes may be made without the approval of the NYDFS.

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, 2019, goodwill and other intangible assets recognized in connection with business and asset acquisitions totaled \$655 million, of which \$631 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 on an annual basis, or whenever indications of potential impairment exist. In the absence of any indications of potential impairment, the evaluation of goodwill and indefinite-lived intangible assets is performed no later than the interim period in which the anniversary of the acquisition date falls. 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 first assesses whether qualitative factors indicate that the carrying value of goodwill or other intangible assets may be impaired. 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 models, market comparisons and other valuation techniques and assumptions, including customer retention rates and revenue growth rates, that are inherently subjective.

Most of White Mountains's total goodwill and other intangible assets of \$655 million relates to the acquisition of NSM and NSM's subsequent acquisitions of Fresh Insurance, KBK, Embrace and the Renewal Rights from AIG. As of December 31, 2019, goodwill and other intangible assets related to NSM were \$623 million. During the second quarter of 2019, White Mountains performed its periodic reviews for potential impairment, including a quantitative review of the goodwill associated with NSM. White Mountains concluded that there was no impairment of the goodwill associated with NSM. White Mountains recognized an impairment of other intangible assets of \$2 million related to Fresh Insurance and impairments of goodwill and other intangible assets of \$8 million and \$1 million, respectively, related to its Other Operations. There were no impairments to goodwill and other intangible assets during 2018 or 2017.

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 19.

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;
- 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;
- deterioration of general economic, market or business conditions, including due to outbreaks of contagious disease (including COVID-19);
- 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, 2019, White Mountains's fixed maturity investments are comprised primarily of debt securities issued by corporations, U.S. Government and agency obligations, municipal obligations and mortgage and asset-backed securities.

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	Fair Value at December 31, 2019	Assumed Change in Relevant Interest Rate	Estimated Fair Value After Change in Interest Rate	Pre-Tax Increase (Decrease) in Fair Value
Fixed maturity investments	\$ 1,205.8	100 bps decrease	\$ 1,244.5	\$ 38.7
		50 bps decrease	1,225.2	19.4
		50 bps increase	1,185.5	(20.3)
		100 bps increase	1,164.3	(41.5)

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:

\$ in Millions	December 31, 2019				
	Fair Value	Tighten 50	Tighten 25	Widen 25	Widen 50
U.S. Government and agency obligations	\$ 232.5	\$ —	\$ —	\$ —	\$ —
		Tighten 100	Tighten 50	Widen 50	Widen 100
Agency mortgage-backed securities	179.9	4.0	3.3	(4.0)	(8.1)
Other asset-backed securities	29.1	0.2	0.2	(0.3)	(0.5)
		Tighten 200	Tighten 100	Widen 100	Widen 200
Debt securities issued by corporations	467.2	9.3	8.7	(15.8)	(31.5)
Municipal obligations	297.1	13.2	12.5	(15.1)	(30.3)

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, 2019, the carrying value of White Mountains's common equity securities and other long-term investments would have increased or decreased by approximately \$154 million and \$462 million pre-tax, respectively.

Long-Term Obligations

White Mountains records its financial instruments at fair value with the exception of debt obligations 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, 2019 and December 31, 2018:

Millions	December 31, 2019		December 31, 2018	
	Fair Value	Carrying Value	Fair Value	Carrying Value
NSM Bank Facility	\$ 221.2	\$ 217.4	\$ 176.1	\$ 176.6
Other NSM debt	\$ 1.7	\$ 1.8	\$ 1.9	\$ 1.9
Kudu Bank Facility ⁽¹⁾	\$ 53.6	\$ 53.6	\$ —	\$ —
MediaAlpha Bank Facility	\$ —	\$ —	\$ 14.6	\$ 14.2
Other Operations debt	\$ 11.3	\$ 10.7	\$ —	\$ —

⁽¹⁾ White Mountains measured the fair value of the Kudu Bank Facility debt at the carrying value as a result of the debt being issued on December 23, 2019. See **Note 5 — "Debt"**.

The fair value estimates for the NSM Bank Facility, the MediaAlpha Bank Facility and Other Operations debt have been determined based on a discounted cash flow approach and are considered to be Level 3 measurements. As a result of the MediaAlpha Transaction, White Mountains's remaining ownership interest in MediaAlpha no longer meets the criteria for a controlling ownership interest and accordingly, White Mountains deconsolidated MediaAlpha as of February 26, 2019. See **Note 2 — "Significant Transactions"**.

Foreign Currency Exposure

As of December 31, 2019, White Mountains had foreign currency exposure on \$191 million of net assets primarily related to common equity securities managed by Silchester and Highclere, NSM's U.K. operations and certain foreign consolidated and unconsolidated entities.

From time to time, White Mountains may enter into foreign currency forward contracts in order to mitigate its foreign currency exposure on certain invested assets. As of December 31, 2019, White Mountains does not have any open foreign currency forward contracts.

The following table presents the fair value of White Mountains's foreign denominated net assets as of December 31, 2019:

\$ in Millions		% of Common
Currency	Fair Value	Shareholders' Equity
GBP	\$ 70.4	2.2%
EUR	40.0	1.2
JPY	39.0	1.2
All other	41.2	1.2
Total	\$ 190.6	5.8%

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 75 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, 2019. 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, 2019. 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-63 of this report. The attestation report on the effectiveness of our internal control over financial reporting by PricewaterhouseCoopers LLP is included on page F-64 of this report.

There has been no change in White Mountains's internal controls over financial reporting that occurred during the fourth quarter of 2019 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 2020 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 2020 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 2020 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 2020 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 2020 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 2020 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 75 of this report. A listing of exhibits filed as part of the report appear below and on page 73 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)
4	Description of White Mountains Common Shares (*)
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 Long-Term Incentive Plan, as amended (incorporated by reference herein to Appendix A of the Company's Notice of 2019 Annual General Meeting of Members and Proxy Statement dated April 8, 2019)
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 (incorporated by reference herein to Exhibit 10.7 of the Company's 2018 Annual Report on Form 10-K)
10.8	White Mountains Bonus Plan (incorporated by reference herein to Exhibit 10.1 of the Company's Report on Form 10-Q dated May 6, 2019)
10.9	FIRST AMENDMENT dated as of December 3, 2018, among NSM INSURANCE GROUP, LLC, a Delaware limited liability company, NSM INSURANCE HOLDCO, LLC, a Delaware limited liability company, the other LOAN PARTIES party hereto, ARES CAPITAL CORPORATION, a Maryland corporation, as administrative agent, and the LENDERS party hereto (incorporated by reference herein to Exhibit 10.2 of the Company's Report on Form 10-Q dated May 6, 2019)
10.10	SECOND AMENDMENT dated as of April 1, 2019, among NSM INSURANCE GROUP, LLC, a Delaware limited liability company, NSM INSURANCE HOLDCO, LLC, a Delaware limited liability company, the other LOAN PARTIES party hereto, ARES CAPITAL CORPORATION, a Maryland corporation, as administrative agent, and the LENDERS party hereto (incorporated by reference herein to Exhibit 10.3 of the Company's Report on Form 10-Q dated May 6, 2019)

Exhibit Number	Name
10.11	THIRD AMENDMENT dated as of June 28, 2019, among NSM INSURANCE GROUP, LLC, a Delaware limited liability company, NSM INSURANCE HOLDCO, LLC, a Delaware limited liability company, the other LOAN PARTIES party hereto, ARES CAPITAL CORPORATION, a Maryland corporation, as administrative agent, and the LENDERS party hereto (incorporated by reference herein to Exhibit 10 of the Company's Report on Form 10-Q dated August 6, 2019)
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	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
(*)	Included herein.

c. Financial Statement Schedules and Separate Financial Statements of Subsidiaries Not Consolidated and Fifty Percent or Less Owned Persons

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 75 of this report.

White Mountains is required to file the financial statements and the related footnotes of MediaAlpha in accordance with SEC Rule 3-09 of Regulation S-X. White Mountains expects to file those financial statements by amendment to its Annual Report on Form 10-K/A on or before March 30, 2020.

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: March 2, 2020

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
/s/ REID T. CAMPBELL Reid T. Campbell	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	March 2, 2020
PETER M. CARLSON* Peter M. Carlson	Director	March 2, 2020
MARY C. CHOKSI* Mary C. Choksi	Director	March 2, 2020
MORGAN W. DAVIS* Morgan W. Davis	Chairman	March 2, 2020
PHILIP A. GELSTON* Philip A. Gelston	Director	March 2, 2020
EDITH E. HOLIDAY* Edith E. Holiday	Director	March 2, 2020
/s/ J. BRIAN PALMER J. Brian Palmer	Managing Director and Chief Accounting Officer (Principal Accounting Officer)	March 2, 2020
/s/ G. MANNING ROUNTREE G. Manning Rountree	Chief Executive Officer (Principal Executive Officer)	March 2, 2020
LOWNDES A. SMITH* Lowndes A. Smith	Director	March 2, 2020
DAVID A. TANNER* David A. Tanner	Director	March 2, 2020

* By: /s/ G. MANNING ROUNTREE

G. Manning Rountree, *Attorney-in-Fact*

WHITE MOUNTAINS INSURANCE GROUP, LTD.
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CONSOLIDATED BALANCE SHEETS

Millions, Except Share and Per Share Amounts	December 31,	
	2019	2018
Assets		
Financial Guarantee (HG Global/BAM)		
Fixed maturity investments, at fair value	\$ 799.3	\$ 701.4
Short-term investments, at fair value	46.3	66.9
Total investments	845.6	768.3
Cash	24.2	12.5
Insurance premiums receivable	6.7	6.4
Deferred acquisition costs	22.1	19.0
Accrued investment income	5.4	4.9
Other assets	20.0	5.1
Total Financial Guarantee assets	924.0	816.2
Specialty Insurance Distribution (NSM)		
Cash (restricted \$56.3, \$50.0)	89.7	66.2
Premium and commission receivable	70.8	44.0
Goodwill and other intangible assets	623.0	486.2
Other assets	41.7	27.2
Total Specialty Insurance Distribution assets	825.2	623.6
Asset Management (Kudu)		
Short-term investments, at fair value	.1	—
Other long-term investments	266.5	—
Total investments	266.6	—
Cash	5.8	—
Accrued investment income	5.8	—
Goodwill and other intangible assets	9.6	—
Other assets	2.7	—
Total Asset Management assets	290.5	—
Marketing Technology (MediaAlpha)		
Cash	—	5.7
Goodwill and other intangible assets	—	43.4
Accounts receivable from publishers and advertisers	—	37.0
Other assets	—	2.3
Total Marketing Technology assets	—	88.4
Other Operations		
Fixed maturity investments, at fair value	406.5	376.1
Short-term investments, at fair value	154.8	147.3
Common equity securities, at fair value	683.9	925.6
Other long-term investments	589.8	325.6
Total investments	1,835.0	1,774.6
Cash	41.3	25.9
Accrued investment income	5.7	5.5
Goodwill and other intangible assets	22.1	7.9
Other assets	36.4	17.2
Assets held for sale	3.0	3.3
Total Other Operations assets	1,943.5	1,834.4
Total assets	\$ 3,983.2	\$ 3,362.6

See Notes to Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEETS (CONTINUED)

Millions, Except Share and Per Share Amounts	December 31,	
	2019	2018
Liabilities		
<i>Financial Guarantee (HG Global/BAM)</i>		
Unearned insurance premiums	\$ 198.4	\$ 176.0
Accrued incentive compensation	21.7	20.4
Other liabilities	26.7	16.1
Total Financial Guarantee liabilities	246.8	212.5
<i>Specialty Insurance Distribution (NSM)</i>		
Debt	219.2	178.5
Premiums payable	102.3	77.2
Contingent consideration earnout liabilities	20.6	20.2
Other liabilities	59.0	38.9
Total Specialty Insurance Distribution liabilities	401.1	314.8
<i>Asset Management (Kudu)</i>		
Debt	53.6	—
Other liabilities	3.4	—
Total Asset Management liabilities	57.0	—
<i>Marketing Technology (MediaAlpha)</i>		
Debt	—	14.2
Amounts due to publishers and advertisers	—	27.0
Other liabilities	—	5.7
Total Marketing Technology liabilities	—	46.9
<i>Other Operations</i>		
Debt	10.7	—
Accrued incentive compensation	55.1	38.9
Other liabilities	67.8	31.3
Total Other Operations liabilities	133.6	70.2
Total liabilities	838.5	644.4
Equity		
<i>White Mountains's common shareholders' equity</i>		
White Mountains's common shares at \$1 par value per share—authorized 50,000,000 shares; issued and outstanding 3,185,353 and 3,173,115 shares	3.2	3.2
Paid-in surplus	593.1	580.8
Retained earnings	2,672.4	2,264.9
Accumulated other comprehensive loss, after-tax:		
Net unrealized foreign currency translation losses and interest rate swap	(7.2)	(5.8)
Total White Mountains's common shareholders' equity	3,261.5	2,843.1
Non-controlling interests	(116.8)	(124.9)
Total equity	3,144.7	2,718.2
Total liabilities and equity	\$ 3,983.2	\$ 3,362.6

See Notes to Consolidated Financial Statements including **Note 12** Common Shareholders' Equity and Non-controlling Interests and **Note 19** for Commitments and Contingencies.

CONSOLIDATED STATEMENTS OF OPERATIONS

Millions	Year Ended December 31,		
	2019	2018	2017
Revenues:			
<i>Financial Guarantee (HG Global/BAM)</i>			
Earned insurance premiums	\$ 16.3	\$ 13.9	\$ 9.4
Net investment income	21.6	16.7	12.3
Net realized and unrealized investment gains (losses)	27.1	(7.5)	.6
Other revenues	1.6	1.2	1.0
Total Financial Guarantee revenues	66.6	24.3	23.3
<i>Specialty Insurance Distribution (NSM)</i>			
Commission revenues	193.4	89.6	—
Other revenues	39.7	12.0	—
Total Specialty Insurance Distribution revenues	233.1	101.6	—
<i>Asset Management (Kudu)</i>			
Net investment income	14.7	—	—
Net realized and unrealized investment gains	6.3	—	—
Other revenues	.2	—	—
Total Asset Management revenues	21.2	—	—
<i>Marketing Technology (MediaAlpha)</i>			
Advertising and commission revenues	48.8	295.5	163.2
Other revenues	—	1.6	—
Total Marketing Technology revenues	48.8	297.1	163.2
<i>Other Operations</i>			
Earned insurance premiums	—	—	1.0
Net investment income	43.4	42.3	43.7
Net realized and unrealized investment gains (losses)	285.1	(100.8)	132.7
Realized gain and unrealized investment gain from the MediaAlpha Transaction	182.2	—	—
Advertising and commission revenues	6.9	4.1	3.8
Other revenues	6.1	.5	6.1
Total Other Operations revenues	523.7	(53.9)	187.3
Total revenues	\$ 893.4	\$ 369.1	\$ 373.8

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF OPERATIONS (CONTINUED)

Millions	Year Ended December 31,		
	2019	2018	2017
Expenses:			
<i>Financial Guarantee (HG Global/BAM)</i>			
Insurance acquisition expenses	\$ 5.7	\$ 5.3	\$ 4.0
Other underwriting expenses	.4	.4	.4
General and administrative expenses	50.5	48.0	42.9
Total Financial Guarantee expenses	56.6	53.7	47.3
<i>Specialty Insurance Distribution (NSM)</i>			
General and administrative expenses	132.2	59.4	—
Broker commission expense	64.8	28.4	—
Change in fair value of contingent consideration earnout liabilities	2.1	2.7	—
Amortization of other intangible assets	19.4	8.3	—
Interest expense	16.7	8.0	—
Total Specialty Insurance Distribution expenses	235.2	106.8	—
<i>Asset Management (Kudu)</i>			
General and administrative expenses	10.1	—	—
Amortization of other intangible assets	.2	—	—
Interest expense	.1	—	—
Total Asset Management expenses	10.4	—	—
<i>Marketing Technology (MediaAlpha)</i>			
Cost of sales	40.6	245.0	135.9
General and administrative expenses	12.5	31.7	16.2
Amortization of other intangible assets	1.6	10.3	10.5
Interest expense	.2	1.2	1.0
Total Marketing Technology expenses	54.9	288.2	163.6
<i>Other Operations</i>			
Loss and loss adjustment expenses	—	—	1.1
Insurance acquisition expense	—	—	.1
Cost of sales	7.5	3.7	3.5
General and administrative expenses	122.5	94.4	148.9
Amortization of other intangible assets	.6	.2	.2
Interest expense	.6	.3	1.3
Total Other Operations expenses	131.2	98.6	155.1
Total expenses	488.3	547.3	366.0
Pre-tax income (loss) from continuing operations	405.1	(178.2)	7.8
Income tax (expense) benefit	(29.3)	4.0	7.8
Net income (loss) from continuing operations	375.8	(174.2)	15.6
Gain from sale of OneBeacon, net of tax	—	—	554.5
Gain from sale of Tranzact, net of tax	—	—	3.2
Gain (loss) from sale of Sirius Group, net of tax	.8	(17.2)	(.7)
Net income from discontinued operations, net of tax	—	—	20.5
Net income (loss)	376.6	(191.4)	593.1
Net loss attributable to non-controlling interests	37.9	50.2	34.1
Net income (loss) attributable to White Mountains's common shareholders	\$ 414.5	\$ (141.2)	\$ 627.2

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Millions, except for per share amounts	Year Ended December 31,		
	2019	2018	2017
Net income (loss) attributable to White Mountains's common shareholders	\$ 414.5	\$ (141.2)	\$ 627.2
Other comprehensive (loss) income, net of tax	(1.4)	(4.8)	.3
Comprehensive income from discontinued operations, net of tax	—	—	3.2
Comprehensive income (loss)	413.1	(146.0)	630.7
Comprehensive loss (income) attributable to non-controlling interests	—	.3	(.2)
Comprehensive income (loss) attributable to White Mountains's common shareholders	\$ 413.1	\$ (145.7)	\$ 630.5
Earnings (loss) per share attributable to White Mountains's common shareholders:			
Basic earnings (loss) per share			
Continuing operations	\$ 130.02	\$ (36.67)	\$ 11.56
Discontinued operations	.25	(5.09)	134.50
Total consolidated operations	<u>\$ 130.27</u>	<u>\$ (41.76)</u>	<u>\$ 146.06</u>
Diluted earnings (loss) per share			
Continuing operations	\$ 130.02	\$ (36.67)	\$ 11.56
Discontinued operations	.25	(5.09)	134.50
Total consolidated operations	<u>\$ 130.27</u>	<u>\$ (41.76)</u>	<u>\$ 146.06</u>
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

Millions	White Mountains's Common Shareholders' Equity					
	Common Shares and Paid-in Surplus	Retained Earnings	AOCL, After-tax	Total	Non-controlling Interests	Total Equity
Balances at December 31, 2016	\$ 810.7	\$ 2,776.6	\$ (4.6)	\$ 3,582.7	\$ 133.3	\$ 3,716.0
Net income (loss)	—	627.2	—	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)	—	627.2	3.3	630.5	(34.0)	596.5
Dividends declared on common shares	—	(4.6)	—	(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)	(576.0)	—	(723.9)	(5.2)	(729.1)
Capital contributions from BAM members, net of tax	—	—	—	—	27.2	27.2
Amortization of restricted share and option awards	14.8	—	—	14.8	.8	15.6
Net contributions from non-controlling interests	(4.6)	—	—	(4.6)	3.0	(1.6)
Issuance of shares of non-controlling interests	(4.1)	—	—	(4.1)	5.2	1.1
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 subsidiary	—	—	—	—	(4.4)	(4.4)
Balances at December 31, 2017	670.6	2,823.2	(1.3)	3,492.5	(131.7)	3,360.8
Net loss	—	(141.2)	—	(141.2)	(50.2)	(191.4)
Net change in foreign currency translation and interest rate swap	—	—	(4.5)	(4.5)	(.3)	(4.8)
Comprehensive income loss	—	(141.2)	(4.5)	(145.7)	(50.5)	(196.2)
Dividends declared on common shares	—	(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)	(413.3)	—	(519.1)	—	(519.1)
Capital contributions from BAM members, net of tax	—	—	—	—	45.0	45.0
Amortization of restricted share and option awards	13.0	—	—	13.0	—	13.0
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 non-controlling interests	—	—	—	—	14.5	14.5
Acquisition of subsidiary	(1.7)	—	—	(1.7)	—	(1.7)
Balances at December 31, 2018	584.0	2,264.9	(5.8)	2,843.1	(124.9)	2,718.2
Net income (loss)	—	414.5	—	414.5	(37.9)	376.6
Net change in foreign currency translation and interest rate swap	—	—	(1.4)	(1.4)	—	(1.4)
Comprehensive income (loss)	—	414.5	(1.4)	413.1	(37.9)	375.2
Dividends declared on common shares	—	(3.2)	—	(3.2)	—	(3.2)
Dividends to non-controlling interests	—	—	—	—	(2.0)	(2.0)
Issuances of common shares	2.2	—	—	2.2	—	2.2
Repurchases and retirements of common shares	(1.1)	(3.8)	—	(4.9)	—	(4.9)
Capital contributions from BAM members, net of tax	—	—	—	—	57.6	57.6
Amortization of restricted share and option awards	10.6	—	—	10.6	—	10.6
Recognition of compensation costs for equity-based units of subsidiary	1.5	—	—	1.5	—	1.5
Net contributions from non-controlling interests	(.9)	—	—	(.9)	2.4	1.5
Acquisition of non-controlling interests	—	—	—	—	1.8	1.8
Deconsolidation of non-controlling interests associated with the MediaAlpha Transaction	—	—	—	—	(13.8)	(13.8)
Balances at December 31, 2019	\$ 596.3	\$ 2,672.4	\$ (7.2)	\$ 3,261.5	\$ (116.8)	\$ 3,144.7

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

Millions	Year Ended December 31,		
	2019	2018	2017
Cash flows from operations:			
Net income (loss)	\$ 376.6	\$ (191.4)	\$ 593.1
<i>Charges (credits) to reconcile net income to net cash provided from (used for) operations:</i>			
Net realized and unrealized investment (gains) losses	(433.2)	108.3	(133.3)
Realized gain from the MediaAlpha Transaction	(67.5)	—	—
Amortization of restricted share and option awards	10.5	13.0	14.8
Amortization and depreciation	29.8	25.7	22.4
Deferred income tax expense (benefit)	24.8	(8.4)	(11.4)
Net income from discontinued operations	—	—	(20.5)
Net (gain) loss from sale of discontinued operations, net of tax	(.8)	17.2	(557.0)
<i>Other operating items:</i>			
Net change in unearned insurance premiums	35.8	39.2	54.5
Net change in deferred acquisition costs	(3.1)	(4.2)	(4.2)
Net change in restricted cash	6.3	(3.4)	—
Investments in asset management firms - Kudu	(118.4)	—	—
Net change in other assets and liabilities, net	18.7	(27.1)	(20.8)
Net cash used for continuing operations	(120.5)	(31.1)	(62.4)
Net cash provided from discontinued operations (See Note 20)	—	—	157.0
Net cash (used for) provided from operations	(120.5)	(31.1)	94.6
Cash flows from investing activities:			
Net change in short-term investments	21.9	(39.0)	(1.7)
Sales of fixed maturity and convertible investments	334.3	1,848.5	2,124.4
Maturities, calls and paydowns of fixed maturity and convertible investments	119.3	141.0	213.4
Sales of common equity securities	467.2	169.9	424.1
Distributions and redemptions of other long-term investments	29.4	5.0	29.4
Sales of unconsolidated affiliates and consolidated subsidiaries, net of cash sold	—	—	1,131.0
Purchases of other long-term investments	(177.7)	(95.9)	(84.1)
Net settlement of investment cash flows and contributions with discontinued operations	—	—	167.7
Purchases of common equity securities	(29.8)	(328.3)	(881.2)
Purchases of fixed maturity and convertible investments	(539.2)	(970.2)	(2,365.2)
Purchases of consolidated subsidiaries, net of cash acquired of \$12.8, \$90.9, and \$0.0 and including restricted cash of \$0.0, \$53.4, \$0.0	(258.0)	(295.2)	(27.6)
Other investing activities, net	(27.3)	23.4	(14.7)
Net cash (used for) provided from investing activities — continuing operations	(59.9)	459.2	715.5
Net cash provided from investing activities — discontinued operations (See Note 20)	—	—	3.0
Net cash (used for) provided from investing activities	(59.9)	459.2	718.5
Cash flows from financing activities:			
Draw down of debt and revolving line of credit	206.4	84.1	376.0
Repayment of debt and revolving line of credit	(22.9)	(15.4)	(365.0)
Cash dividends paid to the Company's common shareholders	(3.2)	(3.8)	(4.6)
Acquisitions of additional shares from non-controlling interest	—	(1.7)	(.7)
Distributions from discontinued operations	—	—	45.2
Common shares repurchased	—	(511.9)	(714.6)
Repurchase of shares from non-controlling interest shareholders	(21.1)	—	—
Proceeds from issuance of shares to non-controlling interest shareholders	62.7	—	—
Capital contributions from non-controlling interest shareholders	1.9	1.3	.5
Distributions to non-controlling interest shareholders	(28.1)	(6.0)	(2.0)
Payments to contingent considerations related to purchases of consolidated subsidiaries	(7.6)	(2.6)	—
Capital contributions from BAM members	54.6	53.8	37.4
Fidus Re premium payment	(3.0)	(3.7)	—
Other financing activities, net	(9.2)	(8.4)	(9.3)
Net cash provided from (used for) financing activities — continuing operations	230.5	(414.3)	(637.1)
Net cash used for financing activities — discontinued operations (See Note 20)	—	—	(61.9)
Net cash provided from (used for) financing activities	230.5	(414.3)	(699.0)
Effect of exchange rate changes on cash	.6	(.6)	—
Net change in cash during the period - continuing operations	50.7	13.2	16.0
Cash balance at beginning 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, and \$70.5)	110.3	97.1	80.2

Add: cash held for sale at the beginning of period	—	—	.9
Cash balance at end of year (includes restricted cash balances of \$56.3, \$50.0, \$0.0)	\$ 161.0	\$ 110.3	\$ 97.1

See 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 16 — "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. As of December 31, 2019, White Mountains's reportable segments were HG Global/BAM, NSM, Kudu and Other Operations. As a result of the MediaAlpha Transaction, White Mountains no longer consolidated MediaAlpha, and consequently it was no longer a reportable segment. See **Note 14 — "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 million of Series A Notes and \$300 million of Series B Notes (the "BAM Surplus Notes"). As of December 31, 2019 and 2018, 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 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, 2019 and 2018, White Mountains owned 96.4% and 95.5% of the basic units outstanding of NSM (88.4% and 85.0% on a fully diluted, fully converted basis). NSM was acquired by White Mountains in 2018. See **Note 2 — “Significant Transactions”**.

The Kudu segment consists of Kudu Investment Management, LLC and its subsidiaries (collectively “Kudu”), a capital solutions provider for asset management firms. Kudu provides capital solutions for boutique asset managers for a variety of 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 minority preferred equity stakes with distribution rights, typically tied to gross revenues and designed to generate immediate strong, stable cash yields. On April 4, 2019, White Mountains acquired the ownership interests in Kudu held by certain funds managed by Oaktree Capital Management, L.P. (“Oaktree”) for cash consideration of \$81.4 million. In addition, White Mountains assumed all of Oaktree’s unfunded capital commitments to Kudu, increasing White Mountains’s total capital commitment to \$250.0 million (the “Kudu Transaction”). As a result of the Kudu Transaction, White Mountains’s basic unit ownership of Kudu increased from 49.5% to 99.1% (42.7% to 85.4% on a fully diluted, fully converted basis), and White Mountains began consolidating Kudu as a reportable segment in its financial statements during the second quarter of 2019. See **Note 2 — “Significant Transactions”**. During the fourth quarter of 2019, White Mountains increased its total capital commitment to Kudu by \$100.0 million to \$350.0 million of which \$129.0 million was undrawn as of December 31, 2019. Also during the fourth quarter of 2019, Kudu obtained a committed \$125.0 million credit facility, of which \$68.0 million was undrawn as of December 31, 2019.

The Other Operations segment consists of the Company and its wholly-owned subsidiary, White Mountains Capital, Inc., 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 MediaAlpha (for periods after the MediaAlpha Transaction), PassportCard Limited (“PassportCard”) and DavidShield Life Insurance Agency (2000) Ltd. (“DavidShield”) (collectively, “PassportCard/ DavidShield”), Elementum Holdings LP (“Elementum”) and Kudu (for periods prior to the Kudu Transaction), and certain other consolidated and unconsolidated entities and certain other strategic investments.

The MediaAlpha segment consisted of QL Holdings LLC and its wholly-owned subsidiary QuoteLab, LLC (collectively “MediaAlpha”). MediaAlpha is a 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). MediaAlpha operates in insurance and non-insurance verticals and uses 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 media to advertisers through transparent, programmatic, auction-based marketplaces. 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 (the “MediaAlpha Transaction”). White Mountains deconsolidated MediaAlpha as a result of the MediaAlpha Transaction and it was no longer a reportable segment. White Mountains’s consolidated statement of comprehensive income and its segment disclosures include MediaAlpha’s results of operations through the date of the MediaAlpha Transaction. See **Note 2 — “Significant Transactions”**.

Discontinued Operations and Assets and Liabilities Held for Sale

As of December 31, 2017, White Mountains classified its Guilford, Connecticut property, which consists of an office building and adjacent land, as held for sale. The property was valued at its estimated fair value, net of disposal costs. The related write-down of \$3.7 million was recorded within general and administrative expenses during 2017. As of December 31, 2019 and 2018, the property has been measured at its estimated fair value, net of disposal costs of \$3.0 million and \$3.3 million. See **Note 20 — “Held for Sale and Discontinued Operations”**.

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. Restricted cash consists primarily of amounts in fiduciary accounts held by NSM on behalf of insurance carriers.

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, 2019 and 2018.

Investment Securities

As of December 31, 2019 and 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 generally 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, non-controlling equity interests in the form of revenue and earnings participation contracts ("Kudu's Participation Contracts"), private equity funds, hedge funds, insurance-linked securities ("ILS") funds and private debt instruments. 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").

Assets and liabilities carried at fair value include substantially all of the investment portfolio and derivative instruments, both exchange traded and over the counter instruments. Valuation of assets 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.

White Mountains uses outside pricing services and brokers 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, 2019, approximately 71% of the investment portfolio recorded at fair value was priced based upon quoted market prices or other observable inputs.

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, municipal obligations and mortgage and asset-backed securities. 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 Index, but are traded on foreign exchanges, which White Mountains values using the fund manager's published net asset value per share ("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 investment 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 of the security on an ad-hoc basis throughout the year. Prices provided by the pricing services that vary by more than \$0.5 million and 5% 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 internal 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.

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.

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.

Level 3 Measurements

Fair value estimates for investments that trade infrequently and have few or no quoted market prices or other observable inputs 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, common equity securities and other long-term investments where quoted market prices or other observable inputs are unavailable or are not considered reliable or reasonable.

Level 3 valuations are generated from techniques that use assumptions not observable in the market. These unobservable inputs reflect White Mountains's assumptions of what market participants would use in valuing the investment. In certain circumstances, investment 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 of securities between levels are based on investments held as of the beginning of the period.

Other Long-Term Investments

As of December 31, 2019, White Mountains owned a portfolio of other long-term investments valued at \$856 million, including unconsolidated entities, Kudu's Participation Contracts, private equity funds, hedge funds, ILS funds and private debt instruments. As of December 31, 2019, \$654 million of White Mountains's other long-term investments, including unconsolidated entities, Kudu's Participation Contracts and private debt instruments were classified as Level 3 investments in the GAAP fair value hierarchy, were not actively traded in public markets and did not have readily observable market prices. The determination of the fair value of these securities involves significant management judgment, and the use of valuation models and assumptions that are inherently subjective and uncertain. As of December 31, 2019, \$202 million of White Mountains's other long-term investments, including private equity funds, hedge funds and ILS funds, were valued at fair value using 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.

White Mountains may use a variety of valuation techniques to determine fair value depending on the nature of the investment, including a discounted cash flow analysis, market multiple approach, cost approach and/or liquidation analysis. On an ongoing basis, White Mountains also considers qualitative changes in facts and circumstances, which may impact the valuation of unconsolidated entities, including economic and market changes in relevant industries, changes to the entity's capital structure, business strategy and key personnel, and any recent transactions relating to the unconsolidated entity. On a quarterly basis, White Mountains evaluates the most recent qualitative and quantitative information of the business and completes a fair valuation analysis for all Level 3 other long-term investments. Periodically, and at least on an annual basis, White Mountains uses a third-party valuation firm to complete an independent valuation analysis of significant unconsolidated entities.

Other Long-term Investments - NAV

White Mountains's portfolio of other long-term investments includes investments in private equity funds, hedge funds and ILS funds. White Mountains employs a number of procedures to assess the reasonableness of the fair value measurements for its private equity funds, hedge funds and ILS 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, hedge fund and ILS fund investments are generally determined using the fund manager's NAV. In the event that White Mountains believes the fair value of a private equity fund, hedge fund or ILS 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, hedge fund or ILS fund.

Derivatives

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 that meet the criteria for hedge accounting are recognized in other comprehensive income and reclassified into current period pre-tax income when the hedged items are recognized therein. Changes in the fair value of derivative instruments that do not meet the criteria for hedge accounting are recognized in current period pre-tax income.

As of December 31, 2019 and 2018, White Mountains holds an interest rate swap derivative instrument that meets the criteria for hedge accounting. In 2018, White Mountains held a foreign currency forward contract derivative instrument that did not meet the criteria for hedge accounting. The foreign currency forward contract was closed in the first quarter of 2018.

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.

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, 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 trade names, URL and online names, customer relationships and contracts, information technology platforms and insurance licenses.

Goodwill and other intangible assets with indefinite lives are not amortized, but rather are 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 and indefinite-lived intangible assets is performed no later than the interim period in which the anniversary of the acquisition date falls. White Mountains initially evaluates goodwill using a qualitative approach (step zero) to determine whether it is more likely than not that the implied 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 implied 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 reviewed for impairment 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 other intangible assets exceeds fair value.

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, 2019 and 2018, BAM did not have any loss or loss adjustment expense reserves.

Revenue Recognition

NSM's revenues consist primarily of commissions and broker revenues for placement of insurance policies and administrative fees for claims and other services provided to insurance carriers. Commission and broker revenues and service fees 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. NSM's primary contractual performance obligations are generally satisfied upon the issuance of an insurance policy by the carrier. Where NSM has significant performance obligations beyond the policy issuance date, NSM estimates the relative standalone selling price for the post-issuance services in order to allocate the transaction price using the price charged for the service when sold separately in similar circumstances to similar customers. Deferred revenues associated with unsatisfied performance obligations are recognized within other liabilities.

Contingent commissions are based upon the overall profit and/or volume of the business placed with the insurance carrier during a calendar year and are determined after the contractual period has ended. NSM recognizes revenue on contingent commissions when management has determined that it is probable that the contingent commission requirements have been met.

Kudu's revenues are primarily generated from non-controlling equity interests in revenue and earnings participation contracts with asset management firms. The participation contracts are measured at fair value with the change therein recognized within unrealized investment gains and losses. Distributions from Kudu's clients are recognized through investment income when Kudu's right to receive payment has been established and can be reliably measured, which generally occurs on a quarterly basis in accordance with the terms of the underlying participation contracts.

MediaAlpha recognized 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 had satisfied its contractual performance obligations, which was generally at the time each transaction was executed. For transactions where MediaAlpha acted as the principal, such as the Open exchange, revenue amounts were reported gross. For transactions where MediaAlpha acted as an agent facilitating transactions between third parties, revenue amounts were reported at the net fee billed.

Cost of Sales and Broker Commission Expense

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.

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

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, 2019 and 2018, White Mountains had unrealized foreign currency translation losses of \$2.4 million and \$3.9 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 12 — "Common Shareholders' Equity and Non-controlling Interests"**.

Recently Adopted Changes in Accounting Principles

Leases

On January 1, 2019, White Mountains adopted ASU 2016-02, *Leases* (ASC 842), which 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. White Mountains elected the optional transition method that permits prospective adoption with recognition of a cumulative effect adjustment to the opening balance of retained earnings. As a result, White Mountains has presented comparative periods prior to adoption in accordance with previous lease accounting guidance. White Mountains also elected all available practical expedients permitted under ASC 842, which allowed White Mountains to carryforward its historical lease classification and not reassess leases for the definition of a lease under the new guidance. Upon adoption on January 1, 2019, White Mountains recognized \$23.2 million for both the lease right-of-use (“ROU”) assets and lease liabilities. As of December 31, 2019, White Mountains recognized \$22.6 million and \$22.8 million of lease ROU assets and lease liabilities. Adoption of ASU 2016-02 did not result in an adjustment to opening retained earnings.

Premium Amortization on Callable Debt Securities

On January 1, 2019, White Mountains adopted 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 is 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. Adoption of ASU 2017-08 did not have any impact on White Mountains’s financial statements.

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.

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

Income Taxes

In December 2019, the FASB issued ASU 2019-12, *Simplifying the Accounting for Income Taxes* (ASC 740), which eliminates exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. ASU 2019-12 also clarifies and simplifies other aspects of the accounting for income taxes. Adoption of ASU 2019-12 is required for fiscal years beginning after December 15, 2020, with early adoption permitted. White Mountains did not elect to adopt the new guidance in 2019 and is currently evaluating the impact of adoption.

VIE

In October 2018, the FASB issued ASU 2018-17, *Targeted Improvements to Related party Guidance for Variable Interest Entities* (ASC 810), which changes the way indirect interests held through related parties under common control are evaluated, requiring consideration of such interests on a proportional basis for purposes of determining whether fees paid to decision makers and service providers are variable interests. The new guidance is effective for fiscal years beginning after December 15, 2019. White Mountains does not currently have any variable interests where the new guidance would affect the determination of the primary beneficiary and does not expect adoption to have any impact on its financial statements.

Goodwill

In January 2017, the FASB issued 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. White Mountains does not expect adoption to have any impact on its periodic evaluation of goodwill.

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 does not expect adoption to have any effect on its financial statements.

Note 2. Significant Transactions

Acquisitions

Elementum

On May 31, 2019, White Mountains acquired a 30.0% limited partnership interest in Elementum, a third-party registered investment adviser specializing in natural catastrophe ILS, for \$55.1 million (the “Elementum Transaction”). Elementum manages separate accounts and pooled investment vehicles across various ILS sectors, including catastrophe bonds, collateralized reinsurance investments and industry loss warranties, on behalf of third-party clients. As part of the Elementum Transaction, White Mountains also committed to invest \$50.0 million in ILS funds managed by Elementum. As of December 31, 2019, White Mountains has invested \$40.0 million into three Elementum-managed funds.

White Mountains has elected to use the fair value option for its investment in Elementum. Both the investment in Elementum and the investments in ILS funds managed by Elementum are included within other long-term investments.

NSM

On May 11, 2018, White Mountains acquired a 95.0% basic unit ownership interest in NSM (83.6% on a fully diluted, fully converted basis). White Mountains funded the acquisition through a combination of cash on hand and new borrowings by NSM. White Mountains paid \$274.2 million of cash consideration for its equity interest in NSM, and NSM borrowed \$100.0 million in new debt as part of the transaction. During the third quarter of 2018, White Mountains recorded a purchase price adjustment of an additional \$2.1 million of consideration, which was paid in the fourth quarter of 2018. 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 in the Other Operations segment, which were expensed in 2018.

On May 18, 2018, NSM acquired 100% of Fresh Insurance Services Group Limited (“Fresh Insurance”). Fresh Insurance is an insurance broker that offers non-standard personal lines products in the United Kingdom. NSM paid \$49.6 million of upfront cash consideration for Fresh Insurance. NSM borrowed \$51.0 million to fund the transaction. During the three months ended March 31, 2019, NSM paid a purchase price adjustment of an additional \$0.7 million of consideration. 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 Insurance Group, Inc. (“KBK”), a specialized MGU focused on the towing and transportation space. NSM paid \$60.0 million of upfront cash consideration for KBK. White Mountains contributed \$29.0 million and NSM borrowed \$30.1 million to fund the transaction. White Mountains recognized \$59.4 million of goodwill and other intangible assets, reflecting acquisition date fair values, for which the relative fair values of goodwill and other intangible assets had not yet been finalized as of December 31, 2018. During 2019, NSM determined that the relative values of goodwill and other intangible assets recorded in connection with the KBK transaction were \$32.6 million and \$32.7 million, reflecting acquisition date fair values. The purchase price is subject to additional adjustments based upon growth in EBITDA during three earn out periods ending in December 2019, December 2020 and December 2021. During the three months ended March 31, 2019, NSM recorded a purchase price adjustment of \$5.9 million relating to the fair value of the contingent consideration earnout liability in connection with the acquisition.

On April 1, 2019, NSM acquired 100% of Embrace Pet Insurance (“Embrace”), a nationwide provider of pet health insurance for dogs and cats. NSM paid \$71.5 million of cash consideration, net of cash acquired, for Embrace. White Mountains contributed \$58.2 million to NSM and NSM borrowed \$20.4 million to fund the transaction. White Mountains recognized \$52.2 million of goodwill and \$15.4 million of other intangible assets, reflecting acquisition date fair values.

On June 28, 2019, NSM acquired the renewal rights on its U.S. collector car business (the “Renewal Rights”) from American International Group, Inc. (“AIG”) for \$82.5 million. The acquisition satisfied NSM’s obligation to acquire the Renewal Rights from AIG. See **Note 19 — “Commitments and Contingencies”**. White Mountains contributed \$59.1 million to NSM and NSM borrowed \$22.5 million to fund the transaction. White Mountains recognized \$82.5 million of other intangible assets, reflecting the acquisition date fair value. See **Note 4 — “Goodwill and Other Intangible Assets”**.

The contingent consideration earnout liabilities related to the NSM, Fresh Insurance and KBK acquisitions are subject to adjustments based upon EBITDA, EBITDA projections, and present value factors for acquired entities. For the year ended December 31, 2019, NSM recognized pre-tax expense of \$2.1 million for the change in the fair value of its contingent consideration earnout liabilities. 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. Any future adjustments to contingent consideration earnout liabilities under the agreements will be recognized through pre-tax income. As of December 31, 2019 and 2018, NSM recognized total contingent consideration earnout liabilities of \$20.6 million and \$20.2 million.

DavidShield

On January 24, 2018, White Mountains acquired a 50% ownership interest in 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% interest in 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 in exchange for a 49.5% basic unit ownership interest in Kudu (42.7% on a fully diluted, fully converted basis). On April 4, 2019, White Mountains acquired the ownership interests in Kudu held by certain funds managed by Oaktree for cash consideration of \$81.4 million. In addition, White Mountains assumed all of Oaktree's unfunded capital commitments to Kudu, increasing White Mountains's total capital commitment to \$250.0 million. White Mountains recognized total assets acquired of \$155.5 million, including \$7.6 million of goodwill and \$2.2 million of other intangible assets, total liabilities assumed of \$0.8 million and non-controlling interest of \$1.5 million.

As a result of the Kudu Transaction, White Mountains's basic unit ownership of Kudu increased from 49.5% to 99.1% (42.7% to 85.4% on a fully diluted, fully converted basis), and White Mountains began consolidating Kudu as a reportable segment in its financial statements during the second quarter of 2019. White Mountains's consolidated financial statements and its segment disclosures include Kudu's results for the period from April 4, 2019 to December 31, 2019. For periods prior to the Kudu Transaction, White Mountains determined that Kudu was a VIE, but White Mountains was not the primary beneficiary. In those periods, White Mountains elected to use the fair value option.

During the fourth quarter of 2019, White Mountains increased its total capital commitment to Kudu by \$100.0 million to \$350.0 million of which \$129.0 million is undrawn as of December 31, 2019. Also during the fourth quarter of 2019, Kudu obtained a committed \$125.0 million credit facility, of which \$68.0 million was undrawn as of December 31, 2019. See **Note 5 — "Debt"**.

Dispositions

MediaAlpha

On February 26, 2019, MediaAlpha completed the MediaAlpha Transaction. White Mountains received net cash proceeds of \$89.3 million from the MediaAlpha Transaction.

White Mountains recognized a realized gain of \$67.5 million and reduced its ownership interest to 48.3% of the basic units outstanding of MediaAlpha (42.0% on a fully diluted, fully converted basis) as a result of the MediaAlpha Transaction. White Mountains's remaining ownership interest in MediaAlpha no longer meets the criteria for a controlling ownership interest and, accordingly, White Mountains deconsolidated MediaAlpha on February 26, 2019. White Mountains's consolidated statement of operations and comprehensive income and its segment disclosures include MediaAlpha's results of operations for the period from January 1, 2019 through February 26, 2019. Upon deconsolidation, White Mountains's investment in MediaAlpha met the criteria to be accounted for under the equity method or under the fair value option. See **Note 15 — "Equity-Method Eligible Investments"**. White Mountains elected the fair value option and the investment in MediaAlpha was initially measured at its estimated fair value of \$114.7 million as of the transaction date, with the change in fair value of \$114.7 million recognized as an unrealized investment gain. White Mountains recognized a total of \$182.2 million of realized gain and unrealized investment gain on the MediaAlpha Transaction.

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 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 20 — “Held for Sale and Discontinued Operations”**.

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 net proceeds of \$221.3 million. 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 disposition of Sirius International Insurance Group, Ltd. (“Sirius Group”) to CM International Pte. Ltd. and CM Bermuda Limited (collectively “CMI”) for approximately \$2.6 billion. 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 2019 and 2018, White Mountains recorded a gain (loss) of \$0.8 million and \$(17.3) million within net gain (loss) on sale of discontinued operations for a contingency related to the sale of Sirius Group. See **Note 19 — “Commitments and Contingencies”**.

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 substantially 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, certificates of deposit 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 as of December 31, 2019 and 2018.

Other long-term investments consist primarily of unconsolidated entities, Kudu’s Participation Contracts, private equity funds, hedge funds, ILS funds and private debt instruments.

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 2019, 2018 and 2017:

Millions	Year Ended December 31,		
	2019	2018	2017
Fixed maturity investments	\$ 32.4	\$ 35.1	\$ 44.9
Short-term investments	5.0	8.0	1.8
Common equity securities	13.5	15.1	10.6
Other long-term investments	30.1	3.8	1.2
Total investment income	81.0	62.0	58.5
Third-party investment expenses	(1.3)	(3.0)	(2.5)
Net investment income, pre-tax	\$ 79.7	\$ 59.0	\$ 56.0

Net Realized and Unrealized Investment Gains (Losses)

The following table presents net realized and unrealized investment gains (losses) for 2019, 2018 and 2017:

Millions	Year Ended December 31,		
	2019	2018	2017
Net realized investment gains (losses), pre-tax ⁽¹⁾	\$ 96.6	\$ (12.9)	\$ 24.1
Net unrealized investment gains (losses), pre-tax ⁽²⁾	336.6	(95.4)	109.2
Net realized and unrealized investment gains (losses), pre-tax	433.2	(108.3)	133.3
Income tax (expense) benefit attributable to net realized and unrealized investment gains (losses)	(87.0)	18.2	(12.9)
Net realized and unrealized investment gains (losses), after-tax	\$ 346.2	\$ (90.1)	\$ 120.4

⁽¹⁾ Excludes \$67.5 realized gain associated with the MediaAlpha Transaction, which is recorded in a separate line item in the statement of operations titled Realized gain and unrealized investment gain from the MediaAlpha Transaction. See Note 2 — “Significant Transactions.”

⁽²⁾ Includes \$114.7 unrealized investment gain associated with the MediaAlpha Transaction, which is recorded in a separate line item in the statement of operations titled Realized gain and unrealized investment gain from the MediaAlpha Transaction. See Note 2 — “Significant Transactions.”

For the years ended December 31, 2019, 2018 and 2017, all of White Mountains’s net realized and unrealized investment gains (losses) were recorded in the consolidated statements of operations. There were no investment gains (losses) recorded in other comprehensive income.

Net Realized Investment Gains (Losses)

The following tables present net realized investment gains (losses) for the years ended 2019, 2018 and 2017:

Millions	Year Ended December 31, 2019		
	Net Realized Gains	Net Foreign Exchange Gains (Losses)	Total Net Realized Gains Reflected in Earnings
Fixed maturity investments	\$ 4.9	\$ —	\$ 4.9
Short-term investments	.2	—	.2
Common equity securities	85.9	—	85.9
Other long-term investments ⁽¹⁾	5.6	—	5.6
Net realized investment gains, pre-tax	96.6	—	96.6
Income tax expense attributable to net realized investment gains	(10.6)	—	(10.6)
Net realized investment gains, after-tax	\$ 86.0	\$ —	\$ 86.0

⁽¹⁾ Excludes \$67.5 realized gain associated with the MediaAlpha Transaction, which is recorded in a separate line item in the statement of operations titled Realized gain and unrealized investment gain from the MediaAlpha Transaction. See Note 2 — “Significant Transactions.”

Millions	Year Ended December 31, 2018		
	Net Realized (Losses) Gains	Net Foreign Exchange Gains (Losses)	Total Net Realized (Losses) Gains Reflected 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)

Millions	Year Ended December 31, 2017		
	Net Realized (Losses) Gains	Net Foreign Exchange 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

White Mountains recognized gross realized investment gains of \$104.0 million, \$49.4 million and \$61.5 million and gross realized investment losses of \$7.4 million, \$62.3 million and \$37.4 million on sales of investment securities during 2019, 2018 and 2017

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 2019, 2018 and 2017:

Millions	Year Ended December 31, 2019		
	Net Unrealized Gains	Net Foreign Exchange Losses	Total Net Unrealized Gains Reflected in Earnings
Fixed maturity investments	\$ 38.6	\$ —	\$ 38.6
Common equity securities	109.8	—	109.8
Other long-term investments ⁽¹⁾	188.5	(.3)	188.2
Net unrealized investment gains (losses), pre-tax	336.9	(.3)	336.6
Income tax expense attributable to net unrealized investment gains	(76.4)	—	(76.4)
Net unrealized investment gains (losses), after-tax	\$ 260.5	\$ (.3)	\$ 260.2

⁽¹⁾ Includes \$114.7 unrealized investment gain associated with the MediaAlpha Transaction, which is recorded in a separate line item in the statement of operations titled Realized gain and unrealized investment gain from the MediaAlpha Transaction. See Note 2 — “Significant Transactions.”

Millions	Year Ended December 31, 2018		
	Net Unrealized (Losses) Gains	Net Foreign Exchange (Losses) Gains	Total Net Unrealized (Losses) Gains Reflected 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)

Millions	Year Ended December 31, 2017		
	Net Unrealized Gains (Losses)	Net Foreign Exchange Gains (Losses)	Total Net Unrealized Gains (Losses) Reflected in Earnings
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

The following table presents total gains (losses) included in earnings attributable to net unrealized investment gains (losses) for Level 3 investments for the years ended December 31, 2019, 2018 and 2017 for investments held as of December 31, 2019, 2018 and 2017:

Millions	Year Ended December 31,		
	2019	2018	2017
Other long-term investments	\$ 181.9	\$ 22.6	\$ (15.4)

Investment Holdings

The following tables present the cost or amortized cost, gross unrealized investment gains (losses) and carrying values of White Mountains's fixed maturity investments as of December 31, 2019 and 2018.

Millions	December 31, 2019			
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Carrying Value
U.S. Government and agency obligations	\$ 231.7	\$ 1.0	\$ (.2)	\$ 232.5
Debt securities issued by corporations	454.9	12.5	(.2)	467.2
Municipal obligations	284.7	12.5	(.1)	297.1
Mortgage and asset-backed securities	206.6	2.7	(.3)	209.0
Total fixed maturity investments	\$ 1,177.9	\$ 28.7	\$ (.8)	\$ 1,205.8

Millions	December 31, 2018			
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	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

The weighted average duration of White Mountains's fixed income portfolio was approximately 2.8 years when including short-term investments and approximately 3.3 years when excluding short-term investments as of December 31, 2019.

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, 2019. 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.

Millions	December 31, 2019	
	Cost or Amortized Cost	Carrying Value
Due in one year or less	\$ 190.0	\$ 190.8
Due after one year through five years	481.6	489.3
Due after five years through ten years	165.3	173.2
Due after ten years	134.4	143.5
Mortgage and asset-backed securities	206.6	209.0
Total	\$ 1,177.9	\$ 1,205.8

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, 2019 and 2018:

Millions	December 31, 2019				
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Net Foreign Currency Losses	Carrying Value
Common equity securities	\$ 553.3	\$ 130.6	\$ —	\$ —	\$ 683.9
Other long-term investments	\$ 667.4	\$ 255.2	\$ (64.1)	\$ (2.2)	\$ 856.3

Millions	December 31, 2018				
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Net Foreign Currency Losses	Carrying Value
Common equity securities	\$ 904.7	\$ 51.0	\$ (30.1)	\$ —	\$ 925.6
Other long-term investments	\$ 330.3	\$ 52.2	\$ (54.9)	\$ (2.0)	\$ 325.6

Proceeds from the sales and maturities of investments, excluding short-term investments, totaled \$1.0 billion, \$2.2 billion and \$2.8 billion for the years ended December 31, 2019, 2018 and 2017.

Investments Held on Deposit or as Collateral

As of December 31, 2019 and 2018, investments of \$319.9 million and \$254.3 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 state deposits and are included within the investment portfolio, totaled \$9.9 million and \$6.1 million as of December 31, 2019 and 2018.

Fair Value Measurements as of December 31, 2019

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, 2019 and 2018, White Mountains used quoted market prices or other observable inputs to determine fair value for approximately 71% and 87% 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, 2019 and 2018 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.

Millions	December 31, 2019			
	Fair Value	Level 1	Level 2	Level 3
Fixed maturity investments:				
U.S. Government and agency obligations	\$ 232.5	\$ 232.5	\$ —	\$ —
Debt securities issued by corporations:				
Financials	144.8	—	144.8	—
Industrial	59.0	—	59.0	—
Healthcare	52.6	—	52.6	—
Consumer	50.9	—	50.9	—
Energy	44.9	—	44.9	—
Technology	41.2	—	41.2	—
Communications	31.3	—	31.3	—
Utilities	25.0	—	25.0	—
Materials	17.5	—	17.5	—
Total debt securities issued by corporations	467.2	—	467.2	—
Municipal obligations	297.1	—	297.1	—
Mortgage and asset-backed securities	209.0	—	209.0	—
Total fixed maturity investments	1,205.8	232.5	973.3	—
Short-term investments ⁽¹⁾	201.2	189.4	11.8	—
Common equity securities:				
Exchange traded funds ⁽²⁾	536.4	521.6	14.8	—
Other ⁽³⁾	147.5	25.9	121.5	0.1
Total common equity securities	683.9	547.5	136.3	0.1
Other long-term investments	654.0	—	—	654.0
Other long-term investments — NAV ⁽⁴⁾	202.3	—	—	—
Total investments	\$ 2,947.2	\$ 969.4	\$ 1,121.4	\$ 654.1

⁽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⁾ Primarily consists of two investments in unit trusts that predominantly invest in international equities and an open-end mutual fund that invests in domestic large-cap companies.

⁽⁴⁾ Consists of private equity funds, one hedge fund and ILS 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.

Millions	December 31, 2018			
	Fair 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	—
Municipal obligations	280.3	—	280.3	—
Mortgage and asset-backed securities	133.5	—	133.5	—
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 predominantly invest in international equities.

⁽⁴⁾ Consists of private equity funds, one hedge fund, White Mountains's non-controlling equity interest in Kudu prior to consolidation and one unconsolidated entity 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, 2019 and 2018:

Millions	Fair Value at December 31,	
	2019	2018
AAA	\$ 9.5	\$ 8.9
AA	73.9	88.7
A	288.5	270.5
BBB	95.3	142.4
Debt securities issued by corporations ⁽¹⁾	\$ 467.2	\$ 510.5

⁽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, 2019 and 2018:

Millions	December 31, 2019			December 31, 2018		
	Fair Value	Level 2	Level 3	Fair Value	Level 2	Level 3
Mortgage-backed securities:						
Agency:						
FNMA	\$ 88.6	\$ 88.6	\$ —	\$ 53.6	\$ 53.6	\$ —
FHLMC	60.5	60.5	—	38.1	38.1	—
GNMA	30.8	30.8	—	23.7	23.7	—
Total agency ⁽¹⁾	179.9	179.9	—	115.4	115.4	—
Total mortgage-backed securities	179.9	179.9	—	115.4	115.4	—
Other asset-backed securities:						
Vehicle receivables	15.1	15.1	—	9.2	9.2	—
Credit card receivables	14.0	14.0	—	8.9	8.9	—
Total other asset-backed securities	29.1	29.1	—	18.1	18.1	—
Total mortgage and asset-backed securities	\$ 209.0	\$ 209.0	\$ —	\$ 133.5	\$ 133.5	\$ —

⁽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).

Other Long-Term Investments

The following table presents the carrying values of White Mountains's other long-term investments as of December 31, 2019 and 2018:

Millions	Carrying Value at	
	December 31, 2019	December 31, 2018
Kudu's Participation Contracts ⁽¹⁾⁽²⁾	\$ 266.5	\$ —
MediaAlpha ⁽¹⁾⁽³⁾	180.0	—
PassportCard/DavidShield ⁽¹⁾	90.0	75.0
Elementum ⁽¹⁾	55.1	—
Other unconsolidated entities ⁽¹⁾⁽⁴⁾	31.2	60.0
Kudu ⁽⁵⁾	—	30.7
Total unconsolidated entities ⁽¹⁾	622.8	165.7
Private equity funds and hedge funds	161.1	146.1
Insurance-linked securities funds	41.2	—
Other	31.2	13.8
Total other long-term investments	\$ 856.3	\$ 325.6

⁽¹⁾ See *Fair Value Measurements by Level* table.

⁽²⁾ Includes Kudu's non-controlling equity interests in the form of revenue and earnings participation contracts. As of December 31, 2019, White Mountains consolidates Kudu. See **Note 2 — "Significant Transactions"**.

⁽³⁾ The MediaAlpha Transaction was completed on February 26, 2019. See **Note 2 — "Significant Transactions"**.

⁽⁴⁾ Includes White Mountains's non-controlling equity interests in certain private common equity securities, limited liability companies and convertible preferred securities.

⁽⁵⁾ Includes White Mountains's non-controlling equity interest in Kudu prior to consolidation. See **Note 2 — "Significant Transactions"**.

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, 2019, White Mountains held investments in 12 private equity funds and one hedge fund. The largest investment in a single fund was \$54.6 million as of December 31, 2019 and \$54.3 million as of December 31, 2018.

The following table presents investments and unfunded commitments in private equity funds and hedge funds by investment objective and sector as of December 31, 2019 and 2018:

Millions	December 31, 2019		December 31, 2018	
	Fair Value	Unfunded Commitments	Fair Value	Unfunded Commitments
Private equity funds				
Manufacturing/Industrial	\$ 57.7	\$ 4.1	\$ 42.9	\$ 10.5
Aerospace/Defense/Government	33.8	23.3	27.6	34.9
Financial services	15.0	22.8	8.3	13.6
Direct lending	—	—	13.0	17.7
Total private equity funds	106.5	50.2	91.8	76.7
Hedge funds				
Long/short banks and financial	54.6	—	54.3	—
Total hedge funds	54.6	—	54.3	—
Total private equity funds and hedge funds included in other long-term investments	\$ 161.1	\$ 50.2	\$ 146.1	\$ 76.7

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, 2019:

Millions	1 – 3 years	3 – 5 years	5 – 10 years	>10 years	Total
Private equity funds — expected lock-up period remaining	\$ 4.8	\$ 51.9	\$ 40.2	\$ 9.6	\$ 106.5

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, 2019 and 2018, 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, 2019, White Mountains held one active hedge fund with a fair value of \$54.6 million. The hedge fund is subject to a semi-annual restriction on redemptions and an advance notice period requirement of 45 days. On February 13, 2020, White Mountains submitted a notice to redeem its full interest in the hedge fund as of March 31, 2020 and expects to receive the proceeds, subject to any audit holdback, in the second quarter of 2020.

Insurance-Linked Securities Funds

White Mountains's other long-term investments include ILS funds. The fair value of these investments are generally estimated using the NAV of the funds. As of December 31, 2019, White Mountains held investments in three ILS funds with a fair value of \$41.2 million. Also as of December 31, 2019, White Mountains had made an in-transit cash contribution of \$4.8 million, which was recorded within other assets, in support of its remaining \$10.0 million commitment to invest \$50.0 million in ILS funds managed by Elementum. The cash was invested in the ILS fund on January 1, 2020 and will be recorded within other long-term investments in the first quarter of 2020.

Investments in ILS funds are generally subject to restrictions, including lock-up periods where no redemptions or withdrawals are allowed, restrictions on redemption frequency and advance notice periods for redemptions. From time to time, natural catastrophe, liquidity, market or other events will occur that make the determination of fair value for underlying investments in an ILS fund less certain due to the potential for loss development. In such circumstances, the impacted investments may be subject to additional lock-up provisions.

As of December 31, 2019, White Mountains holds one ILS fund subject to a lock-up period that expires on June 1, 2020. White Mountains's ILS funds are subject to monthly and annual restrictions on redemptions and advance redemption notice period requirements that range between 30 and 90 days. 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.

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, 2019 and 2018 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, 2019 and 2018:

Millions	Level 3 Investments					Total
	Level 1 Investments	Level 2 Investments	Common Equity Securities	Other Long-term Investments ⁽²⁾	Other Long-term Investments Measured at NAV ⁽³⁾	
Balance at December 31, 2018	\$ 842.6	\$ 1,160.5	\$ —	\$ 138.7	\$ 186.9	\$ 2,328.7 ⁽¹⁾
Net realized and unrealized gains	163.0	76.1	—	181.2	12.7	433.0 ⁽²⁾⁽⁴⁾
Amortization/accretion	.2	(1.8)	—	—	—	(1.6)
Purchases	165.3	404.5	.1	185.4	110.8	866.1
Sales	(391.1)	(529.7)	—	—	(29.5)	(950.3)
Effect of Kudu Transaction	—	—	—	141.8	(71.7)	70.1
Transfers in	—	—	—	10.9	4.0	14.9
Transfers out	—	—	—	(4.0)	(10.9)	(14.9)
Balance at December 31, 2019	\$ 780.0	\$ 1,109.6	\$.1	\$ 654.0	\$ 202.3	\$ 2,746.0 ⁽¹⁾

⁽¹⁾ Excludes carrying value of \$201.2 and \$214.2 as of December 31, 2019 and 2018 classified as short-term investments.

⁽²⁾ Includes \$114.7 unrealized investment gain associated with the MediaAlpha Transaction, which is recorded in a separate line item in the statement of operations titled Realized gain and unrealized investment gain from the MediaAlpha Transaction. See Note 2 — “Significant Transactions”.

⁽³⁾ Includes private equity funds, hedge funds, ILS funds and unconsolidated entities 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 short-term investments of \$0.2 for the year ended December 31, 2019.

Millions	Level 3 Investments			Other Long-term Investments Measured at NAV ⁽³⁾	Total
	Level 1 Investments	Level 2 Investments	Other Long-term Investments		
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⁾ Includes private equity funds, hedge funds and unconsolidated entities 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.

Fair Value Measurements — Transfers Between Levels - For Years Ended December 31, 2019 and 2018

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 2019 and 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.

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, hedge funds and ILS funds, classified within Level 3 as of December 31, 2019 and 2018. The fair value of investments in private equity funds, hedge funds and ILS funds are generally estimated using the NAV of the funds.

\$ in Millions	December 31, 2019				
	Description	Valuation Technique(s)	Fair Value ⁽¹⁾	Unobservable Inputs	
				Discount Rate ⁽²⁾	Terminal Cash Flow Exit Multiple (x) or Terminal Revenue Growth Rate (%) ⁽²⁾
Kudu's Participation Contracts	Discounted cash flow	\$266.5	15% - 22%	6x - 12x	
MediaAlpha	Discounted cash flow	\$180.0	15%	4%	
PassportCard/DavidShield	Discounted cash flow	\$90.0	22%	4%	
Elementum Holdings, L.P.	Discounted cash flow	\$55.1	20%	4%	
Private debt instruments	Discounted cash flow	\$23.7	4% - 9%	N/A	
All other	Discounted cash flow	\$23.7	25% - 32%	4%	
Compare.com	Estimated net realizable value	\$2.5	Net asset value:	\$2.5	

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

⁽²⁾ Increases (decreases) to the discount rates in isolation would result in lower (higher) fair value measurements, while increases (decreases) to the terminal cash flow exit multiples or terminal revenue growth rates in isolation would result in higher (lower) fair value measurements.

\$ in Millions	December 31, 2018				
	Description	Valuation Technique(s)	Fair Value ⁽¹⁾	Unobservable Inputs	
				Discount Rate ⁽²⁾	Terminal Revenue Exit Multiple (x) ⁽²⁾
PassportCard/DavidShield	Discounted cash flow	\$75.0	18%	1x	
Compare.com	Discounted cash flow	\$16.9	22%	3x	
Private debt instrument	Discounted cash flow	\$10.0	9%	N/A	
All other	Discounted cash flow	\$30.0	23%	2x - 4x	
Galvanic Applied Sciences	Multiple of EBITDA	\$3.1	EBITDA multiple:	6x	

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

⁽²⁾ Increases (decreases) to the discount rates in isolation would result in lower (higher) fair value measurements, while increases (decreases) to the terminal revenue exit multiples in isolation would result in higher (lower) fair value measurements.

Note 4. Goodwill and Other Intangible Assets

White Mountains accounts for business combinations using the acquisition method. Under the acquisition method, White Mountains recognizes and measures the assets acquired, liabilities assumed and any non-controlling interest in the acquired entities at their acquisition date fair values. The estimated acquisition date fair values, generally consisting of intangible assets and liabilities for contingent consideration, may be recorded at provisional amounts in circumstances where the information necessary to complete the acquisition accounting is not available at the reporting date. Any such provisional amounts are finalized as measurement period adjustments within one year of the acquisition date.

The following table presents the economic lives, acquisition date fair values, accumulated amortization and net carrying values for other intangible assets and goodwill, by company as of December 31, 2019 and 2018:

\$ in Millions	Weighted Average Economic Life (in years)	December 31, 2019				December 31, 2018		
		Acquisition Date Fair Value	Accumulated Amortization	Impairments	Net Carrying Value	Acquisition Date Fair Value	Accumulated Amortization	Net Carrying Value
Goodwill:								
NSM ⁽¹⁾⁽²⁾	N/A	\$ 381.6	\$ —	\$ —	\$ 381.6	\$ 354.3	\$ —	\$ 354.3
Kudu	N/A	7.6	—	—	7.6	—	—	—
MediaAlpha	N/A	—	—	—	—	18.3	—	18.3
Other Operations ⁽³⁾	N/A	13.1	—	7.6	5.5	7.3	—	7.3
Total goodwill		402.3	—	7.6	394.7	379.9	—	379.9
Other intangible assets:								
NSM ⁽¹⁾⁽²⁾								
Customer relationships	9	121.7	19.8	1.4	100.5	85.3	6.0	79.3
Trade names	19	61.9	5.3	.4	56.2	51.2	1.8	49.4
Information technology platform	5	3.9	1.4	.6	1.9	3.7	.5	3.2
Renewal rights	12	82.5	.7	—	81.8	—	—	—
Other	3	1.7	.7	—	1.0	—	—	—
Subtotal		271.7	27.9	2.4	241.4	140.2	8.3	131.9
Kudu								
Trade names	7	2.2	.2	—	2.0	—	—	—
MediaAlpha								
Customer relationships	9	—	—	—	—	26.8	4.9	21.9
Information technology platform	5	—	—	—	—	33.3	30.9	2.4
Other	3	—	—	—	—	9.8	9.0	.8
Subtotal		—	—	—	—	69.9	44.8	25.1
Other Operations								
Trade names	10	1.7	.5	.2	1.0	.6	.2	.4
Customer Relationships	11	7.2	.4	—	6.8	—	—	—
Information technology platform	5	.5	.3	.2	—	.5	.3	.2
Insurance licenses	N/A	8.6	—	—	8.6	—	—	—
Other	5	.2	—	—	.2	—	—	—
Subtotal		18.2	1.2	.4	16.6	1.1	.5	.6
Total other intangible assets		292.1	29.3	2.8	260.0	211.2	53.6	157.6
Total goodwill and other intangible assets		\$ 694.4	\$ 29.3	\$ 10.4	654.7	\$ 591.1	\$ 53.6	537.5
Goodwill and other intangible assets attributed to non-controlling interests					(23.4)			(40.6)
Goodwill and other intangible assets included in White Mountains's common shareholders' equity					\$ 631.3			\$ 496.9

⁽¹⁾ As of December 31, 2019, NSM's goodwill and intangible assets includes \$1.4 and \$0.7 of the effect of foreign currency translation. As of December 31, 2018, NSM's goodwill and intangible assets includes \$(2.2) and \$(0.7) of the effect of foreign currency translation.

⁽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. The attribution of acquisition date fair value estimates between goodwill and other intangible assets for KBK was completed during 2019.

⁽³⁾ As of December 31, 2019 and 2018, Other Operations' goodwill includes \$0.0 and \$(0.3) of the effect of foreign currency translation.

The goodwill recognized for the entities shown above 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 trade names, customer relationships and contracts and information technology.

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 an other 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 a summary of the acquisition date fair values of goodwill and other intangible assets for acquisitions completed during 2019 and 2018:

\$ in Millions		
Acquisition of Subsidiary/ Asset	Goodwill and Other Intangible Assets⁽¹⁾	Acquisition Date
NSM	\$ 383.0	May 11, 2018
Fresh Insurance	54.6	May 18, 2018
KBK ⁽³⁾	65.3	December 3, 2018
Embrace ⁽²⁾	67.6	April 1, 2019
Renewal Rights ⁽³⁾	82.5	June 28, 2019
Total NSM segment	\$ 653.0	
Kudu Transaction	\$ 9.8	April 4, 2019
Other Operations	\$ 22.6	Various

⁽¹⁾ Acquisition date fair values include the effect of adjustments during the measurement period and excludes the effect of foreign currency translation subsequent to the acquisition date.

⁽²⁾ Excludes \$3.4 of software classified within other assets.

⁽³⁾ NSM's purchase of the Renewal Rights from AIG was an asset acquisition. NSM's purchase of KBK was accounted for as a business combination but did not include acquisition of the legal entity.

On an annual basis beginning no later than the interim period included in the one-year anniversary of an acquisition, White Mountains evaluates goodwill for potential impairment. During 2019, White Mountains recognized impairments of goodwill of \$7.6 million and other intangible assets of \$2.8 million, of which \$7.6 million of goodwill and \$0.4 million of other intangible assets related to Other Operations and \$2.4 million of other intangible assets related to Fresh Insurance. There were no impairments during 2018 or 2017.

The following table presents the change in goodwill and other intangible assets:

Millions	December 31,					
	2019			2018		
	Goodwill	Other Intangible Assets	Total Goodwill and Other Intangible Assets	Goodwill	Other Intangible Assets	Total Goodwill and Other Intangible Assets
Beginning balance	\$ 379.9	\$ 157.6	\$ 537.5	\$ 25.9	\$ 36.2	\$ 62.1
Acquisitions of businesses ⁽¹⁾	64.8	34.6	99.4	356.5	140.9	497.4
Acquisition of collector car renewal rights	—	82.5	82.5	—	—	—
Dispositions of businesses ⁽²⁾	(18.3)	(23.5)	(41.8)	—	—	—
Attribution of acquisition date fair value estimates between goodwill and other intangible assets ⁽³⁾	(26.8)	26.8	—	—	—	—
Impairments ⁽⁴⁾	(7.6)	(2.8)	(10.4)	—	—	—
Measurement period adjustments ⁽⁵⁾	.9	5.9	6.8	—	—	—
Foreign currency translation	1.8	.7	2.5	(2.5)	(.7)	(3.2)
Amortization	—	(21.8)	(21.8)	—	(18.8)	(18.8)
Ending balance	\$ 394.7	\$ 260.0	\$ 654.7	\$ 379.9	\$ 157.6	\$ 537.5

⁽¹⁾ During 2019, amounts include acquisitions related to Kudu, Other Operations and Embrace. During 2018, amounts include acquisitions related to NSM, Fresh Insurance and KBK. See **Note 2** — “**Significant Transactions**”.

⁽²⁾ Dispositions relate to the MediaAlpha Transaction. See **Note 2** — “**Significant Transactions**”.

⁽³⁾ The determination of the relative fair values of goodwill and other intangible assets recognized in connection with the acquisition of KBK was completed in 2019. The attribution is net of a \$5.9 measurement period adjustment for contingent consideration.

⁽⁴⁾ Impairments of \$7.6 and \$0.4 of goodwill and other intangible assets relate to Other Operations and \$2.4 of impairments to other intangible relate to Fresh Insurance.

⁽⁵⁾ Measurement period adjustments relate to updated information about acquisition date fair values of assets acquired and liabilities assumed.

Amortization expense was \$21.8 million, \$18.8 million and \$10.7 million for the years ended December 31, 2019, 2018 and 2017.

White Mountains expects to recognize amortization expense in each of the next five years as the following table presents:

Millions	Amortization Expense
2020	\$ 23.9
2021	30.5
2022	29.7
2023	28.4
2024 and years after	138.9
Total ⁽¹⁾	\$ 251.4

⁽¹⁾ Excludes indefinite-lived intangible assets of \$8.6.

Note 5. Debt

The following table presents White Mountains's debt outstanding as of December 31, 2019 and 2018:

\$ in Millions	December 31,	Effective	December 31,	Effective
	2019	Rate ⁽¹⁾	2018	Rate ⁽¹⁾
NSM Bank Facility	\$ 221.3	7.5%	\$ 180.4	7.4%
Unamortized issuance cost	(3.9)		(3.8)	
NSM Bank Facility, carrying value	217.4		176.6	
Other NSM debt	1.8	3.0%	1.9	2.2%
Kudu Bank Facility	57.0	8.3%	—	
Unamortized issuance cost	(3.4)		—	
Kudu Bank Facility, carrying value	53.6		—	
MediaAlpha Bank Facility	—		14.3	7.1%
Unamortized issuance cost	—		(.1)	
MediaAlpha Bank Facility, carrying value	—		14.2	
Other Operations debt	11.1	8.3%	—	
Unamortized issuance cost	(.4)		—	
Other Operations debt, carrying value	10.7		—	
Total debt	\$ 283.5		\$ 192.7	

⁽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, 2019:

Millions	December 31, 2019
Due in one year or less	\$ 2.8
Due in two to three years	7.0
Due in four to five years	226.2
Due after five years	55.2
Total	\$ 291.2

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 and \$0.6 million of interest expense on the WTM Bank Facility for the years ended December 31, 2018 and 2017.

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 has a total commitment of \$234.0 million, which is comprised of term loans of \$224.0 million and a revolving credit loan of \$10.0 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 2019, NSM repaid \$2.0 million on the term loans and \$6.5 million on the revolving credit loan. During 2019, NSM borrowed \$42.9 million of incremental term loans, which included \$20.4 million and \$22.5 million for the funding of the acquisitions of Embrace and the Renewal Rights from AIG, respectively, and repaid \$2 million of the term loans. Additionally, during 2019, NSM borrowed \$6.5 million on the revolving credit loans under the NSM Bank Facility. 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, 2019, the term loans had an outstanding balance of \$221.3 million and the revolving credit loans were 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 then-current LIBOR. As of December 31, 2019, the variable rate received by NSM under the swap agreement was 1.71%. As of December 31, 2019, the interest rate, including the effect of the swap, for the outstanding term loans of \$148.7 million that are hedged by the swap was 7.47%. The effective interest on the outstanding term loans of \$72.6 million that are unhedged was 6.21%. The effective interest rate on the total outstanding term loans under the NSM Bank Facility of \$221.3 million was 7.06%, excluding the effect of debt issuance costs. See **Note 7 - “Derivatives”**.

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.

Other NSM Debt

NSM also has a secured term loan related to its U.K.-based operations. As of December 31, 2019, the secured term loan had an outstanding balance of \$1.8 million and a maturity date of May 11, 2024.

Kudu Bank Facility

On December 23, 2019, Kudu entered into a secured credit facility (the “Kudu Bank Facility”) with Monroe Capital Management Advisors, LLC to provide funding for distributions to unitholders and fund new investments and related transaction expenses. The Kudu Bank Facility has a maximum borrowing capacity of \$125.0 million, which is comprised of a revolving credit loan of \$5.0 million, an initial term loan of \$57.0 million and a delayed-draw term loan of \$63.0 million. The term loans and revolving credit loans, under the Kudu Bank Facility, mature in 2025. During 2019, Kudu borrowed \$57.0 million in term loans under the Kudu Bank Facility and made no repayments. As of December 31, 2019, the term loans had an outstanding balance of \$57.0 million and the revolving credit loan was undrawn.

Interest on the Kudu Bank Facility accrues at a floating interest rate equal to one-month LIBOR plus 1.0% or the Prime Rate plus, in each case, an applicable margin. The margin over LIBOR may vary between 5.50% and 6.25% and the margin over the Base Rate may vary between 4.50% and 5.25%, depending on the consolidated total leverage ratio of the borrower.

The Kudu 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. The MediaAlpha Bank Facility consists of a \$18.4 million term loan facility, which had 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.

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 and \$1.0 million of interest expense on the MediaAlpha Bank Facility for the years ended December 31, 2018 and 2017.

Other Operations Debt

As of December 31, 2019, debt in White Mountains’s Other Operations segment consisted of a secured credit facility that had a term loan of \$11.3 million, a delayed-draw term loan of \$3.0 million and a revolving credit loan commitment of \$2.0 million, all with a maturity date of March 12, 2024.

Compliance

As of December 31, 2019, 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 \$17.6 million, \$9.5 million and \$2.3 million for the periods ended December 31, 2019, 2018 and 2017. Total interest paid by White Mountains for its indebtedness was \$16.3 million, \$8.8 million, and \$1.4 million for the periods ended December 31, 2019, 2018 and 2017.

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 and 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 (expense) benefit for the years ended December 31, 2019, 2018 and 2017:

Millions	Year Ended December 31,		
	2019	2018	2017
Current income tax benefit (expense):			
U.S. federal	\$.9	\$ (.1)	\$ (.3)
State	(3.7)	(1.4)	(1.3)
Non-U.S.	(1.7)	(2.9)	(2.0)
Total current income tax (expense) benefit	(4.5)	(4.4)	(3.6)
Deferred income tax (expense) benefit:			
U.S. federal	(14.9)	8.3	11.4
State	(10.4)	—	—
Non-U.S.	.5	.1	—
Total deferred income tax (expense) benefit	(24.8)	8.4	11.4
Total income tax (expense) benefit	\$ (29.3)	\$ 4.0	\$ 7.8

Effective Rate Reconciliation

The following table presents a reconciliation of taxes calculated for 2019 and 2018 using the 21% U.S. federal statutory rate and for 2017 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 (expense) benefit on pre-tax income (loss):

Millions	Year Ended December 31,		
	2019	2018	2017
Tax (expense) benefit at the U.S. statutory rate	\$ (85.1)	\$ 37.4	\$ (2.7)
Differences in taxes resulting from:			
Change in valuation allowance	63.6	(31.0)	42.6
Non-U.S. earnings, net of foreign taxes	27.1	(2.9)	21.5
State taxes	(17.5)	4.0	.6
Tax rate changes	(5.7)	1.7	(44.3)
Member's surplus contributions	(3.6)	(2.6)	(3.0)
Withholding tax	(1.6)	(2.7)	(2.0)
Tax exempt interest and dividends	1.1	.6	.5
Tax reserve adjustments	(.7)	(.8)	(.3)
Officer compensation	—	—	(4.1)
Other, net	(6.9)	.3	(1.0)
Total income tax (expense) benefit on pre-tax income (loss)	\$ (29.3)	\$ 4.0	\$ 7.8

The non-U.S. component of pre-tax income (loss) was \$100.4 million, \$(30.1) million and \$71.3 million for the years ended December 31, 2019, 2018 and 2017.

Tax Payments and Receipts

Net income tax payments (primarily to the United States) totaled \$3.7 million, \$3.5 million, and \$2.0 million for the years ended December 31, 2019, 2018 and 2017.

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:

Millions	December 31,	
	2019	2018
Deferred tax assets related to:		
U.S. federal and state net operating and capital loss carryforwards	\$ 92.3	\$ 95.5
Non-U.S. net operating loss carryforwards	41.7	36.6
Incentive compensation	15.0	14.1
Investment basis difference	—	11.1
Net unrealized investment losses	—	9.5
Accrued interest	5.1	—
Deferred acquisition costs	4.3	3.5
Tax credit carryforwards	4.2	4.2
Other items	3.4	5.8
Total gross deferred tax assets	166.0	180.3
Less: valuation allowances	77.9	139.9
Total net deferred tax assets	88.1	40.4
Deferred tax liabilities related to:		
Net unrealized investment gains	66.3	—
Member's surplus contributions	43.2	32.8
Investment basis difference	6.6	—
Other items	4.6	5.4
Total deferred tax liabilities	120.7	38.2
Net deferred tax (liability) asset	\$ (32.6)	\$ 2.2

White Mountains's deferred tax (liabilities) 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 \$77.9 million valuation allowance as of December 31, 2019, \$34.9 million related to deferred tax assets on net operating losses in U.S. subsidiaries and other federal and state deferred tax benefits, \$22.6 million related to deferred tax assets on net operating losses and net investment unrealized gains and losses in Luxembourg subsidiaries, \$17.3 million related to net operating losses and other deferred tax benefits in Israeli subsidiaries and \$3.1 million related to net operating losses and other deferred tax benefits in U.K. subsidiaries. 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 in Israeli subsidiaries and \$1.7 million related to net operating losses and other deferred tax benefits in U.K. subsidiaries.

United States

During 2019 and 2018, White Mountains recorded income tax (benefit) expense of \$(63.2) million to release and \$22.7 million to establish a valuation allowance against deferred tax assets of Guilford Holdings, Inc. and subsidiaries ("Guilford"), which includes Kudu, White Mountains's investment in MediaAlpha, WM Capital, WM Advisors and certain other entities and investments that are included in the Other Operations segment. During 2019, Guilford was in a net deferred tax liability position due to unrealized gains. Guilford recorded a tax benefit due to a release in the full valuation allowance from 2018. During 2018, Guilford had a full valuation allowance recorded against its deferred tax assets, as White Mountains management was unsure it would generate sufficient taxable income to utilize the deferred tax assets.

During 2019 and 2018, White Mountains recorded income tax (benefit) expense of \$(4.5) million to release and \$1.5 million to establish a valuation allowance against deferred tax assets of BAM. During 2019 and 2018, 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 \$10.5 million and \$8.7 million, in continuing operations, with an offsetting tax expense in paid-in surplus. Also, during 2019 and 2018, 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 2019 and 2018, White Mountains recorded income tax expense of \$0.1 million and \$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 2019 and 2018, White Mountains recorded income tax expense of \$1.1 million and \$1.2 million to establish a valuation allowance against most of the deferred tax assets which primarily relate to losses on the write-down of foreign subsidiaries and the unrealized losses on investments held in Luxembourg-domiciled subsidiaries.

During 2019 and 2018, White Mountains recorded income tax expense of \$1.6 million and \$2.1 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 2019 and 2018, White Mountains recorded income tax expense of \$1.3 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, 2019, the expiration dates and the deferred tax assets thereon:

Millions	December 31, 2019				
	United States	Luxembourg	United Kingdom	Israel	Total
2019-2023	\$.1	\$ —	\$ —	\$ —	\$.1
2024-2028	—	—	—	—	—
2029-2038	302.6	58.0	—	—	360.6
No expiration date	117.4	28.5	18.7	73.6	238.2
Total	\$ 420.1	\$ 86.5	\$ 18.7	\$ 73.6	\$ 598.9
Gross deferred tax asset	\$ 88.0	\$ 21.6	\$ 3.2	\$ 16.9	\$ 129.7
Valuation allowance	(63.5)	(21.5)	(3.0)	(16.9)	(104.9)
Net deferred tax asset	\$ 24.5	\$.1	\$.2	\$ —	\$ 24.8

As of December 31, 2019, there are U.S. foreign tax credit carryforwards available of \$3.8 million, which begin to expire in 2028. As of December 31, 2019, there are U.S. alternative minimum tax credit carryforwards of \$0.4 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.

The following table presents a reconciliation of the beginning and ending amount of unrecognized tax benefits from 2017 to 2019:

Millions	Permanent Differences ⁽¹⁾	Temporary Differences ⁽²⁾	Interest and Penalties ⁽³⁾	Total
Balance at December 31, 2016	\$ —	\$ —	\$ —	\$ —
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
Tax positions taken during the current year	1.3	—	—	1.3
Balance at December 31, 2019	\$ 2.4	\$ —	\$ —	\$ 2.4

⁽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, 2019, 2018 and 2017, White Mountains did not recognize any net interest (income) expense. There was no accrued interest as of December 31, 2019 and 2018.

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.

Note 7. Derivatives

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 was estimated using over-the-counter 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 of its 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, 2019 and 2018, White Mountains no longer had any open foreign currency forward contracts. The derivative (losses) recognized in net realized and unrealized investment gains (losses) for the years ended December 31, 2018 and 2017 were \$(3.5) million and \$(23.8) million. White Mountains did not hold or provide any collateral under its foreign currency forward contracts.

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, 2019, the variable rate received by NSM under the swap agreement was 1.71%. 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, 2019, the interest rate, including the effect of the swap, for the outstanding term loans of \$148.7 million that are hedged by the swap was 7.47%, excluding the effect of debt issuance costs. 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 twelve months ending December 31, 2019, NSM recognized net interest expense of \$1.1 million for the periodic net settlement payments on the swap. 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, 2019 and 2018, the estimated fair value of the swap and the accrual of the periodic net settlement payments recorded in other liabilities was \$6.6 million and \$2.7 million. There was no ineffectiveness in the hedge for the twelve months ending December 31, 2019 and for the period from May 11, 2018 through December 31, 2018. For the twelve months ending December 31, 2019, the \$(3.9) million change in the fair value is included within accumulated other comprehensive income (loss). For the period from May 11, 2018 through December 31, 2018, the \$(2.7) million change in the fair value of the swap 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, 2019, 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, which is 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 \$300.0 million of Series B Notes and \$100.0 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 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 New York State Department of Financial Services ("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.

On a monthly basis, BAM deposits cash equal to ceded premiums, net of ceding commissions, due to HG Re under the FLRT directly into the Regulation 114 Trust. The Regulation 114 Trust target balance is equal to gross ceded unearned premiums and unpaid ceded loss and LAE expenses, if any. If, at the end of any quarter, the Regulation 114 Trust balance is below the target balance, funds will be withdrawn from the Supplemental Trust and deposited into the Regulation 114 Trust in an amount equal to the shortfall. If, at the end of any quarter, the Regulation 114 Trust balance is above 102% of the target balance, funds will be withdrawn from the Regulation 114 Trust and deposited into the Supplemental Trust.

The Supplemental Trust target balance is \$603.0 million, less the amount of cash and securities in the Regulation 114 Trust in excess of its target balance (the "Supplemental Trust Target Balance"). If, at the end of any quarter, the Supplemental Trust balance exceeds the Supplemental Trust Target Balance, such excess may be distributed to HG Re. The distribution will be made first as an assignment of accrued interest on the BAM Surplus Notes and second in cash and/or fixed income securities. 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.

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 2020, the interest rate will be 4.6%. In January 2020, HG Global and BAM agreed to amend the BAM Surplus Notes to extend the end of the variable interest rate period until December 31, 2024. See **Note 21 — "Subsequent Event"**. 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 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. No payment of principal or interest on the BAM Surplus Notes may be made without the approval of the NYDFS.

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 to the terms of the BAM Surplus Notes on the expected discounted future cash flows was not greater than 10%.

In December 2019, BAM made a \$32.0 million cash payment of principal and interest on the BAM Surplus Notes held by HG Global. Of this payment, \$23.7 million was a repayment of principal held in the Supplemental Trust, \$0.3 million was a payment of accrued interest held in the Supplemental Trust and \$8.0 million was a payment of accrued interest held outside the Supplemental Trust. During 2018, BAM made a \$23.0 million cash payment of principal and interest on the BAM Surplus Notes. Of this payment, \$17.7 million was a repayment of principal held in the Supplemental Trust, \$0.7 million was a payment of accrued interest held in the Supplemental Trust and \$4.6 million was a payment of accrued interest held outside the Supplemental Trust. During 2017, BAM made a \$5.0 million cash payment principal and interest on the BAM Surplus Notes. Of this payment, \$4.0 million was a repayment of principal held in the Supplemental Trust, \$0.1 million was a payment of accrued interest held in the Supplemental Trust and \$0.9 million was a payment of accrued interest held outside the Supplemental Trust.

As of December 31, 2019 and 2018, the Collateral Trusts held assets of \$786.7 million and \$757.4 million, which included \$457.6 million and \$481.3 million of BAM Surplus Notes. As of December 31, 2019 and 2018, HG Global has accrued \$162.7 million and \$143.7 million of interest receivable on the BAM Surplus Notes.

The following table presents a schedule of BAM's insured obligations as of December 31, 2019 and 2018:

	December 31, 2019	December 31, 2018
Contracts outstanding	8,987	7,525
Remaining weighted average contract period (in years)	10.7	10.7
Contractual debt service outstanding (in millions):		
Principal	\$ 62,250.5	\$ 52,201.6
Interest and capital appreciation	31,799.7	26,560.3
Total debt service outstanding	\$ 94,050.2	\$ 78,761.9
Gross unearned insurance premiums	\$ 198.4	\$ 176.0

The following table presents a schedule of BAM's future premium revenues as of December 31, 2019:

Millions	December 31, 2019
January 1, 2020 - March 31, 2020	\$ 4.8
April 1, 2020 - June 30, 2020	4.8
July 1, 2020 - September 30, 2020	4.6
October 1, 2020 - December 31, 2020	4.5
	18.7
2021	17.3
2022	16.3
2023	15.2
2024	14.2
2025 and thereafter	116.7
Total gross unearned insurance premiums	\$ 198.4

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, 2019, 2018 and 2017:

Millions	December 31, 2019	December 31, 2018	December 31, 2017
Written premiums:			
Direct	\$ 28.1	\$ 44.8	\$ 63.2
Assumed	10.6	8.1	—
Gross written premiums	<u>\$ 38.7</u>	<u>\$ 52.9</u>	<u>\$ 63.2</u>
Earned premiums:			
Direct	\$ 13.6	\$ 13.6	\$ 9.4
Assumed	2.7	.3	—
Gross earned premiums	<u>\$ 16.3</u>	<u>\$ 13.9</u>	<u>\$ 9.4</u>

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. 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 \$100.0 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 September 2019, BAM entered into facultative quota share reinsurance agreements under which it assumed a portfolio of municipal bond guarantee contracts with a par value of \$1.1 billion. 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 as of the transaction dates or as of December 31, 2019. 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, 2019, 2018 and 2017. See **Note 20 — "Held for Sale and Discontinued Operations"**.

	Year Ended December 31,		
	2019	2018	2017
Basic and diluted earnings per share numerators (in millions):			
Net income (loss) attributable to White Mountains's common shareholders	\$ 414.5	\$ (141.2)	\$ 627.2
Less: total income (loss) from discontinued operations, net of tax	.8	(17.2)	577.5
Net income (loss) from continuing operations attributable to White Mountains's common shareholders	413.7	(124.0)	49.7
Allocation of (earnings) losses to participating restricted common shares ⁽¹⁾	(5.3)	1.4	(.7)
Basic and diluted earnings (losses) per share numerators	\$ 408.4	\$ (122.6)	\$ 49.0
Basic earnings per share denominators (in thousands):			
Total average common shares outstanding during the period	3,181.6	3,382.5	4,293.8
Average unvested restricted common shares ⁽²⁾	(40.5)	(40.1)	(54.3)
Basic earnings (losses) per share denominator	3,141.1	3,342.4	4,239.5
Diluted earnings per share denominator (in thousands):			
Total average common shares outstanding during the period	3,181.6	3,382.5	4,293.8
Average unvested restricted common shares ⁽²⁾	(40.5)	(40.1)	(54.3)
Diluted earnings (losses) per share denominator	3,141.1	3,342.4	4,239.5
Basic and diluted earnings per share (in dollars) - continuing operations:			
Distributed earnings - dividends declared and paid	\$ 1.00	\$ 1.00	\$ 1.00
Undistributed earnings (losses)	129.02	(37.67)	10.56
Basic and diluted earnings (losses) per share	\$ 130.02	\$ (36.67)	\$ 11.56

⁽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"**.

The following table presents the undistributed net earnings (losses) from continuing operations for the years ended December 31, 2019, 2018 and 2017. See **Note 20 — "Held for Sale and Discontinued Operations"**.

Millions	Year Ended December 31,		
	2019	2018	2017
Undistributed net earnings - continuing operations:			
Net income (loss) attributable to White Mountains's common shareholders, net of restricted common share amounts	\$ 408.4	\$ (122.6)	\$ 49.0
Dividends declared, net of restricted common share amounts ⁽¹⁾	(3.2)	(3.7)	(4.5)
Total undistributed net earnings (losses), net of restricted common share amounts	\$ 405.2	\$ (126.3)	\$ 44.5

⁽¹⁾ Restricted shares issued by White Mountains receive dividends, and therefore, are considered participating securities.

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, 2013 and 2019. 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, 2019, 2018 and 2017 for performance shares granted under the WTM Incentive Plan:

\$ in Millions	Year Ended December 31,					
	2019		2018		2017	
	Target Performance Shares Outstanding	Accrued Expense	Target Performance Shares Outstanding	Accrued Expense	Target Performance Shares Outstanding	Accrued Expense
Beginning of period	40,616	\$ 31.7	50,515	\$ 45.8	80,353	\$ 42.4
Shares paid or expired ⁽¹⁾	(13,715)	(18.1)	(23,186)	(28.4)	(30,838)	(21.9)
New grants	15,600	—	14,105	—	17,710	—
Forfeitures ⁽²⁾	(28)	(.1)	(818)	.1	(16,710)	(9.3)
Expense recognized	—	30.2	—	14.2	—	34.6
End of period ⁽³⁾	42,473	\$ 43.7	40,616	\$ 31.7	50,515	\$ 45.8

⁽¹⁾ WTM performance shares payments in 2019 for the 2016-2018 performance cycle, which were paid in March 2019 ranged from 139% to 166% of target. 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.

⁽²⁾ Amounts include changes in assumed forfeitures, as required under GAAP.

⁽³⁾ Outstanding performance share awards as of December 31, 2017 exclude 2,195 unvested performance shares awards for employees of Sirius Group, which are included in discontinued operations.

For the 2016-2018, 2015-2017 and 2014-2016 performance cycles, all performance shares earned were settled in cash. If the outstanding performance shares had vested on December 31, 2019, the total additional compensation cost to be recognized would have been \$17.2 million, based on accrual factors as of December 31, 2019 (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, 2019 for each performance cycle:

\$ in Millions	Target Performance Shares Outstanding	Accrued Expense
Performance cycle:		
2019 – 2021	15,600	\$ 6.0
2018 – 2020	13,450	10.5
2017 – 2019	14,070	27.8
Sub-total	43,120	44.3
Assumed forfeitures	(647)	(.6)
Total	42,473	\$ 43.7

For the 2019-2021 performance cycle, the targeted performance goal for full payment of outstanding performance shares granted under the WTM Incentive Plan is 7% 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 12% or more would result in a payout of 200%.

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 investment personnel, for the period ended December 31, 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 to investment personnel 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, 2019, 2018 and 2017:

\$ in Millions	Year Ended December 31,					
	2019		2018		2017	
	Restricted Shares	Unamortized Issue Date Fair Value	Restricted Shares	Unamortized Issue Date Fair Value	Restricted Shares	Unamortized Issue Date Fair Value
Non-vested,						
Beginning of period	41,510	\$ 12.5	53,755	\$ 14.3	70,620	\$ 19.7
Issued	15,600	14.5	14,105	11.4	17,985	16.3
Vested	(13,715)	—	(25,381)	—	(28,846)	—
Forfeited	—	—	(969)	(.2)	(6,004)	(3.5)
Expense recognized	—	(10.3)	—	(13.0)	—	(18.2)
End of period ⁽¹⁾	43,395	\$ 16.7	41,510	\$ 12.5	53,755	\$ 14.3

⁽¹⁾ Outstanding restricted share awards as of December 31, 2017 include 2,195 unvested restricted shares for employees of Sirius Group.

During 2019, White Mountains issued 15,600 restricted shares that vest on January 1, 2022. During 2018, White Mountains issued 13,450 restricted shares that vest on January 1, 2021, 290 restricted shares that vest on January 1, 2019 and 365 restricted shares that vest on January 1, 2018. 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. The unrecognized compensation cost as of December 31, 2019 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. 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.

Note 11. Leases

White Mountains has entered into lease agreements, primarily for office space. These leases are classified as operating leases, with lease expense recognized on a straight-line basis over the term of the lease. Lease incentives, such as free rent or landlord reimbursements for leasehold improvements, are recognized at lease inception and amortized on a straight-line basis over the term of the lease. Lease expense and the amortization of leasehold improvements are recognized within general and administrative expenses. Lease payments related to options to extend or renew the lease term are excluded from the calculation of lease liabilities unless White Mountains is reasonably certain of exercising those options.

On January 1, 2019, White Mountains adopted ASU 2016-02, *Leases (ASC 842)*. See **Note 1 — "Basis of Presentation and Significant Accounting Policies" — Basis of Presentation and Significant Accounting Policies**. Prior to adoption of ASU 2016-02, White Mountains recognized lease expense for operating leases on a straight-line basis, but did not recognize lease assets or liabilities on its consolidated balance sheet. Upon adoption on January 1, 2019, White Mountains recognized lease ROU assets of \$23.2 million and lease liabilities of \$23.2 million. As of December 31, 2019, the ROU asset was \$22.6 million and lease liabilities were \$22.8 million.

The following table summarizes net lease expense recognized in White Mountains's consolidated statement of operations for the year ended December 31, 2019:

Millions Lease Cost	December 31, 2019	
Lease cost	\$	7.2
Less: sublease income		.4
Net lease cost	\$	6.8

The following table presents the contractual maturities of the lease liabilities associated with White Mountains's operating lease agreements as of December 31, 2019:

Millions	As of December 31, 2019	
2020	\$	5.9
2021		4.9
2022		4.5
2023		3.9
2024		3.1
Thereafter		3.4
Total undiscounted lease payments		25.7
Less: present value adjustment		(2.9)
Operating lease liability	\$	22.8

The following table presents lease related assets and liabilities by reportable segment as of December 31, 2019:

\$ in Millions	As of December 31, 2019						Weighted Average Incremental Borrowing Rate ⁽¹⁾
	HG/BAM	NSM	Kudu	Other Operations	Total		
ROU lease asset	\$ 10.4	\$ 4.8	\$ 2.3	\$ 5.1	\$ 22.6		
Lease liability	\$ 10.4	\$ 4.8	\$ 2.3	\$ 5.3	\$ 22.8		4.6%

⁽¹⁾ The present value of the remaining lease payments was determined by discounting the lease payments using the incremental borrowing rate.

Note 12. 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, 2019, 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 2019, the Company repurchased 5,679 common shares for \$4.9 million at an average share price of \$858 pursuant to employee benefit plans.

During 2018, the Company repurchased 592,458 common shares for \$519.1 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.

Common Shares Issued

During 2019, the Company issued a total of 17,917 common shares, which consisted of 15,600 restricted shares issued to key personnel and 2,317 shares issued to directors of the Company.

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.

Dividends on Common Shares

For the years ended December 31, 2019, 2018 and 2017, the Company declared and paid cash dividends totaling \$3.2 million, \$3.8 million and \$4.6 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, 2019 and 2018:

\$ in Millions	December 31, 2019		December 31, 2018	
	Non-controlling Percentage	Non-controlling Equity	Non-controlling Percentage	Non-controlling Equity
Non-controlling interests, excluding BAM				
HG Global	3.1 %	\$ 14.4	3.1 %	\$ 14.5
NSM	3.6	14.9	4.5	13.6
Other NSM	13.4	(.1)	13.4	.3
Kudu	—	2.2	—	—
MediaAlpha	—	—	39.0	16.2
Other Operations	various	(1.5)	various	1.1
Total, excluding BAM		29.9		45.7
BAM	100.0	(146.7)	100.0	(170.6)
Total non-controlling interests		\$ (116.8)		\$ (124.9)

Note 13. 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, 2019, HG Re had statutory capital and surplus of \$745.4 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, 2019, 2018 and 2017 was \$38.3 million, \$34.6 million and \$25.4 million. BAM's members' surplus, as reported to regulatory authorities as of December 31, 2019, was \$402.4 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 than 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, 2019, 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 declared and paid preferred dividends of \$2.0 million in 2019. As of December 31, 2019, HG Global had accrued \$341.7 million of dividends payable to holders of its preferred shares, \$330.2 million of which is payable to White Mountains and eliminated in consolidation. As of December 31, 2019, HG Global and its subsidiaries had \$3.0 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, 2019, HG Re had \$745.4 million of statutory capital and surplus and \$786.7 million of assets held in the Collateral Trusts pursuant to the FLRT with BAM.

On a monthly basis, BAM deposits cash equal to ceded premiums, net of ceding commissions, due to HG Re under the FLRT directly into the Regulation 114 Trust. The Regulation 114 Trust target balance is equal to gross ceded unearned premiums and unpaid ceded loss and LAE expenses, if any. If, at the end of any quarter, the Regulation 114 Trust balance is below the target balance, funds will be withdrawn from the Supplemental Trust and deposited into the Regulation 114 Trust in an amount equal to the shortfall. If, at the end of any quarter, the Regulation 114 Trust balance is above 102% of the target balance, funds will be withdrawn from the Regulation 114 Trust and deposited into the Supplemental Trust.

The Supplemental Trust Target Balance is \$603.0 million, less the amount of cash and securities in the Regulation 114 Trust in excess of its target balance. If, at the end of any quarter, the Supplemental Trust balance exceeds the Supplemental Trust Target Balance, such excess may be distributed to HG Re. The distribution will be made first as an assignment of accrued interest on the BAM Surplus Notes and second in cash and/or fixed income securities. 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.

As of December 31, 2019, HG Re had \$6.3 million of cash and investments and \$111.2 million of accrued interest on the BAM Surplus Notes held outside the Collateral Trusts.

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

In December 2019, BAM made a \$32.0 million cash payment of principal and interest on the BAM Surplus Notes held by HG Global. Of this payment, \$23.7 million was a repayment of principal held in the Supplemental Trust, \$0.3 million was a payment of accrued interest held in the Supplemental Trust and \$8.0 million was a payment of accrued interest held outside the Supplemental Trust. During 2018, BAM made a \$23.0 million cash payment of principal and interest on the BAM Surplus Notes. Of this payment, \$17.7 million was a repayment of principal held in the Supplemental Trust, \$0.7 million was a payment of accrued interest held in the Supplemental Trust and \$4.6 million was a payment of accrued interest held outside the Supplemental Trust.

In January 2020, BAM made an additional \$65.0 million special cash payment of principal and interest on the BAM Surplus Notes. See **Note 21** — "Subsequent Event".

NSM

During 2019, NSM did not make any distributions to unitholders. As of December 31, 2019, NSM had \$33.4 million of net unrestricted cash.

Kudu

In December 2019, Kudu entered into a secured credit facility to provide funding for distributions to unitholders and fund new investments and related transaction expenses. At closing, Kudu drew an initial term loan of \$57.0 million to pay transaction expenses and to distribute \$53.7 million to unitholders, of which \$53.3 million was paid to White Mountains. As of December 31, 2019, Kudu had \$5.9 million of net unrestricted cash and short-term investments.

Other Operations

During 2019, White Mountains paid a \$3.2 million common share dividend. As of December 31, 2019, the Company and its intermediate holding companies had \$602.6 million of net unrestricted cash, short-term investments and fixed maturity investments, \$683.9 million of common equity securities and \$202.3 million of private equity funds, hedge funds and ILS funds.

Note 14. Segment Information

As of December 31, 2019, White Mountains conducted its operations through four segments: (1) HG Global/BAM, (2) NSM, (3) Kudu and (4) Other Operations. In addition, MediaAlpha was consolidated as a reportable segment until the date of the MediaAlpha Transaction. A discussion of White Mountains's consolidated investment operations is included after the discussion of operations by segment.

As a result of the Kudu Transaction, White Mountains began consolidating Kudu in its financial statements in the second quarter of 2019. White Mountains's segment disclosures for the year ended December 31, 2019 include Kudu's results of operations for the period from April 4, 2019, the date of the Kudu Transaction, to December 31, 2019. See **Note 2 — "Significant Transactions"**.

As a result of the MediaAlpha Transaction, White Mountains no longer consolidated MediaAlpha, and consequently it was no longer a reportable segment. White Mountains's segment disclosures for the year ended December 31, 2019 include MediaAlpha's results of operations for the period from January 1, 2019 to February 26, 2019, the date of the MediaAlpha Transaction. See **Note 2 — "Significant Transactions"**.

As a result of the OneBeacon Transaction, the results of operations for OneBeacon for the year ended December 31, 2017 have been classified as discontinued operations, and are now presented separately, net of related income taxes, in the statement of comprehensive income. See **Note 19 — "Held for Sale and Discontinued Operations"**.

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. 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				Other Operations	Total
	Global/BAM ⁽¹⁾	NSM	Kudu ⁽²⁾	MediaAlpha ⁽³⁾		
Year Ended December 31, 2019						
Earned insurance premiums	\$ 16.3	\$ —	\$ —	\$ —	\$ —	\$ 16.3
Net investment income	21.6	—	14.7	—	43.4	79.7
Net realized and unrealized investment gains	27.1	—	6.3	—	285.1	318.5
Gain from deconsolidation of MediaAlpha	—	—	—	—	182.2	182.2
Advertising and commission revenues ⁽⁴⁾	—	193.4	—	48.8	6.9	249.1
Other revenues	1.6	39.7	.2	—	6.1	47.6
Total revenues	66.6	233.1	21.2	48.8	523.7	893.4
Insurance acquisition expenses	5.7	—	—	—	—	5.7
Other underwriting expenses	.4	—	—	—	—	.4
Cost of sales	—	—	—	40.6	7.5	48.1
General and administrative expenses	50.5	132.2	10.1	12.5	122.5	327.8
Broker commission expense	—	64.8	—	—	—	64.8
Change in fair value of contingent consideration	—	—	—	—	—	—
earnout liabilities	—	2.1	—	—	—	2.1
Amortization of other intangible assets	—	19.4	.2	1.6	.6	21.8
Interest expense	—	16.7	.1	.2	.6	17.6
Total expenses	56.6	235.2	10.4	54.9	131.2	488.3
Pre-tax income (loss)	\$ 10.0	\$ (2.1)	\$ 10.8	\$ (6.1)	\$ 392.5	\$ 405.1

⁽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⁾ Kudu's results are from April 4, 2019, the date of the Kudu Transaction, to December 31, 2019.

⁽³⁾ MediaAlpha's results are from January 1, 2019 to February 26, 2019, the date of the MediaAlpha Transaction.

⁽⁴⁾ Approximately 17% of NSM's commission revenue was associated with one single carrier.

Millions	HG Global/BAM (1)	NSM	MediaAlpha	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)	—	89.6	295.5	4.1	389.2
Other revenues	1.2	12.0	1.6	.5	15.3
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	59.4	31.7	94.4	233.5
Broker commission expense	—	28.4	—	—	28.4
Change in fair value of contingent consideration					
earnout liabilities	—	2.7	—	—	2.7
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 Global/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 Selected Balance Sheet Data	HG Global/BAM	NSM	Kudu	MediaAlpha	Other Operations	Held for Sale	Total
December 31, 2019:							
Total investments	\$ 845.6	\$ —	\$ 266.6	\$ —	\$ 1,835.0	\$ —	\$ 2,947.2
Total assets	\$ 924.0 ⁽¹⁾	\$ 825.2	\$ 290.5	\$ —	\$ 1,940.5 ⁽²⁾	\$ 3.0	\$ 3,983.2
Total liabilities	\$ 246.8 ⁽²⁾	\$ 401.1	\$ 57.0	\$ —	\$ 133.6	\$ —	\$ 838.5
Total White Mountains's common shareholders' equity	\$ 809.5 ⁽²⁾	\$ 409.3	\$ 231.3	\$ —	\$ 1,808.4 ⁽²⁾	\$ 3.0	\$ 3,261.5
Non-controlling interest	\$ (132.3)	\$ 14.8	\$ 2.2	\$ —	\$ (1.5)	\$ —	\$ (116.8)
December 31, 2018:							
Total investments	\$ 768.3	\$ —	\$ —	\$ —	\$ 1,774.6	\$ —	\$ 2,542.9
Total assets	\$ 816.2 ⁽¹⁾	\$ 623.6	\$ —	\$ 88.4	\$ 1,831.1 ⁽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⁾	\$ 294.9	\$ —	\$ 25.3	\$ 1,759.8 ⁽²⁾	\$ 3.3	\$ 2,843.1
Non-controlling interest	\$ (156.1)	\$ 13.9	\$ —	\$ 16.2	\$ 1.1	\$ —	\$ (124.9)

⁽¹⁾ As of December 2019 and 2018, total assets in the HG Global/BAM segment reflected the elimination of \$457.6 and \$481.3 of BAM Surplus Notes issued to HG Global and its subsidiaries, and \$162.7 and \$143.7 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, 2019 and 2018, the HG Global preferred dividends payable to White Mountains's subsidiaries was \$330.3 and \$278.5.

In compliance with ASC 606, *Revenues from Contracts with Customers*, the following tables present White Mountains's total revenues by revenue source:

Millions	HG Global/BAM	NSM	Kudu ⁽²⁾	MediaAlpha ⁽³⁾	Other Operations	Total
Year Ended December 31, 2019						
Commission and Other Revenue						
Specialty Transportation	\$ —	\$ 77.6	\$ —	\$ —	\$ —	\$ 77.6
Real Estate	—	34.7	—	—	—	34.7
Social Services	—	25.9	—	—	—	25.9
Pet	—	30.0	—	—	—	30.0
United Kingdom	—	45.9	—	—	—	45.9
Other	—	19.0	—	—	6.9	25.9
Total Commission and Other Revenue	—	233.1	—	—	6.9	240.0
Advertising revenues	—	—	—	48.8	—	48.8
Products	—	—	—	—	5.5	5.5
Total revenues from contracts with customers	—	233.1	—	48.8	12.4	294.3
Other revenues ⁽¹⁾	66.6	—	21.2	—	511.3	599.1
Total revenues	\$ 66.6	\$ 233.1	\$ 21.2	\$ 48.8	\$ 523.7	\$ 893.4

⁽¹⁾ Other revenues consist of premiums, investment income, investment gains and losses and other revenues outside the scope of ASC 606, *Revenues from Contracts with Customers*.

⁽²⁾ Kudu's results are from April 4, 2019, the date of the Kudu Transaction, to December 31, 2019.

⁽³⁾ MediaAlpha's results are from January 1, 2019 to February 26, 2019, the date of the MediaAlpha Transaction.

Millions	HG Global/BAM	NSM	MediaAlpha	Other Operations	Total
Year Ended December 31, 2018					
Commission and Other Revenue					
Specialty Transportation	\$ —	\$ 28.3	\$ —	\$ —	\$ 28.3
Real Estate	—	17.8	—	—	17.8
Social Services	—	14.7	—	—	14.7
United Kingdom	—	28.0	—	—	28.0
Other	—	12.8	—	4.1	16.9
Total Commission and Other Revenue	—	101.6	—	4.1	105.7
Advertising revenues	—	—	295.5	—	295.5
Total revenues from contracts with customers	—	101.6	295.5	4.1	401.2
Other revenues ⁽¹⁾	24.3	—	1.6	(58.0)	(32.1)
Total revenues	\$ 24.3	\$ 101.6	\$ 297.1	\$ (53.9)	\$ 369.1

⁽¹⁾ Other revenues consist of premiums, investment income, investment gains and losses and other revenues outside the scope of ASC 606, *Revenues from Contracts with Customers*.

Millions	HG Global/BAM	MediaAlpha	Other Operations	Total
Year Ended December 31, 2017				
Commission and Other Revenue				
Other	\$ —	\$ —	\$.4	\$.4
Total Commission and Other Revenue	—	—	.4	.4
Advertising revenues	—	163.2	—	163.2
Total revenues from contracts with customers	—	163.2	.4	163.6
Other revenues ⁽¹⁾	23.3	—	186.9	210.2
Total revenues	\$ 23.3	\$ 163.2	\$ 187.3	\$ 373.8

⁽¹⁾ Other revenues consist of premiums, investment income, investment gains and losses and other revenues outside the scope of ASC 606, *Revenues from Contracts with Customers*.

Note 15. Equity-Method Eligible Investments

White Mountains's equity method eligible investments include certain investments in unconsolidated entities, Kudu's Participation Contracts, private equity funds and hedge funds in which White Mountains has the ability to exert significant influence over the investee's operating and financial policies.

The following table presents the carrying values of White Mountains's equity method eligible investments recorded within other long-term investments as of December 31, 2019 and 2018:

Millions	December 31,	
	2019	2018
Equity method eligible investments, at fair value	\$ 761.7	\$ 269.7
Other ⁽¹⁾	94.6	55.9
Total other long-term investments	\$ 856.3	\$ 325.6

⁽¹⁾ Consists of other long-term investments that are not equity method eligible.

The following table presents White Mountains's significant equity method eligible investments as of December 31, 2019 and 2018:

Investee	Basic Ownership Interest		Instrument Held
	December 31, 2019	December 31, 2018	
PassportCard/DavidShield	50.0%	50.0%	Common shares
MediaAlpha ⁽¹⁾	48.3%	n/a	Units
durchblicker	45.0%	45.0%	Common shares
Elementum Holdings, L.P.	30.0%	n/a	Limited partnership interest
Compare.com	18.4%	18.4%	Common shares
Tuckerman Capital Funds ⁽²⁾	17.5 - 62.4%	18.5 - 62.3%	Limited and general partnership interests
JAM Partners L.P.	11.1%	12.3%	Limited partnership interest
Enlightenment Capital Funds	10.0 - 38.4%	10.3 - 36.5%	Limited and general partnership interests
Kudu's Participation Contracts ⁽³⁾	3.2 - 30.0%	n/a	Revenue and earnings participation contracts
Kudu ⁽³⁾	n/a	49.5%	Units

⁽¹⁾ As of December 31, 2018, MediaAlpha was a majority-owned consolidated subsidiary of White Mountains. See Note 2 — "Significant Transactions"

⁽²⁾ As of December 31, 2018, includes White Mountains's direct investment in Galvanic Applied Sciences.

⁽³⁾ As of December 31, 2019 White Mountains consolidates Kudu. See Note 2 — "Significant Transactions".

The following tables present aggregated summarized financial information for White Mountains's investments in equity method eligible unconsolidated entities, excluding MediaAlpha:

Millions	December 31,	
	2019	2018
Balance sheet data ⁽¹⁾:		
Total assets	\$ 1,959.2	\$ 1,373.3
Total liabilities	\$ 653.2	\$ 509.2

⁽¹⁾ Financial data for White Mountains's equity method eligible investees is generally reported on a one-quarter lag.

Millions	Year Ended December 31,		
	2019	2018	2017
Income statement data ⁽¹⁾:			
Revenues	\$ 344.6	\$ 226.0	\$ 143.3
Expenses	\$ 88.3	\$ 141.4	\$ 80.5
Net Income	\$ 255.1	\$ 83.6	\$ 65.3

⁽¹⁾ Financial data for White Mountains's equity method eligible investees is generally reported on a one-quarter lag.

As a result of the MediaAlpha Transaction, White Mountains reduced its ownership interest in MediaAlpha to 48.3% of the basic units outstanding (42.0% on a fully diluted, fully converted basis). White Mountains's remaining ownership interest in MediaAlpha no longer meets the criteria for a controlling ownership interest and, accordingly, White Mountains deconsolidated MediaAlpha as of February 26, 2019. Upon deconsolidation, White Mountains's investment in MediaAlpha met the criteria to be accounted for under the equity method or under the fair value option. White Mountains elected the fair value option and the investment in MediaAlpha was initially measured at its estimated fair value of \$114.7 million as of March 31, 2019, with the change in fair value of \$114.7 million recognized as an unrealized investment gain. For the twelve months ended December 31, 2019, White Mountains recognized \$180.0 million in unrealized investment gains associated with its investment in MediaAlpha including changes in the fair value of White Mountains's investment in MediaAlpha subsequent to the MediaAlpha Transaction. White Mountains's consolidated statement of comprehensive income and its segment disclosures include MediaAlpha's results of operations for the period from January 1, 2019 through February 26, 2019. See **Note 2 — "Significant Transactions"**.

For the period from February 26, 2019 to December 31, 2019, MediaAlpha's total revenues, total expenses, gross profit and pre-tax income were \$359.2 million, \$334.3 million, \$59.7 million and \$24.9 million.

The following tables present summarized financial information for MediaAlpha:

Millions	December 31,		
	2019		2018
Balance sheet data:			
Total assets	\$	106.9	\$ 88.5
Total liabilities	\$	144.6	\$ 46.9
Millions	Year Ended December 31,		
	2019	2018	2017
Income statement data:			
Total revenues	\$	407.9	\$ 297.1 \$ 163.2
Total expenses	\$	389.0	\$ 288.2 \$ 163.5
Net income (loss)	\$	18.9	\$ 8.9 \$ (0.3)

Note 16. 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 member surplus contribution ("MSC") and the remainder is a risk premium. In the event of a municipal bond refunding, a portion of 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.

Elementum

On May 31, 2019, White Mountains acquired a 30.0% limited partnership interest in Elementum for \$55.1 million.

White Mountains has determined that Elementum 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 Elementum. Accordingly, Elementum meets the criteria to be accounted for under the equity method. White Mountains has taken the fair value option for its investment in Elementum. Changes in the fair value of Elementum are recorded in realized and unrealized investment gains. White Mountains's maximum loss in Elementum is limited to the amount invested. As of December 31, 2019, Elementum is recorded within other long-term investments at a carrying amount of \$55.1 million.

Kudu

On April 4, 2019, White Mountains completed the Kudu Transaction for cash consideration of \$81.4 million. White Mountains recognized total assets acquired of \$155.5 million, including \$7.6 million of goodwill and \$2.2 other intangible assets, total liabilities assumed of \$0.8 million and non-controlling interest of \$1.5 million. As a result of the Kudu Transaction, White Mountains's basic unit ownership of Kudu increased from 49.5% to 99.1% (42.7% to 85.4% on a fully diluted, fully converted basis), and White Mountains began consolidating Kudu as a reportable segment in its financial statements during the second quarter of 2019. White Mountains's consolidated financial statements and its segment disclosures include Kudu's results for the period from April 4, 2019 to December 31, 2019.

For periods prior to the Kudu Transaction, White Mountains determined that Kudu was a VIE but that White Mountains was not the primary beneficiary. White Mountains's ownership interest gave White Mountains the opportunity to exert significant influence over the significant financial and operating activities of Kudu. Accordingly, for the year ended December 31, 2018, Kudu met the criteria to be accounted for under the equity method. White Mountains took the fair value option for its investment in Kudu, measuring its investment in Kudu at fair value using NAV as a practical expedient with changes therein recorded in realized and unrealized investment gains for the year ended December 31, 2018.

Note 17. Fair Value of Financial Instruments

White Mountains records its financial instruments at fair value with the exception of debt obligations 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, 2019 and 2018:

Millions	December 31, 2019		December 31, 2018	
	Fair Value	Carrying Value	Fair Value	Carrying Value
NSM Bank Facility	\$ 221.2	\$ 217.4	\$ 176.1	\$ 176.6
Other NSM debt	\$ 1.7	\$ 1.8	\$ 1.9	\$ 1.9
Kudu Bank Facility ⁽¹⁾	\$ 53.6	\$ 53.6	\$ —	\$ —
MediaAlpha Bank Facility	\$ —	\$ —	\$ 14.6	\$ 14.2
Other Operations debt	\$ 11.3	\$ 10.7	\$ —	\$ —

⁽¹⁾ White Mountains measured the fair value of the Kudu Bank Facility debt at the carrying value as a result of the debt being acquired on December 23, 2019. See **Note 5 — "Debt"**.

The fair value estimates for the NSM Bank Facility, the MediaAlpha Bank Facility and Other Operations debt have been determined based on a discounted cash flow approach and are considered to be Level 3 measurements. As a result of the MediaAlpha Transaction, White Mountains's remaining ownership interest in MediaAlpha no longer meets the criteria for a controlling ownership interest and accordingly, White Mountains deconsolidated MediaAlpha as of February 26, 2019. See **Note 2 — "Significant Transactions"**.

Note 18. 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.

Note 19. 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 \$7.2 million, \$5.5 million and \$3.5 million for the years ended December 31, 2019, 2018 and 2017. 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 \$7.1 million, \$6.1 million, \$5.7 million, and \$18.4 million for the years ending December 31, 2020, 2021, 2022 and 2023 and thereafter.

White Mountains also has future binding commitments to fund certain other long-term investments. These commitments, which totaled \$183.4 million as of December 31, 2019, 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, 2019:

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 extra-contractual 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 Group 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 of December 31, 2019 and December 31, 2018, White Mountains reported a liability of \$16.5 million and \$17.3 million, reflecting the value of these interest deductions. During 2019, the decrease in the liability of \$0.8 million is related to foreign currency translation and included within net gain on sale of discontinued operations. Sirius Group has appealed the decision to the Swedish Administrative Court of Appeal.

NSM Renewal Rights Liability

In connection with White Mountains's acquisition of NSM, White Mountains and NSM entered into an agreement with AIG to help 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 the Renewal Rights were not sold by December 31, 2019, AIG had the right to require NSM to purchase the Renewal Rights for \$82.5 million. On June 28, 2019, NSM acquired the Renewal Rights from AIG for \$82.5 million. See **Note 2 — "Significant Transactions"**.

Note 20. 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.

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. 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 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.

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. As of December 31, 2019 and 2018, White Mountains reported a liability of \$16.5 million and \$17.3 million. During 2019, the decrease in the liability of \$0.8 million is related to foreign currency translation and included within net gain on sale of discontinued operations. Sirius Group has appealed the decision to the Swedish Administrative Court of Appeal. See **Note 19 — "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. The related write-down of \$3.7 million was recorded within general and administrative expenses during 2017. As of December 31, 2019 and 2018, the property has been measured at its estimated fair value net of disposal costs of \$3.0 million and \$3.3 million.

Net Income (Loss) from Discontinued Operations

The following table present the results of operations, including related income taxes associated with the business classified as discontinued operations. For the year ended December 31, 2017, the amounts presented relate to OneBeacon, Sirius Group and Tranzact.

Millions	Year Ended December 31, 2017			
	OneBeacon	Sirius Group	Tranzact	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				
Income tax benefit	5.7	—	—	5.7
Net income from discontinued operations				
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

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:

Millions	December 31, 2017
Net cash provided from operations	\$ 157.0
Net cash provided from investing activities	3.0
Net cash used for financing activities	(61.9)
Net change in cash during the period	98.1
Cash balances at beginning of period	70.5
Net change in cash held for sale	(.9)
Cash sold as part of sale of consolidated subsidiaries	(167.7)
Cash balances at end of period	\$ —

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, 2019, 2018 and 2017:

	Year Ended December 31,		
	2019	2018	2017
Basic and diluted earnings per share numerators (in millions):			
Net income (loss) attributable to White Mountains's common shareholders	\$ 414.5	\$ (141.2)	\$ 627.2
Less: total income (loss) from continuing operations, net of tax	413.7	(124.0)	49.7
Net income (loss) from discontinued operations attributable to White Mountains's common shareholders	.8	(17.2)	577.5
Allocation of (earnings) losses to participating restricted common shares ⁽¹⁾	—	.2	(7.3)
Basic and diluted earnings (loss) per share numerators	\$.8	\$ (17.0)	\$ 570.2
Basic earnings per share denominators (in thousands):			
Total average common shares outstanding during the period	3,181.6	3,382.5	4,293.8
Average unvested restricted common shares ⁽³⁾	(40.5)	(40.1)	(54.3)
Basic earnings (loss) per share denominator	3,141.1	3,342.4	4,239.5
Diluted earnings per share denominator (in thousands):			
Total average common shares outstanding during the period	3,181.6	3,382.5	4,293.8
Average unvested restricted common shares ⁽³⁾	(40.5)	(40.1)	(54.3)
Diluted earnings (loss) per share denominator	3,141.1	3,342.4	4,239.5
Basic earnings (loss) per share (in dollars) - discontinued operations:	\$.25	\$ (5.09)	\$ 134.50
Diluted earnings (loss) per share (in dollars) - discontinued operations:	\$.25	\$ (5.09)	\$ 134.50

⁽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, 2019, 2018 and 2017.

⁽³⁾ Restricted common shares outstanding vest either in equal annual installments or upon a stated date. See Note 10 — "Employee Share-Based Compensation Plans".

Note 21. Subsequent Event

In January 2020, HG Global and BAM agreed to amend the BAM Surplus Notes to extend the end of the variable interest rate period from 2021 to 2024, to extend the initial 10-year term of the FLRT to the end of 2022 and to enter into an excess of loss reinsurance agreement (the "XOLT"). Under the XOLT, HG Re provides last dollar protection for exposures on municipal bonds insured by BAM in excess of NYDFS single issuer limits. The XOLT is subject to an aggregate limit equal to the lesser of \$75 million or the assets held in the Supplemental Trust at any point in time. At inception, BAM ceded exposure on one covered risk to HG Re under the XOLT. Additional cessions under the XOLT are subject to approval by HG Re.

In connection with the actions described in the preceding paragraph, in January 2020, BAM made a \$65.0 million special cash payment of principal and interest on the BAM Surplus Notes. Of this payment, \$47.9 million was a repayment of principal held in the Supplemental Trust, \$0.9 million was a payment of accrued interest held in the Supplemental Trust and \$16.2 million was a payment of accrued interest held outside the Supplemental Trust. As of January 20, 2020, subsequent to the special cash payment, the BAM Surplus Notes had a principal balance of \$409.7 million and accrued interest outstanding of \$146.5 million.

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, 2019. Our assessment did not include an assessment of the internal control over financial reporting for Embrace Pet Insurance, which was acquired on April 1, 2019. This acquisition represents less than 1% of White Mountains's total assets as of December 31, 2019 and 3.4% of White Mountains's total revenue for the year ended December 31, 2019. 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, 2019.

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, 2019 as stated in their report which appears on page F-64.

March 2, 2020

/s/ G. MANNING ROUNTREE

Chief Executive Officer
(Principal Executive Officer)

/s/ REID T. CAMPBELL

Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

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, 2019 and 2018, and the related consolidated statements of operations, of comprehensive income, of shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2019, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 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, 2019, 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 Embrace Pet Insurance from its assessment of internal control over financial reporting as of December 31, 2019 because it was acquired by the Company in a purchase business combination during 2019. We have also excluded Embrace Pet Insurance from our audit of internal control over financial reporting. Embrace Pet Insurance 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 less than 1% and 3.4%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2019.

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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Goodwill Impairment Assessment - Certain Entities within the NSM Reporting Unit

As described in Notes 1, 2 and 4 to the consolidated financial statements, the Company acquired NSM Insurance HoldCo, LLC and its subsidiaries (collectively, "NSM") and NSM subsequently acquired Fresh Insurance Services Group Limited and the net assets of KBK Insurance Group, Inc. during 2018. As of December 31, 2019, a significant portion of the \$381.6 million NSM reporting unit goodwill is associated with these acquisitions. As disclosed by management, they performed a quantitative impairment assessment during the second quarter of 2019 to compare the fair value of the NSM reporting unit with its carrying value. Management estimated fair value using discounted cash flow models, market comparisons and assumptions, including the revenue growth rates. If the carrying value had exceeded the estimated fair value, then an impairment charge would have been recognized through current period pre-tax income.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment for certain entities within the NSM reporting unit is a critical audit matter are (i) there was significant judgment by management to determine the fair value of the reporting unit, which in turn led to a high degree of auditor judgment and subjectivity in applying procedures relating to the goodwill impairment assessment; (ii) significant audit effort was required in evaluating the audit evidence relating to management's discounted cash flow model, market comparisons and significant assumptions, including the revenue growth rates; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures and evaluating the audit evidence obtained.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the valuation of the NSM reporting unit, the discounted cash flow model, market comparisons and development of significant assumptions, including the revenue growth rates. For the aforementioned entities, these procedures also included, among others, testing management's process for developing the fair value estimate; evaluating the appropriateness of the discounted cash flow model and market comparisons; testing the completeness and accuracy of the underlying data used in the discounted cash flow model; and evaluating the reasonableness of the significant assumption related to the revenue growth rates. Evaluating the revenue growth rates involved evaluating whether the assumptions used by management were reasonable considering (i) current and past performance of the aforementioned entities, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the appropriateness of the Company's discounted cash flow model and market comparisons valuation techniques.

Valuation of Certain Other Long-Term Investments

As described in Notes 1 and 3 to the consolidated financial statements, the Company maintains various other non-controlling equity interests in operating businesses accounted for at fair value within other long-term investments. The fair values of the most significant of these investments, classified within other long-term investments as of December 31, 2019, consist of QL Holdings LLC and its wholly-owned subsidiary Quote Lab, LLC (collectively “MediaAlpha”) for \$180.0 million; PassportCard Limited and DavidShield Life Insurance Agency (2000) Ltd. (collectively, “PassportCard/DavidShield”) for \$90.0 million; and Kudu Investment Management, LLC and its subsidiaries’s (collectively, “Kudu”) largest participation contract. As disclosed by management, they applied significant judgment in determining the fair value of these other long-term investments using discounted cash flow models, which involved the use of key inputs with respect to (i) projections of future revenues and earnings, discount rates, and terminal revenue growth rates for MediaAlpha and PassportCard/DavidShield and (ii) projections of future revenues, discount rate, and terminal cash flow exit multiple for Kudu’s largest participation contract.

The principal considerations for our determination that performing procedures relating to the valuation of certain other long-term investments is a critical audit matter are (i) there was significant judgment by management to determine the fair value of these other long-term investments, which in turn led to a high degree of auditor judgment and subjectivity in performing procedures relating to the fair value measurement; (ii) significant audit effort was required in evaluating the audit evidence relating to the discounted cash flow models and the key inputs, including (a) projections of future revenues and earnings for MediaAlpha and PassportCard/DavidShield, and (b) projections of future revenues for Kudu’s largest participation contract; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures and evaluating the audit evidence obtained.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the valuation of certain other long-term investments, including controls over the Company’s valuation techniques and determination of key inputs. These procedures also included, among others, the involvement of professionals with specialized skill and knowledge to assist in developing an independent fair value range of each of the aforementioned investments and comparison of management’s estimate to the independently developed range. Developing the independent estimate involved testing the completeness and accuracy of data provided by management and evaluating management’s assumptions related to the key inputs used in those techniques, including (i) projections of future revenues and earnings for MediaAlpha and PassportCard/DavidShield, and (ii) projections of future revenues for Kudu’s largest participation contract.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

March 2, 2020

We have served as the Company’s auditor since 1999.

SELECTED QUARTERLY FINANCIAL DATA
(Unaudited)

The following table presents selected quarterly financial data for 2019 and 2018. 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.

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.

Millions, Except Per Share Amounts	2019 Three Months Ended				2018 Three Months Ended			
	Dec. 31	Sept. 30	June 30	Mar. 31	Dec. 31	Sept. 30	June 30	Mar. 31
Revenues	\$ 175.3	\$ 155.5	\$ 129.0	\$ 433.6	\$ 6.0	\$ 198.7	\$ 122.3	\$ 42.1
Expenses	118.8	104.4	113.2	151.9	150.1	154.4	134.7	108.1
Pre-tax income (loss)	56.5	51.1	15.8	281.7	(144.1)	44.3	(12.4)	(66.0)
Tax (expense) benefit	(10.4)	(8.8)	.1	(10.2)	3.6	3.6	(2.5)	(.7)
Income (loss) from continuing operations	46.1	42.3	15.9	271.5	(140.5)	47.9	(14.9)	(66.7)
Net (loss) gain from discontinued operations, net of tax ⁽¹⁾	(.8)	.9	—	.7	—	(17.3)	—	.1
Non-controlling interest in consolidated subsidiaries	15.6	5.5	4.6	12.2	3.0	10.2	18.4	18.6
Income (loss) attributable to White Mountains's common shareholders	\$ 60.9	\$ 48.7	\$ 20.5	\$ 284.4	\$ (137.5)	\$ 40.8	\$ 3.5	\$ (48.0)
Income (loss) attributable to White Mountains's common shareholders per share:								
Basic								
Continuing operations	\$ 19.37	\$ 15.01	\$ 6.44	\$ 89.42	\$ (43.24)	\$ 18.27	\$ 1.02	\$ (12.85)
Discontinued operations	(.25)	.28	—	.22	—	(5.44)	—	.03
Total consolidated operations	\$ 19.12	\$ 15.29	\$ 6.44	\$ 89.64	\$ (43.24)	\$ 12.83	\$ 1.02	\$ (12.82)
Diluted								
Continuing operations	\$ 19.37	\$ 15.01	\$ 6.44	\$ 89.42	\$ (43.24)	\$ 18.27	\$ 1.02	\$ (12.85)
Discontinued operations	(.25)	.28	—	.22	—	(5.44)	—	.03
Total consolidated operations	\$ 19.12	\$ 15.29	\$ 6.44	\$ 89.64	\$ (43.24)	\$ 12.83	\$ 1.02	\$ (12.82)

⁽¹⁾ During 2019 and 2018, net (loss) gain from discontinued operations arose from the tax contingency on the sale of Sirius Group. See Note 19 — "Commitments and Contingencies".

WHITE MOUNTAINS INSURANCE GROUP, LTD.
SUMMARY OF INVESTMENTS—OTHER THAN
INVESTMENTS IN RELATED PARTIES
At December 31, 2019

Millions	Cost	Carrying Value	Fair Value
Fixed maturity investments:			
U.S. Government and agency obligations	\$ 231.7	\$ 232.5	\$ 232.5
Debt securities issued by corporations	454.9	467.2	467.2
Municipal obligations	284.7	297.1	297.1
Mortgage and asset-backed securities	206.6	209.0	209.0
Total fixed maturity investments	1,177.9	1,205.8	1,205.8
Short-term investments	201.2	201.2	201.2
Common equity securities:			
Exchange traded funds	436.0	536.4	536.4
Other	117.3	147.5	147.5
Total common equity securities	553.3	683.9	683.9
Other long-term investments	667.4	856.3	856.3
Total investments	\$ 2,599.8	\$ 2,947.2	\$ 2,947.2

Schedules of the Registrant should be read in conjunction with the Consolidated Financial Statements and Notes.

CONDENSED FINANCIAL INFORMATION OF THE REGISTRANT

CONDENSED BALANCE SHEETS ⁽¹⁾

Millions	December 31,	
	2019	2018
Assets:		
Cash	\$.7	\$.7
Fixed maturity investments, at fair value	10.0	—
Common equity securities, at fair value	193.5	335.6
Short-term investments, at amortized cost	66.2	28.0
Other assets	1.9	1.8
Investments in consolidated subsidiaries	2,969.0	2,533.2
Total assets	\$ 3,241.3	\$ 2,899.3
Liabilities:		
Payable to subsidiary	\$ (69.3)	\$ 15.8
Other liabilities	34.7	25.9
Total liabilities ⁽²⁾	(34.6)	41.7
White Mountains's common shareholders' equity	3,261.5	2,843.1
Non-controlling interests	14.4	14.5
Total liabilities and equity	\$ 3,241.3	\$ 2,899.3

⁽¹⁾ These condensed unconsolidated financial statements reflect the results of operations, financial condition and cash flows for the Company. Investments in 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 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, 2019 and 2018, White Mountains other liabilities includes \$16.5 and \$17.3 related to the Sirius tax contingency. See Note 19 — "Commitments and Contingencies".

Schedules of the Registrant should be read in conjunction with the Consolidated Financial Statements and Notes.

CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME ⁽¹⁾

Millions	Year Ended December 31,		
	2019	2018	2017
Revenues (loss) (including realized and unrealized gains and losses)	\$ 65.0	\$ (47.7)	\$ 27.3
Expenses	47.1	45.9	99.7
Pre-tax income (loss)	17.9	(93.6)	(72.4)
Income tax expense	(.9)	(2.5)	(1.4)
Net income (loss)	17.0	(96.1)	(73.8)
Net gain (loss) from discontinued operations, net of tax ⁽²⁾	.8	(17.2)	—
Equity in earnings from consolidated and unconsolidated subsidiaries, net of tax	398.5	(27.4)	701.0 ⁽³⁾
Net income attributable to non-controlling interests	(1.8)	(.5)	—
Net income (loss) attributable to White Mountains's common shareholders	414.5	(141.2)	627.2
Other comprehensive (loss) income items, net of tax	(1.4)	(4.5)	3.3
Comprehensive income (loss) attributable to White Mountains's common shareholders	\$ 413.1	\$ (145.7)	\$ 630.5

⁽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 2019 and 2018, net gain (loss) from discontinued operations includes \$0.8 and \$(17.3) arising from the tax contingency on the sale of Sirius Group. See **Note 19 — "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 20 — "Held for Sale and Discontinued Operations"**.

Schedules of the Registrant should be read in conjunction with the Consolidated Financial Statements and Notes.

CONDENSED STATEMENTS OF CASH FLOWS ⁽¹⁾⁽²⁾

Millions	Year Ended December 31,		
	2019	2018	2017
Net income (loss) attributable to White Mountains's common shareholders	\$ 414.5	\$ (141.2)	\$ 627.2
Charges (credits) to reconcile net income to net cash from operations:			
Net realized and unrealized investment (gains) losses on sales of investments	(61.0)	57.8	(18.5)
Undistributed earnings from subsidiaries	(398.5)	27.4	(701.0)
Net (gain) loss from sale of discontinued operations, net of tax ⁽³⁾	(.8)	17.2	—
Other non-cash reconciling items, primarily amortization of restricted share and option awards ⁽⁴⁾	20.0	34.6	31.1
Accumulated earnings distributed from subsidiary in cash ⁽⁵⁾	—	—	1,256.7
Net change in other assets and liabilities ⁽⁶⁾	3.0	16.7	(4.9)
Net cash (used for) provided from operations	(22.8)	12.5	1,190.6
Cash flows from investing activities:			
Net change in short-term investments ⁽⁷⁾	(37.6)	134.0	(24.7)
Purchases of investment securities ⁽⁸⁾	(14.8)	(321.2)	(474.7)
Sales and maturities of investment securities ⁽⁹⁾	207.9	967.6	367.1
Issuance of debt (to) from subsidiaries ⁽¹⁰⁾	(83.5)	(55.2)	382.0
Repayment of debt to (from) subsidiaries ⁽¹¹⁾	5.0	31.0	—
Net (contributions to) distributions from subsidiaries ⁽¹²⁾⁽¹³⁾	(46.1)	(258.2)	(700.0)
Net cash provided from (used for) investing activities	30.9	498.0	(450.3)
Cash flows from financing activities:			
Draw down of revolving line of credit ⁽¹⁴⁾	—	—	350.0
Repayment of revolving line of credit ⁽¹⁴⁾	—	—	(350.0)
Repurchases and retirement of common shares ⁽¹⁰⁾	—	(510.9)	(714.6)
Dividends paid on common shares	(3.2)	(3.8)	(4.6)
Payments of restricted shares withholding taxes	(4.9)	(10.0)	(9.3)
Net cash used for financing activities	(8.1)	(524.7)	(728.5)
Net (decrease) increase in cash during the year	—	(14.2)	11.8
Cash balance at beginning of year	.7	14.9	3.1
Cash balance at end of year	\$.7	\$.7	\$ 14.9
Supplemental cash flow information: interest paid ⁽¹⁴⁾	\$ —	\$ —	\$ (.6)

⁽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 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.

⁽³⁾ During 2019 and 2018, net gain (loss) from sale of discontinued operations includes \$0.8 and \$(17.3) arising from the tax contingency on the sale of Sirius Group. See **Note 19 — "Commitments and Contingencies"**.

⁽⁴⁾ For the years ended December 31, 2019, 2018 and 2017, amortization of restricted share awards was \$10.5, \$13.0 and \$14.8.

⁽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 2019, 2018 and 2017, net change in other assets and liabilities also included a \$(6.6), \$4.0, and \$11.6 net change in (receivables) 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. ("Guilford"). Proceeds of the debt, which included \$170.4 of fixed maturity securities and \$179.2 of short-term investments, were transferred to Guilford. During 2017, the Company had non-cash issuance of debt from LTH of \$94.2. During 2017, 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 2019, the Company made cash contributions of \$70.5 and \$2.0 to Bridge and its wholly-owned subsidiary, White Mountains Investment Bermuda, Ltd ("WMIB"). During 2018, the Company made non-cash contributions of \$350.0 by transferring intercompany debt receivable from Guilford to Bridge. Also during 2018, the Company made a non-cash contribution of \$1.0 by transferring intercompany debt receivable from White Mountains Investment, Ltd. (Luxembourg) ("White Mountains Investments"), a wholly-owned subsidiary of Bridge, to Bridge. During 2018, the Company made cash contributions of \$255.3 and \$2.9 to Bridge and White Mountains Investments. During 2017, the Company made cash contributions of \$700.0 to Guilford.

⁽¹³⁾ During 2019, the Company received cash distributions of \$24.4 and \$1.9 from WMIB and the Company's subsidiary, HG Global Ltd. 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.

⁽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.

WHITE MOUNTAINS INSURANCE GROUP, LTD.
SUPPLEMENTARY INSURANCE INFORMATION ⁽¹⁾

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Millions										
Segment	Deferred Acquisition Costs	Future Policy Benefits, Losses, Claims and Loss Expenses	Unearned Premiums	Other Policy Claims and Benefits Payable	Premiums Earned	Net Investment Income	Benefits, Claims, Losses and Settlement Expenses	Amortization of Deferred Policy Acquisition Costs	Other Operating Expenses	Premiums Written
Years ended:										
December 31, 2019										
HG Global/BAM	\$ 22.1	\$ —	\$ 198.4	\$ —	\$ 16.3	\$ 21.6	\$ —	\$ 5.7	\$.4	\$ 38.7
Other Operations ⁽²⁾	—	—	—	—	—	—	—	—	—	—
December 31, 2018										
HG Global/BAM	19.0	—	176.0	—	13.9	16.7	—	5.3	.4	52.9
Other Operations ⁽²⁾	—	—	—	—	—	—	—	—	—	—
December 31, 2017										
HG Global/BAM	14.8	—	136.8	—	9.4	12.3	—	4.0	.4	63.2
Other Operations ⁽²⁾⁽³⁾	—	—	—	—	1.0	—	1.1	.1	—	.9

⁽¹⁾ Schedule excludes activity related to OneBeacon and Sirius Group for the year ended December 31, 2017. See **Note 20 — “Held for Sale and Discontinued Operations”**.

⁽²⁾ The amounts shown exclude net investment income relating to non-insurance operations of \$43.4, \$42.3 and \$43.7 for the twelve months ended December 31, 2019, 2018 and 2017, respectively.

⁽³⁾ The Other Operations amounts shown relate to SSIE. White Mountains completed the sale of SSIE on March 7, 2017. See **Note 20 — “Held for Sale and Discontinued Operations”**.

Schedules of the Registrant should be read in conjunction with the Consolidated Financial Statements and Notes.

WHITE MOUNTAINS INSURANCE GROUP, LTD.
REINSURANCE ⁽¹⁾

Column A	Column B	Column C	Column D	Column E	Column F
\$ in Millions					
Premiums Earned	Gross Amount	Ceded to Other Companies	Assumed from Other Companies	Net Amount	Percentage of Amount Assumed to Net
Year ended:					
December 31, 2019					
HG Global/BAM	\$ 13.6	\$ —	\$ 2.7	\$ 16.3	16.6%
Other Operations	—	—	—	—	—
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	—

⁽¹⁾ Schedule excludes activity related to OneBeacon and Sirius Group for the year ended December 31, 2017. See **Note 20 — “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 20 — “Held for Sale and Discontinued Operations”**.

Schedules of the Registrant should be read in conjunction with the Consolidated Financial Statements and Notes.

DESCRIPTION OF COMMON SHARES

The summary of the terms of White Mountains's common shares set forth below does not purport to be complete and is qualified in its entirety by reference to our memorandum of continuance and bye-laws.

Authorized Share Capital

White Mountains's memorandum of continuance and the bye-laws provide that its authorized share capital is limited to 50,000,000 common shares, par value U.S. \$1.00 per share. As of February 28, 2020, 3,193,509 common shares were issued and outstanding.

Voting

The holders of common shares are entitled to one vote per share except as restricted by the voting limitation described below (subject to the rights of the holders of any other class of shares that may be issued). All actions submitted to a vote of shareholders shall be voted on by the holders of common shares, voting together as a single class, except as provided by law.

With respect to the election of directors, each holder of common shares entitled to vote at the election has the right to vote, in person or by proxy, the number of shares held by him or her for as many persons as there are directors to be elected and for whose election that holder has a right to vote. The directors are divided into three classes with staggered terms, with only one class standing for election each year. Each nominee receiving the majority of the votes cast at a meeting duly called and constituted shall be elected a director of the company; provided, however, that (i) in a contested director election in which the number of nominees exceeds the number of directors to be elected, the nominees receiving the highest number of votes, up to the number of directors to be elected, shall be elected (a "Plurality Vote"); and (ii) in an uncontested election, any director who receives less than a majority of the votes cast with respect to that director's election shall tender his or her resignation, but if such resignation is declined by the board of directors of White Mountains in accordance with the bye-laws, such director shall be elected by a Plurality Vote.

The bye-laws contain a provision limiting the voting rights of any person who beneficially holds (directly, indirectly or constructively under the Internal Revenue Code) 10% or more of the votes conferred by the issued shares of White Mountains to 9.9% of the votes conferred by the issued shares of White Mountains. This 9.9% voting limitation provision will not be applicable to any foundation or trust established by John J. Byrne, Patrick M. Byrne (his son) and/or any affiliate or associate of any of them or any group of which any of them is a part (each of them, a "Byrne Entity") with respect to any matter submitted to shareholders other than with respect to the election of directors.

In addition, the bye-laws contain a provision limiting the voting rights of any group (defined as two or more persons acting as a partnership, syndicate or other group for the purpose of acquiring, holding or disposition of the relevant securities) which beneficially holds 10% or more of the votes conferred by the issued shares of White Mountains to 9.9% of the votes conferred by the issued shares of White Mountains, except that this provision will not restrict (a) any Byrne Entity or (b) any person or group that the board of directors, by the affirmative vote of at least 75% of the entire board of directors, may exempt from this provision.

The bye-laws also contain a provision limiting the voting rights of any person to a reduced percentage who, at his or her election, notifies the board of directors to the percentage designated by such person (subject to acceptance of such cut-back by the board in its sole discretion) so that (and to the extent) such person may meet any applicable insurance or other regulatory requirement or voting threshold or limitation that may be applicable to such person or to evidence that such person's voting power is no greater than such threshold.

Dividends

Holders of common shares are entitled to participate, on a share-for-share basis, with the holders of any other common shares outstanding, with respect to any dividends declared by the board of directors of White Mountains. Dividends will generally be payable in U.S. dollars.

Liquidation

On a liquidation of White Mountains, holders of common shares are entitled to receive any assets remaining after the payment of our debts and the expenses of the liquidation, subject to such special rights as may be attached to any other class of shares.

Redemption

White Mountains is entitled to redeem common shares from a shareholder at fair market value if its board of directors determines that common share ownership by that shareholder may result in adverse tax, regulatory or legal consequences to White Mountains, any of its subsidiaries or any of the holders of common shares.

Variation of Rights

Under the bye-laws, if at any time White Mountains's share capital is divided into different classes of shares, the rights attached to any class (unless otherwise provided by the terms of the issue of the shares of that class) may be varied with the consent in writing of the holders of a majority of the issued shares of that class or with the sanction of a resolution passed at a separate general meeting of the holders of the shares of that class.

Change of Control

Bermuda law permits an amalgamation or a merger between two or more Bermuda companies subject, unless the bye-laws otherwise provide, to obtaining a majority vote of three-fourths of the shareholders of each of the companies, and of each class of shares entitled to vote separately as a class at such a meeting, present and voting in person or by proxy at a meeting called for that purpose. Unless the bye-laws otherwise provide, Bermuda law also requires that the quorum at the meetings be at least two persons holding or representing by proxy one-third of the issued shares of the company or the class, as the case may be. Each share of an amalgamating or merging company carries the right to vote in respect of an amalgamation or merger, whether or not it otherwise carries the right to vote.

Except as set forth in the next paragraph, the bye-laws provide that any amalgamation or merger approved by two-thirds of White Mountains's board of directors shall only require approval by a majority of the voting power held by the shareholders present at a meeting of the shareholders where a quorum is present.

White Mountains's bye-laws generally prohibit us from engaging in a "business combination" with an "interested shareholder" for a period of three years after the time of the transaction in which the person became an interested shareholder, unless:

- (1) prior to that time, the board of directors approves the transaction or the business combination;
- (2) upon consummation of the transaction which resulted in the shareholder becoming an interested shareholder, the interested shareholder owned at least 85% of the outstanding voting shares, excluding for purposes of determining the number of shares outstanding, shares owned by directors who are also officers and by certain employee plans; or
- (3) on or after that time the board of directors and the shareholders by an affirmative vote of at least $66\frac{2}{3}\%$ of the outstanding voting shares, which are not owned by the interested shareholder, approve the transaction.

The definition of "business combinations" includes mergers, asset sales and other transactions resulting in a financial benefit to the interested shareholder. An "interested shareholder" is a person who, together with affiliates and associates, owns or, within three years, did own 15% or more of White Mountains's voting stock. However, the bye-laws provide that each Byrne Entity is excepted from being an "interested shareholder".

Bermuda law also provides that where an offer is made for shares in a company by another company and, within four months of the offer, the holders of at least 90% in value of the shares which are the subject of the offer (other than shares already held by or on behalf of the offeror) accept, the offeror may by notice, given within two months after such approval is obtained, require any non-tendering shareholder to transfer their shares on the terms of the offer. Dissenting shareholders may apply to a court within one month of notice objecting to the transfer and the court may make any order it thinks fit. The burden is on the dissenting shareholders to show that the court should exercise its discretion to enjoin the required transfer, which the court will be unlikely to do unless there is evidence of fraud or bad faith or collusion between the offeror and the holders of the shares who have accepted the offer as a means of unfairly forcing out minority shareholders.

**SUBSIDIARIES OF THE REGISTRANT
AS OF DECEMBER 31, 2019**

FULL NAME OF SUBSIDIARY	PLACE OF INCORPORATION
WTM (BARBADOS) INTERNATIONAL SRL	BARBADOS
BRIDGE HOLDINGS (BERMUDA) LTD	BERMUDA
HG GLOBAL LTD	BERMUDA
HG HOLDINGS LTD	BERMUDA
HG RE LTD	BERMUDA
HG SERVICES LTD	BERMUDA
PSC HOLDINGS LTD.	BERMUDA
WHITE MOUNTAINS INVESTMENTS BERMUDA LTD.	BERMUDA
ATTORNEY'S & PROFESSIONAL INSURANCE SERVICES, INC.	CALIFORNIA, USA
NSM ADMINISTRATION, INC	CALIFORNIA, USA
AMERICAN COLLECTOR'S INSURANCE, LLC	DELAWARE, USA
COPPER FUNDING, LLC	DELAWARE, USA
GUILFORD HOLDINGS, INC.	DELAWARE, USA
KUDU INVESTMENT MANAGEMENT LLC	DELAWARE, USA
KUDU INVESTMENT US, LLC	DELAWARE, USA
NSM INSURANCE HOLDING CO, LLC	DELAWARE, USA
NSM INSURANCE GROUP, LLC	DELAWARE, USA
TK PARTNERS, LLC	DELAWARE, USA
WHITE MOUNTAINS ADVISORS LLC	DELAWARE, USA
WHITE MOUNTAINS CAPITAL, INC	DELAWARE, USA
WHITE MOUNTAINS CATSKILL HOLDINGS, INC	DELAWARE, USA
WM PORTFOLIO HOLDINGS, LLC	DELAWARE, USA
WHITE MOUNTAINS SERVICES LLC	DELAWARE, USA
WM PORTFOLIO SOLUTIONS ICAV	IRELAND
HGR PORTFOLIO SOLUTIONS ICAV	IRELAND
TNUVA FINANCIT LTD	ISRAEL
WOBI INSURANCE AGENCY, LTD	ISRAEL
WHITE MOUNTAINS HOLDINGS (LUXEMBOURG) S.A.R.L.	LUXEMBOURG
WHITE MOUNTAINS INVESTMENTS (LUXEMBOURG) S.A.R.L	LUXEMBOURG
CLEVERLAND HOLDINGS, LLC	OHIO, USA
EMBRACE PET INSURANCE AGENCY, LLC	OHIO, USA
EMBRACE PET MANAGEMENT, LLC	OHIO, USA
PLANS LIABILITY INSURANCE COMPANY	OHIO, USA
NSM INSURANCE SERVICES LLC	TEXAS, USA
AUTOSAINT LIMITED	UNITED KINGDOM
BUZZVAULT LIMITED	UNITED KINGDOM
CLASSIC INSURANCE SERVICES LIMITED	UNITED KINGDOM
FIRST INSURANCE SERVICES LIMITED	UNITED KINGDOM
FIRST UNDERWRITING LTD	UNITED KINGDOM
FIRST SPECIALTY LTD	UNITED KINGDOM
FRESH INSURANCE SERVICES GROUP LIMITED	UNITED KINGDOM
KFO HOLDINGS LTD	UNITED KINGDOM
KWCP HOLDINGS UK LTD	UNITED KINGDOM
LADYBIRD INSURANCE BROKER LIMITED	UNITED KINGDOM
MAYBURY JAMES LIMITED	UNITED KINGDOM
NSM MGA HOLDINGS	UNITED KINGDOM
PETER D. JAMES LIMITED	UNITED KINGDOM
REMOVAL STARS LIMITED	UNITED KINGDOM
STEWART MILLER MCCULLOCH & CO. LIMITED	UNITED KINGDOM
STEWART MILLER MCCULLOCH (HOLDINGS) LIMITED	UNITED KINGDOM
VANTAGE HOLDINGS LIMITED	UNITED KINGDOM
VANTAGE INSURANCE SERVICES LIMITED	UNITED KINGDOM
WM CAPITAL HOLDINGS LTD	UNITED KINGDOM
WM INTERNATIONAL HOLDINGS LTD	UNITED KINGDOM

Certain other subsidiaries of the Company have been omitted since, in the aggregate, they would not constitute a significant subsidiary.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-220469, 333-83206, 333-68438, 333-68460, 333-132388, 333-143574) of White Mountains Insurance Group, Ltd. of our report dated March 2, 2020 relating to the financial statements and financial statement schedules and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
March 2, 2020

WHITE MOUNTAINS INSURANCE GROUP, LTD.**POWER OF ATTORNEY**

KNOW ALL MEN by these presents, that Peter M. Carlson does hereby make, constitute and appoint G. Manning Rountree and Lowndes A. Smith, and each of them, as true and lawful attorney-in-fact and agent of the undersigned, with full power of substitution, resubstitution and revocation, for and in the name, place and stead of the undersigned, to execute and deliver the Annual Report on Form 10-K, and any and all amendments thereto; such Form 10-K and each such amendment to be in such form and to contain such terms and provisions as said attorney or substitute shall deem necessary or desirable; giving and granting unto said attorney, or to such person or persons as in any case may be appointed pursuant to the power of substitution herein given, full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or, in the opinion of said attorney or substitute, able to be done in and about the premises as fully and to all intents and purposes as the undersigned might or could do if personally present, hereby ratifying and confirming all that said attorney or such substitute shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has duly executed these presents this 27th day of February, 2020.

/s/ Peter M. Carlson

WHITE MOUNTAINS INSURANCE GROUP, LTD.**POWER OF ATTORNEY**

KNOW ALL MEN by these presents, that Mary C. Choksi does hereby make, constitute and appoint G. Manning Rountree and Lowndes A. Smith, and each of them, as true and lawful attorney-in-fact and agent of the undersigned, with full power of substitution, resubstitution and revocation, for and in the name, place and stead of the undersigned, to execute and deliver the Annual Report on Form 10-K, and any and all amendments thereto; such Form 10-K and each such amendment to be in such form and to contain such terms and provisions as said attorney or substitute shall deem necessary or desirable; giving and granting unto said attorney, or to such person or persons as in any case may be appointed pursuant to the power of substitution herein given, full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or, in the opinion of said attorney or substitute, able to be done in and about the premises as fully and to all intents and purposes as the undersigned might or could do if personally present, hereby ratifying and confirming all that said attorney or such substitute shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has duly executed these presents this 27th day of February, 2020.

/s/ Mary C. Choksi

WHITE MOUNTAINS INSURANCE GROUP, LTD.

POWER OF ATTORNEY

KNOW ALL MEN by these presents, that Morgan W. Davis does hereby make, constitute and appoint G. Manning Rountree and Lowndes A. Smith, and each of them, as true and lawful attorney-in-fact and agent of the undersigned, with full power of substitution, resubstitution and revocation, for and in the name, place and stead of the undersigned, to execute and deliver the Annual Report on Form 10-K, and any and all amendments thereto; such Form 10-K and each such amendment to be in such form and to contain such terms and provisions as said attorney or substitute shall deem necessary or desirable; giving and granting unto said attorney, or to such person or persons as in any case may be appointed pursuant to the power of substitution herein given, full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or, in the opinion of said attorney or substitute, able to be done in and about the premises as fully and to all intents and purposes as the undersigned might or could do if personally present, hereby ratifying and confirming all that said attorney or such substitute shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has duly executed these presents this 27th day of February, 2020.

/s/ Morgan W. Davis

WHITE MOUNTAINS INSURANCE GROUP, LTD.

POWER OF ATTORNEY

KNOW ALL MEN by these presents, that Philip A. Gelston does hereby make, constitute and appoint G. Manning Rountree and Lowndes A. Smith, and each of them, as true and lawful attorney-in-fact and agent of the undersigned, with full power of substitution, resubstitution and revocation, for and in the name, place and stead of the undersigned, to execute and deliver the Annual Report on Form 10-K, and any and all amendments thereto; such Form 10-K and each such amendment to be in such form and to contain such terms and provisions as said attorney or substitute shall deem necessary or desirable; giving and granting unto said attorney, or to such person or persons as in any case may be appointed pursuant to the power of substitution herein given, full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or, in the opinion of said attorney or substitute, able to be done in and about the premises as fully and to all intents and purposes as the undersigned might or could do if personally present, hereby ratifying and confirming all that said attorney or such substitute shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has duly executed these presents this 27th day of February, 2020.

/s/ Philip A. Gelston

WHITE MOUNTAINS INSURANCE GROUP, LTD.

POWER OF ATTORNEY

KNOW ALL MEN by these presents, that Edith E. Holiday does hereby make, constitute and appoint G. Manning Rountree and Lowndes A. Smith, and each of them, as true and lawful attorney-in-fact and agent of the undersigned, with full power of substitution, resubstitution and revocation, for and in the name, place and stead of the undersigned, to execute and deliver the Annual Report on Form 10-K, and any and all amendments thereto; such Form 10-K and each such amendment to be in such form and to contain such terms and provisions as said attorney or substitute shall deem necessary or desirable; giving and granting unto said attorney, or to such person or persons as in any case may be appointed pursuant to the power of substitution herein given, full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or, in the opinion of said attorney or substitute, able to be done in and about the premises as fully and to all intents and purposes as the undersigned might or could do if personally present, hereby ratifying and confirming all that said attorney or such substitute shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has duly executed these presents this 27th day of February, 2020.

/s/ Edith E. Holiday

WHITE MOUNTAINS INSURANCE GROUP, LTD.

POWER OF ATTORNEY

KNOW ALL MEN by these presents, that Lowndes A. Smith does hereby make, constitute and appoint G. Manning Rountree and himself, and each of them, as true and lawful attorney-in-fact and agent of the undersigned, with full power of substitution, resubstitution and revocation, for and in the name, place and stead of the undersigned, to execute and deliver the Annual Report on Form 10-K, and any and all amendments thereto; such Form 10-K and each such amendment to be in such form and to contain such terms and provisions as said attorney or substitute shall deem necessary or desirable; giving and granting unto said attorney, or to such person or persons as in any case may be appointed pursuant to the power of substitution herein given, full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or, in the opinion of said attorney or substitute, able to be done in and about the premises as fully and to all intents and purposes as the undersigned might or could do if personally present, hereby ratifying and confirming all that said attorney or such substitute shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has duly executed these presents this 27th day of February, 2020.

/s/ Lowndes A. Smith

WHITE MOUNTAINS INSURANCE GROUP, LTD.

POWER OF ATTORNEY

KNOW ALL MEN by these presents, that David A. Tanner does hereby make, constitute and appoint G. Manning Rountree and Lowndes A. Smith, and each of them, as true and lawful attorney-in-fact and agent of the undersigned, with full power of substitution, resubstitution and revocation, for and in the name, place and stead of the undersigned, to execute and deliver the Annual Report on Form 10-K, and any and all amendments thereto; such Form 10-K and each such amendment to be in such form and to contain such terms and provisions as said attorney or substitute shall deem necessary or desirable; giving and granting unto said attorney, or to such person or persons as in any case may be appointed pursuant to the power of substitution herein given, full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or, in the opinion of said attorney or substitute, able to be done in and about the premises as fully and to all intents and purposes as the undersigned might or could do if personally present, hereby ratifying and confirming all that said attorney or such substitute shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has duly executed these presents this 27th day of February, 2020.

/s/ David A. Tanner

**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, 2019 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.

March 2, 2020

By:

/s/ G. Manning Rountree
Chief Executive Officer
(Principal Executive Officer)

**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, 2019 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.

March 2, 2020

By:

/s/ Reid T. Campbell

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, 2019 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/ G. Manning Rountree

Chief Executive Officer
(Principal Executive Officer)

March 2, 2020

**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, 2019 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.

/s/ Reid T. Campbell

Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

March 2, 2020