Section 1: 10-Q (10-Q)

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 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 1-13754

THE HANOVER INSURANCE GROUP, INC.
(Exact name of registrant as specified in its charter)

Delaware	**04-3263626**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

440 Lincoln Street, Worcester, Massachusetts 01653
(Address of principal executive offices) (Zip Code)

(508) 855-1000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbols	Name of each exchange on which registered
Common Stock, $.01 par value	THG	New York Stock Exchange
7 5/8% Senior Debentures due 2025	THG	New York Stock Exchange
6.35% Subordinated Debentures due 2053	THGA	New York Stock Exchange

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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth 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 Exchange Act). Yes ☐ No ☒

The number of shares outstanding of the registrant’s common stock was 39,553,956 as of July 31, 2019.

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ITEM 1 - FINANCIAL STATEMENTS

THE HANOVER INSURANCE GROUP, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

(In millions, except per share data)	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
Revenues				
Premiums	**$ 1,111.0**	$ 1,058.2	**$ 2,206.1**	$ 2,100.7
Net investment income	**69.6**	65.6	**139.8**	131.6
Net realized and unrealized investment gains (losses):				
Net realized gains (losses) from sales and other	**0.8**	(0.5)	**0.4**	0.1
Net change in fair value of equity securities	**11.7**	6.0	**60.3**	(16.9)
Net other–than–temporary impairment losses on investments recognized in earnings	**(0.4)**	(1.8)	**(0.4)**	(2.4)
Total net realized and unrealized investment gains (losses)	**12.1**	3.7	**60.3**	(19.2)
Fees and other income	**5.9**	5.9	**11.9**	11.8
Total revenues	**1,198.6**	1,133.4	**2,418.1**	2,224.9
Losses and expenses				
Losses and loss adjustment expenses	**717.7**	671.2	**1,417.3**	1,342.1
Amortization of deferred acquisition costs	**230.5**	221.6	**460.0**	440.3
Interest expense	**9.3**	11.4	**18.7**	22.7
Other operating expenses	**131.3**	129.6	**263.7**	261.1
Total losses and expenses	**1,088.8**	1,033.8	**2,159.7**	2,066.2
Income from continuing operations before income taxes	**109.8**	99.6	**258.4**	158.7
Income tax expense:				
Current	**20.4**	16.6	**32.6**	10.9
Deferred	**(1.2)**	0.6	**12.6**	14.9
Effect of new tax regulations on Chaucer gain on sale	**5.6**	—	**5.6**	—
Total income tax expense	**24.8**	17.2	**50.8**	25.8
Income from continuing operations	**85.0**	82.4	**207.6**	132.9
Discontinued operations (net of taxes):				
Sale of Chaucer business	**(9.9)**	—	**(9.0)**	—
Income (loss) from Chaucer business	**(0.2)**	16.8	**(0.5)**	34.1
Income (loss) from discontinued life businesses	**(0.9)**	0.1	**(1.7)**	—
Net income	**$ 74.0**	$ 99.3	**$ 196.4**	$ 167.0
Earnings per common share:				
Basic:				
Income from continuing operations	**$ 2.09**	$ 1.94	**$ 5.10**	$ 3.13
Discontinued operations (net of taxes):				
Sale of Chaucer business	**(0.24)**	—	**(0.22)**	—
Income (loss) from Chaucer business	**(0.01)**	0.40	**(0.01)**	0.80
Loss from discontinued life businesses	**(0.02)**	—	**(0.04)**	—
Net income per share	**$ 1.82**	$ 2.34	**$ 4.83**	$ 3.93
Weighted average shares outstanding	**40.7**	42.5	**40.7**	42.5
Diluted:				
Income from continuing operations	**$ 2.06**	$ 1.91	**$ 5.04**	$ 3.08
Discontinued operations (net of taxes):				
Sale of Chaucer business	**(0.24)**	—	**(0.22)**	—
Income (loss) from Chaucer business	**(0.01)**	0.39	**(0.01)**	0.80
Income (loss) from discontinued life businesses	**(0.02)**	0.01	**(0.04)**	—
Net income per share	**$ 1.79**	$ 2.31	**$ 4.77**	$ 3.88
Weighted average shares outstanding	**41.2**	43.1	**41.2**	43.1

The accompanying notes are an integral part of these interim consolidated financial statements.

THE HANOVER INSURANCE GROUP, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

(In millions)	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
Net income	**$ 74.0**	$ 99.3	**$ 196.4**	$ 167.0
Other comprehensive income (loss), net of tax:				
Available-for-sale securities:				
Net appreciation (depreciation) during the period	**101.1**	(49.0)	**216.1**	(172.9)
Change in other-than-temporary impairment losses recognized in other comprehensive income	**0.5**	(0.1)	**1.9**	0.3
Total available-for-sale securities	**101.6**	(49.1)	**218.0**	(172.6)
Pension and postretirement benefits:				
Net change in net actuarial loss and prior service cost	**2.2**	0.9	**4.5**	(1.4)
Cumulative foreign currency translation adjustment:				
Amount recognized as cumulative foreign currency translation during the period	**0.6**	(0.5)	**0.7**	(1.0)
Total other comprehensive income (loss), net of tax	**104.4**	(48.7)	**223.2**	(175.0)
Comprehensive income (loss)	**$ 178.4**	$ 50.6	**$ 419.6**	$ (8.0)

The accompanying notes are an integral part of these interim consolidated financial statements.

THE HANOVER INSURANCE GROUP, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS (UNAUDITED)

(In millions, except share data)	June 30, 2019	December 31, 2018
Assets		
Investments:		
Fixed maturities, at fair value (amortized cost of $6,402.0 and $6,245.9)	**$ 6,598.9**	$ 6,161.5
Equity securities, at fair value	**531.3**	464.4
Other investments	**692.4**	661.5
Total investments	**7,822.6**	7,287.4
Cash and cash equivalents	**179.8**	1,020.7
Accrued investment income	**53.2**	53.2
Premiums and accounts receivable, net	**1,229.0**	1,176.7
Reinsurance recoverable on paid and unpaid losses and unearned premiums	**1,701.8**	1,648.6
Deferred acquisition costs	**456.8**	450.8
Deferred income tax asset	**—**	50.6
Goodwill	**178.8**	178.8
Other assets	**431.3**	371.6
Assets held-for-sale	**—**	57.4
Assets of discontinued businesses	**106.6**	103.9
Total assets	**$ 12,159.9**	$ 12,399.7
Liabilities		
Loss and loss adjustment expense reserves	**$ 5,478.5**	$ 5,304.1
Unearned premiums	**2,323.4**	2,277.8
Expenses and taxes payable	**563.1**	909.8
Deferred income tax liabilities	**29.2**	—
Reinsurance premiums payable	**53.2**	37.3
Debt	**653.1**	777.9
Liabilities held-for-sale	**—**	22.2
Liabilities of discontinued businesses	**118.3**	115.9
Total liabilities	**9,218.8**	9,445.0
Commitments and contingencies		
Shareholders' Equity		
Preferred stock, par value $0.01 per share; 20.0 million shares authorized; none issued	**—**	—
Common stock, par value $0.01 per share; 300.0 million shares authorized; 60.5 million shares issued	**0.6**	0.6
Additional paid-in capital	**1,833.1**	1,871.8
Accumulated other comprehensive income (loss)	**108.2**	(116.5)
Retained earnings	**2,328.1**	2,182.3
Treasury stock at cost (20.9 million and 18.2 million shares)	**(1,328.9)**	(983.5)
Total shareholders' equity	**2,941.1**	2,954.7
Total liabilities and shareholders' equity	**$ 12,159.9**	$ 12,399.7

The accompanying notes are an integral part of these interim consolidated financial statements.

THE HANOVER INSURANCE GROUP, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (UNAUDITED)

(In millions)	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
Preferred Stock				
Balance at beginning and end of period	**$ —**	$ —	**$ —**	$ —
Common Stock				
Balance at beginning and end of period	**0.6**	0.6	**0.6**	0.6
Additional Paid-in Capital				
Balance at beginning of period	**1,821.7**	1,858.3	**1,871.8**	1,857.0
Prepaid repurchase of common stock and other	**11.4**	5.9	**(38.7)**	7.2
Balance at end of period	**1,833.1**	1,864.2	**1,833.1**	1,864.2
Accumulated Other Comprehensive Income (Loss), net of tax				
Net Unrealized Appreciation (Depreciation) on Investments:				
Balance at beginning of period	**90.7**	0.3	**(27.2)**	205.4
Net appreciation (depreciation) on available-for-sale securities	**101.6**	(49.1)	**218.0**	(172.6)
Adoption of Accounting Standards Updates (No. 2017-08 in 2019 and No. 2016-01 and No. 2018-02 in 2018)	**—**	—	**1.5**	(81.6)
Balance at end of period	**192.3**	(48.8)	**192.3**	(48.8)
Defined Benefit Pension and Postretirement Plans:				
Balance at beginning of period	**(86.3)**	(98.0)	**(88.6)**	(79.5)
Net amount recognized as net periodic benefit (expense)	**2.2**	0.9	**4.5**	(1.4)
Adoption of Accounting Standards Update No. 2018-02	**—**	—	**—**	(16.2)
Balance at end of period	**(84.1)**	(97.1)	**(84.1)**	(97.1)
Cumulative Foreign Currency Translation Adjustment:				
Balance at beginning of period	**(0.6)**	(22.7)	**(0.7)**	(18.3)
Amount recognized as cumulative foreign currency translation during the period	**0.6**	(0.5)	**0.7**	(1.0)
Adoption of Accounting Standards Update No. 2018-02	**—**	—	**—**	(3.9)
Balance at end of period	**—**	(23.2)	**—**	(23.2)
Total accumulated other comprehensive income (loss)	**108.2**	(169.1)	**108.2**	(169.1)
Retained Earnings				
Balance at beginning of period	**2,278.7**	2,124.1	**2,182.3**	1,975.0
Cumulative effect of accounting change, net of taxes	**—**	—	**(1.5)**	104.3
Balance at beginning of period, as adjusted	**2,278.7**	2,124.1	**2,180.8**	2,079.3
Net income	**74.0**	99.3	**196.4**	167.0
Dividends to shareholders	**(24.6)**	(23.0)	**(49.1)**	(45.9)
Balance at end of period	**2,328.1**	2,200.4	**2,328.1**	2,200.4
Treasury Stock				
Balance at beginning of period	**(1,177.8)**	(949.5)	**(983.5)**	(942.5)
Shares purchased at cost	**(155.1)**	(11.7)	**(355.1)**	(25.3)
Net shares reissued at cost under employee stock-based compensation plans	**4.0**	4.9	**9.7**	11.5
Balance at end of period	**(1,328.9)**	(956.3)	**(1,328.9)**	(956.3)
Total shareholders' equity	**$ 2,941.1**	$ 2,939.8	**$ 2,941.1**	$ 2,939.8

The accompanying notes are an integral part of these interim consolidated financial statements.

THE HANOVER INSURANCE GROUP, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Six Months Ended June 30,	
(In millions)	2019	2018
Cash Flows From Operating Activities		
Net income	**$ 196.4**	$ 167.0
Adjustments to reconcile net income to net cash provided by operating activities:		
Net realized and unrealized investment (gains) losses	**(60.3)**	19.4
Sale of Chaucer business	**9.0**	—
Net amortization and depreciation	**12.0**	14.1
Stock-based compensation expense	**8.6**	7.6
Amortization of defined benefit plan costs	**5.7**	4.8
Deferred income tax expense (benefit)	**12.6**	(4.0)
Change in deferred acquisition costs	**(4.3)**	(14.3)
Change in premiums receivable, net of reinsurance premiums payable	**(47.5)**	(100.6)
Change in loss, loss adjustment expense and unearned premium reserves	**231.8**	249.3
Change in reinsurance recoverable	**(66.8)**	(53.3)
Change in expenses and taxes payable	**(80.8)**	(62.4)
Other, net	**(65.8)**	(48.1)
Net cash provided by operating activities	**150.6**	179.5
Cash Flows From Investing Activities		
Proceeds from disposals and maturities of fixed maturities	**490.1**	637.8
Proceeds from disposals of equity securities and other investments	**48.9**	51.2
Purchase of fixed maturities	**(691.4)**	(822.6)
Purchase of equity securities and other investments	**(91.2)**	(92.8)
Capital expenditures	**(6.5)**	(7.8)
Net cash proceeds from sale of Chaucer-related Irish and Australian entities, partially offset by cash transferred	**34.7**	—
Net cash used in investing activities	**(215.4)**	(234.2)
Cash Flows From Financing Activities		
Proceeds from exercise of employee stock options	**10.5**	11.1
Change in cash collateral related to securities lending program	**8.3**	(12.7)
Dividends paid to shareholders	**(241.5)**	(45.9)
Repurchases of common stock	**(400.0)**	(25.3)
Repayment of debt	**(151.1)**	—
Other financing activities	**(5.6)**	(3.2)
Net cash used in financing activities	**(779.4)**	(76.0)
Effect of exchange rate changes on cash	**—**	(0.8)
Net change in cash and cash equivalents	**(844.2)**	(131.5)
Net change in cash related to discontinued operations	**3.3**	(28.2)
Cash and cash equivalents, beginning of period	**1,020.7**	297.9
Cash and cash equivalents, end of period	**$ 179.8**	$ 138.2

The accompanying notes are an integral part of these interim consolidated financial statements.

THE HANOVER INSURANCE GROUP, INC. AND SUBSIDIARIES

NOTES TO INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. Basis of Presentation and Principles of Consolidation

The accompanying unaudited consolidated financial statements of The Hanover Insurance Group, Inc. and subsidiaries ("THG" or the "Company") have been prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP") for interim financial information and with the requirements of Form 10-Q. Certain financial information that is provided in annual financial statements, but is not required in interim reports, has been omitted.

The interim consolidated financial statements of THG include the accounts of The Hanover Insurance Company ("Hanover Insurance") and Citizens Insurance Company of America, THG's principal property and casualty companies; and other insurance and non-insurance subsidiaries. These legal entities conduct their operations through several business segments discussed in Note 9 – "Segment Information". The interim consolidated financial statements also include the Company's discontinued operations consisting of Chaucer Holdings Limited ("Chaucer"), a United Kingdom ("U.K.") domiciled specialist insurance underwriting group which operates through the Society and Corporation of Lloyd's ("Lloyds"), and the international insurance and non-insurance subsidiaries, which collectively constituted the former Chaucer segment. On December 28, 2018, the Company completed the sale of Chaucer to China Reinsurance (Group) Corporation ("China Re"), and subsequently completed the sales of the Chaucer-related Irish and Australian entities on February 14, 2019 and April 10, 2019, respectively. Discontinued operations also include the Company's accident and health and former life insurance businesses. All intercompany accounts and transactions have been eliminated.

The preparation of financial statements in conformity with U.S. GAAP requires the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Actual results could differ from those estimates.

In the opinion of the Company's management, the accompanying interim consolidated financial statements reflect all adjustments, consisting of normal recurring items, necessary for a fair presentation of the financial position and results of operations. The results of operations for the three and six months ended June 30, 2019 are not necessarily indicative of the results to be expected for the full year. These financial statements should be read in conjunction with the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on February 22, 2019.

2. New Accounting Pronouncements

Recently Implemented Standards

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Codification ("ASC") Update No. 2016-02, (Topic 842) *Leases*. This ASC update requires a lessee to recognize a right-of-use asset, which represents the lessee's right to use a specified asset for the lease term, and a corresponding lease liability, which represents a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis, for all leases that extend beyond 12 months. For finance or capital leases, interest on the lease liability will be recognized separately from amortization of the right-of-use asset in the statements of income and comprehensive income. In addition, the repayment of the principal portion of the lease liability will be classified as a financing activity while the interest component will be included in the operating section of the statement of cash flows. For operating leases, the asset and liability will be amortized as a single lease cost, such that the cost of the lease is allocated over the lease term, on a generally straight-line basis, with all cash flows included within operating activities in the statement of cash flows. ASC Update No. 2016-02 requires that implementation of this guidance be through a modified retrospective transition approach. In July 2018, the FASB issued ASC Update No. 2018-11, (Topic 842) *Leases Targeted Improvements*, which provides entities with an additional transition method to adopt ASC Update No. 2016-02. Under this optional transition method, an entity can initially apply the new guidance at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. The Company implemented this guidance effective January 1, 2019 using the optional transition method provided in ASC Update No. 2018-11 and elected to utilize the practical expedient package available in ASC Update 2016-02. The Company has also elected to utilize the practical expedient which allows an entity not to separate lease and nonlease components for all of its asset classes. The effect of implementing this guidance increased total assets and total liabilities each by approximately $35 million on January 1, 2019 and did not have a material effect on the results of operations.

In March 2019, the FASB issued ASC Update No. 2019-01, *Leases (Topic 842) – Codification Improvements* ("ASC Update No. 2019-01"). This ASC update modifies interim disclosure requirements related to the implementation of Topic 842. This ASC update explicitly provides an exception to certain disclosures required under Topic 250 *Accounting Changes and Error Corrections*. An entity should apply the amendments as of the date that it first applied Topic 842, using the same transition methodology. Consistent with the Company's implementation of Topic 842 on January 1, 2019, the updated guidance is effective for interim and annual periods beginning after December 15, 2018. The Company implemented this guidance effective January 1, 2019 and it did not have an impact on the Company's financial position or results of operations as the update is disclosure related.

In March 2017, the FASB issued ASC Update No. 2017-08, (Subtopic 310-20) *Receivables – Nonrefundable Fees and Other Costs: Premium Amortization on Purchased Callable Debt Securities*. This guidance shortens the amortization period of premiums on certain purchased callable debt securities to the earliest call date. The updated guidance is effective for annual and interim periods beginning after December 15, 2018, and should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. The Company implemented this guidance effective January 1, 2019. The effect of implementing this guidance resulted in a cumulative effect adjustment reclassifying unrealized losses, net of tax, of $1.5 million from accumulated other comprehensive income to retained earnings.

Recently Issued Standards

In August 2018, the FASB issued ASC Update No. 2018-15, *Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASC Update No. 2018-15"). This ASC update requires the capitalization of implementation costs incurred in a hosting arrangement that is a service contract consistent with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The guidance also requires an entity to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting agreement, and apply impairment guidance consistent with long-lived assets. ASC Update No. 2018-15 also provides specific guidelines related to the presentation of these capitalized implementation costs and related expenses in the financial statements. The updated guidance is effective for interim and annual periods beginning after December 15, 2019, and should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. Early adoption is permitted, including interim periods. The Company does not expect the adoption of ASC Update No. 2018-15 to have a material impact on its financial position or results of operations.

In August 2018, the FASB issued ASC Update No. 2018-14 (Topic 715-20) *Compensation – Retirement Benefits – Defined Benefit Plans – General – Disclosure Framework – Changes to the Disclosure Requirements for the Defined Benefit Plans.* This ASC update modifies disclosures related to defined benefit pension or other postretirement plans. This ASC update removes the disclosure of amounts in accumulated other comprehensive income expected to be recognized over the next fiscal year and the effects of a one percentage point change of health care cost trends on net periodic benefit costs and postretirement benefit obligations and clarifies the specific requirements of disclosures related to the project benefit obligation and accumulated benefit obligation. This ASC Update also adds disclosures related to weighted average crediting rates for cash balance plans and requires disclosure of an explanation of any significant gains and losses related to changes in benefit obligations for the period. The amendments in this ASC update are effective for fiscal years ending after December 15, 2020, and should be applied on a retrospective basis to all periods presented. Early adoption is permitted. Implementing this guidance is not expected to have an impact on the Company's financial position or results of operations as the update is disclosure related.

In August 2018, the FASB issued ASC Update No. 2018-13 (Topic 820) *Fair Value Measurement, Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*. The update removes the requirement for disclosure of the following: 1) the amount and reasons for transfers between level 1 and level 2 of the fair value hierarchy, 2) the policy for timing of transfers between levels, and 3) the valuation processes for level 3 fair value measurements. This update also added a requirement to disclose the changes in unrealized gains and losses for the period included in other comprehensive income for recurring level 3 fair value measurements held at the end of the reporting period and the range and weighted average of significant unobservable inputs used to develop level 3 fair value measurements, in addition to other fair value disclosure modifications. The updated guidance is effective for interim and annual periods beginning after December 15, 2019, and should be applied prospectively for certain of the disclosure requirements and retrospectively to all periods presented upon the effective date for other disclosure requirements. An entity is permitted to early adopt any removed or modified disclosures upon issuance of the update and delay adoption of additional disclosures until periods beginning after December 15, 2019, the effective date of the standard. Implementing this guidance is not expected to have an impact on the Company's financial position or results of operations as the update is disclosure related.

In January 2017, the FASB issued ASC Update No. 2017-04, (Topic 350) *Intangibles – Goodwill and Other: Simplifying the Test for Goodwill Impairment*. This guidance eliminates step 2 from the goodwill impairment test. Instead, an entity should perform its goodwill impairment test by comparing the fair value of the reporting unit with its carrying amount, including any applicable income tax effects, and recognize an impairment for the amount by which the carrying amount exceeds the reporting unit's fair value. However, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The updated guidance is effective for annual or interim goodwill impairment tests performed in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company does not expect the adoption of ASC Update No. 2017-04 to have a material impact on its financial position or results of operations.

In June 2016, the FASB issued ASC Update No. 2016-13, (Topic 326) *Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments*. This ASC update introduces new guidance for the accounting for credit losses on financial instruments within its scope. A new model, referred to as the current expected credit losses model, requires an entity to determine credit-related impairment losses for financial instruments held at amortized cost and to estimate these expected credit losses over the life of an exposure (or pool of exposures). The estimate of expected credit losses should consider both historical and current information, reasonable and supportable forecasts, as well as estimates of prepayments. The estimated credit losses and subsequent adjustment to such loss estimates, will be recorded through an allowance account which is deducted from the amortized cost of the financial instrument, with the offset recorded in current earnings. ASC No. 2016-13 also modifies the impairment model for available-for-sale debt securities. The new model will require an estimate of expected credit losses only when the fair value is below the amortized cost of the asset, thus the length of time the fair value of an available-for-sale debt security has been below the amortized cost will no longer affect the determination of whether a credit loss exists. In addition, credit losses on available-for-sale debt securities will be limited to the difference between the security's amortized cost basis and its fair value. In November 2018, the FASB issued ASC Update No. 2018-19, *Codification Improvements to Topic 326, Financial Instruments – Credit Losses*, which explicitly states that receivables arising from operating leases are not within the scope of Subtopic 326-20. ASC Update 2016-13 and related guidance is effective for interim and annual periods beginning after December 15, 2019. Early adoption is permitted for periods beginning after December 15, 2018. The Company expects to adopt ASC Update No. 2016-13 on January 1, 2020 and is evaluating the impact on its financial position and results of operations, which it does not expect to be material.

3. Discontinued Operations – Chaucer Business

Sale of Chaucer Business

On December 28, 2018, the Company completed the sale of the U.K. entities of its former subsidiary, Chaucer, to China Re. On February 14, 2019, the Company completed the sale of its Chaucer-related Irish entity and on April 10, 2019, finalized the sale of the Australian entities, completing the transfer of all Chaucer-related companies. Collectively, these entities constituted the Chaucer business in 2018 and prior, whereas just the Irish and Australian Chaucer-related entities comprised the Chaucer business reported in the Company's results in 2019, until their respective sales to China Re. In December 2018, the Company recognized a pre-tax gain on the sale to China Re of $174.4 million and an income tax expense of $42.5 million. As discussed below, both the pre-tax gain and income tax expense were updated this quarter.

Included in the previously recorded $174.4 million gain was $31.7 million of contingent proceeds, based upon the Company's best estimate of Chaucer's 2018 catastrophe losses. During 2019, Chaucer experienced unfavorable development on its 2018 catastrophe losses, primarily due to higher than expected losses for Hurricane Michael, Typhoon Jebi, and a Colombian dam construction loss. Accordingly, the Company updated and reduced its best estimate of pre-tax contingent proceeds by $13.5 million.

In addition, the Company recognized an income tax charge of $5.6 million in the second quarter of 2019 related to new tax regulations that were issued on June 14, 2019 by the U.S. Department of the Treasury, with an effective date retroactive to January 1, 2018. These new regulations retroactively changed the taxation of certain non-U.S. income. Although the impact of these regulations relates to the calculation of the income tax expense related to the sale of Chaucer, unlike the $42.5 million of income tax expense noted above that was reflected in discontinued operations, ASC 740, *Income Taxes*, prescribes that the effect of certain retroactive tax law changes be presented in continuing operations. Accordingly, the Company has presented this charge as a separate component of income from continuing operations. (See also Note 4 "Income Taxes" below.)

During 2019, the sale of the Irish entity provided total proceeds of $28 million and resulted in a pre-tax gain of $0.4 million, with a related income tax benefit of $0.5 million. The sale of the Australian entities for total proceeds of $13 million resulted in a pre-tax gain of $1.2 million and a related income tax expense of $0.1 million.

Income from Discontinued Chaucer Business

Three and six months ended June 30, 2019

Revenues from the portion of the Chaucer business remaining after the sale of the U.K. entities in 2018 were $1.6 million and $4.5 million for the three and six months ended June 30, 2019, respectively, and operating losses in this business totaled $0.2 million and $0.5 million during those same periods.

Three and six months ended June 30, 2018

The following table summarizes the results of Chaucer's operations for the three and six months ended June 30, 2018:

(in millions)	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
Revenues		
Net premiums earned	$ 214.7	$ 435.8
Net investment income	12.5	28.9
Other income	1.6	3.5
	228.8	468.2
Losses and operating expenses		
Losses and LAE	112.5	227.5
Amortization of deferred acquisition costs	67.3	136.6
Other expenses	27.1	59.3
	206.9	423.4
Income from Chaucer business before income taxes and other items (previously presented as Chaucer's operating income)	21.9	44.8
Other items:		
Interest expense	(0.2)	(1.3)
Net realized and unrealized investment losses	—	(0.5)
Other expense	(1.4)	(1.2)
Income from Chaucer business before income taxes	20.3	41.8
Income tax expense	(3.5)	(7.7)
Income from Chaucer business, net of income taxes	$ 16.8	$ 34.1

There were no assets or liabilities held-for-sale at June 30, 2019. Total assets and liabilities held-for-sale were $57.4 and $22.2 million, respectively, at December 31, 2018. Assets and liabilities held-for-sale decreased during the six months ended June 30, 2019 due to the aforementioned sales of the Chaucer-related Irish and Australian entities. These balances are reflected in the Consolidated Balance Sheets under the captions "Assets held-for-sale" and "Liabilities held-for-sale", respectively.

The following table details the cash flows associated with the Chaucer business for the six months ended June 30, 2018:

(in millions)	Six Months Ended June 30, 2018
Net cash used in operating activities	$ (14.0)
Net cash provided by investing activities	$ 96.0

4. Income Taxes

Income tax expense for the six months ended June 30, 2019 and 2018 has been computed using estimated annual effective tax rates. The prior year's rate reflects the recomputed income to exclude the Chaucer business. These rates are revised, if necessary, at the end of each successive interim period to reflect current estimates of the annual effective tax rates.

The tax provision was comprised of U.S. federal income tax expense of $50.8 million and $25.8 million for the six months ended June 30, 2019 and 2018, respectively. The tax provision recorded in discontinued operations related to the Chaucer business for the six months ended June 30, 2018 was comprised of a $7.8 million foreign income tax expense and a $0.1 million U.S. federal income tax benefit.

As noted above, on June 14, 2019, the U.S. Department of the Treasury issued regulations that change the taxation of certain non-U.S. income. These regulations apply retroactively to January 1, 2018. As a result, the Company incurred additional federal income tax of $5.6 million from the 2018 sale of Chaucer. In accordance with ASC 740, the Company has recorded a provision for this amount as a component of income tax expense in continuing operations in its Consolidated Statements of Income for the three and six months ended June 30, 2019.

The Company or its subsidiaries files income tax returns in the U.S. federal jurisdiction and various state jurisdictions, as well as foreign jurisdictions. The Company and its subsidiaries are subject to U.S. federal and state income tax examinations and foreign examinations for years after 2014.

5. Investments

A. Fixed maturities

The amortized cost and fair value of available-for-sale fixed maturities were as follows:

	June 30, 2019				
(in millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	OTTI Unrealized Losses
U.S. Treasury and government agencies	**$ 383.1**	**$ 9.2**	**$ 0.3**	**$ 392.0**	**$ —**
Foreign government	**7.2**	**0.1**	**—**	**7.3**	**—**
Municipal	**806.8**	**28.9**	**0.5**	**835.2**	**—**
Corporate	**3,599.4**	**126.9**	**7.8**	**3,718.5**	**4.2**
Residential mortgage-backed	**824.5**	**15.3**	**1.5**	**838.3**	**—**
Commercial mortgage-backed	**690.9**	**25.4**	**0.2**	**716.1**	**—**
Asset-backed	**90.1**	**1.4**	**—**	**91.5**	**—**
Total fixed maturities	**$ 6,402.0**	**$ 207.2**	**$ 10.3**	**$ 6,598.9**	**$ 4.2**

	December 31, 2018				
(in millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	OTTI Unrealized Losses
U.S. Treasury and government agencies	$ 414.7	$ 2.4	$ 7.2	$ 409.9	$ —
Foreign government	7.3	0.1	—	7.4	—
Municipal	879.0	16.6	9.8	885.8	—
Corporate	3,476.6	26.1	92.0	3,410.7	6.6
Residential mortgage-backed	728.4	2.7	14.7	716.4	—
Commercial mortgage-backed	648.4	1.7	9.8	640.3	—
Asset-backed	91.5	0.2	0.7	91.0	—
Fixed maturities, excluding held-for-sale (Chaucer)	6,245.9	49.8	134.2	6,161.5	6.6
Fixed maturities, held-for-sale	24.9	—	0.4	24.5	—
Total fixed maturities	$ 6,270.8	$ 49.8	$ 134.6	$ 6,186.0	$ 6.6

Other-than-temporary impairments (“OTTI”) unrealized losses in the tables above represent OTTI recognized in accumulated other comprehensive income (“AOCI”). This amount excludes net unrealized gains on impaired securities relating to changes in the value of such securities subsequent to the impairment measurement date of $6.1 million and $7.4 million as of June 30, 2019 and December 31, 2018, respectively.

The Company deposits funds with various state and governmental authorities. For a discussion of the Company’s deposits with state and governmental authorities, see also Note 3 – “Investments” of the Notes to Consolidated Financial Statements in the Company’s 2018 Annual Report on Form 10-K.

The amortized cost and fair value by maturity periods for fixed maturities are shown in the following table. Actual maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties, or the Company may have the right to put or sell the obligations back to the issuers.

	June 30, 2019	
(in millions)	Amortized Cost	Fair Value
Due in one year or less	**$ 244.0**	**$ 246.1**
Due after one year through five years	**1,944.3**	**2,000.9**
Due after five years through ten years	**2,351.9**	**2,435.7**
Due after ten years	**256.3**	**270.3**
	4,796.5	**4,953.0**
Mortgage-backed and asset-backed securities	**1,605.5**	**1,645.9**
Total fixed maturities	**$ 6,402.0**	**$ 6,598.9**

B. Fixed maturity securities in an unrealized loss position

The following tables provide information about the Company’s available-for-sale fixed maturity securities that were in an unrealized loss position at June 30, 2019 and December 31, 2018 including the length of time the securities have been in an unrealized loss position:

	June 30, 2019					
	12 months or less		Greater than 12 months		Total	
(in millions)	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value
Investment grade:						
U.S. Treasury and government agencies	$ —	$ 2.9	$ 0.3	$ 44.9	$ 0.3	$ 47.8
Municipal	—	6.4	0.5	38.8	0.5	45.2
Corporate	0.1	3.5	2.4	176.9	2.5	180.4
Residential mortgage-backed	—	—	1.5	128.1	1.5	128.1
Commercial mortgage-backed	—	0.4	0.2	53.9	0.2	54.3
Asset-backed	—	—	—	8.2	—	8.2
Total investment grade	0.1	13.2	4.9	450.8	5.0	464.0
Below investment grade:						
Corporate	0.5	20.7	4.8	46.7	5.3	67.4
Total fixed maturities	$ 0.6	$ 33.9	$ 9.7	$ 497.5	$ 10.3	$ 531.4

	December 31, 2018					
	12 months or less		Greater than 12 months		Total	
(in millions)	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value
Investment grade:						
U.S. Treasury and government agencies	$ 1.1	$ 66.0	$ 6.1	$ 210.9	$ 7.2	$ 276.9
Foreign governments	—	2.0	—	0.8	—	2.8
Municipal	0.8	110.0	9.0	248.0	9.8	358.0
Corporate	30.0	1,277.9	43.9	781.6	73.9	2,059.5
Residential mortgage-backed	2.6	201.2	12.1	323.7	14.7	524.9
Commercial mortgage-backed	3.4	293.0	6.4	175.5	9.8	468.5
Asset-backed	0.4	42.3	0.3	18.0	0.7	60.3
Total investment grade	38.3	1,992.4	77.8	1,758.5	116.1	3,750.9
Below investment grade:						
Municipal	—	—	—	0.9	—	0.9
Corporate	8.1	185.6	10.0	54.0	18.1	239.6
Total below investment grade	8.1	185.6	10.0	54.9	18.1	240.5
Fixed maturities, excluding held-for-sale (Chaucer)	46.4	2,178.0	87.8	1,813.4	134.2	3,991.4
Fixed maturities, held-for-sale	0.1	4.0	0.3	18.0	0.4	22.0
Total fixed maturities	$ 46.5	$ 2,182.0	$ 88.1	$ 1,831.4	$ 134.6	$ 4,013.4

The Company views gross unrealized losses on fixed maturities as being temporary since it is its assessment that these securities will recover in the near term, allowing the Company to realize the anticipated long-term economic value. The Company employs a systematic methodology to evaluate declines in fair value below amortized cost for fixed maturity securities. In determining OTTI, the Company evaluates several factors and circumstances, including the issuer’s overall financial condition; the issuer’s credit and financial strength ratings; the issuer’s financial performance, including earnings trends and asset quality; any specific events which may influence the operations of the issuer; the general outlook for market conditions in the industry or geographic region in which the issuer operates; and the length of time and the degree to which the fair value of an issuer’s securities remains below the Company’s amortized cost. The Company also considers any factors that might raise doubt about the issuer’s ability to make contractual payments as they come due and whether the Company expects to recover the entire amortized cost basis of the security.

C. Proceeds from sales

The proceeds from sales of available-for-sale securities and gross realized gains and gross realized losses on those sales were as follows:

	Three Months Ended June 30,					
	2019			2018		
(in millions)	Proceeds from Sales	Gross Gains	Gross Losses	Proceeds from Sales	Gross Gains	Gross Losses
Fixed maturities, excluding held-for-sale (Chaucer)	**$ 162.5**	**$ 1.6**	**$ 1.1**	$ 84.2	$ 1.0	$ 2.1
Fixed maturities, held-for-sale	**—**	**—**	**—**	80.4	0.7	0.4
Total fixed maturities	**$ 162.5**	**$ 1.6**	**$ 1.1**	$ 164.6	$ 1.7	$ 2.5

	Six Months Ended June 30,					
	2019			2018		
(in millions)	Proceeds from Sales	Gross Gains	Gross Losses	Proceeds from Sales	Gross Gains	Gross Losses
Fixed maturities, excluding held-for-sale (Chaucer)	**$ 222.6**	**$ 2.6**	**$ 2.6**	$ 141.3	$ 1.2	$ 3.8
Fixed maturities, held-for-sale	**0.3**	**—**	**—**	151.1	1.1	1.0
Total fixed maturities	**$ 222.9**	**$ 2.6**	**$ 2.6**	$ 292.4	$ 2.3	$ 4.8

D. Other-than-temporary impairments

For the three and six months ended June 30, 2019, total OTTI on fixed maturities was $0.7 million, of which $0.4 million was recognized in earnings and the remaining $0.3 million was recorded as unrealized losses in AOCI.

For the three months ended June 30, 2018, total OTTI from continuing operations of $1.8 million, which consisted of other invested assets and fixed maturities, was recognized in earnings. For the six months ended June 30, 2018, total OTTI from continuing operations was $2.7 million, consisting primarily of fixed maturities and other invested assets. Of this amount, $2.4 million was recognized in earnings and the remaining $0.3 million was recorded as unrealized losses in AOCI.

The methodology and significant inputs used to measure the amount of credit losses on fixed maturities in 2019 and 2018 were as follows:

Corporate bonds – the Company utilized a financial model that derives expected cash flows based on probability-of-default factors by credit rating and asset duration and loss-given-default factors based on security type. These factors are based on historical data provided by an independent third-party rating agency. In addition, other market data relevant to the realizability of contractual cash flows may be considered.

The following table provides rollforwards of the cumulative amounts related to the Company's credit loss portion of the OTTI losses on fixed maturity securities from continuing operations for which the non-credit portion of the loss is included in other comprehensive income.

	Three Months Ended June 30,		Six Months Ended June 30,	
(in millions)	2019	2018	2019	2018
Credit losses as of the beginning of the period	**$ 3.3**	$ 3.1	**$ 3.8**	$ 3.6
Credit losses on securities for which an OTTI was not previously recognized	**0.4**	0.6	**0.4**	0.8
Additional credit losses on securities for which an OTTI was previously recognized	**—**	0.1	**—**	0.1
Reductions for securities sold, matured or called	**(0.8)**	(0.1)	**(1.3)**	(0.8)
Credit losses as of the end of the period	**$ 2.9**	$ 3.7	**$ 2.9**	$ 3.7

E. Equity securities

Equity securities are carried at fair value and all increases or decreases in fair value are reported in net realized and unrealized investment gains (losses) on the Consolidated Statements of Income. The following table provides pre-tax net realized and unrealized gains (losses) on equity securities from continuing operations:

	Three Months Ended June 30,		Six Months Ended June 30,	
(in millions)	**2019**	**2018**	**2019**	**2018**
Net gains (losses) recognized during the period	**$ 11.7**	$ 6.0	**$ 60.3**	$ (16.9)
Less: net gains (losses) recognized on equity securities sold during the period	**0.1**	(1.3)	**1.2**	(0.8)
Net unrealized gains (losses) recognized during the period on equity securities still held	**$ 11.6**	$ 7.3	**$ 59.1**	$ (16.1)

6. Fair Value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability, i.e., exit price, in an orderly transaction between market participants. The Company emphasizes the use of observable market data whenever available in determining fair value. Fair values presented for certain financial instruments are estimates which, in many cases, may differ significantly from the amounts that could be realized upon immediate liquidation. A hierarchy of the three broad levels of fair value are as follows, with the highest priority given to Level 1 as these are the most observable, and the lowest priority given to Level 3:

Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 – Quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data, including model-derived valuations.

Level 3 – Unobservable inputs that are supported by little or no market activity.

When more than one level of input is used to determine fair value, the financial instrument is classified as Level 2 or 3 according to the lowest level input that has a significant impact on the fair value measurement.

The following methods and assumptions were used to estimate the fair value of each class of financial instruments and have not changed since last year.

Fixed Maturities

Level 1 securities generally include U.S. Treasury issues and other securities that are highly liquid and for which quoted market prices are available. Level 2 securities are valued using pricing for similar securities and pricing models that incorporate observable inputs including, but not limited to yield curves and issuer spreads. Level 3 securities include issues for which little observable data can be obtained, primarily due to the illiquid nature of the securities, and for which significant inputs used to determine fair value are based on the Company’s own assumptions.

The Company utilizes a third party pricing service for the valuation of the majority of its fixed maturity securities and receives one quote per security. When quoted market prices in an active market are available, they are provided by the pricing service as the fair value and such values are classified as Level 1. Since fixed maturities other than U.S. Treasury securities generally do not trade on a daily basis, the pricing service prepares estimates of fair value for those securities using pricing techniques based on a market approach. Inputs into the fair value pricing common to all asset classes include: benchmark U.S. Treasury security yield curves; reported trades of identical or similar fixed maturity securities; broker/dealer quotes of identical or similar fixed maturity securities and structural characteristics such as maturity date, coupon, mandatory principal payment dates, frequency of interest and principal payments, and optional redemption features. Inputs into the fair value applications that are unique by asset class include, but are not limited to:

- U.S. government agencies – determination of direct versus indirect government support and whether any contingencies exist with respect to the timely payment of principal and interest.
- Foreign government – estimates of appropriate market spread versus underlying related sovereign treasury curve(s) dependent on liquidity and direct or contingent support.
- Municipals – overall credit quality, including assessments of the level and variability of: sources of payment such as income, sales or property taxes, levies or user fees; credit support such as insurance; state or local economic and political base; natural resource availability; and susceptibility to natural or man-made catastrophic events such as hurricanes, earthquakes or acts of terrorism.

- Corporate fixed maturities – overall credit quality, including assessments of the level and variability of: economic sensitivity; liquidity; corporate financial policies; management quality; regulatory environment; competitive position; ownership; restrictive covenants; and security or collateral.
- Residential mortgage-backed securities – estimates of prepayment speeds based upon: historical prepayment rate trends; underlying collateral interest rates; geographic concentration; vintage year; borrower credit quality characteristics; interest rate and yield curve forecasts; government or monetary authority support programs; tax policies; delinquency/default trends; and, in the case of non-agency collateralized mortgage obligations, severity of loss upon default and length of time to recover proceeds following default.
- Commercial mortgage-backed securities – overall credit quality, including assessments of the value and supply/demand characteristics of: collateral type such as office, retail, residential, lodging, or other; geographic concentration by region, state, metropolitan statistical area and locale; vintage year; historical collateral performance including defeasance, delinquency, default and special servicer trends; and capital structure support features.
- Asset-backed securities – overall credit quality, including assessments of the underlying collateral type such as credit card receivables, auto loan receivables and equipment lease receivables; geographic diversification; vintage year; historical collateral performance including delinquency, default and casualty trends; economic conditions influencing use rates and resale values; and contract structural support features.

Generally, all prices provided by the pricing service, except actively traded securities with quoted market prices, are reported as Level 2.

The Company holds privately placed fixed maturity securities and certain other fixed maturity securities that do not have an active market and for which the pricing service cannot provide fair values. The Company determines fair values for these securities using either matrix pricing utilizing the market approach or broker quotes. The Company will use observable market data as inputs into the fair value techniques, as discussed in the determination of Level 2 fair values, to the extent it is available, but is also required to use a certain amount of unobservable judgment due to the illiquid nature of the securities involved. Unobservable judgment reflected in the Company’s matrix model accounts for estimates of additional spread required by market participants for factors such as issue size, structural complexity, high bond coupon or other unique features. These matrix-priced securities are reported as Level 2 or Level 3, depending on the significance of the impact of unobservable judgment on the security’s value. Additionally, the Company may obtain non-binding broker quotes which are reported as Level 3.

Equity Securities

Level 1 consists of publicly traded securities, including exchange traded funds, valued at quoted market prices. Level 2 includes securities that are valued using pricing for similar securities and pricing models that incorporate observable inputs. Level 3 consists of common or preferred stock of private companies for which observable inputs are not available.

The Company utilizes a third party pricing service for the valuation of the majority of its equity securities and receives one quote for each equity security. When quoted market prices in an active market are available, they are provided by the pricing service as the fair value and such values are classified as Level 1. The Company holds certain equity securities that have been issued by privately-held entities that do not have an active market and for which the pricing service cannot provide fair values. Generally, the Company estimates fair value for these securities based on the issuer’s book value and market multiples and reports them as Level 3. Additionally, the Company may obtain non-binding broker quotes which are reported as Level 3.

Other Investments

Other investments primarily include mortgage participations and limited partnerships not subject to the equity method of accounting. The fair values of limited partnerships not subject to the equity method of accounting are based on the net asset value provided by the general partner adjusted for recent financial information and are excluded from the fair value hierarchy.

The estimated fair value of the financial instruments were as follows:

(in millions)	June 30, 2019 Carrying Value	June 30, 2019 Fair Value	December 31, 2018 Carrying Value	December 31, 2018 Fair Value
Financial Assets carried at:				
Fair Value through AOCI:				
Fixed maturities	**$ 6,598.9**	**$ 6,598.9**	$ 6,161.5	$ 6,161.5
Fair Value through Net Income:				
Equity securities	**531.3**	**531.3**	464.4	464.4
Other investments	**181.4**	**181.4**	175.0	175.0
Amortized Cost/Cost:				
Other investments	**428.9**	**445.3**	414.4	418.9
Cash and cash equivalents	**179.8**	**179.8**	1,020.7	1,020.7
Total financial instruments, excluding held-for-sale	**7,920.3**	**7,936.7**	8,236.0	8,240.5
Financial instruments, held-for-sale (Chaucer)	**—**	**—**	27.8	27.8
Total financial instruments	**$ 7,920.3**	**$ 7,936.7**	$ 8,263.8	$ 8,268.3
Financial Liabilities carried at:				
Amortized Cost:				
Debt	**$ 653.1**	**$ 707.7**	$ 777.9	$ 825.0

The Company has processes designed to ensure that the values received from its third party pricing service are accurately recorded, that the data inputs and valuation approaches and techniques utilized are appropriate and consistently applied, and that the assumptions are reasonable and consistent with the objective of determining fair value. The Company performs a review of the fair value hierarchy classifications and of prices received from its pricing service on a quarterly basis. The Company reviews the pricing services' policies describing its methodology, processes, practices and inputs, including various financial models used to value securities. Also, the Company reviews the portfolio pricing, including a process for which securities with changes in prices that exceed a defined threshold are verified to independent sources, if available. If upon review, the Company is not satisfied with the validity of a given price, a pricing challenge would be submitted to the pricing service along with supporting documentation for its review. The Company does not adjust quotes or prices obtained from the pricing service unless the pricing service agrees with the Company's challenge. During 2019 and 2018, the Company did not adjust any prices received from its pricing service.

Changes in the observability of valuation inputs may result in a reclassification of certain financial assets or liabilities within the fair value hierarchy. As previously discussed, the Company utilizes a third-party pricing service for the valuation of the majority of its fixed maturities and equity securities. The pricing service has indicated that it will only produce an estimate of fair value if there is objectively verifiable information to produce a valuation. If the pricing service discontinues pricing an investment, the Company will use observable market data to the extent it is available, but may also be required to make assumptions for market based inputs that are unavailable due to market conditions.

The following tables provide, for each hierarchy level, the Company's investment assets that were measured at fair value on a recurring basis.

	June 30, 2019			
(in millions)	**Total**	**Level 1**	**Level 2**	**Level 3**
Fixed maturities:				
U.S. Treasury and government agencies	**$ 392.0**	**$ 161.9**	**$ 230.1**	**$ —**
Foreign government	**7.3**	**—**	**7.3**	**—**
Municipal	**835.2**	**—**	**822.3**	**12.9**
Corporate	**3,718.5**	**—**	**3,717.8**	**0.7**
Residential mortgage-backed, U.S. agency backed	**835.7**	**—**	**835.7**	**—**
Residential mortgage-backed, non-agency	**2.6**	**—**	**2.6**	**—**
Commercial mortgage-backed	**716.1**	**—**	**703.1**	**13.0**
Asset-backed	**91.5**	**—**	**91.5**	**—**
Total fixed maturities	**6,598.9**	**161.9**	**6,410.4**	**26.6**
Equity securities	**531.3**	**529.2**	**—**	**2.1**
Other investments	**3.5**	**—**	**—**	**3.5**
Total investment assets at fair value	**$ 7,133.7**	**$ 691.1**	**$ 6,410.4**	**$ 32.2**

	December 31, 2018			
(in millions)	**Total**	**Level 1**	**Level 2**	**Level 3**
Fixed maturities:				
U.S. Treasury and government agencies	$ 409.9	$ 154.9	$ 255.0	$ —
Foreign government	7.4	—	7.4	—
Municipal	885.8	—	864.7	21.1
Corporate	3,410.7	—	3,409.9	0.8
Residential mortgage-backed, U.S. agency backed	713.7	—	713.7	—
Residential mortgage-backed, non-agency	2.7	—	2.7	—
Commercial mortgage-backed	640.3	—	627.2	13.1
Asset-backed	91.0	—	91.0	—
Total fixed maturities	6,161.5	154.9	5,971.6	35.0
Equity securities	464.4	463.3	—	1.1
Other investments	3.5	—	—	3.5
Total investment assets at fair value, excluding held-for-sale (Chaucer)	6,629.4	618.2	5,971.6	39.6
Investment assets, held-for-sale	24.5	5.7	18.8	—
Total investment assets at fair value	$ 6,653.9	$ 623.9	$ 5,990.4	$ 39.6

Limited partnerships measured at fair value using NAV based on an ownership interest in partners' capital have not been included in the hierarchy tables. At June 30, 2019 and December 31, 2018, the fair values of these investments were $177.9 million and $171.5 million, respectively, approximately 2% of total investment assets.

The following tables provide, for each hierarchy level, the Company's estimated fair values of financial instruments that were not carried at fair value:

	June 30, 2019			
(in millions)	**Total**	**Level 1**	**Level 2**	**Level 3**
Assets:				
Cash and cash equivalents	**$ 179.8**	**$ 179.8**	**$ —**	**$ —**
Other investments	**445.3**	**—**	**2.1**	**443.2**
Total financial instruments	**$ 625.1**	**$ 179.8**	**$ 2.1**	**$ 443.2**
Liabilities:				
Debt	**$ 707.7**	**$ —**	**$ 707.7**	**$ —**

(in millions)	December 31, 2018 Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	$ 1,020.7	$ 1,020.7	$ —	$ —
Other investments	418.9	—	8.7	410.2
Total financial instruments, excluding held-for-sale	1,439.6	1,020.7	8.7	410.2
Financial instruments, held-for-sale (Chaucer)	3.3	3.3	—	—
Total financial instruments	$ 1,442.9	$ 1,024.0	$ 8.7	$ 410.2
Liabilities:				
Debt	$ 825.0	$ —	$ 825.0	$ —

The table below provide a reconciliation for all assets measured at fair value on a recurring basis using significant unobservable inputs (Level 3).

	Fixed Maturities					
(in millions)	Municipal	Corporate	Commercial mortgage-backed	Total	Equity and Other	Total Assets
Three Months Ended June 30, 2019						
Balance April 1, 2019	**$ 20.5**	**$ 0.7**	**$ 12.8**	**$ 34.0**	**$ 4.6**	**$ 38.6**
Total (losses) gains:						
Included in total net realized and unrealized investment losses	**(0.1)**	**—**	**—**	**(0.1)**	**—**	**(0.1)**
Included in other comprehensive income-net appreciation on available-for-sale securities	**0.6**	**—**	**0.3**	**0.9**	**—**	**0.9**
Purchases and sales:						
Purchases	**—**	**—**	**—**	**—**	**1.0**	**1.0**
Sales	**(8.1)**	**—**	**(0.1)**	**(8.2)**	**—**	**(8.2)**
Balance June 30, 2019	**$ 12.9**	**$ 0.7**	**$ 13.0**	**$ 26.6**	**$ 5.6**	**$ 32.2**
Three Months Ended June 30, 2018						
Balance April 1, 2018, excluding held-for-sale (Chaucer)	$ 23.1	$ 0.8	$ 13.5	$ 37.4	$ 4.7	$ 42.1
Total losses:						
Included in other comprehensive income-net depreciation on available-for-sale securities	(0.1)	—	(0.2)	(0.3)	—	(0.3)
Sales	(0.8)	—	(0.1)	(0.9)	—	(0.9)
Balance June 30, 2018, excluding held-for-sale (Chaucer)	$ 22.2	$ 0.8	$ 13.2	$ 36.2	$ 4.7	$ 40.9

(in millions)	Fixed Maturities: Municipal	Fixed Maturities: Corporate	Fixed Maturities: Commercial mortgage-backed	Fixed Maturities: Total	Equity and Other	Total Assets
Six Months Ended June 30, 2019						
Balance January 1, 2019	**$ 21.1**	**$ 0.8**	**$ 13.1**	**$ 35.0**	**$ 4.6**	**$ 39.6**
Total gains:						
Included in other comprehensive income - net appreciation on available-for-sale securities	**0.8**	**—**	**0.5**	**1.3**	**—**	**1.3**
Purchases and sales:						
Purchases	**—**	**—**	**—**	**—**	**1.0**	**1.0**
Sales	**(9.0)**	**(0.1)**	**(0.6)**	**(9.7)**	**—**	**(9.7)**
Balance June 30, 2019	**$ 12.9**	**$ 0.7**	**$ 13.0**	**$ 26.6**	**$ 5.6**	**$ 32.2**
Six Months Ended June 30, 2018						
Balance January 1, 2018	$ 24.6	$ 0.9	$ 14.2	$ 39.7	$ 4.7	$ 44.4
Total gains (losses):						
Included in total net realized and unrealized investment gains	0.1	—	—	0.1	—	0.1
Included in other comprehensive income-net depreciation on available-for-sale securities	(0.6)	—	(0.4)	(1.0)	—	(1.0)
Sales	(1.9)	(0.1)	(0.6)	(2.6)	—	(2.6)
Balance June 30, 2018, excluding held-for-sale (Chaucer)	$ 22.2	$ 0.8	$ 13.2	$ 36.2	$ 4.7	$ 40.9

There were no transfers between Level 2 and Level 3, and there were no Level 3 liabilities held by the Company for the three and six months ended June 30, 2019 and 2018.

The following table provides quantitative information about the significant unobservable inputs used by the Company in the fair value measurements of Level 3 assets. Where discounted cash flows were used in the valuation of fixed maturities, the internally-developed discount rate was adjusted by the significant unobservable inputs shown in the table.

(in millions)	Valuation Technique	Significant Unobservable Inputs	June 30, 2019: Fair Value	June 30, 2019: Range (Wtd Average)	December 31, 2018: Fair Value	December 31, 2018: Range (Wtd Average)
Fixed maturities:						
Municipal	Discounted cash flow	Discount for:	**$ 12.9**		$ 21.1	
		Small issue size		**0.7 - 6.8% (4.3%)**		0.7 - 6.8% (3.4%)
		Credit stress		**—**		1.3% (1.3%)
		Above-market coupon		**0.3 - 0.5% (0.5%)**		0.3 - 0.5% (0.5%)
Corporate	Discounted cash flow	Discount for:	**0.7**		0.8	
		Small issue size		**2.5% (2.5%)**		2.5% (2.5%)
		Above-market coupon		**0.3% (0.3%)**		0.3% (0.3%)
Commercial mortgage-backed	Discounted cash flow	Discount for:	**13.0**		13.1	
		Small issue size		**1.9 - 3.1% (2.7%)**		1.9 - 3.1% (2.7%)
		Above-market coupon		**0.5% (0.5%)**		0.5% (0.5%)
		Lease structure		**0.3% (0.3%)**		0.3% (0.3%)
Equity securities	Market comparables	Net tangible asset market multiples	**2.1**	**1.0X (1.0X)**	1.1	1.0X (1.0X)
Other	Discounted cash flow	Discount rate	**3.5**	**18.0% (18.0%)**	3.5	18.0% (18.0%)

Significant increases (decreases) in any of the above inputs in isolation would result in a significantly lower (higher) fair value measurement. There were no interrelationships between these inputs which might magnify or mitigate the effect of changes in unobservable inputs on the fair value measurement.

7. Pension and Other Postretirement Benefit Plans

The components of net periodic pension cost for defined benefit pension and other postretirement benefit plans included in the Company's results of operations are as follows:

	Three Months Ended June 30,			
	2019	**2018**	**2019**	**2018**
(in millions)	**Pension Plans**		**Postretirement Plans**	
Service cost - benefits earned during the period	**$ —**	$ —	**$ —**	$ —
Interest cost	**5.3**	5.0	**0.1**	0.1
Expected return on plan assets	**(5.9)**	(5.1)	**—**	—
Recognized net actuarial loss	**2.9**	2.3	**0.1**	—
Amortization of prior service cost	**—**	—	**(0.1)**	(0.1)
Net periodic pension cost	**$ 2.3**	$ 2.2	**$ 0.1**	$ —

	Six Months Ended June 30,			
	2019	**2018**	**2019**	**2018**
(in millions)	**Pension Plans**		**Postretirement Plans**	
Service cost - benefits earned during the period	**$ —**	**$ —**	**$ —**	$ —
Interest cost	**10.6**	9.9	**0.2**	0.2
Expected return on plan assets	**(11.7)**	(10.3)	**—**	—
Recognized net actuarial loss	**5.7**	4.8	**0.1**	0.1
Amortization of prior service cost	**—**	—	**(0.1)**	(0.2)
Net periodic pension cost	**$ 4.6**	$ 4.4	**$ 0.2**	$ 0.1

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8. Other Comprehensive Income

The following tables provide changes in other comprehensive income (loss).

	Three Months Ended June 30,					
	2019			2018		
(in millions)	Pre-Tax	Tax Benefit (Expense)	Net of Tax	Pre-Tax	Tax Benefit (Expense)	Net of Tax
Unrealized gains (losses) on available-for-sale securities:						
Unrealized gains (losses) arising during period	**$ 133.2**	**$ (27.9)**	**$ 105.3**	$ (59.2)	$ 12.6	$ (46.6)
Amount of realized gains from sales and other	**(0.8)**	**(3.2)**	**(4.0)**	—	(3.3)	(3.3)
Portion of other-than-temporary impairment losses recognized in earnings	**0.4**	**(0.1)**	**0.3**	1.0	(0.2)	0.8
Net unrealized gains (losses)	**132.8**	**(31.2)**	**101.6**	(58.2)	9.1	(49.1)
Pension and postretirement benefits:						
Net change in net actuarial loss and prior service cost	**2.8**	**(0.6)**	**2.2**	1.1	(0.2)	0.9
Cumulative foreign currency translation adjustment:						
Foreign currency translation recognized during the period	**0.8**	**(0.2)**	**0.6**	(0.6)	0.1	(0.5)
Other comprehensive income (loss)	**$ 136.4**	**$ (32.0)**	**$ 104.4**	$ (57.7)	$ 9.0	$ (48.7)

	Six Months Ended June 30,					
	2019			2018		
(in millions)	Pre-Tax	Tax Benefit (Expense)	Net of Tax	Pre-Tax	Tax Benefit (Expense)	Net of Tax
Unrealized gains (losses) on available-for-sale securities:						
Unrealized gains (losses) arising during period	**$ 285.2**	**$ (59.9)**	**$ 225.3**	$ (212.9)	$ 44.7	$ (168.2)
Amount of realized (gains) losses from sales and other	**(0.5)**	**(7.1)**	**(7.6)**	0.2	(5.8)	(5.6)
Portion of other-than-temporary impairment losses recognized in earnings	**0.4**	**(0.1)**	**0.3**	1.5	(0.3)	1.2
Net unrealized gains (losses)	**285.1**	**(67.1)**	**218.0**	(211.2)	38.6	(172.6)
Pension and postretirement benefits:						
Net change in net actuarial loss and prior service cost	**5.7**	**(1.2)**	**4.5**	(1.8)	0.4	(1.4)
Cumulative foreign currency translation adjustment:						
Foreign currency translation recognized during the period	**0.9**	**(0.2)**	**0.7**	(1.2)	0.2	(1.0)
Other comprehensive income (loss)	**$ 291.7**	**$ (68.5)**	**$ 223.2**	$ (214.2)	$ 39.2	$ (175.0)

Reclassifications out of accumulated other comprehensive income were as follows:

(in millions)	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018	
Details about Accumulated Other Comprehensive Income Components	**Amount Reclassified from Accumulated Other Comprehensive Income**				**Affected Line Item in the Statement Where Net Income is Presented**
Unrealized gains on available-for-sale securities	**$ 0.8**	$ 1.8	**$ 0.5**	$ 1.8	Net realized losses from sales and other
	(0.4)	(0.7)	**(0.4)**	(1.3)	Net other-than-temporary impairment losses on investments recognized in earnings
	0.4	1.1	**0.1**	0.5	Total before tax
	3.3	3.0	**7.2**	5.7	Tax benefit
	3.7	4.1	**7.3**	6.2	Continued operations; net of tax
	—	(1.6)	**—**	(1.8)	Discontinued operations - Chaucer business
	3.7	2.5	**7.3**	4.4	Net of tax
Amortization of defined benefit pension and postretirement plans	**(2.8)**	(2.2)	**(5.7)**	(4.7)	Loss adjustment expenses and other operating expenses (1)
	0.6	0.5	**1.2**	1.0	Tax benefit
	(2.2)	(1.7)	**(4.5)**	(3.7)	Continued operations; net of tax
	—	(0.1)	**—**	(0.1)	Discontinued Operations - Chaucer Business
	(2.2)	(1.8)	**(4.5)**	(3.8)	Net of tax
Total reclassifications for the period	**$ 1.5**	$ 0.7	**$ 2.8**	$ 0.6	Benefit reflected in income, net of tax

(1) The amount reclassified from accumulated other comprehensive income for the pension and postretirement benefits was allocated approximately 40% to loss adjustment expenses and 60% to other operating expenses for the three and six months ended June 30, 2019 and 2018.

9. Segment Information

The Company's primary business operations include insurance products and services provided through three operating segments: Commercial Lines, Personal Lines and Other. Commercial Lines includes commercial multiple peril, commercial automobile, workers' compensation, and other commercial coverages, such as inland marine, specialty program business, management and professional liability, surety and specialty property. Personal Lines includes personal automobile, homeowners and other personal coverages. Included in the Other segment are Opus Investment Management, Inc., which markets investment management services to institutions, pension funds and other organizations; earnings on holding company assets; holding company and other expenses, including certain costs associated with retirement benefits due to the Company's former life insurance employees and agents; and, a run-off voluntary pools business. On December 28, 2018, the Company completed the sale of Chaucer, the major portion of its Lloyd's international specialty business, to China Re. The sales of the Chaucer-related Irish and Australian entities were subsequently completed on February 14, 2019 and April 10, 2019, respectively. Accordingly, as of December 31, 2018, and for all prior periods, Chaucer's results of operations have been classified as Discontinued Operations in the Consolidated Statements of Income and assets and liabilities related to the Chaucer business were classified as held-for-sale in the Consolidated Balance Sheet at December 31, 2018 (see Note 3 – "Discontinued Operations - Chaucer Business"). Certain ongoing expenses were also reclassified from Chaucer to the other three operating segments. The separate financial information is presented consistent with the way results are regularly evaluated by the chief operating decision maker in deciding how to allocate resources and in assessing performance.

The Company reports interest expense related to debt separately from the earnings of its operating segments. This consists of interest on the Company's senior and subordinated debentures.

Management evaluates the results of the aforementioned segments based on operating income before taxes, excluding interest expense on debt. Operating income before taxes excludes certain items which are included in net income, such as net realized and unrealized investment gains and losses. Such gains and losses are excluded since they are determined by interest rates, financial markets and the timing of sales. Also, operating income before taxes excludes net gains and losses on disposals of businesses, gains and losses related to the repayment of debt, discontinued operations, costs to acquire businesses, restructuring costs, the cumulative effect of accounting changes and certain other items. Although the items excluded from operating income before taxes may be important components in understanding and assessing the Company's overall financial performance, management believes that the presentation of operating income before taxes enhances an investor's understanding of the Company's results of operations by highlighting net income attributable to the core operations of the business. However, operating income before taxes should not be construed as a substitute for income before income taxes and operating income should not be construed as a substitute for net income.

Summarized below is financial information with respect to the Company's business segments.

(in millions)	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
Operating revenues:				
Commercial Lines	**$ 705.2**	$ 681.7	**$ 1,403.9**	$ 1,358.3
Personal Lines	**474.6**	444.5	**939.8**	879.4
Other	**6.7**	3.5	**14.1**	6.4
Total	**1,186.5**	1,129.7	**2,357.8**	2,244.1
Net realized and unrealized investment gains (losses)	**12.1**	3.7	**60.3**	(19.2)
Total revenues	**$ 1,198.6**	$ 1,133.4	**$ 2,418.1**	$ 2,224.9
Operating income (loss) before interest expense and income taxes:				
Commercial Lines:				
Underwriting income	**$ 29.1**	$ 37.5	**$ 65.8**	$ 53.8
Net investment income	**44.4**	44.8	**88.7**	90.1
Other expense	**(0.7)**	(0.5)	**(1.5)**	(0.7)
Commercial Lines operating income	**72.8**	81.8	**153.0**	143.2
Personal Lines:				
Underwriting income	**10.9**	7.9	**16.6**	22.5
Net investment income	**19.7**	18.1	**39.4**	36.5
Other income	**1.1**	1.2	**2.5**	2.5
Personal Lines operating income	**31.7**	27.2	**58.5**	61.5
Other:				
Underwriting loss	**(0.3)**	(1.1)	**(0.6)**	(2.1)
Net investment income	**5.5**	2.7	**11.7**	5.0
Other expense	**(2.7)**	(3.3)	**(5.8)**	(7.0)
Other operating income (loss)	**2.5**	(1.7)	**5.3**	(4.1)
Operating income before interest expense and income taxes	**107.0**	107.3	**216.8**	200.6
Interest on debt	**(9.3)**	(11.4)	**(18.7)**	(22.7)
Operating income before income taxes	**97.7**	95.9	**198.1**	177.9
Non-operating income items:				
Net realized and unrealized investment gains (losses)	**12.1**	3.7	**60.3**	(19.2)
Income from continuing operations before income taxes	**$ 109.8**	$ 99.6	**$ 258.4**	$ 158.7

The following table provides identifiable assets for the Company's business segments and discontinued operations:

(in millions)	June 30, 2019	December 31, 2018
	Identifiable Assets	
U.S. Companies	**$ 12,053.3**	$ 12,238.4
Assets held-for-sale(1)	—	57.4
Assets of discontinued operations	**106.6**	103.9
Total	**$ 12,159.9**	$ 12,399.7

(1) See also Note 3 – "Discontinued Operations – Chaucer Business".

The Company reviews the assets of its U.S. Companies collectively and does not allocate them between the Commercial Lines, Personal Lines and Other segments.

10. Stock-based Compensation

As of June 30, 2019, there were 3,576,818 shares and 2,361,547 shares available for grant under The Hanover Insurance Group 2014 Long-Term Incentive Plan and The Hanover Insurance Group 2014 Employee Stock Purchase Plan, respectively.

Compensation cost for the Company’s stock-based awards and the related tax benefits were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(in millions)	2019	2018	2019	2018
Stock-based compensation expense	**$ 4.4**	$ 4.1	**$ 8.6**	$ 6.6
Tax benefit	**(0.9)**	(0.9)	**(1.8)**	(1.4)
Stock-based compensation expense, net of taxes	**$ 3.5**	$ 3.2	**$ 6.8**	$ 5.2

Stock-based compensation expense for Chaucer, net of taxes, of $0.8 million for the six months ended June 30, 2018 is reported in discontinued operations and is excluded from the amounts disclosed above.

Stock Options

Information on the Company’s stock option activity for the six months ended June 30, 2019 and 2018 is summarized below.

	Six Months Ended June 30,			
	2019		2018	
(in whole shares and dollars)	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding, beginning of period	**1,099,076**	**$ 85.75**	1,062,177	$ 75.53
Granted	**232,568**	**95.05**	294,603	110.68
Exercised	**(127,830)**	**72.79**	(149,043)	71.74
Forfeited or cancelled	**(19,203)**	**101.20**	(50,491)	88.48
Outstanding, end of period	**1,184,611**	**88.72**	1,157,246	84.40

Restricted Stock Units

The Company currently issues time-based, market-based and performance-based restricted stock units to eligible employees, all of which generally vest after 3 years of continued employment. The following tables summarize activity information about employee restricted stock units:

	Six Months Ended June 30,			
	2019		2018	
(in whole shares and dollars)	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value
Time-based restricted stock units:				
Outstanding, beginning of period	**332,481**	**$ 97.28**	298,528	$ 83.45
Granted	**145,040**	**117.55**	143,565	111.21
Vested	**(106,864)**	**83.87**	(71,556)	72.56
Forfeited	**(20,404)**	**101.71**	(16,890)	89.89
Outstanding, end of period	**350,253**	**109.51**	353,647	96.61
Performance-based and market-based restricted stock units:				
Outstanding, beginning of period	**69,838**	**$ 95.58**	102,586	$ 81.21
Granted	**42,119**	**117.09**	34,280	117.65
Vested	**(14,118)**	**84.39**	(14,032)	70.24
Forfeited	**—**	**—**	(7,625)	81.91
Outstanding, end of period	**97,839**	**106.45**	115,209	93.34

In the first six months of 2019 and 2018, the Company granted market-based awards totaling 23,924 and 30,905, respectively, to certain members of senior management, which are included in the table above as performance and market-based restricted stock activity. The vesting of these stock units is based on the relative total shareholder return ("TSR") of the Company. This metric is generally based on relative TSR for a three-year period as compared to a pre-selected group of property and casualty companies. The fair value of market-based awards was estimated at the date of grant using a valuation model. These units have the potential to range from 0% to 150% of the shares disclosed. Included in the amount granted above in 2019 and 2018 are 5,820 shares and 3,115 shares, respectively, related to market-based awards that achieved a payout in excess of 100%. These awards vested in the first quarters of 2019 and 2018, respectively.

The Company also granted performance-based restricted stock units in 2019 which are based upon the Company's achievement of return on equity objectives. These units have the potential to range from 0% to 150% of the shares disclosed, which varies based on grant year and individual participation level. Increases above the 100% target level are reflected as granted in the period in which performance-based stock unit goals are achieved. Decreases below the 100% target level are reflected as forfeited.

11. Earnings Per Share and Shareholders' Equity Transactions

The following table provides weighted average share information used in the calculation of the Company's basic and diluted earnings per share:

	Three Months Ended June 30,		Six Months Ended June 30,	
(in millions, except per share data)	**2019**	**2018**	**2019**	**2018**
Basic shares used in the calculation of earnings per share	**40.7**	42.5	**40.7**	42.5
Dilutive effect of securities:				
Employee stock options	**0.3**	0.3	**0.3**	0.3
Non-vested stock grants	**0.2**	0.3	**0.2**	0.3
Diluted shares used in the calculation of earnings per share	**41.2**	43.1	**41.2**	43.1
Per share effect of dilutive securities on income from continuing operations and net income	**$ (0.03)**	$ (0.03)	**$ (0.06)**	$ (0.05)

Diluted earnings per share for the three months ended June 30, 2018 excludes 0.3 million of common shares issuable under the Company's stock compensation plans because their effect would be antidilutive. Diluted earnings per share for the six months ended June 30, 2019 and 2018 excludes 0.2 million and 0.3 million, respectively, of common shares issuable under the Company's stock compensation plans because their effect would be antidilutive.

On December 30, 2018, the Board of Directors authorized a new share repurchase program which provides for aggregate repurchases of up to $600 million. Under the repurchase authorization, the Company may repurchase, from time to time, common shares in amounts, at prices and at such times as the Company deems appropriate, subject to market conditions and other considerations. Repurchases may be executed using open market purchases, privately negotiated transactions, accelerated repurchase programs or other transactions. The Company is not required to purchase any specific number of shares or to make purchases by any certain date under this program. On January 2, 2019, pursuant to the terms of an accelerated share repurchase ("ASR") agreement executed on December 30, 2018 (the "December ASR"), the Company paid $250.0 million and received an initial delivery of approximately 1.8 million shares of common stock, which was approximately 80% of the total number of shares expected to be repurchased under this agreement. In accordance with its terms, the December ASR terminated on June 27, 2019. On June 28, 2019, the Company received approximately 0.3 million of its common shares as final settlement of shares repurchased under such agreement. Also on June 28, 2019, pursuant to the terms of a second ASR agreement (the "June ASR"), the Company paid $150.0 million and received an initial delivery of approximately 0.9 million shares of its common stock, which is approximately 80% of the total number of shares expected to be repurchased under the June ASR.

12. Liabilities for Outstanding Claims, Losses and Loss Adjustment Expenses

Reserve Rollforward and Prior Year Development

The Company regularly updates its reserve estimates as new information becomes available and further events occur which may impact the resolution of unsettled claims. Reserve adjustments are reflected in results of operations as adjustments to losses and loss adjustment expenses ("LAE"). Often these adjustments are recognized in periods subsequent to the period in which the underlying policy was written and loss event occurred. These types of subsequent adjustments are described as "prior years' loss reserves". Such development can be either favorable or unfavorable to the Company's financial results and may vary by line of business. In this section, all amounts presented include catastrophe losses and LAE, unless otherwise indicated.

The table below provides a reconciliation of the gross beginning and ending reserve for unpaid losses and loss adjustment expenses.

	Six Months Ended June 30,	
(in millions)	2019	2018
Gross loss and LAE reserves, beginning of period	**$ 5,304.1**	$ 5,058.5
Reinsurance recoverable on unpaid losses	**1,472.6**	1,455.0
Net loss and LAE reserves, beginning of period	**3,831.5**	3,603.5
Net incurred losses and LAE in respect of losses occurring in:		
Current year	**1,437.9**	1,348.8
Prior years	**(20.6)**	(6.7)
Total incurred losses and LAE	**1,417.3**	1,342.1
Net payments of losses and LAE in respect of losses occurring in:		
Current year	**497.0**	492.8
Prior years	**778.4**	736.8
Total payments	**1,275.4**	1,229.6
Net reserve for losses and LAE, end of period	**3,973.4**	3,716.0
Reinsurance recoverable on unpaid losses	**1,505.1**	1,400.4
Gross reserve for losses and LAE, end of period	**$ 5,478.5**	$ 5,116.4

As a result of continuing trends in the Company's business, reserves including catastrophes have been re-estimated for all prior accident years and were decreased by $20.6 million and $6.7 million in 2019 and 2018, respectively.

2019

For the six months ended June 30, 2019, net favorable loss and LAE development was $20.6 million, primarily as a result of favorable catastrophe development due to anticipated subrogation recoveries on the 2017 and 2018 California wildfires and lower than expected losses related to the 2018 hurricanes. For non-catastrophe loss and LAE development, lower than expected losses in the Company's workers' compensation and commercial multiple peril lines were substantially offset by higher than expected losses in the Company's personal and commercial automobile lines.

2018

For the six months ended June 30, 2018, net favorable loss and LAE development was $6.7 million, primarily as a result of favorable catastrophe development related to the 2017 hurricanes and California wildfires. For non-catastrophe loss and LAE development, higher than expected losses in Hanover programs and the commercial and personal automobile lines were substantially offset by lower than expected losses in other commercial lines and the workers' compensation line.

13. Commitments and Contingencies

Legal Proceedings

The Company has been named a defendant in various legal proceedings arising in the normal course of business. In addition, the Company is involved, from time to time, in examinations, investigations and proceedings by governmental and self-regulatory agencies. The potential outcome of any such action or regulatory proceedings in which the Company has been named a defendant or the subject of an inquiry or investigation, and its ultimate liability, if any, from such action or regulatory proceedings, is difficult to predict at this time. The ultimate resolutions of such proceedings are not expected to have a material effect on its financial position, although they could have a material effect on the results of operations for a particular quarter or annual period.

Residual Markets

The Company is required to participate in residual markets in various states, which generally pertain to high risk insureds, disrupted markets or lines of business or geographic areas where rates are regarded as excessive. The results of the residual markets are not subject to the predictability associated with the Company's own managed business, and are significant to both the personal and commercial automobile lines of business.

14. Other Items

On January 2, 2019, the Company repaid $125 million of its FHLB advances that were due 2029 and had an interest rate of 5.5%, along with related prepayment fees of $26 million; such fees were recognized in 2018.

15. Subsequent Events

There were no subsequent events requiring adjustment to the financial statements and no additional disclosures required in the notes to the interim consolidated financial statements.

PART I
ITEM 2

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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Introduction

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to assist readers in understanding the interim consolidated results of operations and financial condition of The Hanover Insurance Group, Inc. and its subsidiaries ("THG"). Consolidated results of operations and financial condition are prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP"). This discussion should be read in conjunction with the interim consolidated financial statements and related footnotes included elsewhere in this Quarterly Report on Form 10-Q and Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on February 22, 2019.

Results of operations include the accounts of The Hanover Insurance Company ("Hanover Insurance") and Citizens Insurance Company of America ("Citizens"), our principal property and casualty companies; and certain other insurance and non-insurance subsidiaries. Our results of operations also include the results of our discontinued operations, consisting primarily of our former Chaucer international business, Chaucer Holdings Limited ("Chaucer"), a United Kingdom ("U.K.") domiciled specialist insurance underwriting group which operates through the Society and Corporation of Lloyd's ("Lloyd's"), and the international insurance and non-insurance subsidiaries, which collectively constituted our former Chaucer segment. On December 28, 2018, we completed the sale of Chaucer Holdings Limited, the major portion of our Lloyd's international specialty business, to China Reinsurance (Group) Corporation ("China Re"). We subsequently completed the sales of the Chaucer-related Irish and Australian entities on February 14, 2019 and April 10, 2019, respectively. For all periods presented, operations from Chaucer are presented as discontinued operations. Discontinued operations also includes the results of our accident and health and former life insurance businesses.

Executive Overview

Business operations consist of three operating segments: Commercial Lines, Personal Lines and Other.

Net income was $196.4 million during the six months ended June 30, 2019, compared to $167.0 million for the six months ended June 30, 2018, an increase of $29.4 million, primarily due to an increase in the net change in fair value of equity securities and from an increase in operating income, partially offset by a decrease in income from the former Chaucer segment due to its sale in 2018, and to a reduction in the estimate of contingent proceeds related to the 2018 Chaucer sale transaction.

Operating income before interest expense and income taxes (a non-GAAP financial measure; see also "Results of Operations – Consolidated – Non-GAAP Financial Measures") was $216.8 million for the six months ended June 30, 2019, compared to $200.6 million for the six months ended June 30, 2018, an increase of $16.2 million. This increase is primarily due to lower catastrophe losses, earned premium growth, higher net investment income and lower expenses, partially offset by higher non-catastrophe current accident year losses. Pre-tax catastrophe losses were $99.0 million for the six months ended June 30, 2019, compared to $124.3 million during the same period of 2018. Net development on prior years' loss and loss adjustment expense ("LAE") reserves ("prior years' loss reserves") was insignificant overall for both the six months ended June 30, 2019 and 2018.

As discussed further in "Discontinued Operations" below, on December 28, 2018, we completed the sale of Chaucer's U.K. entities to China Re. Included with this transaction were contingent proceeds that were based upon our best estimate of Chaucer's 2018 catastrophe losses. During 2019, Chaucer experienced unfavorable development on its 2018 catastrophe losses, primarily due to higher than expected losses for Hurricane Michael, Typhoon Jebi, and a Colombian dam construction loss. Accordingly, we updated this estimate and reduced our pre-tax estimate for contingent proceeds by $13.5 million. Also, we completed the sales of our Chaucer-related Irish entity on February 14, 2019 and our Australian entities on April 10, 2019, for which we received additional consideration of $28 million and $13 million, respectively.

Our strategy reinforces our commitment to our agency partners and is designed to generate profitable growth by leveraging the strengths of our distribution strategy, including expansion of our agency footprint in underpenetrated geographies as warranted. We also have increased our capabilities in specialty markets and investments designed to develop growth solutions for our agency distribution channel. Our goal is to grow responsibly in all of our businesses, while managing volatility.

Commercial Lines

Our account-focused approach to the small commercial market, distinctiveness in the middle market, and continued development of specialty lines provides us with a diversified portfolio of products and delivers significant value to agents and policyholders. Each of these businesses is expected to contribute to premium growth in Commercial Lines over the next several years as we continue to pursue our core strategy of developing strong partnerships with agents, enhanced franchise value through selective distribution, distinctive products and coverages, and continued investment in industry segmentation.

These efforts have driven improvement in our overall mix of business and our underwriting profitability. Commercial Lines net premiums written grew by 1.6% in the first six months of 2019, compared to the same period in 2018, primarily due to growth in marine, small commercial and professional liability lines, partially offset by specific underwriting actions in our commercial automobile line and Hanover programs.

Underwriting results improved in the first six months of 2019, primarily due to lower catastrophe losses, earned premium growth and lower expenses, partially offset by unusually high current accident year large loss activity in our specialty industrial property line and to a lesser extent, our inland marine line. The competitive nature of the Commercial Lines market requires us to be highly disciplined in our underwriting process to ensure that we write business at acceptable margins, and we continue to seek rate increases across our lines of business.

Personal Lines

Personal Lines focuses on partnering with high quality, value-oriented agencies that deliver consultative selling and stress the importance of account rounding (the conversion of single policy customers to accounts with multiple policies and additional coverages, to address customers' broader insurance needs). Approximately 85% of our policies in force are account business. We are focused on seeking profitable growth opportunities, building a distinctive position in the market, and diversifying geographically.

Net premiums written grew by 6.1% in the first six months of 2019, compared to the same period in 2018, primarily due to higher renewal premium driven by rate increases. Underwriting results declined in the first six months of 2019, primarily due to higher non-catastrophe current accident year losses, partially offset by earned premium growth. We continue to seek rate increases that meet or exceed underlying loss cost trends, subject to regulatory and competitive considerations.

Description of Operating Segments

Primary business operations include insurance products and services currently provided through three operating segments: Commercial Lines, Personal Lines, and Other. Commercial Lines includes commercial multiple peril, commercial automobile, workers' compensation, and other commercial coverages, such as inland marine, specialty program business, management and professional liability, surety, and specialty property. Personal Lines includes personal automobile, homeowners, and other personal coverages, such as umbrella. Included in the "Other" segment are Opus Investment Management, Inc., which markets investment management services to institutions, pension funds, and other organizations; earnings on holding company assets; holding company and other expenses, including certain costs associated with retirement benefits due to our former life insurance employees and agents; and a run-off voluntary pools business. We present the separate financial information of each segment consistent with the manner in which our chief operating decision maker evaluates results in deciding how to allocate resources and in assessing performance.

We report interest expense on debt separately from the earnings of our operating segments. This consists of interest on our senior and subordinated debentures.

Results of Operations – Consolidated

Consolidated net income for the three months ended June 30, 2019 was $74.0 million, compared to $99.3 million for the three months ended June 30, 2018, a decrease of $25.3 million. This decrease reflects a $17.0 million decrease in income from our former Chaucer business, as well as a reduction to our estimate of contingent proceeds related to the 2018 Chaucer sale. (See also the "Discontinued Operations" section below).

Consolidated net income for the six months ended June 30, 2019 was $196.4 million, compared to $167.0 million for the six months ended June 30, 2018, an increase of $29.4 million. The year over year comparison of consolidated net income was primarily affected by an increase in after-tax net realized and unrealized investment gains of $64.2 million, principally related to the changes in fair value of equity securities. Additionally, operating income before interest expense and income taxes for the six months ended June 30, 2019 increased $16.2 million, primarily due to earned premium growth, lower catastrophe losses and higher net investment income, partially offset by higher non-catastrophe current accident year losses. These increases were partially offset by a $34.6 million decrease in income from our former Chaucer business and the aforementioned reduction to our estimate of contingent proceeds related to the 2018 Chaucer sale.

The following table reflects operating income before interest expense and income taxes for each operating segment and a reconciliation to consolidated net income from operating income before interest expense and income taxes (a non-GAAP measure).

	Three Months Ended June 30,		Six Months Ended June 30,	
(in millions)	**2019**	**2018**	**2019**	**2018**
Operating income (loss) before interest expense and income taxes:				
Commercial Lines	**$ 72.8**	$ 81.8	**$ 153.0**	$ 143.2
Personal Lines	**31.7**	27.2	**58.5**	61.5
Other	**2.5**	(1.7)	**5.3**	(4.1)
Operating income before interest expense and income taxes	**107.0**	107.3	**216.8**	200.6
Interest expense on debt	**(9.3)**	(11.4)	**(18.7)**	(22.7)
Operating income before income taxes	**97.7**	95.9	**198.1**	177.9
Income tax expense on operating income	**(20.0)**	(19.7)	**(39.7)**	(35.6)
Operating income	**77.7**	76.2	**158.4**	142.3
Non-operating items:				
Net realized and unrealized investment gains (losses)	**12.1**	3.7	**60.3**	(19.2)
Effect of new tax regulations on Chaucer gain on sale	**(5.6)**	—	**(5.6)**	—
Income tax benefit (expense) on non-operating items	**0.8**	2.5	**(5.5)**	9.8
Income from continuing operations, net of taxes	**85.0**	82.4	**207.6**	132.9
Discontinued operations (net of taxes):				
Sale of Chaucer business	**(9.9)**	—	**(9.0)**	—
Income (loss) from Chaucer business	**(0.2)**	16.8	**(0.5)**	34.1
Income (loss) from discontinued life businesses	**(0.9)**	0.1	**(1.7)**	—
Net income	**$ 74.0**	$ 99.3	**$ 196.4**	$ 167.0

Non-GAAP Financial Measures

In addition to consolidated net income, discussed above, we assess our financial performance based upon pre-tax “operating income,” and we assess the operating performance of each of our three operating segments based upon the pre-tax operating income (loss) generated by each segment. As reflected in the table above, operating income before taxes excludes interest expense on debt and certain other items which we believe are not indicative of our core operations, such as net realized and unrealized investment gains and losses. Such gains and losses are excluded since they are determined by interest rates, financial markets and the timing of sales. Also, operating income before taxes excludes net gains and losses on disposals of businesses, gains and losses related to the repayment of debt, discontinued operations, costs to acquire businesses, restructuring costs, the cumulative effect of accounting changes and certain other items. Although the items excluded from operating income before taxes are important components in understanding and assessing our overall financial performance, we believe a discussion of operating income before taxes enhances an investor’s understanding of our results of operations by highlighting net income attributable to the core operations of the business. However, operating income before taxes, which is a non-GAAP measure, should not be construed as a substitute for income before income taxes, and operating income should not be construed as a substitute for net income.

Catastrophe losses and prior years’ reserve development are significant components in understanding and assessing the financial performance of our business. Management reviews and evaluates catastrophes and prior years’ reserve development separately from the other components of earnings. References to “current accident year underwriting results” exclude prior accident year reserve development, and may also be presented “excluding catastrophes”. Prior years’ reserve development and catastrophes are not predictable as to timing or the amount that will affect the results of our operations and have an effect on each year’s operating and net income. Management believes that providing certain financial metrics and trends excluding the effects of catastrophes and prior years’ reserve development helps investors to understand the variability in periodic earnings and to evaluate the underlying performance of our operations. Discussion of catastrophe losses in this Management’s Discussion and Analysis includes development on prior years’ catastrophe reserves and, unless otherwise indicated, such development is excluded from discussions of prior year loss and LAE reserve development.

Results of Operations – Segments

The following is our discussion and analysis of the results of operations by business segment. The operating results are presented before interest expense, taxes and other items which management believes are not indicative of our core operations, including realized gains and losses, as well as unrealized gains and losses on equity securities, and the results of discontinued operations.

The following table summarizes the results of operations for the periods indicated:

	Three Months Ended June 30,		Six Months Ended June 30,	
(in millions)	2019	2018	2019	2018
Operating revenues				
Net premiums written	**$ 1,137.8**	$ 1,094.2	**$ 2,235.8**	$ 2,162.9
Net premiums earned	**1,111.0**	1,058.2	**2,206.1**	2,100.7
Net investment income	**69.6**	65.6	**139.8**	131.6
Other income	**5.9**	5.9	**11.9**	11.8
Total operating revenues	**1,186.5**	1,129.7	**2,357.8**	2,244.1
Losses and operating expenses				
Losses and LAE	**717.7**	671.2	**1,417.3**	1,342.1
Amortization of deferred acquisition costs	**230.5**	221.6	**460.0**	440.3
Other operating expenses	**131.3**	129.6	**263.7**	261.1
Total losses and operating expenses	**1,079.5**	1,022.4	**2,141.0**	2,043.5
Operating income before interest expense and income taxes	**$ 107.0**	$ 107.3	**$ 216.8**	$ 200.6

Three Months Ended June 30, 2019 Compared to Three Months Ended June 30, 2018

Operating income before interest expense and income taxes was $107.0 million in the three months ended June 30, 2019, essentially flat compared to $107.3 million for the three months ended June 30, 2018. Higher current accident year large loss activity primarily in our inland marine line was substantially offset by earned premium growth, higher net investment income and lower expenses.

Net premiums written increased by $43.6 million in the three months ended June 30, 2019, compared to the three months ended June 30, 2018, due to growth in both our Personal and Commercial Lines segments.

Production and Underwriting Results

The following tables summarize premiums written on a gross and net basis, net premiums earned and loss (including catastrophe losses), LAE, expense and combined ratios for the Commercial Lines and Personal Lines segments. Loss, LAE, catastrophe loss and combined ratios shown below include prior year reserve development. These items are not meaningful for our Other segment.

	Three Months Ended June 30, 2019						
(dollars in millions)	Gross Premiums Written	Net Premiums Written	Net Premiums Earned	Catastrophe Loss Ratios	Loss & LAE Ratios	Expense Ratios	Combined Ratios
Commercial Lines	**$ 749.5**	**$ 644.7**	**$ 658.8**	**3.5**	**61.0**	**34.4**	**95.4**
Personal Lines	**522.0**	**493.1**	**452.2**	**8.1**	**69.8**	**27.2**	**97.0**
Total	**$ 1,271.5**	**$ 1,137.8**	**$ 1,111.0**	**5.4**	**64.6**	**31.5**	**96.1**

	Three Months Ended June 30, 2018						
(dollars in millions)	Gross Premiums Written	Net Premiums Written	Net Premiums Earned	Catastrophe Loss Ratios	Loss & LAE Ratios	Expense Ratios	Combined Ratios
Commercial Lines	$ 717.7	$ 629.6	$ 634.6	3.9	59.1	34.8	93.9
Personal Lines	489.1	464.6	423.6	8.0	69.9	27.7	97.6
Total	$ 1,206.8	$ 1,094.2	$ 1,058.2	5.6	63.5	32.0	95.5

The following table summarizes net premiums written, and loss and LAE and catastrophe loss ratios by line of business for the Commercial Lines and Personal Lines segments. Loss and LAE and catastrophe loss ratios include prior year reserve development.

	Three Months Ended June 30,					
	2019			2018		
(dollars in millions)	Net Premiums Written	Loss & LAE Ratios	Catastrophe Loss Ratios	Net Premiums Written	Loss & LAE Ratios	Catastrophe Loss Ratios
Commercial Lines:						
Commercial multiple peril	**$ 210.7**	**62.5**	**7.3**	$ 201.4	60.2	5.3
Commercial automobile	**77.9**	**72.8**	**1.1**	83.9	74.6	2.2
Workers' compensation	**78.9**	**53.4**	**—**	74.6	57.2	—
Other commercial	**277.2**	**58.3**	**2.2**	269.7	53.9	4.6
Total Commercial Lines	**$ 644.7**	**61.0**	**3.5**	$ 629.6	59.1	3.9
Personal Lines:						
Personal automobile	**$ 310.4**	**70.8**	**0.7**	$ 293.2	70.6	1.1
Homeowners	**169.1**	**70.6**	**22.2**	160.4	70.4	21.3
Other personal	**13.6**	**34.2**	**3.5**	11.0	42.9	—
Total Personal Lines	**$ 493.1**	**69.8**	**8.1**	$ 464.6	69.9	8.0

The following table summarizes GAAP underwriting results for the Commercial Lines, Personal Lines, and Other segments and reconciles them to operating income (loss) before interest expense and income taxes.

	Three Months Ended June 30,							
	2019				2018			
(in millions)	Commercial Lines	Personal Lines	Other	Total	Commercial Lines	Personal Lines	Other	Total
Underwriting profit (loss), excluding prior year reserve development and catastrophes	**$ 48.1**	**$ 50.8**	**$ —**	**$ 98.9**	$ 54.3	$ 49.7	$ (0.8)	$ 103.2
Prior year favorable (unfavorable) loss and LAE reserve development on non-catastrophe losses	**4.0**	**(3.3)**	**(0.3)**	**0.4**	8.0	(7.8)	(0.3)	(0.1)
Prior year favorable catastrophe development	**5.3**	**1.7**	**—**	**7.0**	0.3	—	—	0.3
Current year catastrophe losses	**(28.3)**	**(38.3)**	**—**	**(66.6)**	(25.1)	(34.0)	—	(59.1)
Underwriting profit (loss)	**29.1**	**10.9**	**(0.3)**	**39.7**	37.5	7.9	(1.1)	44.3
Net investment income	**44.4**	**19.7**	**5.5**	**69.6**	44.8	18.1	2.7	65.6
Fees and other income	**2.0**	**2.7**	**1.2**	**5.9**	2.3	2.8	0.8	5.9
Other operating expenses	**(2.7)**	**(1.6)**	**(3.9)**	**(8.2)**	(2.8)	(1.6)	(4.1)	(8.5)
Operating income (loss) before interest expense and income taxes	**$ 72.8**	**$ 31.7**	**$ 2.5**	**$ 107.0**	$ 81.8	$ 27.2	$ (1.7)	$ 107.3

Commercial Lines

Commercial Lines net premiums written were $644.7 million in the three months ended June 30, 2019, compared to $629.6 million in the three months ended June 30, 2018. This $15.1 million increase was primarily driven by pricing increases and strong retention, partially offset by specific underwriting actions in our commercial automobile line and Hanover programs.

Commercial Lines underwriting profit for the three months ended June 30, 2019 was $29.1 million, compared to $37.5 million for the three months ended June 30, 2018, a decrease of $8.4 million. Catastrophe-related losses for the three months ended June 30, 2019 were $23.0 million, compared to $24.8 million for the three months ended June 30, 2018, a decrease of $1.8 million. Favorable development on prior years' loss reserves for the three months ended June 30, 2019 was $4.0 million, compared to $8.0 million for the three months ended June 30, 2018, a decrease of $4.0 million.

Commercial Lines current accident year underwriting profit, excluding catastrophes, was $48.1 million for the three months ended June 30, 2019, compared to $54.3 million for the three months ended June 30, 2018. This $6.2 million decrease was primarily due to higher current accident year large loss activity in our inland marine line, within other commercial lines, partially offset by earned premium growth.

We are continuing to manage underwriting performance through increased rates, pricing segmentation, specific underwriting actions and targeted new business growth. Our ability to achieve overall rate increases is affected by the current competitive pricing environment, particularly within the workers' compensation line, as well as for larger middle market accounts, which may hamper our ability to grow in this portion of our business.

Personal Lines

Personal Lines net premiums written were $493.1 million in the three months ended June 30, 2019, compared to $464.6 million in the three months ended June 30, 2018, an increase of $28.5 million. This was primarily due to higher renewal premium driven by rate increases.

Net premiums written in the personal automobile line of business for the three months ended June 30, 2019 were $310.4 million, compared to $293.2 million for the three months ended June 30, 2018, an increase of $17.2 million. This was primarily due to rate increases and an increase in policies in force of 2.1%. Net premiums written in the homeowners line of business for the three months ended June 30, 2019 were $169.1 million, compared to $160.4 million for the three months ended June 30, 2018, an increase of $8.7 million. This is attributable to rate increases and an increase in policies in force of 2.7%.

Personal Lines underwriting profit for the three months ended June 30, 2019 was $10.9 million, compared to $7.9 million for the three months ended June 30, 2018, an increase of $3.0 million. Catastrophe losses for the three months ended June 30, 2019 were $36.6 million, compared to $34.0 million for the three months ended June 30, 2018, an increase of $2.6 million. Unfavorable development on prior years' loss reserves for the three months ended June 30, 2019 was $3.3 million, compared to $7.8 million for the three months ended June 30, 2018, a decrease of $4.5 million.

Personal Lines current accident year underwriting profit, excluding catastrophes, was $50.8 million in the three months ended June 30, 2019, compared to $49.7 million for the three months ended June 30, 2018. This $1.1 million improvement was primarily due to earned premium growth and lower expenses, partially offset by higher current accident year losses in our automobile liability line.

We have been able to obtain rate increases in our Personal Lines markets and believe that our ability to obtain these increases will continue. However, our ability to maintain Personal Lines net premiums written may be affected by price competition, and regulatory and legal developments. Additionally, these factors along with weather-related loss volatility may also affect our ability to maintain and improve underwriting results. We monitor these trends and consider them in our rate actions.

Other

Other operating income was $2.5 million for the three months ended June 30, 2019, compared to an operating loss of $1.7 million for the three months ended June 30, 2018, an improvement of $4.2 million, primarily due to higher net investment income which includes the investment of proceeds from our Chaucer sale transaction.

Six Months Ended June 30, 2019 Compared to Six Months Ended June 30, 2018

Operating income before interest expense and income taxes was $216.8 million in the six months ended June 30, 2019, compared to $200.6 million for the six months ended June 30, 2018, an increase of $16.2 million. This increase was primarily due to lower catastrophe losses, earned premium growth, higher net investment income and lower expenses, partially offset by unusually high current accident year large loss activity in our specialty industrial property line and, to a lesser extent, our inland marine line. Our specialty property line provides insurance to small- and medium-sized chemical, paint, solvent and other industrial manufacturing and distribution companies.

Net premiums written increased by $72.9 million in the six months ended June 30, 2019, compared to the six months ended June 30, 2018, due to growth in both our Personal and Commercial Lines segments.

Production and Underwriting Results

The following tables summarize premiums written on a gross and net basis, net premiums earned and loss (including catastrophe losses), LAE, expense and combined ratios for the Commercial Lines and Personal Lines segments. Loss, LAE, catastrophe loss and combined ratios shown below include prior year reserve development. These items are not meaningful for our Other segment.

	Six Months Ended June 30, 2019						
(dollars in millions)	Gross Premiums Written	Net Premiums Written	Net Premiums Earned	Catastrophe Loss Ratios	Loss & LAE Ratios	Expense Ratios	Combined Ratios
Commercial Lines	**$ 1,529.0**	**$ 1,322.1**	**$ 1,311.2**	**2.5**	**60.1**	**34.7**	**94.8**
Personal Lines	**968.8**	**913.7**	**894.9**	**7.3**	**70.2**	**27.4**	**97.6**
Total	**$ 2,497.8**	**$ 2,235.8**	**$ 2,206.1**	**4.5**	**64.2**	**31.7**	**95.9**

	Six Months Ended June 30, 2018						
(dollars in millions)	Gross Premiums Written	Net Premiums Written	Net Premiums Earned	Catastrophe Loss Ratios	Loss & LAE Ratios	Expense Ratios	Combined Ratios
Commercial Lines	$ 1,476.7	$ 1,301.5	$ 1,263.6	5.0	60.5	35.0	95.5
Personal Lines	908.7	861.4	837.1	7.3	68.9	27.8	96.7
Total	$ 2,385.4	$ 2,162.9	$ 2,100.7	6.0	63.9	32.2	96.1

The following table summarizes net premiums written, and loss and LAE and catastrophe loss ratios by line of business for the Commercial Lines and Personal Lines segments. Loss and LAE and catastrophe loss ratios include prior year reserve development.

	Six Months Ended June 30,					
	2019			2018		
(dollars in millions)	Net Premiums Written	Loss & LAE Ratios	Catastrophe Loss Ratios	Net Premiums Written	Loss & LAE Ratios	Catastrophe Loss Ratios
Commercial Lines:						
Commercial multiple peril	**$ 434.3**	**60.5**	**5.8**	$ 417.3	64.2	9.1
Commercial automobile	**163.7**	**72.7**	**0.6**	173.6	73.6	1.3
Workers' compensation	**172.0**	**53.7**	**—**	167.7	57.3	—
Other commercial	**552.1**	**57.9**	**1.3**	542.9	54.4	4.4
Total Commercial Lines	**$ 1,322.1**	**60.1**	**2.5**	$ 1,301.5	60.5	5.0
Personal Lines:						
Personal automobile	**$ 587.1**	**71.9**	**0.5**	$ 555.7	70.6	0.8
Homeowners	**302.7**	**68.9**	**20.3**	286.0	67.4	19.7
Other personal	**23.9**	**44.1**	**2.7**	19.7	44.9	3.1
Total Personal Lines	**$ 913.7**	**70.2**	**7.3**	$ 861.4	68.9	7.3

The following table summarizes GAAP underwriting results for the Commercial Lines, Personal Lines, and Other segments and reconciles them to operating income (loss) before interest expense and income taxes.

	Six Months Ended June 30,							
	2019				2018			
(in millions)	Commercial Lines	Personal Lines	Other	Total	Commercial Lines	Personal Lines	Other	Total
Underwriting profit (loss), excluding prior year reserve development and catastrophes	**$ 87.7**	**$ 93.0**	**$ —**	**$ 180.7**	$ 107.0	$ 93.4	$ (1.5)	$ 198.9
Prior year favorable (unfavorable) loss and LAE reserve development on non-catastrophe losses	**11.5**	**(10.8)**	**(0.6)**	**0.1**	9.6	(9.4)	(0.6)	(0.4)
Prior year favorable catastrophe development	**18.8**	**1.7**	**—**	**20.5**	6.9	0.2	—	7.1
Current year catastrophe losses	**(52.2)**	**(67.3)**	**—**	**(119.5)**	(69.7)	(61.7)	—	(131.4)
Underwriting profit (loss)	**65.8**	**16.6**	**(0.6)**	**81.8**	53.8	22.5	(2.1)	74.2
Net investment income	**88.7**	**39.4**	**11.7**	**139.8**	90.1	36.5	5.0	131.6
Fees and other income	**4.0**	**5.5**	**2.4**	**11.9**	4.6	5.8	1.4	11.8
Other operating expenses	**(5.5)**	**(3.0)**	**(8.2)**	**(16.7)**	(5.3)	(3.3)	(8.4)	(17.0)
Operating income (loss) before interest expense and income taxes	**$ 153.0**	**$ 58.5**	**$ 5.3**	**$ 216.8**	$ 143.2	$ 61.5	$ (4.1)	$ 200.6

Commercial Lines

Commercial Lines net premiums written were $1,322.1 million in the six months ended June 30, 2019, compared to $1,301.5 million in the six months ended June 30, 2018. This $20.6 million increase was primarily driven by pricing increases and strong retention, partially offset by specific underwriting actions in our commercial automobile line and Hanover programs.

Commercial Lines underwriting profit for the six months ended June 30, 2019 was $65.8 million, compared to $53.8 million for the six months ended June 30, 2018, an increase of $12.0 million. Catastrophe-related losses for the six months ended June 30, 2019 were $33.4 million, compared to $62.8 million for the six months ended June 30, 2018, a decrease of $29.4 million. Favorable development on prior years' loss reserves for the six months ended June 30, 2019 was $11.5 million, compared to $9.6 million for the six months ended June 30, 2018, an increase of $1.9 million.

Commercial Lines current accident year underwriting profit, excluding catastrophes, was $87.7 million for the six months ended June 30, 2019, compared to $107.0 million for the six months ended June 30, 2018. This $19.3 million decrease was primarily due to unusually high current accident year large loss activity in our specialty industrial property line and, to a lesser extent, our inland marine line, within other commercial lines, partially offset by earned premium growth and lower expenses.

Personal Lines

Personal Lines net premiums written were $913.7 million in the six months ended June 30, 2019, compared to $861.4 million in the six months ended June 30, 2018, an increase of $52.3 million. This was primarily due to higher renewal premium driven by rate increases.

Net premiums written in the personal automobile line of business for the six months ended June 30, 2019 were $587.1 million, compared to $555.7 million for the six months ended June 30, 2018, an increase of $31.4 million. This was primarily due to rate increases and an increase in policies in force of 2.1%. Net premiums written in the homeowners line of business for the six months ended June 30, 2019 were $302.7 million, compared to $286.0 million for the six months ended June 30, 2018, an increase of $16.7 million. This is attributable to rate increases and an increase in policies in force of 2.7%.

Personal Lines underwriting profit for the six months ended June 30, 2019 was $16.6 million, compared to $22.5 million for the six months ended June 30, 2018, a decline of $5.9 million. Catastrophe losses for the six months ended June 30, 2019 were $65.6 million, compared to $61.5 million for the six months ended June 30, 2018, an increase of $4.1 million. Unfavorable development on prior years' loss reserves for the six months ended June 30, 2019 was $10.8 million, compared to $9.4 million for the six months ended June 30, 2018, an increase of $1.4 million.

Personal Lines current accident year underwriting profit, excluding catastrophes, was $93.0 million in the six months ended June 30, 2019, compared to $93.4 million for the six months ended June 30, 2018. This $0.4 million decline was primarily due to higher current accident year losses in our automobile liability and homeowners lines, substantially offset by earned premium growth and lower expenses.

Other

Other operating income was $5.3 million for the six months ended June 30, 2019, compared to an operating loss of $4.1 million for the six months ended June 30, 2018, an improvement of $9.4 million, primarily due to higher net investment income which includes the investment of proceeds from our Chaucer sale transaction.

Reserve for Losses and Loss Adjustment Expenses

The table below provides a reconciliation of the gross beginning and ending reserve for unpaid losses and loss adjustment expenses.

	Six Months Ended June 30,	
(in millions)	**2019**	**2018**
Gross loss and LAE reserves, beginning of period	**$ 5,304.1**	$ 5,058.5
Reinsurance recoverable on unpaid losses	**1,472.6**	1,455.0
Net loss and LAE reserves, beginning of period	**3,831.5**	3,603.5
Net incurred losses and LAE in respect of losses occurring in:		
Current year	**1,437.9**	1,348.8
Prior year non-catastrophe loss development	**(0.1)**	0.4
Prior year catastrophe development	**(20.5)**	(7.1)
Total incurred losses and LAE	**1,417.3**	1,342.1
Net payments of losses and LAE in respect of losses occurring in:		
Current year	**497.0**	492.8
Prior years	**778.4**	736.8
Total payments	**1,275.4**	1,229.6
Net reserve for losses and LAE, end of period	**3,973.4**	3,716.0
Reinsurance recoverable on unpaid losses	**1,505.1**	1,400.4
Gross reserve for losses and LAE, end of period	**$ 5,478.5**	$ 5,116.4

The table below summarizes the gross reserve for losses and LAE by line of business.

(in millions)	**June 30, 2019**	**December 31, 2018**
Commercial multiple peril	**$ 1,138.3**	$ 1,098.7
Workers' compensation	**663.3**	649.3
Commercial automobile	**409.5**	399.6
Other commercial lines:		
Hanover programs	**487.0**	492.0
Other	**966.9**	919.0
Total other commercial lines	**1,453.9**	1,411.0
Total Commercial Lines	**3,665.0**	3,558.6
Personal automobile	**1,563.0**	1,532.8
Homeowners and other personal	**213.0**	174.8
Total Personal	**1,776.0**	1,707.6
Total Other Segment	**37.5**	37.9
Total loss and LAE reserves	**$ 5,478.5**	$ 5,304.1

"Other commercial lines – Other" in the table above is primarily comprised of general liability - occurrence, general liability - claims made, commercial umbrella, marine, surety, miscellaneous commercial property, fidelity, and healthcare lines. Loss and LAE reserves in our "Total Other Segment" relate to our run-off voluntary assumed reinsurance pools business. Also included in the above table are $56.0 million and $57.6 million of asbestos and environmental reserves as of June 30, 2019 and December 31, 2018, respectively.

The following table summarizes prior year (favorable) unfavorable development for the periods indicated:

	Six Months Ended June 30,					
	2019			2018		
(in millions)	Loss & LAE	Catastrophe	Total	Loss & LAE	Catastrophe	Total
Commercial Lines	**$ (11.5)**	**$ (18.8)**	**$ (30.3)**	$ (9.6)	$ (6.9)	$ (16.5)
Personal Lines	**10.8**	**(1.7)**	**9.1**	9.4	(0.2)	9.2
Other Segment	**0.6**	**—**	**0.6**	0.6	—	0.6
Total prior year (favorable) unfavorable development	**$ (0.1)**	**$ (20.5)**	**$ (20.6)**	$ 0.4	$ (7.1)	$ (6.7)

It is not possible to know whether the factors that affected loss reserves in the first six months of 2019 will also occur in future periods. We encourage you to read our 2018 Annual Report on Form 10-K for more information about our reserving process and the judgments, uncertainties and risks associated therewith.

Catastrophe Loss Development

In the six months ended June 30, 2019 and 2018, favorable catastrophe development was $20.5 million and $7.1 million, respectively. The favorable catastrophe development during the six months ended June 30, 2019 is primarily due to anticipated subrogation recoveries on the 2017 and 2018 California wildfires and lower than expected losses related to the 2018 hurricanes. The favorable catastrophe development during the six months ended June 30, 2018 was driven by lower than expected losses related to the 2017 hurricanes and California wildfires.

2019 Loss and LAE Development, excluding catastrophes

For the six months ended June 30, 2019, net favorable loss and LAE development, excluding catastrophes, was $0.1 million. Lower than expected losses in the workers' compensation line of $10.7 million in accident years 2017 and 2018 and the commercial multiple peril line were substantially offset by higher than expected losses in the personal and commercial automobile lines. In addition, Other Segment unfavorable development of $0.6 million was due to adverse loss trends in our run-off voluntary pools business which includes asbestos and environmental reserves.

2018 Loss and LAE Development, excluding catastrophes

For the six months ended June 30, 2018, net unfavorable loss and LAE development, excluding catastrophes, was $0.4 million. Higher than expected losses in Hanover programs of $10.4 million and the commercial and personal automobile lines were substantially offset by lower than expected losses in other commercial lines and the workers' compensation line. In addition, Other Segment unfavorable development of $0.6 million was due to adverse loss trends in our run-off voluntary pools business.

Investments

The investments discussion below excludes amounts relating to the operations of Chaucer.

Investment Results

Net investment income before income taxes was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(dollars in millions)	2019	2018	2019	2018
Fixed maturities	**$ 57.8**	$ 53.3	**$ 115.8**	$ 106.0
Limited partnerships	**4.8**	5.8	**9.3**	13.1
Mortgage loans	**4.0**	3.4	**7.9**	6.7
Equity securities	**4.0**	4.6	**7.6**	8.5
Other investments	**1.1**	1.1	**3.2**	2.3
Investment expenses	**(2.1)**	(2.6)	**(4.0)**	(5.0)
Net investment income	**$ 69.6**	$ 65.6	**$ 139.8**	$ 131.6
Earned yield, fixed maturities	**3.57%**	3.61%	**3.59%**	3.62%
Earned yield, total portfolio	**3.67%**	3.77%	**3.66%**	3.80%

The increase in net investment income for the three and six months ended June 30, 2019 was primarily due to the continued investment of operational cash flows and the investment of proceeds from the sale of Chaucer, partially offset by lower limited partnership income.

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Investment Portfolio

We held cash and investment assets diversified across several asset classes, as follows:

(dollars in millions)	June 30, 2019 Carrying Value	June 30, 2019 % of Total Carrying Value	December 31, 2018 Carrying Value	December 31, 2018 % of Total Carrying Value
Fixed maturities, at fair value	$ 6,598.9	82.5 %	$ 6,161.5	74.1 %
Equity securities, at fair value	531.3	6.7	464.4	5.6
Mortgage and other loans	426.8	5.3	405.7	4.9
Other investments	265.6	3.3	255.8	3.1
Cash and cash equivalents	179.8	2.2	1,020.7	12.3
Total cash and investments	$ 8,002.4	100.0 %	$ 8,308.1	100.0 %

Cash and Investments

Total cash and investments decreased $305.7 million, or 3.7%, for the six months ended June 30, 2019, primarily due to $400 million of accelerated share repurchases, a special dividend payment on January 25, 2019 of $193 million, and repayment of the Federal Home Loan Bank ("FHLB") debt and related prepayment fees of $151 million. These decreases were partially offset by market value appreciation of approximately $343 million and operational cash flows of approximately $130 million.

The following table provides information about the investment types of our fixed maturities portfolio:

(in millions) Investment Type	June 30, 2019 Amortized Cost	Fair Value	Net Unrealized Gains	Change in Net Unrealized For the Year
U.S. Treasury and government agencies	$ 383.1	$ 392.0	$ 8.9	$ 13.7
Foreign government	7.2	7.3	0.1	—
Municipals:				
Taxable	755.4	782.9	27.5	20.1
Tax-exempt	51.4	52.3	0.9	1.5
Corporate	3,599.4	3,718.5	119.1	185.0
Asset-backed:				
Residential mortgage-backed	824.5	838.3	13.8	25.8
Commercial mortgage-backed	690.9	716.1	25.2	33.3
Asset-backed	90.1	91.5	1.4	1.9
Total fixed maturities	$ 6,402.0	$ 6,598.9	$ 196.9	$ 281.3

The increase in net unrealized gains on fixed maturities was primarily due to lower prevailing interest rates and tighter credit spreads.

Amortized cost and fair value by rating category were as follows:

(dollars in millions) NAIC Designation	Rating Agency Equivalent Designation	June 30, 2019 Amortized Cost	June 30, 2019 Fair Value	June 30, 2019 % of Total Fair Value	December 31, 2018 Amortized Cost	December 31, 2018 Fair Value	December 31, 2018 % of Total Fair Value
1	Aaa/Aa/A	$ 4,392.5	$ 4,527.7	68.6 %	$ 4,297.7	$ 4,258.8	69.1 %
2	Baa	1,716.3	1,769.7	26.8	1,636.7	1,601.0	26.0
3	Ba	167.7	174.0	2.6	176.4	173.2	2.8
4	B	120.8	122.3	1.9	120.0	113.8	1.9
5	Caa and lower	3.1	3.3	0.1	14.8	14.3	0.2
6	In or near default	1.6	1.9	—	0.3	0.4	—
Total fixed maturities		$ 6,402.0	$ 6,598.9	100.0 %	$ 6,245.9	$ 6,161.5	100.0 %

Based on ratings by the National Association of Insurance Commissioners ("NAIC"), approximately 95% of the fixed maturity portfolio consisted of investment grade securities at June 30, 2019 and December 31, 2018. The quality of our fixed maturity portfolio remains strong based on ratings, capital structure position, support through guarantees, underlying security, issuer diversification and yield curve position.

Our investment portfolio primarily consists of fixed maturity securities whose fair value is susceptible to market risk, including interest rate changes. See also "Quantitative and Qualitative Disclosures about Market Risk" included in Management's Discussion and Analysis contained in our 2018 Annual Report on Form 10-K. Duration is a measurement used to quantify our inherent interest rate risk and analyze invested assets relative to our reserve liabilities.

The duration of our fixed maturity portfolio was as follows:

(dollars in millions)	June 30, 2019			December 31, 2018		
Duration	Amortized Cost	Fair Value	% of Total Fair Value	Amortized Cost	Fair Value	% of Total Fair Value
0-2 years	**$ 1,402.3**	**$ 1,424.2**	**21.6 %**	$ 1,092.3	$ 1,101.5	17.9 %
2-4 years	**1,584.4**	**1,629.7**	**24.7**	1,427.3	1,420.4	23.0
4-6 years	**1,845.7**	**1,909.5**	**28.9**	1,831.2	1,801.4	29.2
6-8 years	**1,377.8**	**1,431.7**	**21.7**	1,768.6	1,710.3	27.8
8-10 years	**136.3**	**143.9**	**2.2**	57.5	59.7	1.0
10+ years	**55.5**	**59.9**	**0.9**	69.0	68.2	1.1
Total fixed maturities	**$ 6,402.0**	**$ 6,598.9**	**100.0 %**	$ 6,245.9	$ 6,161.5	100.0 %
Weighted average duration		**4.2**			4.5	

Our fixed maturity and equity securities are carried at fair value. Financial instruments whose value was determined using significant management judgment or estimation constituted less than 1% of the total assets we measured at fair value. See also Note 6 – "Fair Value" in the Notes to Interim Consolidated Financial Statements.

Equity securities primarily consist of U.S. income-oriented large capitalization common stocks and developed market equity index exchange-traded funds.

Mortgage and other loans consist primarily of commercial mortgage loan participations which represent our interest in commercial mortgage loans originated by a third party. We share, on a pro-rata basis, in all related cash flows of the underlying mortgage loans, which are investment-grade quality and diversified by geographic area and property type.

Other investments consist primarily of our interest in corporate middle market and real estate limited partnerships. Corporate middle market limited partnerships may invest in senior or subordinated debt, preferred or common equity or a combination thereof, of middle market businesses. Real estate limited partnerships invest in debt and/or equity of real properties.

Although we expect to invest new funds primarily in investment grade fixed maturities, we have invested, and expect to continue to invest, a portion of funds in limited partnerships, common equity securities, below investment grade fixed maturities and other investment assets.

Other-than-Temporary Impairments

For the three and six months ended June 30, 2019, we recognized $0.4 million of other-than-temporary impairments ("OTTI") on corporate fixed maturity securities. For the three and six months ended June 30, 2018, we recognized in earnings $1.8 million and $2.4 million, respectively, of OTTI on corporate fixed maturity securities and other invested assets.

The carrying values of fixed maturity securities on non-accrual status at June 30, 2019 and December 31, 2018 were not material. The effects of non-accruals for the six months ended June 30, 2019 and 2018, compared with amounts that would have been recognized in accordance with the original terms of the fixed maturities, were also not material. Any defaults in the fixed maturities portfolio in future periods may negatively affect investment income.

Unrealized Losses

Gross unrealized losses on fixed maturities at June 30, 2019 were $10.3 million, a decrease of $123.9 million compared to December 31, 2018, primarily attributable to lower prevailing interest rates and tighter credit spreads. At June 30, 2019, gross unrealized losses consisted primarily of $7.8 million on corporate fixed maturities and $1.5 million on residential mortgage-backed securities. See Note 5 – "Investments" in the Notes to Interim Consolidated Financial Statements.

We view gross unrealized losses on fixed maturities as temporary since it is our assessment that these securities will recover in the near term, allowing us to realize their anticipated long-term economic value. Further, we do not intend to sell, nor is it more likely than not we will be required to sell, such debt securities before this expected recovery of amortized cost (See also "Liquidity and Capital Resources"). Inherent in our assessment are the risks that market factors may differ from our expectations; the global economy reverts to recessionary trends; we may decide to subsequently sell a security for unforeseen business needs; or changes in the credit assessment from our original assessment may lead us to determine that a sale at the current value would maximize recovery on such investments. To the extent that there are such adverse changes, an OTTI would be recognized as a realized loss. Although unrealized losses on fixed maturities are not reflected in the results of financial operations until they are realized or deemed "other-than-temporary," the fair value of the underlying investment, which does reflect the unrealized loss, is reflected in our Consolidated Balance Sheets.

The following table sets forth gross unrealized losses for fixed maturities by maturity period at June 30, 2019 and December 31, 2018. Actual maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations, with or without call or prepayment penalties, or we may have the right to put or sell the obligations back to the issuers.

(in millions)	June 30, 2019	December 31, 2018
Due in one year or less	**$ 0.1**	$ 0.3
Due after one year through five years	**3.2**	20.2
Due after five years through ten years	**4.8**	80.2
Due after ten years	**0.5**	8.3
	8.6	109.0
Mortgage-backed and asset-backed securities	**1.7**	25.2
Total fixed maturities	**$ 10.3**	$ 134.2

Our investment portfolio and shareholders' equity can be significantly impacted by changes in market values of our securities. Market volatility could increase and defaults on fixed income securities could occur. As a result, we could incur additional realized and unrealized losses in future periods, which could have a material adverse impact on our results of operations and/or financial position.

Monetary policies in developed economies have become more accommodative recently amid signs of limited inflationary pressures and slowing global economic activity. Major central banks continue to closely monitor geo-political developments, conditions in global financial markets and the outlook for growth, and continue to demonstrate an ability and willingness to adjust monetary policy as required to provide liquidity, support growth and achieve inflation targets. In the United States, the Federal Reserve (the "Fed") maintained its federal funds target range at 2.25% to 2.50% during the second quarter of 2019. Recent economic activity has slowed, although growth continues at a moderate rate, and the Fed continues to expect growth to remain solid, labor markets to stay strong, and inflation to move back up over time to its 2% objective as the most likely outcomes. The Fed has communicated that in light of increased economic uncertainties and muted inflation pressures, it will closely monitor the implications of incoming information and act appropriately to sustain the expansion. This may include a reduction in its target for the federal funds rate in the near term. The Fed has noted growth indicators from around the world have disappointed on net, raising concerns that weakness in the global economy will continue to affect the U.S. economy. Three potentially significant developments being watched carefully are the trade/tariff negotiations between the United States and its various trade partners, the negotiations within the United Kingdom ("U.K.") and between the U.K. and the European Union regarding Brexit, and the U.S. federal debt ceiling. Should trade negotiations lead to a shift or break-down in global trade patterns or inaction on the resolution of the U.S. debt ceiling occur, there could be negative implications for certain issuers, sectors, or the economy at large.

Fundamental conditions in the corporate sector generally remain sound. While we may experience defaults on fixed income securities, particularly with respect to non-investment grade debt securities, it is difficult to foresee which issuers, industries or markets will be affected. As a result, the value of our fixed maturity portfolio could change rapidly in ways we cannot currently anticipate, and we could incur additional realized and unrealized losses in future periods.

Other Items

Net income also included the following items:

	Three Months Ended June 30,				
(in millions)	Commercial Lines	Personal Lines	Other	Discontinued Operations	Total
2019					
Net realized and unrealized investment gains	**$ 11.9**	**$ —**	**$ 0.2**	**$ —**	**$ 12.1**
Discontinued operations - Chaucer business, including sale, net of taxes	**—**	**—**	**—**	**(10.1)**	**(10.1)**
Discontinued life businesses	**—**	**—**	**—**	**(0.9)**	**(0.9)**
2018					
Net realized and unrealized investment gains (losses)	$ 3.1	$ 1.6	$ (1.0)	$ —	$ 3.7
Discontinued operations - Chaucer business	—	—	—	16.8	16.8
Discontinued life businesses	—	—	—	0.1	0.1

(in millions)	Six Months Ended June 30, Commercial Lines	Personal Lines	Other	Discontinued Operations	Total
2019					
Net realized and unrealized investment gains (losses)	**$ 45.9**	**$ 15.1**	**$ (0.7)**	**$ —**	**$ 60.3**
Discontinued operations - Chaucer business, including sale, net of taxes	**—**	**—**	**—**	**(9.5)**	**(9.5)**
Discontinued life businesses	**—**	**—**	**—**	**(1.7)**	**(1.7)**
2018					
Net realized and unrealized investment losses	$ (13.0)	$ (4.8)	$ (1.4)	**$** —	$ (19.2)
Discontinued operations - Chaucer business	—	—	—	34.1	34.1

We manage investment assets for our Commercial Lines, Personal Lines, and Other segments based on the requirements of our U.S. combined property and casualty companies. We allocate the investment income, expenses and realized gains and losses to our Commercial Lines, Personal Lines and Other segments based on actuarial information related to the underlying businesses. We managed investment assets separately for our former Chaucer business.

Net realized and unrealized investment gains on investments were $12.1 million for the three months ended June 30, 2019 compared to net realized and unrealized investment gains of $3.7 million for the three months ended June 30, 2018. Net realized and unrealized gains in both 2019 and 2018 were primarily due to changes in the fair value of equity securities.

Net realized and unrealized investment gains on investments were $60.3 million for the six months ended June 30, 2019 compared to net realized and unrealized investment losses of $19.2 million for the six months ended June 30, 2018. Net realized and unrealized gains in both 2019 and 2018 were primarily due to changes in the fair value of equity securities.

Discontinued operations primarily include our former Chaucer business and, to a lesser extent, our discontinued life businesses. For the three months ended June 30, 2019, results related to our discontinued Chaucer business, including the sale, net of taxes, primarily reflects a revision to our best estimate of Chaucer's 2018 catastrophe losses, which reduced our estimate of pre-tax contingent proceeds by $13.5 million. This was partially offset by a gain from the sale of the Chaucer-related Australian entity. For the three months ended June 30, 2018, discontinued operations generated income of $16.8 million related to our former Chaucer segment. For the six months ended June 30, 2019, we recognized the aforementioned $13.5 million reduction to pre-tax contingent proceeds. This was partially offset by gains from the sales of the Chaucer-related Irish and Australian entities. In the six months ended June 30, 2018, discontinued operations generated income of $34.1 million related to our former Chaucer segment. Losses of $0.9 million and $1.7 million in the three and six months ended June 30, 2019, respectively, in our discontinued life businesses, reflect adverse loss trends related to the long-term care pool.

See also "Discontinued Chaucer Business" below and Note 3 – "Discontinued Operations - Chaucer Business" in the Notes to Interim Consolidated Financial Statements.

Discontinued Chaucer Business

Sale of Chaucer Business

On December 28, 2018, we completed the sale of the U.K. entities of our former subsidiary, Chaucer, to China Re. On February 14, 2019, we completed the sale of our Chaucer-related Irish entity and on April 10, 2019, we finalized the sale of the Australian entities, completing the transfer of all Chaucer-related companies. Collectively, these entities constituted the Chaucer business in 2018 and prior, whereas just the Irish and Australian Chaucer-related entities comprised the Chaucer business reported in our results in 2019, until their respective sales to China Re. In December 2018, we recognized a pre-tax gain on the sale of Chaucer to China Re of $174.4 million and an income tax expense of $42.5 million. As discussed below, both the pre-tax gain and income tax expense were updated this quarter.

Included in the previously recorded $174.4 million gain was $31.7 million of contingent proceeds, based upon our best estimate of Chaucer's 2018 catastrophe losses. During 2019, Chaucer experienced unfavorable development on its 2018 catastrophe losses, primarily due to higher than expected losses for Hurricane Michael, Typhoon Jebi, and a Colombian dam construction loss. Accordingly, we updated and reduced our best estimate of pre-tax contingent proceeds by $13.5 million.

In addition, we recognized an income tax charge of $5.6 million in the second quarter of 2019 related to new tax regulations that were issued on June 14, 2019 by the U.S. Department of the Treasury, with an effective date retroactive to January 1, 2018. These new regulations retroactively changed the taxation of certain non-U.S. income. Although the impact of these regulations relates to the calculation of the income tax expense related to the sale of Chaucer, unlike the $42.5 million of income tax expense noted above that was reflected in discontinued operations, ASC 740, *Income Taxes*, prescribes that the effect of certain retroactive tax law changes be presented in continuing operations. Accordingly, we have presented this charge as a separate component of our non-operating items from continuing operations. (See also Income Taxes below.)

During 2019, the sale of the Irish entity provided total proceeds of $28 million and resulted in a pre-tax gain of $0.4 million, with a related income tax benefit of $0.5 million. The sale of the Australian entities for total proceeds of $13 million resulted in a pre-tax gain of $1.2 million and a related income tax expense of $0.1 million.

Income from Discontinued Chaucer Business

Three and six months ended June 30, 2019

Revenues from the portion of the Chaucer business remaining after the sale of the U.K. entities in 2018 were $1.6 million and $4.5 million during the three and six months ended June 30, 2019, respectively, and operating losses in this business totaled $0.2 million and $0.5 million during those same periods.

Three and six months ended June 30, 2018

The following table summarizes the results of operations for the former Chaucer business for the three and six months ended June 30, 2018:

(in millions)	Three Months Ended June 30, 2018 [(1)]	Six Months Ended June 30, 2018 [(1)]
Revenues		
Net premiums earned	$ 214.7	$ 435.8
Net investment income	12.5	28.9
Other income	1.6	3.5
	228.8	468.2
Losses and operating expenses		
Losses and LAE	112.5	227.5
Amortization of deferred acquisition costs	67.3	136.6
Other expenses	27.1	59.3
	206.9	423.4
Income from Chaucer business before income taxes and other items (previously presented as Chaucer's operating income)	21.9	44.8
Other items:		
Interest expense	(0.2)	(1.3)
Net realized and unrealized investment losses	—	(0.5)
Other expenses	(1.4)	(1.2)
Income from Chaucer business before income taxes	$ 20.3	$ 41.8
Loss and LAE ratio:		
Current accident year, excluding catastrophe losses	55.1 %	54.2 %
Prior accident year favorable reserve development, excluding catastrophe losses	(4.9) %	(4.4) %
Current accident year catastrophe losses	4.8 %	4.3 %
Prior accident year favorable catastrophe loss development	(2.6) %	(1.9) %
Total loss and LAE ratio	52.4 %	52.2 %
Expense ratio	43.3 %	44.2 %
Combined ratio	95.7 %	96.4 %

(1) 2019 information is omitted as it is not material.

Chaucer’s income before income taxes for the three and six months ended June 30, 2018 was $21.9 million and $44.8 million, respectively. This included favorable development on prior years’ loss reserves of $10.5 million and $19.2 million, respectively. In addition, catastrophe losses were $4.8 million and $10.5 million for the three and six months ended June 30, 2018, respectively. Net favorable loss and LAE development during the first half of 2018 was primarily due to lower than expected losses in Chaucer’s political, marine, aviation and energy lines, partially offset by higher than expected losses in the casualty line and U.S. casualty business within the treaty line. Also partially offsetting Chaucer’s favorable development was the unfavorable impact of foreign exchange rate movements on prior years’ loss reserves.

Income Taxes

We are subject to the tax laws and regulations of the U.S. and foreign countries in which we operate. We file a consolidated U.S. federal income tax return that includes our holding company and its U.S. subsidiaries. Generally, taxes are accrued at the U.S. statutory tax rate of 21% for income from the U.S. operations. Our primary non-U.S. jurisdiction was the U.K. until the sale of our U.K. subsidiaries, completed December 28, 2018. The U.K. statutory tax rate ranged between 20% and 19% during the period 2017 through 2018. We accrue taxes on certain non-U.S. income that is subject to U.S. tax at the enacted U.S. tax rate. Foreign tax credits, where available, are utilized to offset U.S. tax as permitted.

Three Months Ended June 30, 2019 Compared to Three Months Ended June 30, 2018

The provision for income taxes from continuing operations was an expense of $24.8 million and $17.2 million for the three months ended June 30, 2019 and 2018, respectively. These provisions resulted in consolidated effective federal tax rates of 22.6% and 17.3% for the three months ended June 30, 2019 and 2018, respectively. These provisions reflect benefits related to tax planning strategies implemented in prior years of $3.4 million and $3.3 million for the three months ended June 30, 2019 and 2018, respectively. In addition, these provisions also included excess tax benefits related to stock-based compensation of $0.6 million and $0.5 million for the three months ended June 30, 2019 and 2018, respectively. Finally, the provision for 2019 includes a charge of $5.6 million, which reflects the effect of the aforementioned changes in the tax law related to the 2018 sale of Chaucer. Absent these items, the provision for income taxes would have been an expense of $23.2 million and $21.0 million for the three months ended June 30, 2019 and 2018, respectively, or 21.1% for both periods.

The income tax provision on operating income was an expense of $20.0 million and $19.7 million for the three months ended June 30, 2019 and 2018, respectively. These provisions resulted in effective tax rates for operating income of 20.5% for both periods. These provisions included excess tax benefits related to stock-based compensation of $0.6 million and $0.5 million for the three months ended June 30, 2019 and 2018, respectively. Absent this item, the provision for income taxes would have been an expense of $20.6 million and $20.2 million for the three months ended June 30, 2019 and 2018, respectively, or 21.1% for both periods.

Six Months Ended June 30, 2019 Compared to Six Months Ended June 30, 2018

The provision for income taxes from continuing operations was an expense of $50.8 million and $25.8 million for the six months ended June 30, 2019 and 2018, respectively. These provisions resulted in consolidated effective federal tax rates of 19.7% and 16.3% for the six months ended June 30, 2019 and 2018, respectively. These provisions reflect benefits related to tax planning strategies implemented in prior years of $7.2 million and $5.8 million for the six months ended June 30, 2019 and 2018, respectively. In addition, these provisions also included excess tax benefits related to stock-based compensation of $2.1 million and $1.8 million for the six months ended June 30, 2019 and 2018, respectively. Finally, the provision for 2019 includes a charge of $5.6 million, which reflects the effect of the aforementioned changes in the tax law related to the 2018 sale of Chaucer. Absent these items, the provision for income taxes would have been an expense of $54.5 million, or 21.1%, and $33.4 million, or 21.0%, for the six months ended June 30, 2019 and 2018, respectively.

The income tax provision on operating income was an expense of $39.7 million and $35.6 million for the six months ended June 30, 2019 and 2018, respectively. These provisions resulted in effective tax rates for operating income of 20.0% for both periods. These provisions included excess tax benefits related to stock-based compensation of $2.1 million and $1.8 million for the six months ended June 30, 2019 and 2018, respectively. Absent this item, the provision for income taxes would have been an expense of $41.8 million, or 21.1%, and $37.4 million, or 21.0%, for the six months ended June 30, 2019 and 2018, respectively.

The income tax provision on our former Chaucer business was an expense of $3.5 million for the three months ended June 30, 2018. This provision resulted in an effective tax rate of 17.2% for the three months ended June 30, 2018. The income tax provision on our former Chaucer business was an expense of $7.7 million for the six months ended June 30, 2018. This provision resulted in an effective tax rate of 18.4% for the six months ended June 30, 2018.

Critical Accounting Estimates

Interim consolidated financial statements have been prepared in conformity with U.S. GAAP and include certain accounting policies that we consider to be critical due to the amount of judgment and uncertainty inherent in the application of those policies. While we believe that the amounts included in our consolidated financial statements reflect our best judgment, the use of different assumptions could produce materially different accounting estimates. As disclosed in our 2018 Annual Report on Form 10-K, we believe the following accounting estimates are critical to our operations and require the most subjective and complex judgment:

- Reserve for losses and loss expenses
- Reinsurance recoverable balances
- Pension benefit obligations
- Other-than-temporary impairments on fixed maturity securities
- Deferred tax assets

For a more detailed discussion of these critical accounting estimates, see our 2018 Annual Report on Form 10-K.

Statutory Surplus of U.S. Insurance Subsidiaries

The following table reflects statutory surplus for our insurance subsidiaries:

(in millions)	June 30, 2019	December 31, 2018
Total Statutory Capital and Surplus	**$ 2,249.7**	$ 2,172.5

The statutory capital and surplus for our insurance subsidiaries increased $77.2 million during the first six months of 2019. This increase was primarily due to underwriting profits, and to a lesser extent, unrealized gains in 2019, primarily due to changes in the fair value of equity securities. These increases were partially offset by a $140 million dividend paid by Hanover Insurance to THG in the second quarter of 2019, and to a lesser extent, changes in deferred taxes.

The NAIC prescribes an annual calculation regarding risk based capital ("RBC"). RBC ratios for regulatory purposes are expressed as a percentage of the capital required to be above the Authorized Control Level (the "Regulatory Scale"); however, in the insurance industry, RBC ratios are widely expressed as a percentage of the Company Action Level. The following table reflects the Company Action Level, the Authorized Control Level and RBC ratios for Hanover Insurance (which includes Citizens and other insurance subsidiaries), as of June 30, 2019, expressed both on the Industry Scale (Total Adjusted Capital divided by the Company Action Level) and Regulatory Scale (Total Adjusted Capital divided by Authorized Control Level):

(dollars in millions)	Company Action Level	Authorized Control Level	RBC Ratio Industry Scale	RBC Ratio Regulatory Scale
The Hanover Insurance Company	**$ 1,041.8**	**$ 520.9**	**215%**	**430%**

Liquidity and Capital Resources

Liquidity is a measure of our ability to generate sufficient cash flows to meet the cash requirements of business operations. As a holding company, our primary ongoing source of cash is dividends from our insurance subsidiaries. However, dividend payments to us by our insurance subsidiaries are subject to limitations imposed by regulators, such as prior notice periods and the requirement that dividends in excess of a specified percentage of statutory surplus or prior year's statutory earnings receive prior approval (so called "extraordinary dividends"). During the second quarter of 2019, Hanover Insurance paid $140.0 million in dividends to the holding company.

Sources of cash for our insurance subsidiaries primarily consist of premiums collected, investment income and maturing investments. Primary cash outflows are paid claims, losses and loss adjustment expenses, policy and contract acquisition expenses, other underwriting expenses, and investment purchases. Cash outflows related to losses and loss adjustment expenses can be variable because of uncertainties surrounding settlement dates for liabilities for unpaid losses and because of the potential for large losses either individually or in the aggregate. We periodically adjust our investment policy to respond to changes in short-term and long-term cash requirements.

Net cash provided by operating activities was $150.6 million during the first six months of 2019, as compared to $179.5 million during the first six months of 2018. During 2019, the $28.9 million decrease in cash provided was primarily the result of higher loss payments, partially offset by an increase in premiums collected.

Net cash used in investing activities was $215.4 million during the first six months of 2019, as compared to $234.2 million during the first six months of 2018. During 2019, cash used in investing activities primarily related to net purchases of fixed maturities and to a lesser extent, equity securities and other investments, partially offset by net proceeds received from the sale of the Chaucer-related Irish and Australian entities. During 2018, cash used in investing activities primarily related to net purchases of fixed maturities, equity securities and other investments.

Net cash used in financing activities was $779.4 million during the first six months of 2019, as compared to $76.0 million during the first six months of 2018. During 2019, cash used in financing activities primarily resulted from repurchases of common stock through two accelerated share repurchase ("ASR") agreements, the payments of a special dividend and two quarterly dividends to shareholders and the repayment of the FHLB advances. (See further discussion below for additional information regarding the special dividend, the ASR agreements and the repayment of the FHLB advances). During 2018, cash used in financing activities primarily resulted from the payment of dividends to shareholders, repurchases of common stock and changes in cash collateral related to securities lending, partially offset by cash inflows related to option exercises.

Dividends to common shareholders are subject to quarterly board approval and declaration. During the first six months of 2019, our Board declared and paid two quarterly dividends, each for $0.60 per share, to our shareholders totaling approximately $49 million. In January 2019, we also paid a special dividend of $4.75 per share associated with the Chaucer sale that was declared on December 30, 2018 totaling $192.6 million. We believe that our holding company assets are sufficient to provide for future shareholder dividends should the Board of Directors declare them.

At June 30, 2019, THG, as a holding company, held approximately $616.9 million of fixed maturities and cash. We believe our holding company assets will be sufficient to meet our 2019 obligations, which we expect to consist primarily of quarterly dividends to our shareholders (as and to the extent declared), interest on our senior and subordinated debentures, certain costs associated with benefits due to our former life employees and agents, and, to the extent required, payments related to indemnification of liabilities associated with the sale of various subsidiaries. As discussed below, we have, and opportunistically may continue to, repurchase our common stock and debt. We do not expect that it will be necessary to dividend additional funds from our insurance subsidiaries in order to fund 2019 holding company obligations; however, we may decide to do so.

We expect to continue to generate sufficient positive operating cash to meet all short-term and long-term cash requirements relating to current operations, including the funding of our qualified defined benefit pension plan. The ultimate payment amounts for our benefit plan is based on several assumptions, including but not limited to, the rate of return on plan assets, the discount rate for benefit obligations, mortality experience, interest crediting rates, inflation and the ultimate valuation and determination of benefit obligations. Since differences between actual plan experience and our assumptions are almost certain, changes, both positive and negative, to our current funding status and ultimately our obligations in future periods are likely.

Our insurance subsidiaries maintain a high degree of liquidity within their respective investment portfolios in fixed maturity and short-term investments. We believe that the quality of the assets we hold will allow us to realize the long-term economic value of our portfolio, including securities that are currently in an unrealized loss position. We do not anticipate the need to sell these securities to meet our insurance subsidiaries' cash requirements since we expect our insurance subsidiaries to generate sufficient operating cash to meet all short-term and long-term cash requirements relating to current operations. However, there can be no assurance that unforeseen business needs or other items will not occur causing us to have to sell those securities in a loss position before their values fully recover, thereby causing us to recognize impairment charges in that time period.

On December 30, 2018, the Board of Directors authorized a new share repurchase program which provides for aggregate repurchases of our common stock of up to $600 million. Under the repurchase authorization, we may repurchase, from time to time, common shares in amounts, at prices and at such times as we deem appropriate, subject to market conditions and other considerations. Repurchases may be executed using open market purchases, privately negotiated transactions, accelerated repurchase programs or other transactions. We are not required to purchase any specific number of shares or to make purchases by any certain date under this program. On January 2, 2019, pursuant to the terms of an ASR agreement (the "December ASR"), we paid $250.0 million to J.P. Morgan Chase Bank, National Association London Branch and received an initial delivery of approximately 1.8 million shares of our common stock, which was approximately 80% of the total number of shares expected to be repurchased under this agreement. In accordance with its terms, the December ASR terminated on June 27, 2019. On June 28, 2019 we received approximately 0.3 million shares of our common stock as final settlement of shares repurchased under such agreement. In total, we purchased 2.1 million shares at an average price of $120.83, as a result of the December ASR. Also on June 28, 2019, pursuant to the terms of a second ASR agreement (the "June ASR"), we paid $150.0 million to The Bank of Nova Scotia and received an initial delivery of approximately 0.9 million shares of our common stock, which is approximately 80% of the total number of shares expected to be repurchased under this agreement. Final settlement of the June ASR is expected to be completed not later than October 31, 2019. As of June 30, 2019, we have repurchased approximately 3.0 million shares under our repurchase program and have approximately $200 million available for additional repurchases under this program.

From time to time, we may repurchase our debt on an opportunistic basis. On January 2, 2019, we repaid $125 million of our FHLB advances that were due 2029 and had an interest rate of 5.5%, along with related prepayment fees of $26 million which were recognized as a non-operating charge in 2018. We maintained our membership in FHLB which provides us with access to additional liquidity based on our stock holdings and pledged collateral. At June 30, 2019 we had borrowing capacity of $91.7 million. There were no borrowings outstanding under this short-term facility at June 30, 2019; however we have and may continue to borrow, from time to time, through this facility to provide short-term liquidity.

On April 30, 2019, we entered into a new credit agreement that provides for a five-year unsecured revolving credit facility not to exceed $200.0 million at any one time outstanding, with the option to increase the facility up to $300.0 million, (assuming no default and satisfaction of other specified conditions, including the receipt of additional lender commitments.) The agreement also includes an uncommitted subfacility of $50.0 million for standby letters of credit. Borrowings, if any, under this new agreement are unsecured and incur interest at a rate per annum equal to, at our election, either (i) the greater of, (a) the prime commercial lending rate of the administrative agent, (b) the NYFRB Rate plus half a percent, or (c) the one month Adjusted LIBOR plus one percent and a margin that ranges from 0.25% to 0.625% depending on our debt rating, or (ii) Adjusted LIBOR for the applicable interest period, plus a margin that ranges from 1.25% to 1.625% depending on our debt rating. The agreement also contains certain financial covenants such as maintenance of specified levels of consolidated equity and leverage ratios, and requires that certain of our subsidiaries maintain minimum RBC ratios. Concurrent with our entry into this agreement, we voluntarily terminated our existing $200.0 million credit agreement, dated November 12, 2013. We currently have no borrowings under the new agreement and had no borrowings under the previous agreement during the first six months of 2019.

At June 30, 2019, we were in compliance with the covenants of our debt and credit agreements.

Off-Balance Sheet Arrangements

We currently do not have any material off-balance sheet arrangements that are reasonably likely to have an effect on our financial position, revenues, expenses, results of operations, liquidity, capital expenditures, or capital resources.

Contingencies and Regulatory Matters

Information regarding litigation, legal contingencies and regulatory matters appears in Part I – Note 13 “Commitments andContingencies” in the Notes to Interim Consolidated Financial Statements.

Risks and Forward-Looking Statements

Information regarding risk factors and forward-looking information appears in Part II – Item 1A of this Quarterly Report on Form 10-Q and in Part I – Item 1A of our 2018 Annual Report on Form 10-K. This Management’s Discussion and Analysis should be read and interpreted in light of such factors.

ITEM 3

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our market risks, the ways we manage them, and sensitivity to changes in interest rates, and equity price risk are summarized in Management's Discussion and Analysis of Financial Condition and Results of Operations as of December 31, 2018, included in our Annual Report on Form 10-K for the year ended December 31, 2018. There have been no material changes in the first six months of 2019 to these risks or our management of them.

ITEM 4

CONTROLS AND PROCEDURES

Disclosure Controls and Procedures Evaluation

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

Limitations on the Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, do not expect that our disclosure controls over financial reporting will prevent all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Based on our controls evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this quarterly report, our disclosure controls and procedures were effective to provide reasonable assurance that (i) the information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) material information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and the Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting, as required by Rule 13a-15(d) of the Exchange Act, to determine whether any changes occurred during the period covered by this quarterly report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that there were no such changes during the quarter ended June 30, 2019, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1 – LEGAL PROCEEDINGS

The Company has been named a defendant in various legal proceedings arising in the normal course of business. In addition, the Company is involved, from time to time, in examinations, investigations and proceedings by governmental and self-regulatory agencies. The potential outcome of any such action or regulatory proceedings in which the Company has been named a defendant or the subject of an inquiry or investigation, and its ultimate liability, if any, from such action or regulatory proceedings, is difficult to predict at this time. The ultimate resolutions of such proceedings are not expected to have a material effect on the Company's financial position, although they could have a material effect on the results of operations for a particular quarter or annual period.

ITEM 1A – RISK FACTORS

This document contains, and management may make, certain "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, may be forward-looking statements. When used in our Management's Discussion and Analysis, words such as: "believes," "anticipates," "expects," "projections," "outlook," "should," "could," "plan," "guidance," "likely," "on track to," "potential," "continue," "targeted," and similar expressions are intended to identify forward-looking statements. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. We caution readers that accuracy with respect to forward-looking projections is difficult and risks and uncertainties, in some cases, have affected, and in the future could affect, our actual results and could cause our actual results for the remainder of 2019 and beyond to differ materially from historical results and from those expressed in any of our forward-looking statements. We operate in a business environment that is continually changing, and as such, new risk factors may emerge over time. Additionally, our business is conducted in competitive markets and, therefore, involves a higher degree of risk. We cannot predict these new risk factors nor can we assess the impact, if any, that they may have on our business in the future. Some of the factors that could cause actual results to differ include, but are not limited to, the following:

- changes in the demand for our products;
- risks and uncertainties with respect to our ability to retain profitable policies in force and attract profitable policies and to increase rates commensurate with, or in excess of, loss trends;
- adverse claims experience or changes in our estimates of loss and loss adjustment expense reserves, including with respect to catastrophes, which may result in lower current year underwriting income or adverse loss development, and could impact our carried reserves;
- uncertainties with respect to the long-term profitability of our products, including with respect to new products such as our Hanover Platinum Personal Lines, excess and surplus lines, or longer-tail products covering casualty losses;
- the loss or disruption of our independent agency channel, including the impact of competition and consolidation in the industry and among agents and brokers;
- changes in frequency and loss severity trends;
- changes in regulation, economic, market and political conditions, particularly with respect to regions where we have geographical concentrations;
- volatile and unpredictable developments, including severe weather and other natural physical events, catastrophes and terrorist actions, and the uncertainty in estimating the resulting losses;
- changes in weather patterns, whether as a result of global climate change, or otherwise, causing a higher level of losses from weather events to persist;
- the availability of sufficient information to accurately estimate a loss at a point in time and the limitations and assumptions used to model property and casualty losses in general;
- risks and uncertainties with respect to our ability to collect all amounts due from reinsurers and to maintain current levels of reinsurance in the future at commercially reasonable rates, or at all;
- heightened volatility, fluctuations in interest rates (which have a significant impact on the market value of our investment portfolio and thus our book value), inflationary pressures, default rates and other factors that affect investment returns from our investment portfolio;
- risks and uncertainties associated with our participation in shared market mechanisms, mandatory reinsurance programs and mandatory and voluntary pooling arrangements, including the Michigan Catastrophic Claims Association (the "MCCA");

- an increase in mandatory assessments by state guaranty funds;
- actions by our competitors, many of which are larger or have greater financial resources than we do;
- loss or retirement of key employees;
- operating difficulties and other unintended consequences from acquisitions and integration of acquired businesses, the introduction of new products and related technology changes and new operating models;
- changes in our claims-paying and financial strength ratings;
- negative changes in our level of statutory surplus;
- risks and uncertainties with respect to our growth or operating strategies, or with respect to our expense and strategic initiatives;
- our ability to declare and pay dividends;
- changes in accounting principles and related financial reporting requirements;
- errors or omissions in connection with the administration of any of our products;
- risks and uncertainties with technology, including cloud-based data information storage, data security, cyber-security attacks, and/or outsourcing relationships and third-party operations and data security that may negatively impact our ability to conduct business;
- an inability to be compliant with recently implemented regulations or existing regulation such as those relating to Sarbanes-Oxley;
- unfavorable developments as a result of the implementation of recently enacted legislation in Michigan described below, or litigation matters and the possibility of adverse judicial decisions, including those which expand policy coverage beyond its intended scope or award “bad faith” or other non-contractual damages; and
- other factors described in such forward-looking statements.

In addition, historical and future reported financial results include estimates with respect to premiums written and earned, reinsurance recoverables, current accident year “picks,” loss and loss adjustment reserves and development, fair values of certain investments, other assets and liabilities, tax, contingent and other liabilities, and other items. These estimates are subject to change as more information becomes available.

In May 2019, the state of Michigan enacted legislation that will significantly change the current no-fault and personal injury protection (PIP) system. The new legislation will eliminate, effective July 1, 2020, the current requirement that all insureds purchase unlimited PIP coverage, substituting instead tiered limits ranging from zero (for those with certain government-sponsored benefits) to unlimited benefits. The minimum amounts of bodily injury liability coverage drivers are required to purchase will also increase and we anticipate an increase in tort liability and related litigation from these changes.

As part of these changes, various cost controls, including fee schedules referenced to a multiple of Medicare reimbursement rates, will be imposed, along with mandated premium rate reductions and an eight-year premium rate freeze for the PIP component of automobile policies. PIP premium represents approximately 28% of our Michigan personal automobile premiums, excluding the MCCA assessment. The mandated premium rate reductions and premium rate freeze will be effective July 1, 2020 and the Medicare-based fee schedules are to become effective July 1, 2021. It is not clear at this time whether projected savings from the various cost control measures are commensurate with the required PIP reductions and controls.

For a more detailed discussion of our risks and uncertainties, see also Item 1A – Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2018.

Readers should not place undue reliance on forward-looking statements, which speak only as of the date they are made. We do not undertake any responsibility to update or revise our forward-looking statements, except as required by law.

ITEM 2 – UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Issuer Purchases of Equity Securities

Shares purchased in the second quarter of 2019 are as follows:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (2)	Approximate Dollar Value of Shares That May Yet be Purchased Under the Plans or Programs (in millions)
April 1 - 30, 2019 (1)	1,352	$ 117.20	—	$ 350
May 1 - 31, 2019 (1)	810	122.39	—	350
June 1 - 30, 2019 (1)	1,231,178	126.10	1,229,810	200
Total	1,233,340	$ 126.09	1,229,810	$ 200

(1) Includes 1,352, 810 and 1,368 shares withheld to satisfy tax withholding amounts due from employees related to the receipt of stock which resulted from the exercise or vesting of equity awards for the months ended April 30, May 31 and June 30, 2019, respectively.

(2) As noted above, on December 30, 2018, the Board of Directors authorized a new share repurchase program which provides for aggregate repurchases of up to $600 million. Shares were purchased pursuant to the terms of two separate accelerated share repurchase ("ASR") agreements authorized by the Board of Directors for $250.0 million and $150.0 million. June repurchases include 278,184 shares as final settlement of the December ASR and 951,626 shares, or approximately 80% of the total number of shares expected to be repurchased under the June ASR. Final settlement of the June ASR is expected to be completed not later than October 31, 2019.

ITEM 6 – EXHIBITS

EX – +10.1	Description of 2019-2020 Non-Employee Director Compensation.
EX – 10.2	Form of Accelerated Share Repurchase Confirmation between The Hanover Insurance Group, Inc. and The Bank of Nova Scotia, dated June 27, 2019, previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on July 1, 2019 and incorporated herein by reference.
EX – 31.1	Certification of the Chief Executive Officer, pursuant to 15 U.S.C. 78m, 78o(d), as adopted pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
EX – 31.2	Certification of the Chief Financial Officer, pursuant to 15 U.S.C. 78m, 78o(d), as adopted pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
EX – 32.1	Certification of the Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.
EX – 32.2	Certification of the Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.
EX – 101	The following materials from The Hanover Insurance Group, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 formatted in inline eXtensible Business Reporting Language ("XBRL"): (i) the Cover Page; (ii) Consolidated Statements of Income for the three and six months ended June 30, 2019 and 2018; (iii) Consolidated Statements of Comprehensive Income for the three and six months ended June 30, 2019 and 2018; (iv) Consolidated Balance Sheets at June 30, 2019 and December 31, 2018; (v) Consolidated Statements of Shareholders' Equity for the three and six months ended June 30, 2019 and 2018; (vi) Consolidated Statements of Cash Flows for the six months ended June 30, 2019 and 2018, and (vii) related notes to these financial statements.

\+ Management contract or compensatory plan or arrangement.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

The Hanover Insurance Group, Inc.
Registrant

August 1, 2019	/s/ John C. Roche
Date	John C. Roche President, Chief Executive Officer and Director
August 1, 2019	/s/ Jeffrey M. Farber
Date	Jeffrey M. Farber Executive Vice President and Chief Financial Officer

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Section 2: EX-10.1 (EX-10.1)

Exhibit 10.1

The Hanover Insurance Group, Inc.
2019-2020 Compensation of Non-Employee Directors
— For the annual service period beginning on May 14, 2019, the date of the 2019 Annual Meeting of Shareholders—

Standard Fees	Description
Annual Director Retainer	
- Stock Component	- **$135,000** valuation - Granted on May 14, 2019. Issued pursuant to the Company's 2014 Long-Term Incentive Plan (the "2014 Plan")
- Cash Component	- **$95,000** - Payable on or after May 14, 2019
Committee Chairperson Annual Retainer (amount includes Committee Annual Retainer)	- **$21,000** for the chairperson of the Nominating and Corporate Governance Committee, payable on or after May 14, 2019 - **$25,000** for the chairperson of the Compensation Committee, payable on or after May 14, 2019 - **$36,000** for the chairperson of the Audit Committee, payable on or after May 14, 2019
Chair of the Board Retainer	- **$125,000** - Payable on or after May 14, 2019
Committee Annual Retainer	- **$10,000** for each member of the Nominating and Corporate Governance Committee (excluding the Committee Chairperson), payable on or after May 14, 2019 - **$11,000** for each member of the Compensation Committee (excluding the Committee Chairperson), payable on or after May 14, 2019 - **$15,000** for each member of the Audit Committee (excluding the Committee Chairperson), payable on or after May 14, 2019
Deferred Compensation Plan	- Directors may defer receipt of their cash and stock compensation (including any cash compensation that is converted into stock under the Conversion Program). Deferred cash amounts are accrued in a memorandum account that is credited with interest derived from the so-called General Agreement on Tariffs and Trade (GATT) Rate (3.36% in 2019). All deferrals are pursuant to The Hanover Insurance Group, Inc. Non-Employee Director Deferral Plan.

Conversion Program	- At the election of each director, cash retainers may be converted into Common Stock of the Company with such stock issued pursuant to the 2014 Plan

Reimbursable Expenses	- Travel and related expenses incurred in connection with service on the Board of Directors and its Committees
Matching Charitable Contributions	- Company will provide matching contributions to qualified charitable organizations up to $5,000 per director per year

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Section 3: EX-31.1 (EX-31.1)

Exhibit 31.1

**CERTIFICATION AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, John C. Roche, certify that:

1. I have reviewed this quarterly report on Form 10-Q of The Hanover Insurance Group, Inc.;

2. 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;

3. 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;

4. The registrant's other certifying officer(s) 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 that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant's other certifying officer(s) 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 (or persons performing the equivalent functions):

   (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.

Date: August 1, 2019

/s/ John C. Roche
John C. Roche
President, Chief Executive Officer and Director

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Section 4: EX-31.2 (EX-31.2)

Exhibit 31.2

**CERTIFICATION AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Jeffrey M. Farber, certify that:

1. I have reviewed this quarterly report on Form 10-Q of The Hanover Insurance Group, Inc.;

2. 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;

3. 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;

4. The registrant's other certifying officer(s) 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 that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant's other certifying officer(s) 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 (or persons performing the equivalent functions):

   (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.

Date: August 1, 2019

/s/ Jeffrey M. Farber
Jeffrey M. Farber
Executive Vice President and Chief Financial Officer

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Section 5: EX-32.1 (EX-32.1)

Exhibit 32.1

CERTIFICATION PURSUANT TO
SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to Section 1350, Chapter 63 of Title 18, United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned, as President, Chief Executive Officer and Director of The Hanover Insurance Group, Inc. (the “Company”), does hereby certify that to the undersigned’s knowledge:

1) the Company’s Quarterly Report on Form 10-Q for the period ended June 30, 2019 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2) the information contained in the Company’s Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ John C. Roche
John C. Roche
President, Chief Executive Officer and
Director

Dated: August 1, 2019

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Section 6: EX-32.2 (EX-32.2)

Exhibit 32.2

CERTIFICATION PURSUANT TO
SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to Section 1350, Chapter 63 of Title 18, United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned, as Executive Vice President and Chief Financial Officer of The Hanover Insurance Group, Inc. (the "Company"), does hereby certify that to the undersigned's knowledge:

1) the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2) the information contained in the Company's Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Jeffrey M. Farber
Jeffrey M. Farber
Executive Vice President and
Chief Financial Officer

Dated: August 1, 2019

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