

FORM 10-Q
UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

(Mark One)

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

For the quarterly period ended September 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 001-14905

BERKSHIRE HATHAWAY INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

47-0813844

(I.R.S. Employer Identification Number)

3555 Farnam Street, Omaha, Nebraska 68131

(Address of principal executive office) (Zip Code)

(402) 346-1400

(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbols	Name of each exchange on which registered
Class A Common Stock	BRK.A	New York Stock Exchange
Class B Common Stock	BRK.B	New York Stock Exchange
0.750% Senior Notes due 2023	BRK23	New York Stock Exchange
1.125% Senior Notes due 2027	BRK27	New York Stock Exchange
1.625% Senior Notes due 2035	BRK35	New York Stock Exchange
0.500% Senior Notes due 2020	BRK20	New York Stock Exchange
1.300% Senior Notes due 2024	BRK24	New York Stock Exchange
2.150% Senior Notes due 2028	BRK28	New York Stock Exchange
0.250% Senior Notes due 2021	BRK21	New York Stock Exchange
0.625% Senior Notes due 2023	BRK23A	New York Stock Exchange
2.375% Senior Notes due 2039	BRK39	New York Stock Exchange
2.625% Senior Notes due 2059	BRK59	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, 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

Number of shares of common stock outstanding as of October 24, 2019:

Class A —	707,755
Class B —	1,383,414,987

BERKSHIRE HATHAWAY INC.

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Part I Financial Information
Item 1. Financial Statements
BERKSHIRE HATHAWAY INC.
and Subsidiaries
CONSOLIDATED BALANCE SHEETS
(dollars in millions)

	September 30, 2019 (Unaudited)	December 31, 2018
ASSETS		
<i>Insurance and Other:</i>		
Cash and cash equivalents*	\$ 71,064	\$ 27,749
Short-term investments in U.S. Treasury Bills	53,378	81,506
Investments in fixed maturity securities	19,172	19,898
Investments in equity securities	220,051	172,757
Equity method investments	17,535	17,325
Loans and finance receivables	17,135	16,280
Other receivables	34,511	31,564
Inventories	19,951	19,069
Property, plant and equipment	21,230	20,628
Equipment held for lease	14,934	14,298
Goodwill	56,478	56,323
Other intangible assets	30,788	31,499
Deferred charges under retroactive reinsurance contracts	13,359	14,104
Other	13,430	9,307
	<u>603,016</u>	<u>532,307</u>
<i>Railroad, Utilities and Energy:</i>		
Cash and cash equivalents*	3,712	2,612
Receivables	3,756	3,666
Property, plant and equipment	135,326	131,780
Goodwill	24,750	24,702
Regulatory assets	3,007	3,067
Other	14,915	9,660
	<u>185,466</u>	<u>175,487</u>
	<u>\$ 788,482</u>	<u>\$ 707,794</u>

* Cash and cash equivalents included U.S. Treasury Bills with maturities of three months or less when purchased of \$40.6 billion at September 30, 2019 and \$3.9 billion at December 31, 2018.

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC.
and Subsidiaries
CONSOLIDATED BALANCE SHEETS
(dollars in millions)

	September 30, 2019	December 31, 2018		
	(Unaudited)			
LIABILITIES AND SHAREHOLDERS' EQUITY				
<i>Insurance and Other:</i>				
Unpaid losses and loss adjustment expenses	\$ 71,997	\$ 68,458		
Unpaid losses and loss adjustment expenses under retroactive reinsurance contracts	41,364	41,834		
Unearned premiums	20,764	18,093		
Life, annuity and health insurance benefits	19,422	18,632		
Other policyholder liabilities	7,686	7,675		
Accounts payable, accruals and other liabilities	25,880	23,696		
Payable for purchases of U.S. Treasury Bills	8,123	2,080		
Derivative contract liabilities	1,236	2,452		
Aircraft repurchase liabilities and unearned lease revenues	5,106	4,593		
Notes payable and other borrowings	<u>37,176</u>	<u>34,975</u>		
	<u>238,754</u>	<u>222,488</u>		
<i>Railroad, Utilities and Energy:</i>				
Accounts payable, accruals and other liabilities	15,309	11,410		
Regulatory liabilities	7,454	7,506		
Notes payable and other borrowings	<u>65,018</u>	<u>62,515</u>		
	<u>87,781</u>	<u>81,431</u>		
Income taxes, principally deferred	<u>60,389</u>	<u>51,375</u>		
Total liabilities	<u>386,924</u>	<u>355,294</u>		
Shareholders' equity:				
Common stock	8	8		
Capital in excess of par value	35,612	35,707		
Accumulated other comprehensive income	(5,408)	(5,015)		
Retained earnings	373,334	321,112		
Treasury stock, at cost	(5,937)	(3,109)		
Berkshire Hathaway shareholders' equity	397,609	348,703		
Noncontrolling interests	3,949	3,797		
Total shareholders' equity	<u>401,558</u>	<u>352,500</u>		
	<u>\$ 788,482</u>	<u>\$ 707,794</u>		

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC.
and Subsidiaries
CONSOLIDATED STATEMENTS OF EARNINGS
(dollars in millions except per share amounts)

	Third Quarter		First Nine Months					
	2019	2018	2019	2018				
	(Unaudited)		(Unaudited)					
Revenues:								
<i>Insurance and Other:</i>								
Insurance premiums earned	\$ 15,323	\$ 14,333	\$ 44,505	\$ 41,855				
Sales and service revenues	34,026	33,832	100,563	99,492				
Leasing revenues	1,438	1,474	4,365	4,378				
Interest, dividend and other investment income	2,483	1,993	6,895	5,583				
	<u>53,270</u>	<u>51,632</u>	<u>156,328</u>	<u>151,308</u>				
<i>Railroad, Utilities and Energy:</i>								
Freight rail transportation revenues	5,982	6,112	17,558	17,547				
Energy operating revenues	4,338	4,419	11,729	11,818				
Service revenues and other income	1,382	1,287	3,633	3,450				
	<u>11,702</u>	<u>11,818</u>	<u>32,920</u>	<u>32,815</u>				
Total revenues	64,972	63,450	189,248	184,123				
<i>Investment and derivative contract gains (losses):</i>								
Investment gains (losses)	10,692	14,569	40,079	12,750				
Derivative contract gains (losses)	234	137	1,217	303				
	<u>10,926</u>	<u>14,706</u>	<u>41,296</u>	<u>13,053</u>				
Costs and expenses:								
<i>Insurance and Other:</i>								
Insurance losses and loss adjustment expenses	10,858	9,932	31,701	28,296				
Life, annuity and health insurance benefits	1,176	1,448	3,245	4,153				
Insurance underwriting expenses	2,708	2,352	8,033	7,079				
Cost of sales and services	26,950	27,084	79,764	79,254				
Cost of leasing	1,010	978	3,030	2,949				
Selling, general and administrative expenses	4,384	4,494	13,645	13,434				
Interest expense	261	252	790	772				
	<u>47,347</u>	<u>46,540</u>	<u>140,208</u>	<u>135,937</u>				
<i>Railroad, Utilities and Energy:</i>								
Freight rail transportation expenses	3,839	4,012	11,706	11,838				
Utilities and energy cost of sales and other expenses	2,981	2,981	8,503	8,637				
Other expenses	1,162	1,094	2,990	2,976				
Interest expense	724	698	2,178	2,110				
	<u>8,706</u>	<u>8,785</u>	<u>25,377</u>	<u>25,561</u>				
Total costs and expenses	56,053	55,325	165,585	161,498				
Earnings (loss) before income taxes and equity method earnings	19,845	22,831	64,959	35,678				
Equity method earnings	644	316	936	1,044				
Earnings (loss) before income taxes	20,489	23,147	65,895	36,722				
Income tax expense (benefit)	3,832	4,440	13,333	7,009				
Net earnings (loss)	16,657	18,707	52,562	29,713				
Earnings attributable to noncontrolling interests	133	167	304	300				
Net earnings (loss) attributable to Berkshire Hathaway shareholders	\$ 16,524	\$ 18,540	\$ 52,258	\$ 29,413				
Net earnings (loss) per average equivalent Class A share	\$ 10,119	\$ 11,280	\$ 31,944	\$ 17,885				
Net earnings (loss) per average equivalent Class B share*	\$ 6.75	\$ 7.52	\$ 21.30	\$ 11.92				
Average equivalent Class A shares outstanding	1,633,002	1,643,556	1,635,903	1,644,519				
Average equivalent Class B shares outstanding	2,449,502,430	2,465,333,662	2,453,854,768	2,466,777,764				

* Class B shares are economically equivalent to one-fifteen-hundredth of a Class A share. Accordingly, net earnings per average equivalent Class B share outstanding is equal to one-fifteen-hundredth of the equivalent Class A amount. See Note 20.

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC.
and Subsidiaries
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(dollars in millions)

	Third Quarter		First Nine Months	
	2019	2018 (Unaudited)	2019	2018 (Unaudited)
Net earnings (loss)	\$ 16,657	\$ 18,707	\$ 52,562	\$ 29,713
Other comprehensive income:				
Net change in unrealized appreciation of investments	18	5	232	(132)
Applicable income taxes	(2)	(1)	(51)	19
Reclassification of investment appreciation in net earnings	(57)	(34)	(53)	(299)
Applicable income taxes	12	7	11	63
Foreign currency translation	(700)	(79)	(534)	(842)
Applicable income taxes	6	9	3	46
Defined benefit pension plans	(45)	(13)	47	50
Applicable income taxes	7	3	(16)	-
Other, net	10	(21)	(35)	(57)
Other comprehensive income, net	<u>(751)</u>	<u>(124)</u>	<u>(396)</u>	<u>(1,152)</u>
Comprehensive income	15,906	18,583	52,166	28,561
Comprehensive income attributable to noncontrolling interests	112	162	301	271
Comprehensive income attributable to Berkshire Hathaway shareholders	<u>\$ 15,794</u>	<u>\$ 18,421</u>	<u>\$ 51,865</u>	<u>\$ 28,290</u>

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC.
and Subsidiaries
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Unaudited)
(dollars in millions)

	Berkshire Hathaway shareholders' equity					
	Common stock and capital in excess of par value	Accumulated other comprehensive income	Retained earnings	Treasury stock	Non- controlling interests	Total
Balance at December 31, 2017	\$ 35,702	\$ 58,571	\$ 255,786	\$ (1,763)	\$ 3,658	\$ 351,954
Adoption of new accounting pronouncements	—	(61,375)	61,304	—	—	(71)
Net earnings (loss)	—	—	(1,138)	—	67	(1,071)
Other comprehensive income, net	—	327	—	—	8	335
Issuance (acquisition) of common stock	24	—	—	—	—	24
Transactions with noncontrolling interests	(37)	—	—	—	(82)	(119)
Balance at March 31, 2018	35,689	(2,477)	315,952	(1,763)	3,651	351,052
Net earnings (loss)	—	—	12,011	—	66	12,077
Other comprehensive income, net	—	(1,331)	—	—	(32)	(1,363)
Issuance (acquisition) of common stock	8	—	—	—	—	8
Transactions with noncontrolling interests	5	—	—	—	(21)	(16)
Balance at June 30, 2018	35,702	(3,808)	327,963	(1,763)	3,664	361,758
Net earnings (loss)	—	—	18,540	—	167	18,707
Other comprehensive income, net	—	(119)	—	—	(5)	(124)
Issuance (acquisition) of common stock	22	—	—	(928)	—	(906)
Transactions with noncontrolling interests	(3)	—	—	—	(13)	(16)
Balance at September 30, 2018	<u>\$ 35,721</u>	<u>\$ (3,927)</u>	<u>\$ 346,503</u>	<u>\$ (2,691)</u>	<u>\$ 3,813</u>	<u>\$ 379,419</u>
Balance at December 31, 2018	\$ 35,715	\$ (5,015)	\$ 321,112	\$ (3,109)	\$ 3,797	\$ 352,500
Net earnings (loss)	—	—	21,661	—	71	21,732
Other comprehensive income, net	—	288	—	—	22	310
Issuance (acquisition) of common stock	13	—	—	(1,690)	—	(1,677)
Transactions with noncontrolling interests	(98)	—	—	—	(176)	(274)
Balance at March 31, 2019	35,630	(4,727)	342,773	(4,799)	3,714	372,591
Net earnings (loss)	—	—	14,073	—	100	14,173
Other comprehensive income, net	—	49	—	—	(4)	45
Issuance (acquisition) of common stock	8	—	—	(443)	—	(435)
Transactions with noncontrolling interests	(20)	—	—	—	37	17
Balance at June 30, 2019	35,618	(4,678)	356,846	(5,242)	3,847	386,391
Net earnings (loss)	—	—	16,524	—	133	16,657
Other comprehensive income, net	—	(730)	—	—	(21)	(751)
Issuance (acquisition) of common stock	—	—	—	(695)	—	(695)
Transactions with noncontrolling interests and other	2	—	(36)	—	(10)	(44)
Balance at September 30, 2019	<u>\$ 35,620</u>	<u>\$ (5,408)</u>	<u>\$ 373,334</u>	<u>\$ (5,937)</u>	<u>\$ 3,949</u>	<u>\$ 401,558</u>

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC.
and Subsidiaries
CONSOLIDATED STATEMENTS OF CASH FLOWS
(dollars in millions)

	First Nine Months	
	2019	2018 (Unaudited)
Cash flows from operating activities:		
Net earnings (loss)	\$ 52,562	\$ 29,713
Adjustments to reconcile net earnings (loss) to operating cash flows:		
Investment (gains) losses	(40,079)	(12,750)
Depreciation and amortization	7,407	7,169
Other	(1,740)	(677)
Changes in operating assets and liabilities:		
Losses and loss adjustment expenses	3,252	2,272
Deferred charges reinsurance assumed	745	827
Unearned premiums	2,663	2,974
Receivables and originated loans	(3,618)	(4,781)
Other assets	(2,419)	(1,788)
Other liabilities	(889)	805
Income taxes	8,726	2,791
Net cash flows from operating activities	<u>26,610</u>	<u>26,555</u>
Cash flows from investing activities:		
Purchases of U.S. Treasury Bills and fixed maturity securities	(72,189)	(85,502)
Purchases of equity securities	(15,090)	(38,552)
Sales of U.S. Treasury Bills and fixed maturity securities	13,602	26,903
Redemptions and maturities of U.S. Treasury Bills and fixed maturity securities	94,742	83,742
Sales and redemptions of equity securities	7,127	14,164
Purchases of loans and finance receivables	(57)	(1,748)
Collections of loans and finance receivables	259	266
Acquisitions of businesses, net of cash acquired	(732)	(521)
Purchases of property, plant and equipment and equipment held for lease	(11,139)	(10,040)
Other	(1,067)	257
Net cash flows from investing activities	<u>15,456</u>	<u>(11,031)</u>
Cash flows from financing activities:		
Proceeds from borrowings of insurance and other businesses	8,141	2,394
Proceeds from borrowings of railroad, utilities and energy businesses	4,163	7,019
Repayments of borrowings of insurance and other businesses	(5,046)	(7,322)
Repayments of borrowings of railroad, utilities and energy businesses	(1,766)	(3,658)
Changes in short term borrowings, net	165	(2,754)
Acquisition of treasury stock	(2,807)	(928)
Other	(341)	(277)
Net cash flows from financing activities	<u>2,509</u>	<u>(5,526)</u>
Effects of foreign currency exchange rate changes	(95)	(109)
Increase in cash and cash equivalents and restricted cash	44,480	9,889
Cash and cash equivalents and restricted cash at beginning of year	<u>30,811</u>	<u>32,212</u>
Cash and cash equivalents and restricted cash at end of third quarter *	<u>\$ 75,291</u>	<u>\$ 42,101</u>
* Cash and cash equivalents and restricted cash are comprised of the following:		
Beginning of year—		
Insurance and Other	\$ 27,749	\$ 28,673
Railroad, Utilities and Energy	2,612	2,910
Restricted cash, included in other assets	450	629
	<u>\$ 30,811</u>	<u>\$ 32,212</u>
End of third quarter—		
Insurance and Other	\$ 71,064	\$ 38,141
Railroad, Utilities and Energy	3,712	3,297
Restricted cash, included in other assets	515	663
	<u>\$ 75,291</u>	<u>\$ 42,101</u>

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC.
and Subsidiaries

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
September 30, 2019

Note 1. General

The accompanying unaudited Consolidated Financial Statements include the accounts of Berkshire Hathaway Inc. (“Berkshire” or “Company”) consolidated with the accounts of all its subsidiaries and affiliates in which Berkshire holds controlling financial interests as of the financial statement date. In these notes, the terms “us,” “we” or “our” refer to Berkshire and its consolidated subsidiaries. Reference is made to Berkshire’s most recently issued Annual Report on Form 10-K (“Annual Report”), which includes information necessary or useful to understanding Berkshire’s businesses and financial statement presentations. Our significant accounting policies and practices were presented as Note 1 to the Consolidated Financial Statements included in the Annual Report. As described in the Annual Report, we modified certain presentations to our Consolidated Financial Statements. Presentations in these interim Consolidated Financial Statements conform to the presentations in the Annual Report. Changes to those policies due to the adoption of a new accounting standard are described in Note 2.

Financial information in this Quarterly Report reflects all adjustments (consisting only of normal recurring adjustments) that are, in the opinion of management, necessary to a fair statement of results for the interim periods in accordance with accounting principles generally accepted in the United States (“GAAP”). For a number of reasons, our results for interim periods are not normally indicative of results to be expected for the year. The timing and magnitude of catastrophe losses incurred by insurance subsidiaries and the estimation error inherent to the process of determining liabilities for unpaid losses of insurance subsidiaries can be more significant to results of interim periods than to results for a full year. In light of the size of our equity security investment portfolio, changes in market prices and the related changes in unrealized gains on equity securities will produce significant volatility in our interim and annual earnings. In addition, changes in the fair values of certain derivative contract liabilities and gains and losses from the periodic revaluation of certain assets and liabilities denominated in foreign currencies can cause significant variations in periodic net earnings.

Note 2. New Accounting Pronouncements

Berkshire adopted Accounting Standards Codification (“ASC”) 842 “Leases” on January 1, 2019. Most significantly, ASC 842 requires a lessee to recognize a liability to make lease payments and an asset with respect to its right to use the underlying asset for the lease term. Upon the adoption of ASC 842, we recognized operating lease assets of approximately \$6.2 billion and lease liabilities of \$5.9 billion. We also reduced other assets by approximately \$300 million. Consequently, our consolidated assets and liabilities increased by approximately \$5.9 billion.

We are party to contracts where we lease property from others (“lessee” contracts) and where we lease property to others (“lessor” contracts). In adopting and applying ASC 842, we elected to use practical expedients, including but not limited to, not reassessing past lease and easement accounting, not separating lease components from non-lease components by class of asset and not recording assets or liabilities for leases with terms of one year or less. We adopted ASC 842 as of January 1, 2019 with regard to leases in effect as of that date and elected to not restate prior period financial statements. ASC 842 did not have a material effect on our accounting for lessor contracts or for lessee contracts classified as financing leases.

Right-of-use assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. In this regard, lease payments include fixed payments and variable payments that depend on an index or rate. The lease term is generally the non-cancellable lease period. Certain lease contracts contain renewal options or other terms that provide for variable payments based on performance or usage or changes in an index or interest rates. Options are not included in determining right-of-use assets or lease liabilities unless it is reasonably certain that options will be exercised. Generally, incremental borrowing rates are used in measuring lease liabilities. Right-of-use assets are subject to review for impairment.

Notes to Consolidated Financial Statements (*Continued*)

Note 2. New Accounting Pronouncements (*Continued*)

On January 1, 2018, we adopted Accounting Standards Update (“ASU”) 2016-01 “Financial Instruments—Recognition and Measurement of Financial Assets and Financial Liabilities,” ASU 2018-02 “Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income” and ASC 606 “Revenues from Contracts with Customers.” Prior year financial statements were not restated. A summary of the effects of the initial adoption of ASU 2016-01, ASU 2018-02 and ASC 606 on our shareholders’ equity follows (in millions).

	<u>ASU 2016-01</u>	<u>ASU 2018-02</u>	<u>ASC 606</u>	<u>Total</u>
Increase (decrease):				
Accumulated other comprehensive income	\$ (61,459)	\$ 84	\$ —	\$ (61,375)
Retained earnings	61,459	(84)	(70)	61,305
Shareholders’ equity	—	—	(70)	(70)

With respect to ASU 2016-01, beginning in 2018, unrealized gains and losses from the changes in the fair values of our equity securities during the period are included within investment gains (losses) in the Consolidated Statements of Earnings. As of January 1, 2018, we reclassified net after-tax unrealized gains on equity securities from accumulated other comprehensive income to retained earnings.

In adopting ASU 2018-02, we reclassified the stranded deferred income tax effects arising from the reduction in the U.S. statutory income tax rate under the U.S. Tax Cuts and Jobs Act that were included in accumulated other comprehensive income as of January 1, 2018 to retained earnings.

In adopting ASC 606, we recorded increases to certain assets and other liabilities, with the cumulative net effect recorded to retained earnings. Prior to January 1, 2018, we recognized revenues from the sales of fractional ownership interests in aircraft over the term of the related management services agreements, as the transfers of the ownership interests were inseparable from the management services agreements. These agreements also include provisions that require us to repurchase the fractional interest at fair market value at contract termination or upon the customer’s request following the end of a minimum commitment period. ASC 606 provides that such contracts are subject to accounting guidance for lease contracts. The principal effects of this re-characterization were to increase equipment held for lease and aircraft repurchase liabilities and unearned lease revenues by approximately \$3.5 billion.

In June 2016, the Financial Accounting Standards Board (“FASB”) issued ASU 2016-13 “Financial Instruments—Credit Losses,” which provides for the recognition and measurement at the reporting date of all expected credit losses for financial assets held at amortized cost and for available-for-sale debt securities. Currently, credit losses are recognized and measured when such losses become probable based on the prevailing facts and circumstances. ASU 2016-13 is effective for reporting periods beginning after December 15, 2019. We are evaluating the effect this standard will have on our Consolidated Financial Statements.

In January 2017, the FASB issued ASU 2017-04 “Simplifying the Test for Goodwill Impairment.” ASU 2017-04 eliminates the requirement to determine the implied value of goodwill in measuring an impairment loss. Upon adoption of ASU 2017-04, the measurement of a goodwill impairment will represent the excess of the reporting unit’s carrying value over its fair value and will be limited to the carrying value of goodwill. ASU 2017-04 is effective for goodwill impairment tests in fiscal years beginning after December 15, 2019, with early adoption permitted.

In August 2018, the FASB issued ASU 2018-12 “Targeted Improvements to the Accounting for Long-Duration Contracts.” ASU 2018-12 requires periodic reassessment of actuarial and discount rate assumptions used to value policyholder liabilities and deferred acquisition costs arising from the issuance of long-duration insurance and reinsurance contracts, with the effects of changes in cash flow assumptions reflected in earnings and the effects of changes in discount rate assumptions reflected in other comprehensive income. Currently, the actuarial and discount rate assumptions are set at the contract inception date and not subsequently changed, except under limited circumstances. ASU 2018-12 provides for new disclosures and is expected to be effective for fiscal years beginning after December 15, 2021 as a result of a recent decision by the FASB, with early adoption permitted. We are evaluating the effect this standard will have on our Consolidated Financial Statements.

Notes to Consolidated Financial Statements (Continued)

Note 3. Investments in fixed maturity securities

Investments in fixed maturity securities as of September 30, 2019 and December 31, 2018 are summarized by type below (in millions).

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
September 30, 2019				
U.S. Treasury, U.S. government corporations and agencies	\$ 3,760	\$ 47	\$ (2)	\$ 3,805
States, municipalities and political subdivisions	152	5	—	157
Foreign governments	7,962	70	(9)	8,023
Corporate bonds	6,230	477	(3)	6,704
Mortgage-backed securities	419	66	(2)	483
	<u>\$ 18,523</u>	<u>\$ 665</u>	<u>\$ (16)</u>	<u>\$ 19,172</u>
December 31, 2018				
U.S. Treasury, U.S. government corporations and agencies	\$ 4,223	\$ 22	\$ (22)	\$ 4,223
States, municipalities and political subdivisions	182	7	—	189
Foreign governments	7,480	50	(28)	7,502
Corporate bonds	7,055	408	(23)	7,440
Mortgage-backed securities	487	59	(2)	544
	<u>\$ 19,427</u>	<u>\$ 546</u>	<u>\$ (75)</u>	<u>\$ 19,898</u>

Investments in foreign governments include securities issued by national and provincial government entities as well as instruments that are unconditionally guaranteed by such entities. As of September 30, 2019, approximately 88% of our foreign government holdings were rated AA or higher by at least one of the major rating agencies.

The amortized cost and estimated fair value of fixed maturity securities at September 30, 2019 are summarized below by contractual maturity dates (in millions). Actual maturities may differ from contractual maturities due to early call or prepayment rights held by issuers.

	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years	Mortgage- backed securities	Total
Amortized cost	\$ 6,864	\$ 10,503	\$ 301	\$ 436	\$ 419	\$ 18,523
Fair value	6,889	10,650	351	799	483	19,172

Note 4. Investments in equity securities

Investments in equity securities as of September 30, 2019 and December 31, 2018 are summarized based on the primary industry of the investee in the table below (in millions).

	Cost Basis	Net Unrealized Gains	Fair Value
September 30, 2019*			
Banks, insurance and finance	\$ 44,694	\$ 51,804	\$ 96,498
Consumer products	38,928	43,087	82,015
Commercial, industrial and other	28,585	12,953	41,538
	<u>\$ 112,207</u>	<u>\$ 107,844</u>	<u>\$ 220,051</u>

* Approximately 66% of the aggregate fair value was concentrated in five companies (American Express Company – \$17.9 billion; Apple Inc. – \$57.0 billion; Bank of America Corporation – \$27.8 billion; The Coca-Cola Company – \$21.8 billion and Wells Fargo & Company – \$20.2 billion).

Notes to Consolidated Financial Statements (*Continued*)

Note 4. Investments in equity securities (*Continued*)

On April 30, 2019, Berkshire committed to invest a total of \$10 billion in connection with Occidental Petroleum Corporation’s (“Occidental”) proposal to acquire Anadarko Petroleum Corporation (“Anadarko”). The Anadarko shareholders approved the acquisition by Occidental on August 8, 2019 and the acquisition and our investment in Occidental closed on August 8, 2019.

Berkshire’s investments in Occidental include newly issued Occidental Cumulative Perpetual Preferred Stock with an aggregate liquidation value of \$10 billion, together with warrants to purchase up to 80 million shares of Occidental common stock at an exercise price of \$62.50 per share. The preferred stock accrues dividends at 8% per annum and is redeemable at the option of Occidental commencing on the tenth anniversary of issuance at a redemption price equal to 105% of the liquidation preference plus any accumulated and unpaid dividends, or mandatorily under certain specified capital return events. Dividends on the preferred stock may be paid in cash or, at Occidental’s option, in shares of Occidental common stock. The warrants are exercisable in whole or in part until one year after the redemption of the preferred stock. Our investments in Occidental are included in the commercial, industrial and other category in the preceding table.

	Cost Basis	Net Unrealized Gains	Fair Value
<i>December 31, 2018*</i>			
Banks, insurance and finance	\$ 44,332	\$ 38,260	\$ 82,592
Consumer products	38,783	22,838	61,621
Commercial, industrial and other	19,752	8,792	28,544
	<u>\$ 102,867</u>	<u>\$ 69,890</u>	<u>\$ 172,757</u>

* Approximately 68% of the aggregate fair value was concentrated in five companies (American Express Company – \$14.5 billion; Apple Inc. – \$40.3 billion; Bank of America Corporation – \$22.6 billion; The Coca-Cola Company – \$18.9 billion and Wells Fargo & Company – \$20.7 billion).

Note 5. Equity method investments

Berkshire and its subsidiaries hold investments in certain businesses that are accounted for pursuant to the equity method. Currently, the most significant of these is our investment in the common stock of The Kraft Heinz Company (“Kraft Heinz”). Kraft Heinz is one of the world’s largest manufacturers and marketers of food and beverage products, including condiments and sauces, cheese and dairy, meals, meats, refreshment beverages, coffee and other grocery products.

Berkshire currently owns 325,442,152 shares of Kraft Heinz common stock representing 26.6% of the outstanding shares. Shares of Kraft Heinz common stock are publicly-traded and the fair value of our investment was approximately \$9.1 billion at September 30, 2019 and \$14.0 billion at December 31, 2018. The carrying value of our investment was approximately \$13.8 billion at both September 30, 2019 and December 31, 2018.

As discussed in Berkshire’s first and second quarter Form 10-Qs, Kraft Heinz’s financial statements for the first and second quarters of 2019 were not available and thus we excluded our share of Kraft Heinz’s earnings and other comprehensive income from our consolidated results during those periods. On August 13, 2019, Kraft Heinz filed financial statements for the first and second quarters of 2019 with the Securities and Exchange Commission. Kraft Heinz has also made its financial results for the third quarter of 2019 available to Berkshire. Accordingly, Berkshire’s equity method earnings in the third quarter and first nine months of 2019 included \$467 million attributable to Kraft Heinz’s results for the first nine months of 2019, of which \$228 million was attributable to Kraft Heinz’s results for the first six months. Equity method earnings from Kraft Heinz for the third quarter and first nine months of 2018 were \$168 million and \$635 million, respectively. Dividends received from Kraft Heinz in the first nine months of 2019 and 2018 were \$391 million and \$610 million, respectively, which were recorded as reductions to the carrying value of our investment.

We evaluated our investment in Kraft Heinz for impairment as of September 30, 2019. Based on the available facts and information, the length of time that fair value was less than carrying value and our ability and intent to hold the investment until recovery, we concluded that recognition of an impairment loss in earnings at September 30, 2019 was not required. However, we will continue to monitor this investment and it is possible that an impairment loss will be recorded in earnings in future periods based on changes in facts and circumstances or intentions.

Notes to Consolidated Financial Statements (Continued)

Note 5. Equity method investments (Continued)

Summarized consolidated financial information of Kraft Heinz follows (in millions).

	September 28, 2019	December 29, 2018
Assets	\$ 102,822	\$ 103,461
Liabilities	51,016	51,683
	<u>Third Quarter</u>	<u>First Nine Months</u>
	2019	2018
Sales	\$ 6,076	\$ 6,383
Net earnings attributable to Kraft Heinz common shareholders	899	619
	18,441	19,377
	1,753	2,376

Other investments accounted for pursuant to the equity method include our investments in Berkadia Commercial Mortgage LLC (“Berkadia”), Pilot Travel Centers LLC, d/b/a Pilot Flying J (“Pilot Flying J”), and Electric Transmission Texas, LLC (“ETT”). The carrying value of our investments in these entities was approximately \$3.7 billion as of September 30, 2019 and \$3.5 billion as of December 31, 2018. Our equity method earnings in these entities in the first nine months were \$491 million in 2019 and \$409 million in 2018. Additional information concerning these investments follows.

We own a 50% interest in Berkadia, with Jefferies Financial Group Inc. (“Jefferies”) owning the other 50% interest. Berkadia is a servicer of commercial real estate loans in the U.S., performing primary, master and special servicing functions for U.S. government agency programs, commercial mortgage-backed securities transactions, banks, insurance companies and other financial institutions. A source of funding for Berkadia’s operations is through its issuance of commercial paper, which is currently limited to \$1.5 billion. On September 30, 2019, Berkadia’s commercial paper outstanding was \$1.47 billion. The commercial paper is supported by a surety policy issued by a Berkshire insurance subsidiary. Jefferies is obligated to indemnify us for one-half of any losses incurred under the policy. In addition, a Berkshire Hathaway Energy Company subsidiary owns a 50% interest in ETT, an owner and operator of electric transmission assets in the Electric Reliability Council of Texas footprint. American Electric Power owns the other 50% interest.

On October 3, 2017, we entered into an investment agreement and an equity purchase agreement whereby we acquired a 38.6% interest in Pilot Flying J, headquartered in Knoxville, Tennessee. Pilot Flying J is one of the largest operators of travel centers in North America, with more than 28,000 team members, 750 locations across the U.S. and Canada, and nearly \$30 billion in annual revenues. The Haslam family currently owns a 50.1% interest in Pilot Flying J and a third party owns the remaining 11.3% interest. We also entered into an agreement to acquire in 2023 an additional 41.4% interest in Pilot Flying J with the Haslam family retaining a 20% interest. As a result, Berkshire will become the majority owner of Pilot Flying J in 2023.

Note 6. Investment gains/losses

Investment gains/losses in the third quarter and first nine months of 2019 and 2018 are summarized as follows (in millions).

	<u>Third Quarter</u>		<u>First Nine Months</u>	
	2019	2018	2019	2018
Equity securities:				
Unrealized investment gains (losses) on securities held at the end of the period	\$ 10,489	\$ 14,294	\$ 39,546	\$ 12,126
Investment gains (losses) during the period	135	244	464	307
	10,624	14,538	40,010	12,433
Fixed maturity securities:				
Gross realized gains	59	44	71	451
Gross realized losses	(2)	(10)	(18)	(152)
Other	11	(3)	16	18
	<u>\$ 10,692</u>	<u>\$ 14,569</u>	<u>\$ 40,079</u>	<u>\$ 12,750</u>

Notes to Consolidated Financial Statements (*Continued*)

Note 6. Investment gains/losses (*Continued*)

Prior to 2018, we recognized investment gains and losses in earnings when we sold equity securities based on the difference between the sale proceeds and the cost of the securities and also when we recognized other-than-temporary impairment losses. Beginning in 2018, equity securities gains and losses include unrealized gains and losses from changes in fair values during the period on equity securities we still own. Prior to 2018, we recorded the changes in unrealized gains and losses on our investments in equity securities in other comprehensive income.

In the first nine months of 2019 and 2018, as reflected in the Consolidated Statements of Cash Flows, we received proceeds of approximately \$7.1 billion and \$14.2 billion, respectively, from sales of equity securities. In the preceding table, investment gains/losses on equity securities sold in each period reflect the difference between proceeds from sales and the fair value of the equity security sold at the beginning of the period or the purchase date, if later. Our taxable gains on equity securities sold are generally the difference between the proceeds from sales and original cost. Taxable gains in the third quarter and first nine months of 2019 were \$609 million and \$1,959 million, respectively, and in the third quarter and first nine months of 2018 were \$1,329 million and \$2,688 million, respectively.

Note 7. Loans and finance receivables

Loans and finance receivables are summarized as follows (in millions).

	September 30, 2019	December 31, 2018
Loans and finance receivables before allowances and discounts	\$ 17,462	\$ 16,622
Allowances for uncollectible loans	(183)	(177)
Unamortized acquisition discounts	(144)	(165)
	<u>\$ 17,135</u>	<u>\$ 16,280</u>

Loans and finance receivables are principally installment loans originated or acquired by our manufactured housing business. Provisions for loan losses for the first nine months were \$109 million in both 2019 and 2018. Loan charge-offs, net of recoveries in the first nine months, were \$103 million in 2019 and \$106 million in 2018. At September 30, 2019, approximately 98% of the manufactured housing loan balances were evaluated collectively for impairment, with the remainder evaluated individually. As part of the evaluation process, credit quality indicators are reviewed and loans are designated as performing or non-performing. At September 30, 2019, we considered approximately 99% of the loan balances to be performing and approximately 96% of the loan balances to be current as to payment status.

Additionally, during 2018, an insurance subsidiary entered into an agreement with Seritage Growth Properties to provide a \$2.0 billion term loan facility, which matures on July 31, 2023. As of September 30, 2019 and December 31, 2018, the outstanding loans under the facility were approximately \$1.6 billion.

Note 8. Other receivables

Other receivables of insurance and other businesses are comprised of the following (in millions).

	September 30, 2019	December 31, 2018
Insurance premiums receivable	\$ 13,906	\$ 12,452
Reinsurance recoverable on unpaid losses	3,105	3,060
Trade receivables	12,852	12,617
Other	5,035	3,823
Allowances for uncollectible accounts	(387)	(388)
	<u>\$ 34,511</u>	<u>\$ 31,564</u>

Receivables of railroad and utilities and energy businesses are comprised of the following (in millions).

	September 30, 2019	December 31, 2018
Trade receivables	\$ 3,551	\$ 3,433
Other	342	362
Allowances for uncollectible accounts	(137)	(129)
	<u>\$ 3,756</u>	<u>\$ 3,666</u>

Notes to Consolidated Financial Statements (Continued)

Note 8. Other receivables (Continued)

Trade receivables include unbilled revenue of \$657 million and \$554 million as of September 30, 2019 and December 31, 2018, respectively, attributable to the regulated utility businesses.

Note 9. Inventories

Inventories are comprised of the following (in millions).

	September 30, 2019	December 31, 2018
Raw materials	\$ 4,430	\$ 4,182
Work in process and other	2,695	2,625
Finished manufactured goods	4,737	4,541
Goods acquired for resale	8,089	7,721
	<u>\$ 19,951</u>	<u>\$ 19,069</u>

Note 10. Property, plant and equipment

A summary of property, plant and equipment of our insurance and other businesses follows (in millions).

	September 30, 2019	December 31, 2018
Land	\$ 2,557	\$ 2,536
Buildings and improvements	10,530	9,959
Machinery and equipment	23,409	22,574
Furniture, fixtures and other	5,064	4,758
	<u>41,560</u>	<u>39,827</u>
Accumulated depreciation	(20,330)	(19,199)
	<u>\$ 21,230</u>	<u>\$ 20,628</u>

A summary of property, plant and equipment of railroad and utilities and energy businesses follows (in millions). The utility generation, transmission and distribution systems and interstate natural gas pipeline assets are owned by regulated public utility and natural gas pipeline subsidiaries.

	September 30, 2019	December 31, 2018
Railroad:		
Land, track structure and other roadway	\$ 61,345	\$ 59,509
Locomotives, freight cars and other equipment	13,381	13,016
Construction in progress	788	664
	<u>75,514</u>	<u>73,189</u>
Accumulated depreciation	(11,512)	(10,004)
	<u>64,002</u>	<u>63,185</u>
Utilities and energy:		
Utility generation, transmission and distribution systems	78,596	77,288
Interstate natural gas pipeline assets	7,637	7,524
Independent power plants and other assets	8,572	8,324
Construction in progress	5,313	3,110
	<u>100,118</u>	<u>96,246</u>
Accumulated depreciation	(28,794)	(27,651)
	<u>71,324</u>	<u>68,595</u>
	<u>\$ 135,326</u>	<u>\$ 131,780</u>

Notes to Consolidated Financial Statements (Continued)

Note 10. Property, plant and equipment (Continued)

Depreciation expense for the first nine months of 2019 and 2018 is summarized below (in millions).

	First Nine Months	
	2019	2018
Insurance and other	\$ 1,660	\$ 1,622
Railroad, utilities and energy	3,881	3,678
	\$ 5,541	\$ 5,300

Note 11. Equipment held for lease

Equipment held for lease includes railcars, aircraft, over-the-road trailers, intermodal tank containers, cranes, storage units and furniture. Equipment held for lease is summarized below (in millions).

	September 30, 2019	December 31, 2018
Railcars	\$ 9,211	\$ 8,862
Aircraft	7,907	7,376
Other equipment held for lease	4,802	4,379
	21,920	20,617
Accumulated depreciation	(6,986)	(6,319)
	\$ 14,934	\$ 14,298

Depreciation expense for equipment held for lease in the first nine months was \$880 million in 2019 and \$817 million in 2018. Operating lease revenues by type for the third quarter and first nine months of 2019 were as follows (in millions).

	Fixed lease revenue	Variable lease revenue	Total
Third quarter	\$ 1,097	\$ 341	\$ 1,438
First nine months	3,289	1,076	4,365

Future operating lease rentals to be received on assets we lease to others at September 30, 2019 are as follows (in millions).

2019	2020	2021	2022	2023	Thereafter	Total
\$ 674	\$ 2,245	\$ 1,659	\$ 1,134	\$ 726	\$ 590	\$ 7,028

Note 12. Leases

We are party to contracts where we lease property from others. As a lessee, we primarily lease office and operating facilities, locomotives, freight cars, energy generation facilities and transmission assets. Operating lease right-of-use assets and lease liabilities as of September 30, 2019 were \$5,996 million and \$5,852 million, respectively, and were included in other assets and accounts payable, accruals and other liabilities in our Consolidated Balance Sheet. The weighted average term of these leases was approximately 7.5 years and the weighted average discount rate used to measure lease liabilities was approximately 3.9%. A summary of our remaining operating lease payments as of September 30, 2019 and December 31, 2018 follows (in millions).

	2019	2020	2021	2022	2023	Thereafter	Total lease payments	Amount representing interest	Lease liabilities
September 30, 2019	\$ 296	\$ 1,363	\$ 1,140	\$ 915	\$ 732	\$ 2,423	\$ 6,869	\$ (1,017)	\$ 5,852
December 31, 2018	1,310	1,268	1,048	820	658	2,079	7,183		

Components of operating lease costs for the third quarter and first nine months of 2019 by type were as follows (in millions).

	Operating lease cost	Short-term lease cost	Variable lease cost	Sublease income	Total lease cost
Third quarter	\$ 355	\$ 39	\$ 63	\$ (6)	\$ 451
First nine months	1,083	118	202	(18)	1,385

Notes to Consolidated Financial Statements (Continued)

Note 13. Goodwill and other intangible assets

Reconciliations of the changes in the carrying value of goodwill for the first nine months of 2019 and for the year ended December 31, 2018 follows (in millions).

	September 30, 2019	December 31, 2018
Balance at beginning of year	\$ 81,025	\$ 81,258
Acquisitions of businesses	279	376
Other, including foreign currency translation	(76)	(609)
Balance at end of period	<u>\$ 81,228</u>	<u>\$ 81,025</u>

Other intangible assets and related accumulated amortization are summarized as follows (in millions).

	September 30, 2019		December 31, 2018	
	Gross carrying amount	Accumulated amortization	Gross carrying amount	Accumulated amortization
Insurance and other:				
Trademarks and trade names	\$ 5,145	\$ 743	\$ 5,152	\$ 727
Patents and technology	4,524	2,973	4,446	2,790
Customer relationships	27,786	4,874	27,697	4,287
Other	3,169	1,246	3,198	1,190
	<u>\$ 40,624</u>	<u>\$ 9,836</u>	<u>\$ 40,493</u>	<u>\$ 8,994</u>
Railroad, utilities and energy:				
Trademarks and trade names	\$ 216	\$ 27	\$ 216	\$ 23
Customer relationships	678	315	678	286
Other	117	56	117	53
	<u>\$ 1,011</u>	<u>\$ 398</u>	<u>\$ 1,011</u>	<u>\$ 362</u>

Intangible asset amortization expense in the first nine months was \$986 million in 2019 and \$1,052 million in 2018. Intangible assets with indefinite lives were \$18.8 billion as of September 30, 2019 and \$18.9 billion as of December 31, 2018 and primarily related to certain customer relationships and trademarks and trade names.

Note 14. Derivative contracts

We are party to derivative contracts through certain of our subsidiaries. Currently, the most significant derivative contracts consist of equity index put option contracts. The liabilities and related notional values of these contracts follows (in millions).

	Liabilities	Notional Value
September 30, 2019	\$ 1,236	\$ 23,042
December 31, 2018	2,452	26,759

Notional value represents the aggregate undiscounted amounts payable assuming the value of each index is zero at each contract's expiration date. Certain contracts are denominated in foreign currencies and the related notional amounts are based on the foreign currency exchange rates as of the balance sheet date. Pre-tax gains from equity index put option contracts were \$234 million and \$1,217 million in the third quarter and first nine months of 2019, respectively, and \$137 million and \$303 million in the third quarter and first nine months of 2018, respectively.

Notes to Consolidated Financial Statements (*Continued*)

Note 14. Derivative contracts (*Continued*)

The equity index put option contracts are European style options written prior to March 2008 on four major equity indexes. The remaining contracts expire between October 2019 and October 2025. The weighted average life of unexpired contracts at September 30, 2019 was approximately 1.3 years. Contracts with notional values of \$9.0 billion will expire in the fourth quarter of 2019. Future payments, if any, under any given contract will be required if the prevailing index value is below the contract strike price at the expiration date. We received aggregate premiums of \$3.6 billion on the contract inception dates with respect to unexpired contracts at September 30, 2019 and we have no counterparty credit risk. The aggregate intrinsic value (the undiscounted liability assuming the contracts are settled based on the index values and foreign currency exchange rates as of the balance sheet date) was \$626 million at September 30, 2019 and \$1,653 million at December 31, 2018. These contracts may not be unilaterally terminated or fully settled before the expiration dates and the ultimate amount of cash basis gains or losses on these contracts will not be determined until the contract expiration dates.

A limited number of our equity index put option contracts contain collateral posting requirements with respect to changes in the fair value or intrinsic value of the contracts and/or a downgrade of Berkshire's credit ratings. As of September 30, 2019, we did not have any collateral posting requirements. If Berkshire's credit ratings (currently AA from Standard & Poor's and Aa2 from Moody's) are downgraded below either A- by Standard & Poor's or A3 by Moody's, collateral of up to \$1.1 billion could be required to be posted.

Our regulated utility subsidiaries are exposed to variations in the prices of fuel required to generate electricity, wholesale electricity purchased and sold and natural gas supplied for customers. We may use forward purchases and sales, futures, swaps and options to manage a portion of these price risks. Most of the net derivative contract assets or liabilities of our regulated utilities are probable of recovery through rates and are offset by regulatory liabilities or assets. Derivative contract assets are included in other assets and were \$144 million as of September 30, 2019 and \$172 million as of December 31, 2018. Derivative contract liabilities are included in accounts payable, accruals and other liabilities and were \$96 million as of September 30, 2019 and \$111 million as of December 31, 2018.

Note 15. Supplemental cash flow information

A summary of supplemental cash flow information is presented in the following table (in millions).

	First Nine Months	
	2019	2018
Cash paid during the period for:		
Income taxes	\$ 4,395	\$ 3,977
Interest:		
Insurance and other	879	934
Railroad, utilities and energy	2,149	2,129
Non-cash investing and financing activities:		
Liabilities assumed in connection with business acquisitions	147	93
Right-of-use assets obtained in exchange for new operating lease liabilities	526	—

Notes to Consolidated Financial Statements (Continued)

Note 16. Unpaid losses and loss adjustment expenses

Our liabilities for unpaid losses and loss adjustment expenses (also referred to as “claim liabilities”) under short-duration property and casualty insurance and reinsurance contracts are based upon estimates of the ultimate claim costs associated with claim occurrences on or before the balance sheet date and include estimates for incurred-but-not-reported (“IBNR”) claims. Reconciliations of the changes in claim liabilities, excluding liabilities under retroactive reinsurance contracts (see Note 17), for each of the nine months ending September 30, 2019 and 2018 follow (in millions).

	2019	2018
Balances – beginning of year:		
Gross liabilities	\$ 68,458	\$ 61,122
Reinsurance recoverable on unpaid losses	(3,060)	(3,201)
Net liabilities	<u>65,398</u>	<u>57,921</u>
Incurred losses and loss adjustment expenses:		
Current accident year events	31,179	29,071
Prior accident years’ events	(396)	(1,566)
Total incurred losses and loss adjustment expenses	<u>30,783</u>	<u>27,505</u>
Paid losses and loss adjustment expenses:		
Current accident year events	(13,144)	(12,474)
Prior accident years’ events	(13,967)	(11,516)
Total payments	<u>(27,111)</u>	<u>(23,990)</u>
Foreign currency translation adjustment	(178)	(117)
Balances – September 30:		
Net liabilities	68,892	61,319
Reinsurance recoverable on unpaid losses	3,105	2,944
Gross liabilities	<u>\$ 71,997</u>	<u>\$ 64,263</u>

Incurred losses and loss adjustment expenses in the first nine months of 2019 and 2018 included net decreases of estimated ultimate liabilities for prior accident years of \$396 million and \$1,566 million, respectively. Increases and decreases in estimated ultimate liabilities produce corresponding decreases and increases to pre-tax earnings. The reductions in incurred losses for prior accident years’ events for the first nine months as percentages of net liabilities at the beginning of the respective year were 0.6% in 2019 and 2.7% in 2018.

In the first nine months of 2019, we lowered estimated ultimate liabilities of primary insurance for prior years’ events by \$321 million, compared to \$985 million in 2018. Reductions of estimated liabilities in the first nine months of 2019 were lower than the first nine months of 2018 with respect to private passenger automobile and medical malpractice insurance. In addition, we increased estimated liabilities in the first nine months of 2019 for legacy casualty exposures and other commercial insurance business.

In the first nine months of 2019, we decreased estimated ultimate property and casualty reinsurance liabilities for prior years’ events by \$75 million, compared to \$581 million in the first nine months of 2018. The decreases in prior years’ incurred losses in each year derived primarily from property claims.

Notes to Consolidated Financial Statements (Continued)

Note 17. Retroactive reinsurance contracts

Retroactive reinsurance policies provide indemnification of losses and loss adjustment expenses of short-duration insurance contracts with respect to underlying loss events that occurred prior to the contract inception date. Depending on the contract terms, claims payments may commence immediately after the contract date or once a contractual retention amount has been reached. Reconciliations of the changes in estimated liabilities for retroactive reinsurance unpaid losses and loss adjustment expenses (“claim liabilities”) and related deferred charge reinsurance assumed assets for each of the nine months ending September 30, 2019 and 2018 follows (in millions).

	2019	2018	
	Unpaid losses and loss adjustment expenses	Deferred charges reinsurance assumed	
Balances – beginning of year:	\$ 41,834	\$ (14,104)	\$ 42,937
Incurred losses and loss adjustment expenses			
Current year contracts	175	(82)	—
Prior years’ contracts	(2)	827	(36) 827
Total	173	745	(36) 827
Paid losses and loss adjustment expenses	(643)	—	(966) —
Balances – September 30:	<u>\$ 41,364</u>	<u>\$ (13,359)</u>	<u>\$ 41,935</u>
Incurred losses and loss adjustment expenses, net of deferred charges	<u>\$ 918</u>		<u>\$ 791</u>

In the preceding table, classifications of incurred losses and loss adjustment expenses are based on the inception dates of the contracts. Incurred losses and loss adjustment expenses in the first nine months related to contracts written in prior years were \$825 million in 2019 and \$791 million in 2018. Such losses reflected the periodic amortization of deferred charge assets and the effects of changes in the timing and amount of ultimate claim liabilities.

In 2017, National Indemnity Company (“NICO”) entered into a contract with various subsidiaries of American International Group, Inc. (collectively, “AIG”). Our estimated ultimate claim liabilities with respect to the AIG contract at both September 30, 2019 and December 31, 2018 were \$18.2 billion. Deferred charge assets related to the AIG contract were approximately \$6.4 billion at September 30, 2019 and \$6.9 billion at December 31, 2018.

Note 18. Notes payable and other borrowings

Notes payable and other borrowings are summarized below (in millions). The weighted average interest rates and maturity date ranges shown in the following tables are based on borrowings as of September 30, 2019.

	Weighted Average Interest Rate	September 30, 2019	December 31, 2018
<i>Insurance and other:</i>			
Berkshire Hathaway Inc. (“Berkshire”):			
U.S. Dollar denominated due 2019-2047	3.2%	\$ 8,321	\$ 9,065
Euro denominated due 2020-2035	1.1%	7,422	7,806
Japanese Yen denominated due 2024-2049	0.5%	3,962	—
Berkshire Hathaway Finance Corporation (“BHFC”):			
U.S. Dollar denominated due 2020-2049	4.1%	8,679	10,650
Great Britain Pound denominated due 2039-2059	2.5%	2,108	—
Other subsidiary borrowings due 2019-2045	4.0%	5,304	5,597
Subsidiary short-term borrowings	4.1%	1,380	1,857
		<u>\$ 37,176</u>	<u>\$ 34,975</u>

Notes to Consolidated Financial Statements (Continued)

Note 18. Notes payable and other borrowings (Continued)

In September 2019, Berkshire issued ¥430.0 billion of senior notes consisting of ¥108.5 billion of 0.17% senior notes due in 2024, ¥61.0 billion of 0.27% senior notes due in 2026, ¥146.5 billion of 0.44% senior notes due in 2029, ¥19.0 billion of 0.787% senior notes due in 2034, ¥59.0 billion of 0.965% senior notes due in 2039 and ¥36.0 billion of 1.108% senior notes due in 2049.

Borrowings of BHFC, a wholly owned finance subsidiary of Berkshire, consist of senior unsecured notes used to fund manufactured housing loans originated or acquired and equipment held for lease of certain subsidiaries. BHFC borrowings are fully and unconditionally guaranteed by Berkshire. BHFC repaid \$3.95 billion of maturing senior notes in the first nine months of 2019. In January 2019, BHFC issued \$2.0 billion of 4.25% senior notes due in 2049. In June 2019, BHFC also issued £1.75 billion of senior notes consisting of £1.0 billion of 2.375% senior notes due in 2039 and £750 million of 2.625% senior notes due in 2059.

The carrying values of our non-U.S. Dollar denominated senior notes (€6.85 billion, £1.75 billion and ¥430 billion par) reflect the applicable exchange rates as of the balance sheet dates. The effects of changes in foreign currency exchange rates during the period are recorded in earnings as a component of selling, general and administrative expenses. Changes in the exchange rates resulted in pre-tax gains of \$447 million in the first nine months of 2019 and \$273 million in the first nine months of 2018.

In addition to BHFC borrowings, Berkshire guaranteed approximately \$1.3 billion of other subsidiary borrowings at September 30, 2019. Generally, Berkshire's guarantee of a subsidiary's debt obligation is an absolute, unconditional and irrevocable guarantee for the full and prompt payment when due of all payment obligations.

	Weighted Average Interest Rate	September 30, 2019	December 31, 2018
<i>Railroad, utilities and energy:</i>			
Berkshire Hathaway Energy Company ("BHE") and subsidiaries:			
BHE senior unsecured debt due 2020-2049	4.6%	\$ 8,580	\$ 8,577
Subsidiary and other debt due 2019-2064	4.5%	29,329	28,196
Short-term borrowings	2.8%	3,119	2,516
Burlington Northern Santa Fe and subsidiaries due 2019-2097	4.6%	23,990	23,226
		<u>\$ 65,018</u>	<u>\$ 62,515</u>

BHE subsidiary debt represents amounts issued pursuant to separate financing agreements. Substantially all of the assets of certain BHE subsidiaries are, or may be, pledged or encumbered to support or otherwise secure debt. These borrowing arrangements generally contain various covenants, including covenants which pertain to leverage ratios, interest coverage ratios and/or debt service coverage ratios. During the first nine months of 2019, BHE and its subsidiaries issued approximately \$3.4 billion of long-term debt. The debt issued in 2019 has maturity dates ranging from 2029 to 2050 and a weighted average interest rate of 3.9%. Proceeds from these debt issuances were used to repay debt, to fund capital expenditures and for general corporate purposes.

BNSF's borrowings are primarily senior unsecured debentures. In July 2019, BNSF issued \$825 million of 3.55% senior unsecured debentures due in 2050. As of September 30, 2019, BNSF, BHE and their subsidiaries were in compliance with all applicable debt covenants. Berkshire does not guarantee any debt, borrowings or lines of credit of BNSF, BHE or their subsidiaries.

As of September 30, 2019, our subsidiaries had unused lines of credit and commercial paper capacity aggregating approximately \$7.2 billion to support short-term borrowing programs and provide additional liquidity. Such unused lines of credit included approximately \$5.7 billion related to BHE and its subsidiaries.

Notes to Consolidated Financial Statements (Continued)

Note 19. Fair value measurements

Our financial assets and liabilities are summarized below as of September 30, 2019 and December 31, 2018, with fair values shown according to the fair value hierarchy (in millions). The carrying values of cash and cash equivalents, U.S. Treasury Bills, receivables and accounts payable, accruals and other liabilities are considered to be reasonable estimates of their fair values.

	<u>Carrying Value</u>	<u>Fair Value</u>	<u>Quoted Prices (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Significant Unobservable Inputs (Level 3)</u>
September 30, 2019					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 3,805	\$ 3,805	\$ 2,833	\$ 972	\$ —
States, municipalities and political subdivisions	157	157	—	157	—
Foreign governments	8,023	8,023	5,752	2,271	—
Corporate bonds	6,704	6,704	—	6,701	3
Mortgage-backed securities	483	483	—	483	—
Investments in equity securities	220,051	220,051	209,195	51	10,805
Investment in Kraft Heinz common stock	13,770	9,091	9,091	—	—
Loans and finance receivables	17,135	17,367	—	1,758	15,609
Derivative contract assets ⁽¹⁾	144	144	—	18	126
Derivative contract liabilities:					
Railroad, utilities and energy ⁽¹⁾	96	96	6	62	28
Equity index put options	1,236	1,236	—	—	1,236
Notes payable and other borrowings:					
Insurance and other	37,176	40,409	—	40,381	28
Railroad, utilities and energy	65,018	76,008	—	76,008	—
December 31, 2018					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 4,223	\$ 4,223	\$ 2,933	\$ 1,290	\$ —
States, municipalities and political subdivisions	189	189	—	189	—
Foreign governments	7,502	7,502	5,417	2,085	—
Corporate bonds	7,440	7,440	—	7,434	6
Mortgage-backed securities	544	544	—	544	—
Investments in equity securities	172,757	172,757	172,253	203	301
Investment in Kraft Heinz common stock	13,813	14,007	14,007	—	—
Loans and finance receivables	16,280	16,377	—	1,531	14,846
Derivative contract assets ⁽¹⁾	172	172	2	52	118
Derivative contract liabilities:					
Railroad, utilities and energy ⁽¹⁾	111	111	1	101	9
Equity index put options	2,452	2,452	—	—	2,452
Notes payable and other borrowings:					
Insurance and other	34,975	35,361	—	35,335	26
Railroad, utilities and energy	62,515	66,422	—	66,422	—

⁽¹⁾ Assets are included in other assets and liabilities are included in accounts payable, accruals and other liabilities.

Notes to Consolidated Financial Statements (*Continued*)

Note 19. Fair value measurements (*Continued*)

The fair values of substantially all of our financial instruments were measured using market or income approaches. The hierarchy for measuring fair value consists of Levels 1 through 3, which are described below.

Level 1 – Inputs represent unadjusted quoted prices for identical assets or liabilities exchanged in active markets.

Level 2 – Inputs include directly or indirectly observable inputs (other than Level 1 inputs) such as quoted prices for similar assets or liabilities exchanged in active or inactive markets; quoted prices for identical assets or liabilities exchanged in inactive markets; other inputs that may be considered in fair value determinations of the assets or liabilities, such as interest rates and yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates; and inputs that are derived principally from or corroborated by observable market data by correlation or other means. Pricing evaluations generally reflect discounted expected future cash flows, which incorporate yield curves for instruments with similar characteristics, such as credit ratings, estimated durations and yields for other instruments of the issuer or entities in the same industry sector.

Level 3 – Inputs include unobservable inputs used in the measurement of assets and liabilities. Management is required to use its own assumptions regarding unobservable inputs because there is little, if any, market activity in the assets or liabilities and it may be unable to corroborate the related observable inputs. Unobservable inputs require management to make certain projections and assumptions about the information that would be used by market participants in valuing assets or liabilities.

Reconciliations of significant assets and liabilities measured and carried at fair value on a recurring basis with the use of significant unobservable inputs (Level 3) for the nine months ended September 30, 2019 and 2018 follow (in millions).

	Gains (losses) included in:						
	Balance – beginning of year	Earnings	Other comprehensive income	Regulatory assets and liabilities	Acquisitions, dispositions and settlements	Balance – September 30	
Investments in fixed maturity and equity securities:							
2019	\$ 307	\$ 499	\$ —	\$ —	\$ 10,002	\$ 10,808	
2018	6	—	—	—	(1)	5	
Net derivative contract assets (liabilities):							
2019	(2,343)	1,528	(1)	(40)	(282)	(1,138)	
2018	(2,069)	446	—	(11)	(141)	(1,775)	

Quantitative information as of September 30, 2019, with respect to assets and liabilities measured and carried at fair value on a recurring basis with the use of significant unobservable inputs (Level 3) follows (in millions).

	Fair Value	Principal Valuation Techniques	Unobservable Inputs	Weighted Average
Investments in equity securities:				
Preferred stocks	\$ 10,363	Discounted cash flow	Expected duration	10 years
			Discount for transferability restrictions and subordination	375 basis points
Common stock warrants	136	Warrant pricing model	Expected duration	10 years
Derivative contract liabilities	1,236	Option pricing model	Volatility	16%

Investments in equity securities at September 30, 2019 included our investments in Occidental preferred stock and common stock warrants (see Note 4). These investments are subject to contractual restrictions on transferability and may contain provisions that prevent us from economically hedging our investments. In applying discounted cash flow techniques in valuing the perpetual preferred stock, we made assumptions regarding the expected duration of the investment, as the issuer may have the right to redeem or convert the stock. We also made estimates regarding the impact of subordination, as the preferred stock has a lower priority in liquidation than debt instruments of the issuer. In valuing the common stock warrants, we used a warrant valuation model. While most of the inputs to the model are observable, we made assumptions regarding the expected duration of the investment. Increases or decreases to these inputs would result in decreases or increases to the fair value of the investments.

Notes to Consolidated Financial Statements (*Continued*)

Note 19. Fair value measurements (*Continued*)

Our equity index put option derivative contracts are illiquid and contain contract terms that are not standard in derivatives markets. For example, we are not required to post collateral under most of our contracts and certain of the contracts have relatively long durations. For these and other reasons, we classified these contracts as Level 3 measurements. The methods we use to value these contracts are those that we believe market participants would use in determining exchange prices with respect to our contracts.

We value equity index put option contracts based on the Black-Scholes option valuation model. Inputs to this model include index price, contract duration and dividend and interest rate inputs (including a Berkshire non-performance input) which are observable. However, we believe that the valuation of long-duration options using any model is inherently subjective and, given the lack of observable transactions and prices, acceptable values may be subject to wide ranges. Volatility inputs represent our expectations, which consider the remaining duration of each contract and assume that the contracts will remain outstanding until the expiration dates. Increases or decreases in the volatility inputs will produce increases or decreases in the fair values of the liabilities.

Note 20. Common stock

Changes in Berkshire's issued, treasury and outstanding common stock during the first nine months of 2019 are shown in the table below. In addition to our common stock, 1,000,000 shares of preferred stock are authorized, but none are issued.

	Class A, \$5 Par Value (1,650,000 shares authorized)			Class B, \$0.0033 Par Value (3,225,000,000 shares authorized)		
	Issued	Treasury	Outstanding	Issued	Treasury	Outstanding
Balance December 31, 2018	742,213	(12,897)	729,316	1,373,558,983	(6,138,909)	1,367,420,074
Conversions of Class A common stock to Class B common stock and exercises of replacement stock options	(18,581)	—	(18,581)	28,137,369	—	28,137,369
Treasury stock acquired	—	(1,752)	(1,752)	—	(11,454,833)	(11,454,833)
Balance at September 30, 2019	<u>723,632</u>	<u>(14,649)</u>	<u>708,983</u>	<u>1,401,696,352</u>	<u>(17,593,742)</u>	<u>1,384,102,610</u>

Each Class A common share is entitled to one vote per share. Class B common stock possesses dividend and distribution rights equal to one-fifteen-hundredth (1/1,500) of such rights of Class A common stock. Each Class B common share possesses voting rights equivalent to one-ten-thousandth (1/10,000) of the voting rights of a Class A share. Unless otherwise required under Delaware General Corporation Law, Class A and Class B common shares vote as a single class. Each share of Class A common stock is convertible, at the option of the holder, into 1,500 shares of Class B common stock. Class B common stock is not convertible into Class A common stock. On an equivalent Class A common stock basis, there were 1,631,718 shares outstanding as of September 30, 2019 and 1,640,929 shares outstanding as of December 31, 2018.

Since we have two classes of common stock, we provide earnings per share data on the Consolidated Statements of Earnings for average equivalent Class A shares outstanding and average equivalent Class B shares outstanding. Class B shares are economically equivalent to one-fifteen-hundredth (1/1,500) of a Class A share. Average equivalent Class A shares outstanding represents average Class A shares outstanding plus one-fifteen-hundredth (1/1,500) of the average Class B shares outstanding. Average equivalent Class B shares outstanding represents average Class B shares outstanding plus 1,500 times average Class A shares outstanding.

For several years, Berkshire had a common stock repurchase program that permitted Berkshire to repurchase its Class A and Class B shares at prices no higher than a 20% premium over the book value of the shares. On July 17, 2018, Berkshire's Board of Directors authorized an amendment to the program, permitting Berkshire to repurchase shares any time that Warren Buffett, Berkshire's Chairman of the Board and Chief Executive Officer, and Charlie Munger, Vice Chairman of the Board, believe that the repurchase price is below Berkshire's intrinsic value, conservatively determined. The program continues to allow share repurchases in the open market or through privately negotiated transactions and does not specify a maximum number of shares to be repurchased. However, repurchases will not be made if they would reduce the total value of Berkshire's consolidated cash, cash equivalents and U.S. Treasury Bills holdings below \$20 billion. The repurchase program does not obligate Berkshire to repurchase any specific dollar amount or number of Class A or Class B shares and there is no expiration date to the program.

Notes to Consolidated Financial Statements (*Continued*)

Note 21. Income taxes

Our consolidated effective income tax rates for the third quarter and first nine months of 2019 were 18.7% and 20.2%, respectively. Our effective income tax rates were 19.2% and 19.1% in the third quarter and first nine months of 2018, respectively. Our effective income tax rate normally reflects recurring benefits from dividends-received deductions applicable to investments in equity securities and production tax credits related to wind-powered electricity generation placed in service in the U.S. Our periodic effective income tax rate will also vary due to the changes in mix of pre-tax earnings and underlying income tax rates applicable in the various taxing jurisdictions. In the first quarter of 2019, we recorded income tax expense of \$377 million for uncertain tax positions related to investments in certain tax equity investment funds that generated income tax benefits from 2015 through 2018. We now believe that it is more likely than not those income tax benefits are not valid.

Note 22. Accumulated other comprehensive income

A summary of the net changes in after-tax accumulated other comprehensive income attributable to Berkshire Hathaway shareholders and amounts reclassified out of accumulated other comprehensive income for the nine months ending September 30, 2019 and 2018 follows (in millions).

	Unrealized appreciation of investments, net	Foreign currency translation	Defined benefit pension plans	Other	Accumulated other comprehensive income
First nine months of 2019:					
Balance at December 31, 2018	\$ 370	\$ (4,603)	\$ (816)	\$ 34	\$ (5,015)
Other comprehensive income, net before reclassifications	95	(534)	(18)	(32)	(489)
Reclassifications into net earnings:					
Reclassifications before income taxes	53	—	68	6	127
Applicable income taxes	(11)	—	(17)	(3)	(31)
Balance at September 30, 2019	<u>\$ 507</u>	<u>\$ (5,137)</u>	<u>\$ (783)</u>	<u>\$ 5</u>	<u>\$ (5,408)</u>
First nine months of 2018:					
Balance at December 31, 2017	\$ 62,093	\$ (3,114)	\$ (420)	\$ 12	\$ 58,571
Reclassifications to retained earnings upon adoption of new accounting standards	(61,340)	(65)	36	(6)	(61,375)
Other comprehensive income, net before reclassifications	(142)	(776)	(33)	(19)	(970)
Reclassifications into net earnings:					
Reclassifications before income taxes	(299)	—	101	10	(188)
Applicable income taxes	63	—	(25)	(3)	35
Balance at September 30, 2018	<u>\$ 375</u>	<u>\$ (3,955)</u>	<u>\$ (341)</u>	<u>\$ (6)</u>	<u>\$ (3,927)</u>

Note 23. Contingencies and Commitments

We are parties in a variety of legal actions that routinely arise out of the normal course of business, including legal actions seeking to establish liability directly through insurance contracts or indirectly through reinsurance contracts issued by Berkshire subsidiaries. Plaintiffs occasionally seek punitive or exemplary damages. We do not believe that such normal and routine litigation will have a material effect on our financial condition or results of operations. Berkshire and certain of its subsidiaries are also involved in other kinds of legal actions, some of which assert or may assert claims or seek to impose fines and penalties. We believe that any liability that may arise from other pending legal actions will not have a material effect on our consolidated financial condition or results of operations.

Notes to Consolidated Financial Statements (Continued)

Note 24. Revenues from contracts with customers

On January 1, 2018, we adopted ASC 606 “Revenues from Contracts with Customers.” Under ASC 606, revenues are recognized when a good or service is transferred to a customer. A good or service is transferred when or as the customer obtains control of that good or service. Revenues are based on the consideration we expect to receive in connection with our promises to deliver goods and services to our customers.

The following tables summarize customer contract revenues disaggregated by reportable segment and the source of the revenue for the third quarter and first nine months of 2019 and 2018 (in millions). Other revenues included in consolidated revenues were primarily insurance premiums earned, interest, dividend and other investment income and leasing revenues which are not within the scope of ASC 606.

	Manufacturing	McLane Company	Service and Retail	BNSF	Berkshire Hathaway Energy	Insurance, Corporate and other	Total
Three months ending September 30, 2019							
Manufactured products:							
Industrial and commercial products	\$ 6,346	\$ —	\$ 44	\$ —	\$ —	\$ —	\$ 6,390
Building products	4,101	—	—	—	—	—	4,101
Consumer products	3,528	—	—	—	—	—	3,528
Grocery and convenience store distribution	—	8,298	—	—	—	—	8,298
Food and beverage distribution	—	4,202	—	—	—	—	4,202
Auto sales	—	—	2,250	—	—	—	2,250
Other retail and wholesale distribution	524	—	2,946	—	—	—	3,470
Service	445	80	1,034	5,967	1,191	—	8,717
Electricity and natural gas	—	—	—	—	4,213	—	4,213
Total	14,944	12,580	6,274	5,967	5,404	—	45,169
Other revenue	937	24	1,080	15	316	17,431	19,803
	\$ 15,881	\$ 12,604	\$ 7,354	\$ 5,982	\$ 5,720	\$ 17,431	\$ 64,972
Nine months ending September 30, 2019							
Manufactured products:							
Industrial and commercial products	\$ 19,308	\$ —	\$ 136	\$ —	\$ —	\$ —	\$ 19,444
Building products	11,796	—	—	—	—	—	11,796
Consumer products	10,487	—	—	—	—	—	10,487
Grocery and convenience store distribution	—	24,375	—	—	—	—	24,375
Food and beverage distribution	—	12,648	—	—	—	—	12,648
Auto sales	—	—	6,312	—	—	—	6,312
Other retail and wholesale distribution	1,602	—	8,959	—	—	—	10,561
Service	1,222	123	3,068	17,517	3,139	—	25,069
Electricity and natural gas	—	—	—	—	11,329	—	11,329
Total	44,415	37,146	18,475	17,517	14,468	—	132,021
Other revenue	2,715	68	3,323	41	894	50,186	57,227
	\$ 47,130	\$ 37,214	\$ 21,798	\$ 17,558	\$ 15,362	\$ 50,186	\$ 189,248

Notes to Consolidated Financial Statements (Continued)

Note 24. Revenues from contracts with customers (Continued)

	<u>Manufacturing</u>	<u>McLane Company</u>	<u>Service and Retail</u>	<u>BNSF</u>	<u>Berkshire Hathaway Energy</u>	<u>Insurance, Corporate and other</u>	<u>Total</u>
Three months ending September 30, 2018							
Manufactured products:							
Industrial and commercial products	\$ 6,466	\$ —	\$ 47	\$ —	\$ —	\$ —	\$ 6,513
Building products	3,477	—	—	—	—	—	3,477
Consumer products	4,008	—	—	—	—	—	4,008
Grocery and convenience store distribution	—	8,709	—	—	—	—	8,709
Food and beverage distribution	—	4,079	—	—	—	—	4,079
Auto sales	—	—	2,083	—	—	—	2,083
Other retail and wholesale distribution	524	—	3,137	—	—	—	3,661
Service	395	16	980	6,099	1,140	—	8,630
Electricity and natural gas	—	—	—	—	4,267	—	4,267
Total	14,870	12,804	6,247	6,099	5,407	—	45,427
Other revenue	795	18	964	13	299	15,934	18,023
	<u>\$ 15,665</u>	<u>\$ 12,822</u>	<u>\$ 7,211</u>	<u>\$ 6,112</u>	<u>\$ 5,706</u>	<u>\$ 15,934</u>	<u>\$ 63,450</u>

Nine months ending September 30, 2018

Manufactured products:							
Industrial and commercial products	\$ 19,809	\$ —	\$ 155	\$ —	\$ —	\$ —	\$ 19,964
Building products	9,828	—	—	—	—	—	9,828
Consumer products	11,858	—	—	—	—	—	11,858
Grocery and convenience store distribution	—	25,128	—	—	—	—	25,128
Food and beverage distribution	—	12,203	—	—	—	—	12,203
Auto sales	—	—	6,087	—	—	—	6,087
Other retail and wholesale distribution	1,541	—	8,791	—	—	—	10,332
Service	892	53	2,953	17,510	3,026	—	24,434
Electricity and natural gas	—	—	—	—	11,357	—	11,357
Total	43,928	37,384	17,986	17,510	14,383	—	131,191
Other revenue	2,346	54	3,298	37	885	46,312	52,932
	<u>\$ 46,274</u>	<u>\$ 37,438</u>	<u>\$ 21,284</u>	<u>\$ 17,547</u>	<u>\$ 15,268</u>	<u>\$ 46,312</u>	<u>\$ 184,123</u>

A summary of the transaction price allocated to the significant unsatisfied remaining performance obligations relating to contracts with expected durations in excess of one year as of September 30, 2019 follows (in millions).

	Performance obligations expected to be satisfied:		
	Less than 12 months	Greater than 12 months	Total
Electricity and natural gas	\$ 922	\$ 5,309	\$ 6,231
Other sales and service contracts	1,196	2,540	3,736

Notes to Consolidated Financial Statements (Continued)

Note 25. Business segment data

Our operating businesses include a large and diverse group of insurance, manufacturing, service and retailing businesses. We organize our reportable business segments in a manner that reflects how management views those business activities. Certain businesses are grouped together for segment reporting based upon similar products or product lines, marketing, selling and distribution characteristics, even though those business units are operated under separate local management. The accompanying business segment information for the 2018 periods reflects certain reclassifications to conform to presentations as of December 31, 2018. Specifically, business units that previously were reported as the finance and financial products segment in the 2018 periods were reclassified to manufacturing (Clayton Homes and UTLX), services and retailing (CORT and XTRA leasing) and corporate and other (principally investment income). Revenues and earnings before income taxes by segment for the third quarter and first nine months of 2019 and 2018 were as follows (in millions).

	Third Quarter		First Nine Months	
	2019	2018	2019	2018
Revenues of Operating Businesses:				
Insurance:				
Underwriting:				
GEICO	\$ 8,996	\$ 8,506	\$ 26,487	\$ 24,705
Berkshire Hathaway Reinsurance Group	3,940	3,777	11,193	11,229
Berkshire Hathaway Primary Group	2,387	2,050	6,825	5,921
Investment income	1,789	1,446	4,930	4,058
Total insurance	17,112	15,779	49,435	45,913
BNSF	6,021	6,147	17,676	17,649
Berkshire Hathaway Energy	5,720	5,706	15,362	15,268
Manufacturing	15,897	15,686	47,173	46,335
McLane Company	12,604	12,822	37,214	37,438
Service and retailing	7,378	7,230	21,865	21,352
	64,732	63,370	188,725	183,955
Reconciliation of segments to consolidated amount:				
Corporate, eliminations and other	240	80	523	168
	<u>\$ 64,972</u>	<u>\$ 63,450</u>	<u>\$ 189,248</u>	<u>\$ 184,123</u>
	Third Quarter		First Nine Months	
	2019	2018	2019	2018
Earnings Before Income Taxes of Operating Businesses:				
Insurance:				
Underwriting:				
GEICO	\$ 376	\$ 627	\$ 1,539	\$ 1,977
Berkshire Hathaway Reinsurance Group	52	(163)	(305)	(124)
Berkshire Hathaway Primary Group	153	135	290	468
Investment income	1,782	1,455	4,916	4,052
Total insurance	2,363	2,054	6,440	6,373
BNSF	1,941	1,879	5,379	5,047
Berkshire Hathaway Energy	1,061	1,165	2,194	2,238
Manufacturing	2,484	2,369	7,205	7,105
McLane Company	50	44	220	171
Service and retailing	639	701	2,005	2,037
	8,538	8,212	23,443	22,971
Reconciliation of segments to consolidated amount:				
Investment and derivative gains (losses)	10,926	14,706	41,296	13,053
Interest expense, not allocated to segments	(96)	(115)	(312)	(350)
Equity method investments	644	316	936	1,044
Corporate, eliminations and other	477	28	532	4
	<u>\$ 20,489</u>	<u>\$ 23,147</u>	<u>\$ 65,895</u>	<u>\$ 36,722</u>

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations

Net earnings attributable to Berkshire Hathaway shareholders are disaggregated in the table that follows. Amounts are after deducting income taxes and exclude earnings attributable to noncontrolling interests (in millions).

	Third Quarter		First Nine Months	
	2019	2018	2019	2018
Insurance – underwriting	\$ 440	\$ 441	\$ 1,182	\$ 1,791
Insurance – investment income	1,484	1,239	4,087	3,393
Railroad	1,466	1,393	4,057	3,847
Utilities and energy	1,178	1,091	2,390	2,257
Manufacturing, service and retailing	2,455	2,411	7,142	7,024
Investment and derivative gains (losses)	8,666	11,660	32,706	10,352
Other	835	305	694	749
Net earnings attributable to Berkshire Hathaway shareholders	<u>\$ 16,524</u>	<u>\$ 18,540</u>	<u>\$ 52,258</u>	<u>\$ 29,413</u>

Through our subsidiaries, we engage in a number of diverse business activities. We manage our operating businesses on an unusually decentralized basis. There are essentially no centralized or integrated business functions and there is minimal involvement by our corporate headquarters in the day-to-day business activities of the operating businesses. Our senior corporate management team participates in and is ultimately responsible for significant capital allocation decisions, investment activities and the selection of the Chief Executive to head each of the operating businesses. The business segment data (Note 25 to the accompanying Consolidated Financial Statements) should be read in conjunction with this discussion.

Our insurance businesses generated after-tax earnings from underwriting of \$440 million in the third quarter and \$1,182 million in the first nine months of 2019. Insurance underwriting results in the first nine months of 2019 include earnings from primary insurance and losses from reinsurance, reflecting lower gains from reductions of claim liability estimates for prior years' property/casualty loss events and lower gains from foreign currency remeasurement applicable to certain reinsurance liabilities than in 2018. After-tax earnings from insurance investment income increased 19.8% in the third quarter and 20.5% in the first nine months of 2019 over the same periods in 2018. These increases reflect higher short-term interest income and dividend income.

After-tax earnings of our railroad business increased 5.2% in the third quarter and 5.5% in the first nine months of 2019 compared to 2018. Earnings in 2019 were negatively affected by persistent flooding conditions and severe winter weather, which negatively affected operating costs and freight volumes. During the third quarter, the company placed back into service all key routes impacted by flooding. Earnings in 2019 benefited from higher rates per car/unit, a curtailment gain related to an amendment to defined benefit retirement plans and ongoing operating cost control initiatives.

After-tax earnings of our utilities and energy business increased 8.0% in the third quarter and 5.9% in the first nine months of 2019 compared to the corresponding 2018 periods. Earnings from our manufacturing, service and retailing businesses increased approximately 2% in both the third quarter and first nine months over the same periods in 2018. Operating results of our manufacturing, service and retailing businesses in 2019 were mixed, with several of these businesses experiencing lower earnings in 2019. Revenues and pre-tax earnings in 2019 of certain of these businesses were negatively affected by the unfavorable effects of foreign currency translation attributable to a stronger U.S. Dollar, international trade tensions and U.S. trade tariffs.

Investment and derivative gains/losses in 2019 and 2018 included significant unrealized gains from market price changes on our holdings of equity securities. After-tax unrealized gains on equity securities were approximately \$8.0 billion in the third quarter and \$30.1 billion in the first nine months of 2019 and were approximately \$10.2 billion in the third quarter and \$7.5 billion in the first nine months of 2018. After-tax investment gains in 2019 also included after-tax realized gains on sales of equity and fixed maturity securities of \$513 million in the third quarter and \$1.6 billion in the first nine months. After-tax realized gains on sales of equity and fixed maturity securities in 2018 were \$995 million in the third quarter and \$2.3 billion in the first nine months.

We believe that investment and derivative gains/losses, whether realized from dispositions or settlements or unrealized from changes in market prices of equity securities, are generally meaningless in understanding our reported results or evaluating our economic performance. These gains and losses have caused and will continue to cause significant volatility in our periodic earnings.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Insurance—Underwriting

Our management views our insurance businesses as possessing two distinct activities – underwriting and investing. Underwriting decisions are the responsibility of the unit managers, while investing decisions are the responsibility of Berkshire's Chairman and CEO, Warren E. Buffett and Berkshire's corporate investment managers. Accordingly, we evaluate performance of underwriting operations without any allocation of investment income or investment gains/losses. We consider investment income as a component of our aggregate insurance operating results. However, we consider investment gains and losses, whether realized or unrealized as non-operating, based on our long-held philosophy of acquiring securities and holding those securities for long periods. Accordingly, we believe that such gains and losses are not necessarily meaningful in understanding the operating results of our insurance operations.

The timing and amount of catastrophe losses can produce significant volatility in our periodic underwriting results, particularly with respect to our reinsurance businesses. Generally, we consider pre-tax losses in excess of \$100 million from a current year event as significant. Changes in estimates for unpaid losses and loss adjustment expenses, including amounts established for occurrences in prior years, can also significantly affect our periodic underwriting results. Unpaid loss estimates, including estimates under retroactive reinsurance contracts, were \$113.4 billion as of September 30, 2019. Our periodic underwriting results may also include significant foreign currency transaction gains and losses arising from the changes in the valuation of non-U.S. Dollar denominated reinsurance liabilities of our U.S. based insurance subsidiaries due to foreign currency exchange rate fluctuations.

We engage in both primary insurance and reinsurance of property/casualty, life and health risks. In primary insurance activities, we assume defined portions of the risks of loss from persons or organizations that are directly subject to the risks. In reinsurance activities, we assume defined portions of similar or dissimilar risks that other insurers or reinsurers have subjected themselves to in their own insuring activities. Our insurance and reinsurance businesses are GEICO, Berkshire Hathaway Reinsurance Group ("BHRG") and Berkshire Hathaway Primary Group.

Underwriting results of our insurance businesses are summarized below (dollars in millions).

	Third Quarter		First Nine Months	
	2019	2018	2019	2018
Pre-tax underwriting earnings (loss):				
GEICO	\$ 376	\$ 627	\$ 1,539	\$ 1,977
Berkshire Hathaway Reinsurance Group	52	(163)	(305)	(124)
Berkshire Hathaway Primary Group	153	135	290	468
Pre-tax underwriting earnings	581	599	1,524	2,321
Income taxes and noncontrolling interests	141	158	342	530
Net underwriting earnings	<u>\$ 440</u>	<u>\$ 441</u>	<u>\$ 1,182</u>	<u>\$ 1,791</u>
Effective income tax rate	<u>24.1%</u>	<u>25.9%</u>	<u>23.0%</u>	<u>22.6%</u>

GEICO

GEICO writes private passenger automobile insurance, offering coverages to insureds in all 50 states and the District of Columbia. GEICO markets its policies mainly by direct response methods where most customers apply for coverage directly to the company via the Internet or over the telephone. A summary of GEICO's underwriting results follows (dollars in millions).

	Third Quarter		First Nine Months	
	2019	2018	2019	2018
	Amount	%	Amount	%
Premiums written	\$ 9,412		\$ 8,952	
Premiums earned	\$ 8,996	100.0	\$ 8,506	100.0
Losses and loss adjustment expenses	7,344	81.6	6,725	79.1
Underwriting expenses	1,276	14.2	1,154	13.5
Total losses and expenses	<u>8,620</u>	<u>95.8</u>	<u>7,879</u>	<u>92.6</u>
Pre-tax underwriting earnings	<u>\$ 376</u>		<u>\$ 627</u>	

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Insurance—Underwriting (Continued)

GEICO (Continued)

Premiums written in 2019 increased 5.1% in the third quarter and 5.8% in the first nine months compared to the corresponding periods in 2018. Premiums earned in 2019 increased 5.8% in the third quarter and 7.2% in the first nine months compared to the corresponding 2018 periods. The premium increases were primarily attributable to voluntary auto policies-in-force growth of 5.6% over the past twelve months, as average premiums per auto policy were relatively unchanged. The increase in voluntary auto policies-in-force primarily resulted from an increase in new business sales of 10.6% and a decrease in the number of policies not renewed. Voluntary auto policies-in-force increased approximately 846,000 during the first nine months of 2019.

Losses and loss adjustment expenses in 2019 increased 9.2% in the third quarter to \$7.3 billion and 9.7% in the first nine months to \$21.2 billion. GEICO's ratios of losses and loss adjustment expenses to premiums earned (the "loss ratio") in the third quarter and first nine months of 2019 were 81.6% and 80.0%, respectively, increases of 2.5 percentage points over the third quarter and 1.9 percentage points over the first nine months of 2018. The loss ratio increases in 2019 reflected continuing increases in loss severities, slightly offset by lower storm-related losses.

Claims frequencies in the first nine months of 2019 declined for property damage and collision coverages (two to three percent range) and personal injury protection coverage (two to four percent range) compared to 2018 and were relatively unchanged for bodily injury coverage. Average claims severities in the first nine months of 2019 were higher for property damage and collision coverages (four to six percent range) and bodily injury coverage (six to eight percent range).

GEICO reduced ultimate claim loss estimates for prior years' loss events by \$47 million in the first nine months of 2019 compared to \$478 million in the first nine months of 2018. These reductions produced corresponding pre-tax underwriting gains. The reduction in claim loss estimates in 2019 was primarily due to lower than expected losses from property damage and collision claims, partly offset by higher than expected losses from personal injury protection claims.

Underwriting expenses in the first nine months of 2019 were \$3.8 billion, an increase of \$349 million (10.2%) over 2018. GEICO's expense ratio (underwriting expenses to premiums earned) in the first nine months of 2019 was 14.2%, an increase of 0.3 percentage points compared to 2018. The underwriting expense increase was primarily attributable to increases in advertising expenses, insurance premium taxes and employee-related costs, which reflected wage and staffing increases.

Berkshire Hathaway Reinsurance Group

We offer excess-of-loss and quota-share reinsurance coverages on property and casualty risks and life and health reinsurance to insurers and reinsurers worldwide through several subsidiaries, led by National Indemnity Company ("NICO"), Berkshire Hathaway Life Insurance Company of Nebraska ("BHLN") and General Reinsurance Corporation, General Reinsurance AG and General Re Life Corporation (collectively, "General Re"). We also periodically assume property and casualty risks under retroactive reinsurance contracts written through NICO. In addition, we write periodic payment annuity contracts predominantly through BHLN.

With the exception of our retroactive reinsurance and periodic payment annuity product lines, we strive to generate pre-tax underwriting profits. Time-value-of-money concepts are important elements in establishing prices for retroactive reinsurance and periodic payment annuity premiums due to the expected long durations of the associated liabilities. We expect to incur pre-tax underwriting losses from these products through deferred charge amortization and discount accretion charges. We receive premiums at the inception of these contracts, which are then available for investment. A summary of BHRG's premiums and pre-tax underwriting results follows (dollars in millions).

	Third Quarter				First Nine Months			
	Premiums earned		Pre-tax underwriting earnings (loss)		Premiums earned		Pre-tax underwriting earnings (loss)	
	2019	2018	2019	2018	2019	2018	2019	2018
Property/casualty	\$ 2,614	\$ 2,157	\$ 314	\$ 67	\$ 7,237	\$ 6,479	\$ 472	\$ 535
Retroactive reinsurance	—	1	(190)	(246)	94	1	(751)	(704)
Life/health	1,097	1,307	19	108	3,210	3,855	310	324
Periodic payment annuity	229	312	(91)	(92)	652	894	(336)	(279)
	<u>\$ 3,940</u>	<u>\$ 3,777</u>	<u>\$ 52</u>	<u>\$ (163)</u>	<u>\$ 11,193</u>	<u>\$ 11,229</u>	<u>\$ (305)</u>	<u>\$ (124)</u>

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Insurance—Underwriting (Continued)

Berkshire Hathaway Reinsurance Group (Continued)

Property/casualty

A summary of property/casualty reinsurance underwriting results follows (dollars in millions).

	Third Quarter				First Nine Months			
	2019		2018		2019		2018	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 2,435		\$ 2,201		\$ 8,304		\$ 7,636	
Premiums earned	\$ 2,614	100.0	\$ 2,157	100.0	\$ 7,237	100.0	\$ 6,479	100.0
Losses and loss adjustment expenses	1,659	63.5	1,514	70.2	4,888	67.5	4,315	66.6
Underwriting expenses	641	24.5	576	26.7	1,877	26.0	1,629	25.1
Total losses and expenses	2,300	88.0	2,090	96.9	6,765	93.5	5,944	91.7
Pre-tax underwriting earnings (loss)	\$ 314		\$ 67		\$ 472		\$ 535	

Property/casualty premiums written increased 10.6% in the third quarter and 8.7% in the first nine months of 2019, as compared to the same periods in 2018. Premiums earned in the third quarter and first nine months of 2019 increased \$457 million (21.2%) and \$758 million (11.7%), respectively, versus 2018. The increases in premiums written reflected overall growth in U.S. and international markets. The growth was primarily attributable to new business, net of non-renewals, and increased participations for renewal business, partly offset by the unfavorable foreign currency translation effects of a stronger U.S. Dollar. Premiums earned in the first nine months included \$1,286 million in 2019 and \$1,347 million in 2018 from a 10-year, 20% quota-share contract between NICO with Insurance Australia Group Limited, which expires in 2025.

Losses and loss adjustment expenses in the third quarter and first nine months of 2019 increased \$145 million (9.6%) and \$573 million (13.3%), respectively, compared to the same periods in 2018. Losses and loss adjustment expenses in the first nine months of 2019 included a net decrease in estimated ultimate claim liabilities attributable to prior years' loss events of approximately \$75 million compared to \$581 million in 2018. Such decreases as percentages of the related net unpaid claim liabilities as of the beginning of the applicable year were 0.25% in 2019 and 2% in 2018. Losses and loss adjustment expenses in the first nine months of 2019 also reflected an overall 7.0 percentage point decline in the loss ratio attributable to the current accident year as compared to 2018. Incurred losses in the third quarter included \$281 million in 2019 related to Typhoon Faxia in Japan and \$267 million in 2018 related to Hurricane Florence and Typhoon Jebi. In the fourth quarter of 2019, Typhoon Hagibis struck Japan and caused widespread damage, which certain industry models presently estimate insured losses will likely exceed \$8 billion. While we cannot reasonably estimate our losses from this event at this time, we expect our underwriting results in the fourth quarter will be negatively affected.

Retroactive reinsurance

There were no significant retroactive reinsurance contracts written in the first nine months of 2019 or 2018. Pre-tax underwriting losses in 2019 and 2018 derived from deferred charge amortization and changes in the estimated timing and amount of future claim payments, as well as from foreign currency gains arising from the periodic re-measurement of liabilities related to contracts written by our U.S. subsidiaries that are denominated in foreign currencies.

Pre-tax foreign currency re-measurement gains were \$84 million in the third quarter and \$73 million in the first nine months of 2019 and were \$35 million in the third quarter and \$99 million in the first nine months of 2018. Retroactive reinsurance contracts produced pre-tax underwriting losses before foreign currency gains of \$824 million in the first nine months of 2019 and \$803 million in 2018, and included deferred charge amortization of \$480 million in 2019 and \$454 million in 2018 related to the reinsurance agreement with various subsidiaries of American International Group, Inc. entered into in 2017.

Gross unpaid losses assumed under retroactive reinsurance contracts were \$41.4 billion at September 30, 2019 and \$41.8 billion at December 31, 2018. Unamortized deferred charge assets related to such reinsurance contracts were \$13.4 billion at September 30, 2019 and \$14.1 billion at December 31, 2018. Deferred charge assets will be charged to earnings over the expected remaining claims settlement periods through periodic amortization.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Insurance—Underwriting (Continued)

Berkshire Hathaway Reinsurance Group (Continued)

Life/health

A summary of our life/health reinsurance underwriting results follows (dollars in millions).

	Third Quarter				First Nine Months			
	2019		2018		2019		2018	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 1,099		\$ 1,327		\$ 3,218		\$ 3,894	
Premiums earned	\$ 1,097	100.0	\$ 1,307	100.0	\$ 3,210	100.0	\$ 3,855	100.0
Life and health insurance benefits	829	75.6	1,051	80.4	2,290	71.3	3,011	78.1
Underwriting expenses	249	22.7	148	11.3	610	19.0	520	13.5
Total benefits and expenses	1,078	98.3	1,199	91.7	2,900	90.3	3,531	91.6
Pre-tax underwriting earnings (loss)	\$ 19		\$ 108		\$ 310		\$ 324	

Life/health premiums earned were \$1.1 billion in the third quarter and \$3.2 billion in first nine months of 2019, decreases of \$210 million (16.1%) and \$645 million (16.7%), respectively, compared to corresponding 2018 periods. In the first quarter of 2019, BHLN amended a yearly-renewable-term life reinsurance contract with a major U.S. reinsurer. The amendment effectively eliminated BHLN's future exposures under the contract. BHLN recorded a reduction in earned premiums on this contract of \$49 million in the first nine months of 2019 attributable to the contract amendment, while premiums earned related to this contract were \$666 million for the first nine months of 2018. Life/health premiums earned in 2019 also reflected volume growth in several international life markets, partially offset by the unfavorable effects of foreign currency translation attributable to a stronger U.S. Dollar and lower U.S. life and medical supplement volumes.

The life/health business produced pre-tax underwriting income of \$19 million in the third quarter and \$310 million in the first nine months of 2019. Underwriting results in the third quarter of 2019 included lower earnings from the run-off of variable annuity guarantee contracts. Results for the first nine months of 2019 also included a one-time pre-tax gain of \$163 million attributable to the BHLN contract amendment in the first quarter, primarily from reductions of benefits incurred.

Variable annuity guarantee contracts produced pre-tax losses of \$18 million in the third quarter and earnings of \$83 million in the first nine months of 2019 compared to earnings of \$66 million in the third quarter and \$166 million in the first nine months of 2018. Underwriting results from this business reflect changes in estimated liabilities for guaranteed benefits, which derive from changes in securities markets and interest rates and from the periodic amortization of expected profit margins.

Pre-tax underwriting earnings in 2019 also included losses from increased disability benefit liabilities in Australia in the second quarter, attributable to higher claims experience and changes to various underlying assumptions, and an increase in life claims in North America, partially offset by increased earnings from other international life business.

Periodic payment annuity

Periodic payment annuity premiums earned in the first nine months of 2019 were \$652 million, a decrease of \$242 million (27.1%) compared to 2018. Periodic payment business is price sensitive. The volumes written can change rapidly due to changes in prices, which are affected by prevailing interest rates, the perceived risks and durations associated with the expected annuity payments, and the level of competition.

Periodic payment annuity contracts normally produce pre-tax underwriting losses deriving from the recurring discount accretion of annuity liabilities. Underwriting results also include the effects of mortality and interest rate changes and re-measurement gains and losses related to foreign currency denominated liabilities of certain contracts written by our U.S. subsidiaries. Pre-tax re-measurement gains were \$61 million in the third quarter and \$70 million in the first nine months in 2019 compared to \$21 million in the third quarter and \$57 million in the first nine months of 2018.

Excluding foreign currency re-measurement gains, pre-tax underwriting losses from periodic payment annuity contracts were \$152 million in the third quarter and \$406 million in the first nine months of 2019 compared to \$113 million in the third quarter and \$336 million in the first nine months of 2018. Discounted annuity liabilities were \$13.2 billion at September 30, 2019 and \$12.5 billion at December 31, 2018, reflecting a weighted average discount rate of approximately 4.1%.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Insurance—Underwriting (Continued)

Berkshire Hathaway Primary Group

The Berkshire Hathaway Primary Group (“BH Primary”) provides a variety of commercial insurance solutions, including healthcare malpractice, workers’ compensation, automobile, general liability, property and various specialty coverages for small, medium and large clients. The largest of these insurers are Berkshire Hathaway Specialty Insurance (“BH Specialty”), Berkshire Hathaway Homestate Companies (“BHHC”), MedPro Group, Berkshire Hathaway GUARD Insurance Companies (“GUARD”), and National Indemnity Company (“NICO Primary”). Other BH Primary insurers include U.S. Liability Insurance Company, Applied Underwriters (which was sold in October 2019), Central States Indemnity Company and MLMIC Insurance Company, acquired October 1, 2018.

A summary of BH Primary underwriting results follows (dollars in millions).

	Third Quarter				First Nine Months			
	2019		2018		2019		2018	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 2,824		\$ 2,227		\$ 7,535		\$ 6,498	
Premiums earned	\$ 2,387	100.0	\$ 2,050	100.0	\$ 6,825	100.0	\$ 5,921	100.0
Losses and loss adjustment expenses	1,583	66.3	1,419	69.2	4,721	69.2	3,884	65.6
Underwriting expenses	651	27.3	496	24.2	1,814	26.6	1,569	26.5
Total losses and expenses	2,234	93.6	1,915	93.4	6,535	95.8	5,453	92.1
Pre-tax underwriting earnings (loss)	\$ 153		\$ 135		\$ 290		\$ 468	

Premiums written in the third quarter and first nine months of 2019 increased 26.8% and 16.0%, respectively, compared to the same periods in 2018. The comparative year-to-date increase was primarily attributable to GUARD (25.8%), BH Specialty (24.1%) and the impact of the MLMIC acquisition, while aggregate premiums written in 2019 by other BH Primary operations were relatively unchanged from 2018. The increases in premiums earned in 2019 reflected volume increases over the past year.

BH Primary produced pre-tax underwriting earnings of \$290 million in the first nine months of 2019 and \$468 million in the first nine months of 2018. BH Primary’s aggregate loss ratios for the first nine months were 69.2% in 2019 and 65.6% in 2018. Losses and loss adjustment expenses incurred in the first nine months included reductions for prior years’ loss events of \$274 million in 2019 and \$507 million in 2018. The net gains from the reductions of prior accident years’ liabilities in 2019 were generally lower compared to 2018 across the various BH Primary operations, due in part to additional estimated claim liabilities recorded in the first quarter of 2019 for legacy casualty exposures. Underwriting results in the third quarter of 2018 included estimated losses from Hurricane Florence of approximately \$75 million.

BH Primary insurers write significant levels of commercial and professional liability and workers’ compensation insurance and the related claim costs may be subject to higher severity and longer claim-tails. Accordingly, we could experience significant increases in claims liabilities in the future attributable to higher than expected claim settlements, adverse litigation outcomes or judicial rulings and other factors not currently anticipated.

Insurance—Investment Income

A summary of net investment income attributable to our insurance operations follows (dollars in millions).

	Third Quarter		First Nine Months	
	2019	2018	2019	2018
Interest and other investment income	\$ 556	\$ 495	\$ 1,646	\$ 1,346
Dividend income	1,226	960	3,270	2,706
Investment income before income taxes and noncontrolling interests	1,782	1,455	4,916	4,052
Income taxes and noncontrolling interests	298	216	829	659
Net investment income	\$ 1,484	\$ 1,239	\$ 4,087	\$ 3,393
Effective income tax rate	16.6%	14.7%	16.7%	16.2%

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Insurance—Investment Income (Continued)

Interest and other investment income in the third quarter and first nine months of 2019 increased \$61 million (12.3%) and \$300 million (22.3%), respectively, as compared to the same periods in 2018. The comparative increases were primarily due to higher interest rates on short-term investments and interest from a term loan with Seritage Growth Properties. For the first nine months, the increase in interest income was partially offset by lower income earned from limited partnership investments. Dividend income in 2019 increased \$266 million (27.7%) in the third quarter and \$564 million (20.8%) in the first nine months compared to the corresponding 2018 periods. The increases in dividend income were attributable to an overall increase in investment levels over the past year, including the investment in \$10 billion liquidation value of 8% cumulative preferred stock of Occidental on August 8, 2019 (see Note 4 to the accompanying unaudited Interim Consolidated Financial Statements), and higher dividend rates on common stock investments. We continue to hold large balances of cash, cash equivalents and U.S. Treasury Bills. While short-term interest yields in the U.S. were higher in the first half of 2019 compared to 2018, interest rates began to decline in the third quarter. Accordingly, earnings from such balances may be lower in the fourth quarter than in prior quarters of 2019. We believe that maintaining ample liquidity is paramount and we insist on safety over yield with respect to short-term investments.

Invested assets of our insurance businesses derive from shareholder capital, including reinvested earnings, and from net liabilities under insurance contracts or “float.” The major components of float are unpaid losses and loss adjustment expenses, including liabilities under retroactive reinsurance contracts, life, annuity and health benefit liabilities, unearned premiums and other liabilities due to policyholders, less premium and reinsurance receivables, deferred charges assumed under retroactive reinsurance contracts and deferred policy acquisition costs. Float was approximately \$127 billion at September 30, 2019 and \$123 billion at December 31, 2018. Our average cost of float was negative in the first nine months of 2019 as our underwriting operations generated pre-tax earnings of \$1.5 billion.

A summary of cash and investments held in our insurance businesses as of September 30, 2019 and December 31, 2018 follows (in millions).

	September 30, 2019	December 31, 2018
Cash, cash equivalents and U.S. Treasury Bills	\$ 62,979	\$ 64,548
Equity securities	213,144	166,385
Fixed maturity securities	19,008	19,690
Other	2,522	2,288
	\$ 297,653	\$ 252,911

Fixed maturity securities as of September 30, 2019 were as follows (in millions).

	Amortized cost	Unrealized gains	Carrying value
U.S. Treasury, U.S. government corporations and agencies	\$ 3,754	\$ 44	\$ 3,798
States, municipalities and political subdivisions	148	6	154
Foreign governments	7,960	61	8,021
Corporate bonds, investment grade	5,674	452	6,126
Corporate bonds, non-investment grade	442	20	462
Mortgage-backed securities	382	65	447
	\$ 18,360	\$ 648	\$ 19,008

U.S. government securities are rated AA+ or Aaa by the major rating agencies. Approximately 87% of all state, municipal and political subdivisions, foreign government securities and mortgage-backed securities were rated AA or higher. Non-investment grade securities represent securities rated below BBB- or Baa3. Foreign government securities include obligations issued or unconditionally guaranteed by national or provincial government entities.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Railroad ("Burlington Northern Santa Fe")

Burlington Northern Santa Fe, LLC ("BNSF") operates one of the largest railroad systems in North America, with approximately 32,500 route miles of track in 28 states. BNSF also operates in three Canadian provinces. BNSF classifies its major business groups by type of product shipped which includes consumer products, coal, industrial products and agricultural products. A summary of BNSF's earnings follows (dollars in millions).

	Third Quarter		First Nine Months	
	2019	2018	2019	2018
Revenues	\$ 6,021	\$ 6,147	\$ 17,676	\$ 17,649
Operating expenses:				
Compensation and benefits	1,337	1,378	4,071	4,021
Fuel	725	859	2,211	2,456
Purchased services	687	718	2,087	2,124
Depreciation and amortization	602	580	1,788	1,726
Equipment rents, materials and other	458	471	1,334	1,501
Total operating expenses	3,809	4,006	11,491	11,828
Interest expense	271	262	806	774
	4,080	4,268	12,297	12,602
Pre-tax earnings	1,941	1,879	5,379	5,047
Income taxes	475	486	1,322	1,200
Net earnings	\$ 1,466	\$ 1,393	\$ 4,057	\$ 3,847
Effective income tax rate	24.5%	25.9%	24.6%	23.8%

BNSF's revenues in the third quarter and first nine months of 2019 were \$6.0 billion and \$17.7 billion, respectively, representing a decrease of \$126 million (2.0%) and an increase of \$27 million (0.2%) versus the corresponding periods in 2018. During the first nine months of 2019, revenues reflected a 4.5% comparative increase in average revenue per car/unit, driven by increased rates per car/unit. Aggregate volumes were 2.65 million cars/units in the third quarter and 7.68 million cars/units in the first nine months of 2019 compared to 2.72 million cars/units in the third quarter and 7.99 million cars/units in the first nine months of 2018.

Pre-tax earnings were \$1.9 billion and \$5.4 billion in the third quarter and first nine months of 2019, respectively, increases of 3.3% and 6.6%, respectively, compared to the corresponding 2018 periods. BNSF experienced severe winter weather and flooding on parts of the network, which has negatively affected revenues, expenses and service levels. BNSF's earnings in the first nine months of 2019 also benefitted from a revenue increase related to the favorable outcome of an arbitration hearing and a reduction to expense for a curtailment gain arising from an amendment to the defined benefit retirement plans in the first quarter, as well as lower operating expenses attributable to lower volume and cost control initiatives.

Revenues from consumer products were \$2.0 billion in the third quarter and \$5.9 billion in the first nine months of 2019, representing a decrease of 1.4% and an increase of 0.6%, respectively, from the corresponding periods in 2018. Average revenue per car/unit in 2019 was essentially unchanged for the third quarter and higher for the first nine months. Volumes in 2019 decreased 1.2% in the third quarter and 4.4% in the first nine months. The volume decreases were driven by overall lower demand and the availability of truck capacity, as well as from lower international intermodal market share.

Revenues from industrial products were \$1.6 billion in the third quarter and \$4.6 billion for the first nine months of 2019, increases of 0.8% and 5.0%, respectively, from comparable 2018 periods. The revenue increases reflected higher average revenue per car/unit and volume decreases of 2.9% in the third quarter and 0.6% in the first nine months of 2019. Volumes decreased primarily due to overall softness in the industrial sector, lower sand volumes, and reduced car loadings due to the challenging weather conditions in 2019. Strength in the energy sector, which drove higher demand for petroleum products and liquefied petroleum gas, partially offset the decreases in other volumes.

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Railroad (“Burlington Northern Santa Fe”) (Continued)

Revenues from agricultural products in 2019 increased 0.1% in the third quarter to \$1.2 billion and were unchanged in the first nine months at \$3.5 billion, when compared to the same periods in 2018. The comparative results reflected higher average revenue per car/unit, offset by volume decreases of 5.7% in both periods. The volume decreases were attributable to export competition from non-U.S. sources, the impacts of changes in international trade policies, and the challenging weather conditions in 2019.

Revenues from coal in 2019 decreased 6.8% in the third quarter to \$1.0 billion and 6.1% in the first nine months to \$2.7 billion compared to 2018. The decreases reflected lower average revenue per car/unit and volume decreases of 4.0% in the third quarter and 4.5% in the first nine months of 2019. Volumes were impacted by adverse weather conditions as well as from the effects of lower natural gas prices.

Total operating expenses in the third quarter and first nine months of 2019 were \$3.8 billion and \$11.5 billion, respectively, decreases of \$197 million (4.9%) and \$337 million (2.8%), respectively, compared to the same periods in 2018. Our ratio of operating expenses to revenues decreased 1.9 percentage points to 63.3% in the third quarter and 2.0 percentage points to 65.0% in the first nine months of 2019 versus the corresponding prior year periods. BNSF’s expenses in 2019 reflected lower volume-related costs, the effects of several cost control initiatives, and a retirement plan curtailment gain, partially offset by the unfavorable impact of adverse weather conditions.

Compensation and benefits expense decreased \$41 million (3.0%) for the third quarter and increased \$50 million (1.2%) for the first nine months of 2019. The decrease for the third quarter was primarily due to lower volume-related costs and cost control initiatives. The increase for the first nine months was driven by wage inflation and higher average employee counts offset by the effects of lower volume and cost control initiatives. Fuel expenses decreased \$134 million (15.6%) for the third quarter and \$245 million (10.0%) for the first nine months of 2019 primarily due to lower average fuel prices, lower volumes in both periods, and favorable fuel efficiency in the third quarter. Equipment rents, materials and other expense decreased \$13 million (2.8%) for the third quarter and \$167 million (11.1%) for the first nine months of 2019 as compared to the same periods in 2018. The decrease in the first nine months was driven by a \$120 million curtailment gain from the amendment to company-sponsored defined benefit retirement plans.

BNSF’s effective income tax rate was 24.5% and 24.6% for the third quarter and first nine months of 2019, respectively, as compared to 25.9% and 23.8%, respectively, for the corresponding periods in 2018. The effective income tax rates in 2018 included the impact of various state income tax rate reductions enacted during the second quarter. The effective income tax rate for the third quarter of 2019 includes the favorable impact of a completed state audit.

Utilities and Energy (“Berkshire Hathaway Energy Company”)

We currently own 90.9% of the outstanding common stock of Berkshire Hathaway Energy Company (“BHE”), which operates a global energy business. BHE’s domestic regulated utility interests are comprised of PacifiCorp, MidAmerican Energy Company (“MEC”) and NV Energy. In Great Britain, BHE subsidiaries operate two regulated electricity distribution businesses referred to as Northern Powergrid. BHE also owns two domestic regulated interstate natural gas pipeline companies. Other energy businesses include a regulated electricity transmission-only business in Alberta, Canada (“AltaLink, L.P.”) and a diversified portfolio of mostly renewable independent power projects. In addition, BHE also operates the largest residential real estate brokerage firm and one of the largest residential real estate brokerage franchise networks in the United States.

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Utilities and Energy (“Berkshire Hathaway Energy Company”) (Continued)

The rates our regulated businesses charge customers for energy and services are based in large part on the costs of business operations, including income taxes and a return on capital, and are subject to regulatory approval. To the extent such costs are not allowed in the approved rates, operating results will be adversely affected. The legislation known as the Tax Cuts and Jobs Act of 2017 (“TCJA”) was enacted in December 2017, which reduced the U.S. federal statutory corporate income tax rate from 35% to 21%. In 2018, BHE’s regulated subsidiaries began passing the benefits of lower income tax expense attributable to the TCJA to customers through various regulatory mechanisms, including lower rates, higher depreciation and reductions to rate base. Revenues and earnings of BHE are summarized below (dollars in millions).

	Third Quarter				First Nine Months			
	Revenues		Earnings		Revenues		Earnings	
	2019	2018	2019	2018	2019	2018	2019	2018
PacifiCorp	\$ 1,396	\$ 1,386	\$ 275	\$ 319	\$ 3,868	\$ 3,786	\$ 703	\$ 704
MidAmerican Energy Company	823	857	199	251	2,379	2,354	336	347
NV Energy	1,057	1,071	261	268	2,416	2,456	401	403
Northern Powergrid	230	233	47	58	737	756	226	217
Natural gas pipelines	238	268	86	104	833	889	387	376
Other energy businesses	663	669	189	184	1,697	1,764	260	318
Real estate brokerage	1,313	1,222	112	83	3,432	3,263	203	180
Corporate interest	—	—	(108)	(102)	—	—	(322)	(307)
	<u>\$ 5,720</u>	<u>\$ 5,706</u>			<u>\$15,362</u>	<u>\$15,268</u>		
Pre-tax earnings			1,061	1,165			2,194	2,238
Income tax benefit			(241)	(49)			(451)	(279)
Net earnings			1,302	1,214			2,645	2,517
Noncontrolling interests			124	123			255	260
Net earnings attributable to Berkshire Hathaway shareholders			<u>\$ 1,178</u>	<u>\$ 1,091</u>			<u>\$ 2,390</u>	<u>\$ 2,257</u>
Effective income tax rate			<u>(22.7)%</u>	<u>(4.2)%</u>			<u>(20.6)%</u>	<u>(12.5)%</u>

PacifiCorp

PacifiCorp operates a regulated electric utility in portions of several Western states, including Utah, Oregon and Wyoming. Revenues and other income in the third quarter of 2019 were \$1.4 billion, relatively unchanged from 2018, and were \$3.9 billion in the first nine months, an increase of 2% over the first nine months of 2018. Retail revenues in the first nine months of 2019 increased \$81 million compared to 2018, reflecting higher average rates (\$65 million) and business mix changes. Wholesale and other revenues in the first nine months of 2019 decreased \$34 million due to lower volumes and other income increased in the first nine months of 2019 primarily due to higher allowances for equity funds used during construction.

Pre-tax earnings were \$275 million in the third quarter of 2019, a decline of \$44 million (14%) from 2018, and were \$703 million in the first nine months, relatively unchanged from 2018. Utility margin (operating revenues less cost of fuel and energy) was \$2.5 billion in the first nine months of 2019, an increase of 1% compared to 2018. Pre-tax earnings in the third quarter of 2019 included additional depreciation expense of \$65 million due to a state regulatory order that accelerated depreciation on certain retired wind equipment due to repowering activities. Under the order, this pre-tax charge was offset by reduced income tax expense. The changes in earnings reflected the improved utility margin, lower operations and maintenance expense, higher depreciation and lower net interest and finance expenses. PacifiCorp’s after-tax earnings were \$278 million in the third quarter and \$626 million in the first nine months of 2019, increases of 3% and 4%, respectively, over 2018.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Utilities and Energy (“Berkshire Hathaway Energy Company”) (Continued)

MidAmerican Energy Company

MEC operates a regulated electric and natural gas utility primarily in Iowa and Illinois. Revenues and other income were \$823 million in the third quarter of 2019, a decrease of 4% compared to 2018, and \$2.4 billion in the first nine months, an increase of 1% versus the same period in 2018. Electric operating revenues were \$712 million in the third quarter of 2019 and \$1.8 billion in the first nine months, each relatively unchanged from 2018. Natural gas revenues decreased in the third quarter and first nine months of 2019 versus the same periods in 2018, primarily due to decreased volumes. Revenues and other income also increased \$38 million in the first nine months of 2019, primarily from increased allowances for equity funds used during construction and higher nonregulated utility construction services revenues.

Pre-tax earnings were \$199 million in the third quarter of 2019, a decline of \$52 million (21%) versus 2018, and were \$336 million in the first nine months, a decrease of \$11 million (3%) compared to 2018. Electric utility margin in the third quarter of 2019 increased 2% to \$599 million and in the first nine months increased 4% to \$1.5 billion. The increases in electric utility margin were more than offset by increased depreciation, operations and maintenance expenses and interest. MEC’s after-tax earnings are greater than its pre-tax earnings due to the significant production tax credits related to its wind-powered generating facilities. MEC’s after-tax earnings were \$279 million in the third quarter of 2019 and \$622 million in the first nine months, decreases of \$200 million (42%) and \$63 million (9%), respectively, compared to the same periods in 2018, reflecting decreases in tax credits recognized.

NV Energy

NV Energy operates regulated electric and natural gas utilities in Nevada. Revenues were \$1.1 billion in the third quarter and \$2.4 billion in the first nine months of 2019, decreases of 1% and 2%, respectively, compared to the same periods in 2018. Electric operating revenues decreased \$9 million in the third quarter and \$38 million in the first nine months of 2019 versus 2018, primarily attributable to lower retail revenue, reflecting lower customer volumes and reductions related to the TCJA that were effective April 1, 2018, partially offset by higher rates resulting from increased pass-through cost adjustments.

Pre-tax earnings decreased \$7 million (3%) in the third quarter and \$2 million (1%) in the first nine months of 2019 as compared to 2018. Electric utility margin was \$592 million in the third quarter and \$1.3 billion in the first nine months of 2019, decreases of \$32 million and \$58 million, respectively, compared to 2018, primarily due to lower retail operating revenues. The declines in electric utility margin and increases in depreciation in 2019 were mostly offset by lower operations and maintenance expenses. NV Energy’s after-tax earnings were \$206 million in the third quarter and \$316 million in the first nine months of 2019, increases of 2% over each of the corresponding 2018 periods.

Northern Powergrid

Revenues decreased \$3 million in the third quarter and \$19 million in the first nine months of 2019 compared to 2018, primarily due to the unfavorable foreign currency translation effects of a stronger U.S. Dollar in 2019, partially offset by higher distribution and smart meter revenues. Pre-tax earnings decreased \$11 million in the third quarter and increased \$9 million in the first nine months of 2019 as compared to 2018, reflecting changes in the timing and amount of pension settlement losses and lower revenues.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Utilities and Energy (“Berkshire Hathaway Energy Company”) (Continued)

Natural gas pipelines

Revenues in the third quarter and first nine months of 2019 declined \$30 million (11%) and \$56 million (6%), respectively, compared to 2018. The third quarter decline was due to lower transportation revenues of \$30 million. The decrease in the first nine months was primarily due to lower gas sales (\$58 million) related to system balancing activities at Northern Natural Gas (largely offset in cost of sales) and lower transportation revenues of \$3 million, which included a reduction of \$26 million from lower contract rates (largely offset by lower depreciation and amortization) and refunds related to the TCJA, substantially offset by higher volumes and rates. Pre-tax earnings were \$86 million in the third quarter and \$387 million in the first nine months of 2019, a decrease of \$18 million (17%) and an increase of \$11 million (3%), respectively, compared to 2018. The earnings decrease in the third quarter was primarily due to the decrease in transportation revenues, partly offset by a comparative decrease in operating expenses. The earnings increase in the first nine months was primarily due to the increase in transportation revenues from higher volumes and rates and favorable margins from system rebalancing activities, partly offset by comparative increases in depreciation and operating expenses.

Other energy businesses

Other energy revenues and other income declined \$6 million (1%) in the third quarter and \$67 million (4%) in the first nine months of 2019 as compared to the same periods in 2018. The declines were primarily due to increased losses from tax equity renewable energy investments of \$13 million for the third quarter and \$48 million for the first nine months (largely due to increased investments) and lower operating revenues from non-regulated services. Pre-tax earnings increased \$5 million in the third quarter and decreased \$58 million in the first nine months of 2019 compared to the same periods in 2018. The decrease in the comparative earnings for the first nine months is a result of the increase in tax equity investment losses. The pre-tax losses from these investments are included in revenues and are substantially offset by income tax benefits. Results for the first nine months of 2019 also included increased earnings from AltaLink, L.P. and lower operating earnings from renewable energy and the non-regulated service business, attributable to higher operating expenses and depreciation from renewable energy and lower non-regulated service business margin. After-tax earnings from other energy activities were \$228 million in the third quarter and \$466 million in the first nine months of 2019, increases of \$42 million and \$26 million, respectively, versus 2018.

Real estate brokerage

Revenues increased 7% in the third quarter and 5% in the first nine months of 2019 compared to the same periods in 2018. The increases were attributable to recent business acquisitions and higher mortgage revenues, partly offset by a 5% year-to-date decrease in closed units at existing brokerage businesses. Pre-tax earnings increased 35% in the third quarter and 13% in the first nine months of 2019 compared to 2018. The year-to-date increase was primarily due to the increase in mortgage net revenues and earnings from acquired businesses, partially offset by lower earnings at existing brokerage businesses.

Corporate interest

Corporate interest includes interest on unsecured debt issued by the BHE holding company. Corporate interest in the first nine months of 2019 increased 5% compared to 2018, primarily due to higher average borrowings.

Income taxes

BHE's effective income tax rates for the first nine months of 2019 and 2018 were approximately (20.6%) and (12.5%), respectively. BHE's effective income tax rates regularly reflect significant production tax credits from wind-powered electricity generation placed in service by our domestic regulated utilities and other energy businesses. The effective tax rate in the first nine months of 2019 decreased primarily due to an increase in recognized production tax credits and favorable impacts of rate making in 2019, partially offset by benefits recognized in 2018 related to foreign earnings and the accrued repatriation tax on undistributed foreign earnings in connection with the TCJA.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Manufacturing, Service and Retailing

A summary of revenues and earnings of our manufacturing, service and retailing businesses follows (dollars in millions).

	Third Quarter				First Nine Months			
	Revenues		Earnings *		Revenues		Earnings *	
	2019	2018	2019	2018	2019	2018	2019	2018
Manufacturing	\$ 15,897	\$ 15,686	\$ 2,484	\$ 2,369	\$ 47,173	\$ 46,335	\$ 7,205	\$ 7,105
Service and retailing	19,982	20,052	689	745	59,079	58,790	2,225	2,208
	<u>\$35,879</u>	<u>\$35,738</u>			<u>\$106,252</u>	<u>\$105,125</u>		
Pre-tax earnings		3,173	3,114				9,430	9,313
Income taxes and noncontrolling interests		718	703				2,288	2,289
		<u>\$ 2,455</u>	<u>\$ 2,411</u>				<u>\$ 7,142</u>	<u>\$ 7,024</u>
Effective income tax rate		22.1%	22.1%				23.7%	24.1%

* Excludes certain acquisition accounting expenses, which were primarily from the amortization of identified intangible assets recorded in connection with our business acquisitions. The after-tax acquisition accounting expenses excluded from earnings in the preceding table were \$201 million in the third quarter and \$581 million in first nine months of 2019, compared to \$199 million in the third quarter and \$637 million in the first nine months of 2018. These expenses are included in "Other" in the summary of earnings on page 28 and in the "Other" earnings section on page 46.

Manufacturing

Our manufacturing group includes a variety of industrial, building and consumer products businesses. The industrial products group includes specialty chemicals (The Lubrizol Corporation ("Lubrizol")), complex metal products for aerospace, power and general industrial markets (Precision Castparts Corp. ("PCC")), metal cutting tools/systems (IMC International Metalworking Companies ("IMC")), equipment and systems for the livestock and agricultural industries (CTB International ("CTB")), and a variety of industrial products for diverse markets (Marmon, Scott Fetzer and LiquidPower Specialty Products ("LSPI")). Marmon includes UTLX Company ("UTLX"), which provides various products and services (including equipment leasing) for the rail and mobile crane industries.

The building products group includes homebuilding and manufactured housing finance (Clayton Homes), flooring (Shaw), insulation, roofing and engineered products (Johns Manville), bricks and masonry products (Acme Building Brands), paint and coatings (Benjamin Moore) and residential and commercial construction and engineering products and systems (MiTek). The consumer products group includes leisure vehicles (Forest River), several apparel and footwear operations (including Fruit of the Loom, Garan, H.H. Brown Shoe Group and Brooks Sports) and the Duracell Company ("Duracell"), a manufacturer of high performance alkaline batteries. This group also includes custom picture framing products (Larson Juhl) and jewelry products (Richline). A summary of revenues and pre-tax earnings of our manufacturing operations follows (dollars in millions).

	Third Quarter				First Nine Months			
	Revenues		Pre-tax earnings		Revenues		Pre-tax earnings	
	2019	2018	2019	2018	2019	2018	2019	2018
Industrial products	\$ 7,716	\$ 7,673	\$ 1,458	\$ 1,449	\$ 23,280	\$ 23,143	\$ 4,441	\$ 4,481
Building products	5,281	4,969	696	580	15,212	13,899	1,904	1,676
Consumer products	2,900	3,044	330	340	8,681	9,293	860	948
	<u>\$15,897</u>	<u>\$15,686</u>	<u>\$ 2,484</u>	<u>\$ 2,369</u>	<u>\$47,173</u>	<u>\$46,335</u>	<u>\$ 7,205</u>	<u>\$ 7,105</u>

Aggregate revenues of our manufacturing businesses in the third quarter of 2019 were \$15.9 billion, an increase of 1.3% compared to 2018 and in the first nine months were \$47.2 billion, an increase of 1.8%. Pre-tax earnings in the third quarter of 2019 were \$2.5 billion, an increase of 4.9% compared to 2018 and in the first nine months were \$7.2 billion, an increase of 1.4%.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Manufacturing, Service and Retailing (Continued)

Industrial products

Revenues of the industrial products group were \$7.7 billion in the third quarter and \$23.3 billion in the first nine months of 2019, slight increases over revenues in each of the comparable 2018 periods. Pre-tax earnings of the group were \$1.46 billion in the third quarter and \$4.44 billion in the first nine months of 2019, compared to \$1.45 billion and \$4.48 billion in the corresponding 2018 periods. Pre-tax earnings as a percentage of revenues for the group were 19.1% in the first nine months of 2019 compared to 19.4% in 2018.

PCC's revenues were \$2.58 billion in the third quarter and \$7.80 billion in the first nine months of 2019, increases of \$37 million (1.4%) and \$148 million (1.9%), respectively, compared to 2018. The revenue increases reflected increased sales in aerospace markets, partly offset by lower industrial gas turbine products sales and lower sales of certain pipe products, primarily attributable to U.S tariffs.

PCC's pre-tax earnings increased 9% in the third quarter and 8% in the first nine months of 2019 compared to 2018. The earnings increases reflected higher earnings from aerospace products and the impacts of costs incurred in 2018 related to the temporary unplanned shutdown of certain metals facilities and metal press outages and earnings from various non-recurring items in 2019, partially offset by lower earnings from industrial gas turbine business. While demand for aerospace products continues to be high, we continue to incur incremental production and other costs to meet required deliveries to customers, which have negatively affected margins and earnings. The production headwinds experienced were primarily attributable to shortages of qualified skilled labor and plant capacity. We continue to work towards addressing these issues.

Lubrizol's revenues were \$1.62 billion in the third quarter and \$5.01 billion in the first nine months of 2019, decreases of \$92 million (5%) and \$231 million (4%), respectively, as compared to 2018. The declines were primarily due to lower volumes and unfavorable foreign currency translation effects, partly offset by higher average selling prices which were necessitated by raw material cost increases in 2018 and the first quarter of 2019. Lubrizol's consolidated volume in the first nine months of 2019 declined 4% from 2018, reflecting reduced volumes in both the Additives and Advanced Materials product lines.

Lubrizol's pre-tax earnings decreased 8% in the third quarter and 5% in the first nine months of 2019 compared to 2018. Earnings in the third quarter and first nine months of 2019 were negatively affected by lower sales volumes, unfavorable foreign currency translation effects, higher manufacturing expenses and the impact of a fire at Lubrizol's Rouen, France manufacturing facility on September 26, 2019, partly offset by improved material margins.

Marmon's revenues were \$2.13 billion in the third quarter and \$6.28 billion in the first nine months of 2019, increases of \$58 million (2.8%) and \$140 million (2.3%), respectively, as compared to 2018. The increases reflected higher volumes in the Electrical Products, Retail Solutions and Water sectors, increased railcar repair services, higher railcar lease revenues in the third quarter, and the effects of business acquisitions. These increases were partly offset by lower distribution volumes in the Metals Services sector, unfavorable foreign currency translation effects and lower metals prices in the Electrical Products and Plumbing & Refrigeration sectors.

Marmon's pre-tax earnings in the third quarter of 2019 increased \$12 million (3.5%), while earnings in first nine months of 2019 decreased \$50 million (5%), as compared to 2018. Pre-tax earnings in the first nine months of 2018 included a gain of \$44 million realized on the divestiture in the Food & Beverage sector. Excluding the divestiture gain, pre-tax earnings as a percentage of sales were 15.6% in the first nine months of 2019 as compared to 16.0% in 2018. In the first nine months of 2019, we experienced lower earnings attributable to lower rail tank car leasing rates coupled with higher rail tank car maintenance expenses in the Rail Products & Leasing sector and declines in the Metals Services and Industrial Products sectors, somewhat offset by earnings increases in the Retail Solutions, Water Technologies and Crane Services sectors and from business acquisitions.

IMC's revenues in the third quarter increased 2% over 2018, and were relatively unchanged in the first nine months of 2019 as compared to the corresponding 2018 period, reflecting increased revenues from recent business acquisitions, offset by unfavorable foreign currency translation effects of a stronger U.S. Dollar and the effects of the U.S./China trade disputes. IMC's pre-tax earnings declined 11% in the first nine months of 2019 versus 2018, attributable to increased raw material costs, unfavorable foreign currency translation effects, changes in business mix and the effects of the U.S./China trade disputes.

CTB's revenues decreased 8% in the third quarter of 2019 and were relatively unchanged in the first nine months of 2019 versus the same periods in 2018. The comparative decline in third quarter revenues was primarily due to lower revenues from grain and protein equipment and the unfavorable foreign currency translation effects of a stronger U.S. Dollar, partly offset by higher revenues from processing systems. CTB's pre-tax earnings declined 3% in the third quarter and increased 17% in the first nine months of 2019 as compared to the 2018 periods. Earnings in the first nine months of 2019 benefitted from a combination of favorable changes in business mix, the moderation of cost increases of certain raw materials, better pricing efficiency and ongoing efforts to control operating expenses.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Manufacturing, Service and Retailing (Continued)

Building products

Revenues of the building products group were \$5.3 billion in the third quarter and \$15.2 billion in the first nine months of 2019, increases of \$312 million (6.3%) and \$1.3 billion (9.4%), respectively, compared to the same periods in 2018. Pre-tax earnings of the group were \$696 million in the third quarter and \$1.9 billion in the first nine months of 2019, increases of 20.0% and 13.6%, respectively, over 2018. Pre-tax earnings as percentages of revenues were 12.5% and 12.1% in the first nine months of 2019 and 2018, respectively.

Clayton Homes revenues were approximately \$1.9 billion in the third quarter and \$5.3 billion in the first nine months of 2019, increases of \$304 million (19%) and \$993 million (23%), respectively, over the same periods in 2018. The comparative increases were primarily due to increases in home sales of \$263 million (22%) in the third quarter and \$890 million (28%) year-to-date, reflecting increased units sold and changes in sales mix. Unit sales of site-built homes increased 58% in the third quarter and 105% in the first nine months of 2019 over 2018, primarily due to business acquisitions, while manufactured home unit sales at retail and wholesale were unchanged in the third quarter and 4% lower in the first nine months of 2019. Interest income from lending activities in the first nine months of 2019 increased 6.5% compared to 2018, attributable to increased originations and average outstanding loan balances. Aggregate loan balances outstanding were approximately \$15.5 billion at September 30, 2019 compared to \$14.4 billion as of September 30, 2018.

Pre-tax earnings of Clayton Homes were \$272 million in the third quarter and \$769 million in the first nine months of 2019, increases of \$67 million (33%) and \$135 million (21%), respectively, compared to 2018. The earnings increases in 2019 were attributable to home building activities, which reflected the increases in home sales and manufactured housing lending activities. Pre-tax earnings from lending and finance activities in the first nine months of 2019 increased 8%, reflecting the increases in interest income and other financial services income and decreases in insurance losses, partially offset by higher interest expense, attributable to higher average borrowings and interest rates, and by higher other operating costs.

Aggregate revenues of our other building products businesses were \$3.4 billion in the third quarter of 2019, unchanged from 2018, and \$9.9 billion in the first nine months of 2019, an increase of 3.4% versus 2018. Comparative third quarter revenues increased for paint, coatings, and roofing products, due primarily to increased volumes and to a lesser extent increased selling prices, while sales of flooring and brick products declined, primarily attributable to lower volumes.

Pre-tax earnings of the other building products businesses were \$424 million in the third quarter and \$1.1 billion in the first nine months of 2019, increases of 13% and 9%, respectively, over the corresponding 2018 periods. Earnings in 2019 benefitted from a combination of increases in selling prices in certain product categories, declining raw material costs for certain commodities and operating cost control initiatives, which were partly offset by the effects of increased facilities closure costs and lower earnings from flooring products.

Consumer products

Consumer products revenues were \$2.9 billion in the third quarter and \$8.7 billion in the first nine months of 2019, decreases of \$144 million (4.7%) and \$612 million (6.6%), respectively, versus 2018. Revenues in the first nine months of 2019 declined at Forest River, Duracell and the apparel and footwear businesses versus 2018. Revenues of Forest River declined 11% in the third quarter and 13% in the first nine months versus 2018 due to lower unit sales. Revenues of Duracell increased 7% in the third quarter and decreased 2% in the first nine months of 2019 compared to the prior year periods. Duracell's third quarter revenue increase was primarily attributable to customers delaying orders in the second quarter, partly offset by unfavorable foreign currency translation effects. Apparel and footwear revenues in the third quarter and first nine months of 2019 declined 4% and 2%, respectively, compared to 2018. The declines reflected the product shipping delays associated with a Brooks Sports distribution center that opened in the second quarter of 2019, and lower apparel and other footwear volumes, reflecting the shift by major retailers towards private label products and smaller order sizes.

Consumer products pre-tax earnings were \$330 million in the third quarter and \$860 million in the first nine months of 2019, decreases of \$10 million (2.9%) and \$88 million (9.3%), respectively, compared to 2018. Pre-tax earnings as a percentage of revenues for the first nine months were 9.9% in 2019 and 10.2% in 2018. The decline in pre-tax earnings for the first nine months of 2019 was primarily attributable to lower recreational vehicle sales at Forest River, lower gross margin rates at Duracell and the costs related to a Duracell new product launch.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Manufacturing, Service and Retailing (Continued)

Service and retailing

A summary of revenues and pre-tax earnings of our service and retailing businesses follows (in millions).

	Third Quarter				First Nine Months			
	Revenues		Pre-tax earnings		Revenues		Pre-tax earnings	
	2019	2018	2019	2018	2019	2018	2019	2018
Service	\$ 3,341	\$ 3,397	\$ 451	\$ 517	\$ 10,195	\$ 9,948	\$ 1,425	\$ 1,465
Retailing	4,037	3,833	188	184	11,670	11,404	580	572
McLane Company	12,604	12,822	50	44	37,214	37,438	220	171
	<u>\$ 19,982</u>	<u>\$ 20,052</u>	<u>\$ 689</u>	<u>\$ 745</u>	<u>\$ 59,079</u>	<u>\$ 58,790</u>	<u>\$ 2,225</u>	<u>\$ 2,208</u>

Service

Our service business group offers fractional ownership programs for general aviation aircraft (NetJets) and high technology training to operators of aircraft (FlightSafety). We also distribute electronic components (TTI), franchise and service a network of quick service restaurants (Dairy Queen) and offer third party logistics services that primarily serve the petroleum and chemical industries (Charter Brokerage). Other service businesses include transportation equipment leasing (XTRA) and furniture leasing (CORT), electronic news distribution, multimedia and regulatory filings (Business Wire), publishing newspapers and other publications (Buffalo News and the BH Media Group) and operation of a television station in Miami, Florida (WPLG).

Service group revenues were \$3.3 billion in the third quarter and \$10.2 billion in the first nine months of 2019, a decrease of \$56 million (1.6%) in the third quarter and an increase of \$247 million (2.5%) in the first nine months as compared to 2018. Sales of TTI declined 4% in the third quarter and increased 4% in the first nine months of 2019 compared to the exceptionally high sales levels in 2018. Excluding the effects of acquisitions and foreign currency, TTI's sales in the third quarter of 2019 declined 7% compared to 2018 and increased 2% in the first nine months compared to 2018. Sales began slowing in the fourth quarter of 2018 and continued to slow through the third quarter of 2019. The declines were attributable to reduced customer demand, the effects of U.S. trade tariffs, and lower sales prices.

Service group revenues in the first nine months of 2019 also reflected increases in aviation-related services (NetJets and to a lesser extent FlightSafety) and the leasing businesses, and decreases from the media businesses and Charter Brokerage, which divested a high revenue, low margin business in 2019. The increases in NetJets revenues were primarily due to increases in the number of aircraft on lease and increased flight hours.

Pre-tax earnings of the service group were \$451 million in the third quarter of 2019, a decrease of \$66 million (12.8%) compared to 2018, and \$1.4 billion in the first nine months, a decrease of \$40 million (2.7%) compared to the first nine months of 2018. Pre-tax earnings of the group as a percentage of revenues were 14.0% in the first nine months of 2019 compared to 14.7% in 2018. The comparative declines in earnings in the third quarter of 2019 were primarily due to lower earnings from TTI, partly offset by higher earnings from NetJets and FlightSafety. TTI's earnings declines in 2019 reflected lower gross margin rates. Earnings from NetJets increased in 2019, primarily attributable to increased revenues and improved operating margins.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Manufacturing, Service and Retailing (Continued)

Retailing

Our largest retailing business is Berkshire Hathaway Automotive (“BHA”), which consists of over 80 auto dealerships that sell new and pre-owned automobiles and offer repair services and related products. BHA also operates two insurance businesses, two auto auctions and an automotive fluid maintenance products distributor. Other retailing businesses include four home furnishings retailing businesses (Nebraska Furniture Mart, R.C. Willey, Star Furniture and Jordan’s), which sell furniture, appliances, flooring and electronics. Other retailing businesses also include three jewelry businesses (Borsheims, Helzberg and Ben Bridge), See’s Candies (confectionary products), Pampered Chef (high quality kitchen tools), Oriental Trading Company (party supplies, school supplies and toys and novelties) and Detlev Louis Motorrad (“Louis”), a Germany-based retailer of motorcycle accessories.

Retailing group revenues were \$4.0 billion in the third quarter and \$11.7 billion in the first nine months of 2019, increases of \$204 million (5.3%) and \$266 million (2.3%), respectively, compared to 2018. BHA’s revenues, which represented approximately 65% of our year-to-date retailing revenues, increased 8% in the third quarter and 4% in the first nine months of 2019, as compared to 2018. BHA experienced revenue increases in the third quarter of 2019 in all significant product categories, including a 6% increase in new auto sales. For the first nine months of 2019, BHA’s revenue increase reflected an increase in pre-owned vehicle sales, while new auto sales were relatively unchanged compared to 2018. BHA’s revenues also reflected increases in vehicle repair work and finance and service contract activities.

Home furnishings group revenues, which represented about 20% of the aggregate retailing group revenues, were relatively unchanged in the third quarter and declined 2% in the first nine months of 2019 compared to the same periods in 2018. Sales in 2019 were relatively unchanged or lower in each of our home furnishings operations.

Retail group pre-tax earnings were \$188 million in the third quarter and \$580 million in the first nine months of 2019, increases of 2.2% and 1.4%, respectively, over the comparable 2018 periods. Comparative pre-tax earnings of BHA increased 24% in the third quarter and 25% in the first nine months of 2019, primarily due to the increases in vehicle sales and from earnings from finance and service contract activities, partly offset by higher floorplan interest expense. Home furnishings group pre-tax earnings in the first nine months of 2019 declined 19% versus 2018, reflecting the decline in revenues and generally higher operating expenses.

McLane Company

McLane operates a wholesale distribution business that provides grocery and non-food consumer products to retailers and convenience stores (“grocery”) and to restaurants (“foodservice”). McLane also operates businesses that are wholesale distributors of distilled spirits, wine and beer (“beverage”). The grocery and foodservice businesses generate high sales and very low profit margins. These businesses have several significant customers, including Walmart, 7-Eleven, Yum! Brands and others. Grocery sales comprise approximately two-thirds of McLane’s consolidated sales with food service comprising most of the remainder. A curtailment of purchasing by any of its significant customers could have an adverse impact on periodic revenues and earnings.

Revenues were \$12.6 billion in the third quarter and \$37.2 billion in the first nine months of 2019, declines of 1.7% and 0.6% compared to the corresponding 2018 periods. Revenues in the first nine months of 2019 decreased 3% in the grocery business and increased 4% in the foodservice business compared to 2018. Pre-tax earnings increased \$6 million (14%) in the third quarter and \$49 million (29%) in the first nine months of 2019 as compared to 2018. Results in 2019 reflected a slight increase in average gross margins and changes in business mix, partly offset by increased operating expenses, which were primarily employee-related. McLane continues to operate in an intensely competitive business environment, which is negatively affecting its current operating results. We expect these operating conditions will continue over the remainder of 2019.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Investment and Derivative Gains/Losses

A summary of investment and derivative gains/losses follows (dollars in millions).

	Third Quarter		First Nine Months	
	2019	2018	2019	2018
Investment gains (losses)	\$ 10,692	\$ 14,569	\$ 40,079	\$ 12,750
Derivative gains (losses)	234	137	1,217	303
Gains (losses) before income taxes and noncontrolling interests	10,926	14,706	41,296	13,053
Income taxes and noncontrolling interests	2,260	3,046	8,590	2,701
Net gains (losses)	<u>\$ 8,666</u>	<u>\$ 11,660</u>	<u>\$ 32,706</u>	<u>\$ 10,352</u>
Effective income tax rate	<u>20.8%</u>	<u>20.5%</u>	<u>20.8%</u>	<u>20.8%</u>

Investment gains/losses

Due to a new accounting pronouncement adopted as of January 1, 2018, pre-tax investment gains/losses reported in earnings include unrealized gains and losses arising from changes in market prices of investments in equity securities. Pre-tax investment gains included net unrealized gains of approximately \$10.5 billion in the third quarter and \$39.5 billion in the first nine months of 2019 attributable to equity securities we held at September 30, 2019. By comparison, we recorded pre-tax investment gains of approximately \$14.3 billion in the third quarter and \$12.1 billion in the first nine months of 2018 with respect to equity securities we held at September 30, 2018.

Prior to 2018, investment gains/losses on equity securities were recorded when securities were sold based on the cost of the disposed securities. Taxable investment gains on equity securities sold in the first nine months, which is the difference between sales proceeds and the original cost basis of the securities sold, were \$2.0 billion in 2019 and \$2.7 billion in 2018.

While the new accounting standard does not change the effect on our consolidated shareholders' equity or total comprehensive income, it has significantly increased the volatility of our periodic net earnings due to the magnitude of our equity securities portfolio and the inherent volatility of equity securities prices. Investment gains/losses from periodic changes in securities prices will continue to cause significant volatility in our consolidated earnings. We believe that investment gains/losses, whether realized from sales or unrealized from changes in market prices, are often meaningless in terms of understanding our reported consolidated earnings or evaluating our periodic economic performance. We continue to believe that the amount of investment gains/losses included in earnings in any given period has little analytical or predictive value.

Derivative gains/losses

Derivative contract gains/losses include the changes in fair value of our equity index put option contract liabilities, which relate to contracts that were originated prior to March 2008. Substantially all remaining contracts will expire by February 2023. The periodic changes in the fair values of these liabilities are recorded in earnings and can be significant, primarily due to the volatility of underlying equity markets.

As of September 30, 2019, the intrinsic value of our equity index put option contracts was \$626 million and our recorded liability at fair value was \$1.2 billion. Our ultimate payment obligations, if any, under our contracts will be determined as of the contract expiration dates based on the intrinsic value as defined under the contracts. Contracts with an aggregate notional value of \$3 billion expired in the first nine months of 2019 and contracts with an aggregate notional value of \$9 billion will expire in the fourth quarter of 2019.

Pre-tax gains from equity index put option contracts were \$234 million in the third quarter and \$1.2 billion in the first nine months of 2019 compared to pre-tax gains of \$137 million in the third quarter and \$303 million in the first nine months of 2018. The gains in 2019 were primarily due to higher equity index values and shorter remaining contract durations.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Other

A summary of after-tax other earnings/losses follows (in millions).

	Third Quarter		First Nine Months	
	2019	2018	2019	2018
Equity method earnings	\$ 515	\$ 269	\$ 812	\$ 894
Acquisition accounting expenses	(201)	(199)	(581)	(637)
Corporate interest expense, before foreign currency effects	(63)	(77)	(209)	(236)
Foreign currency exchange rate gains (losses) on Berkshire and BHFC non-U.S. Dollar senior notes	308	56	355	216
Income tax expense adjustment	—	—	(377)	—
Other, principally corporate investment income	276	256	694	512
Net earnings (losses) attributable to Berkshire Hathaway shareholders	<u>\$ 835</u>	<u>\$ 305</u>	<u>\$ 694</u>	<u>\$ 749</u>

After-tax equity method earnings include Berkshire's share of earnings attributable to Kraft Heinz, Pilot Flying J, Berkadia and Electric Transmission of Texas. As discussed in Note 5 to the accompanying unaudited interim Consolidated Financial Statements, financial results of Kraft Heinz for the first three quarters of 2019 were made available to us during the third quarter of 2019. Accordingly, our consolidated statement of earnings for the third quarter of 2019 include our share of Kraft Heinz's earnings for those periods. After-tax equity method earnings related to our Kraft Heinz investment were \$377 million for the third quarter and first nine months of 2019 and \$163 million in the third quarter and \$584 million for the first nine months of 2018.

After-tax acquisition accounting expenses include charges arising from the application of the acquisition method in connection with certain of Berkshire's past business acquisitions. Such charges arise primarily from the amortization or impairment of intangible assets recorded in connection with those business acquisitions.

Foreign currency exchange rate gains and losses pertain to Berkshire's outstanding Euro denominated debt (€6.85 billion par) and Japanese Yen denominated debt (¥430 billion par), which was issued in September 2019, and BHFC's Great Britain Pound denominated debt (£1.75 billion par), which was issued in June 2019. Changes in foreign currency exchange rates produced non-cash unrealized gains and losses from the periodic revaluation of these liabilities into U.S. Dollars. The gains and losses recorded in any given period can be significant due the magnitude of the borrowings and the inherent volatility in foreign currency exchange rates.

The income tax expense adjustment in the first nine months of 2019 relates to investments that we made between 2015 and 2018 in certain tax equity investment funds. Our investments in these funds aggregated approximately \$340 million. In December 2018 and during the first quarter of 2019, we learned of allegations by federal authorities of fraudulent income conduct by the sponsor of these funds. As a result of our investigation into these allegations, we now believe that it is more likely than not that the income tax benefits that we recognized are not valid.

Financial Condition

Our consolidated balance sheet continues to reflect significant liquidity and a strong capital base. Consolidated shareholders' equity at September 30, 2019 was \$397.6 billion, an increase of \$48.9 billion since December 31, 2018. Net earnings attributable to Berkshire shareholders in the first nine months of 2019 were \$52.3 billion, which included after-tax gains on our investments of approximately \$31.7 billion, which was primarily due to increases in market prices of the equity securities we owned at September 30, 2019.

At September 30, 2019, our insurance and other businesses held cash, cash equivalents and U.S. Treasury Bills (net of amounts payable for acquired but not yet settled purchases) of \$116.3 billion, which included \$85.9 billion in U.S. Treasury Bills. Investments in equity and fixed maturity securities (excluding our investment in Kraft Heinz) were \$239.2 billion. In August 2019, Berkshire paid \$10 billion to acquire preferred stock and warrants of Occidental Petroleum Corporation, as discussed in Note 4 to the accompanying unaudited interim Consolidated Financial Statements.

Berkshire parent company debt outstanding at September 30, 2019 was \$19.7 billion, an increase of \$2.8 billion since December 31, 2018. In August 2019, Berkshire repaid maturing senior notes of \$750 million and issued ¥430 billion of senior notes (approximately \$4.0 billion) in September 2019, which has a weighted average interest rate of 0.49% and maturity dates ranging from 2024 to 2049.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Financial Condition (*Continued*)

Berkshire's insurance and other subsidiary outstanding borrowings were \$17.5 billion at September 30, 2019, which included senior note borrowings of BHFC, a wholly-owned financing subsidiary, of \$10.8 billion. BHFC's borrowings are used to fund loans originated and acquired by Clayton Homes and a portion of assets held for lease by our UTLX railcar leasing business. In the first nine months of 2019, BHFC repaid \$3.95 billion of maturing senior notes. BHFC issued \$2.0 billion of 4.25% senior notes due in 2049 in the first quarter of 2019 and in the second quarter of 2019 issued £1.0 billion of 2.375% senior notes due in 2039 and £750 million of 2.625% senior notes due in 2059. Berkshire guarantees the full and timely payment of principal and interest with respect to BHFC's senior notes.

Our railroad, utilities and energy businesses (conducted by BNSF and BHE) maintain very large investments in capital assets (property, plant and equipment) and will regularly make significant capital expenditures in the normal course of business. Capital expenditures of these two operations in the first nine months of 2019 were \$7.4 billion and we forecast additional capital expenditures of approximately \$3.8 billion in the fourth quarter of 2019.

BNSF's outstanding debt was \$24.0 billion as of September 30, 2019, an increase of approximately \$764 million since December 31, 2018. In July 2019, BNSF issued \$825 million of 3.55% senior unsecured debentures due in 2050. BNSF debentures of \$750 million matured in October 2019. Outstanding borrowings of BHE and its subsidiaries were \$41.0 billion at September 30, 2019, an increase of \$1.7 billion since December 31, 2018. In the first nine months of 2019, BHE and its subsidiaries issued debt aggregating \$3.4 billion with maturity dates ranging from 2029 to 2050 and repaid approximately \$1.7 billion of maturing term debt. The proceeds from these financings were used to repay borrowings, to fund capital expenditures and for other general corporate purposes. BHE subsidiary term debt of \$368 million will mature in the fourth quarter of 2019. Berkshire does not guarantee the repayment of debt issued by BNSF, BHE or any of their subsidiaries and is not committed to provide capital to support BNSF, BHE or any of their subsidiaries.

Berkshire's common stock repurchase program was amended on July 17, 2018, permitting Berkshire to repurchase its Class A and Class B shares at prices below Berkshire's intrinsic value, as conservatively determined by Warren Buffett, Berkshire's Chairman of the Board and Chief Executive Officer, and Charlie Munger, Vice Chairman of the Board. The program allows share repurchases in the open market or through privately negotiated transactions and does not specify a maximum number of shares to be repurchased. The program is expected to continue indefinitely. We will not repurchase our stock if it reduces the total amount of Berkshire's consolidated cash, cash equivalents and U.S. Treasury Bills holdings below \$20 billion. Financial strength and redundant liquidity will always be of paramount importance at Berkshire. In the first nine months of 2019, Berkshire repurchased shares of Class A and B common stock for an aggregate cost of \$2.8 billion.

Contractual Obligations

We are party to contracts associated with ongoing business and financing activities, which will result in cash payments to counterparties in future periods. Certain obligations are included in our Consolidated Balance Sheets, such as notes payable, which require future payments on contractually specified dates and in fixed and determinable amounts. Other obligations pertaining to the acquisition of goods or services in the future are not currently reflected in the financial statements, which will be recognized in future periods as the goods are delivered or services are provided. Beginning in 2019, operating lease obligations are included in the consolidated balance sheet due to the adoption of a new accounting pronouncement. The timing and amount of the payments under certain contracts, such as insurance and reinsurance contracts, are contingent upon the outcome of future events. Actual payments will likely vary, perhaps materially, from the estimated liabilities currently recorded in our Consolidated Balance Sheet.

In the first nine months of 2019, Berkshire and its subsidiaries issued new term debt. Principal and interest payments associated with these new borrowings are expected as follows: 2019 – \$124 million; 2020 and 2021 – \$637 million; 2022 and 2023 – \$637 million; and thereafter – \$19.1 billion.

Except as otherwise disclosed in this Quarterly Report, our contractual obligations as of September 30, 2019 were, in the aggregate, not materially different from those disclosed in the "Contractual Obligations" section of "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in Berkshire's Annual Report on Form 10-K for the year ended December 31, 2018.

Critical Accounting Policies

Certain accounting policies require us to make estimates and judgments that affect the amounts reflected in the Consolidated Financial Statements. Such estimates and judgments necessarily involve varying, and possibly significant, degrees of uncertainty. Accordingly, certain amounts currently recorded in the financial statements will likely be adjusted in the future based on new available information and changes in other facts and circumstances. Reference is made to "Critical Accounting Policies" discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Berkshire's Annual Report on Form 10-K for the year ended December 31, 2018.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies (*Continued*)

Our Consolidated Balance Sheet as of September 30, 2019 includes estimated liabilities for unpaid losses and loss adjustment expenses from property and casualty insurance and reinsurance contracts of \$113.4 billion. Due to the inherent uncertainties in the process of establishing loss reserve amounts, the actual ultimate claim amounts will likely differ from the currently recorded amounts. A very small percentage change in estimates of this magnitude will result in a material effect on periodic earnings. The effects from changes in these estimates are recorded as a component of insurance losses and loss adjustment expenses in the period of the change.

Our Consolidated Balance Sheet as of September 30, 2019 includes goodwill of acquired businesses of \$81.2 billion. We evaluate goodwill for impairment at least annually and we conducted our most recent annual review during the fourth quarter of 2018. Although we believe that the goodwill reflected in the Consolidated Balance Sheet is not impaired, goodwill may subsequently become impaired due to changes in facts and circumstances affecting the valuation of the reporting unit. A goodwill impairment charge could have a material effect on periodic earnings.

Information concerning new accounting pronouncements is included in Note 2 to the accompanying Consolidated Financial Statements.

Forward-Looking Statements

Investors are cautioned that certain statements contained in this document as well as some statements in periodic press releases and some oral statements of Berkshire officials during presentations about Berkshire or its subsidiaries are "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995 (the "Act"). Forward-looking statements include statements which are predictive in nature, which depend upon or refer to future events or conditions, which include words such as "expects," "anticipates," "intends," "plans," "believes," "estimates" or similar expressions. In addition, any statements concerning future financial performance (including future revenues, earnings or growth rates), ongoing business strategies or prospects and possible future Berkshire actions, which may be provided by management, are also forward-looking statements as defined by the Act. Forward-looking statements are based on current expectations and projections about future events and are subject to risks, uncertainties and assumptions about Berkshire and its subsidiaries, economic and market factors and the industries in which we do business, among other things. These statements are not guarantees of future performance and we have no specific intention to update these statements.

Actual events and results may differ materially from those expressed or forecasted in forward-looking statements due to a number of factors. The principal risk factors that could cause our actual performance and future events and actions to differ materially from such forward-looking statements include, but are not limited to, changes in market prices of our investments in fixed maturity and equity securities, losses realized from derivative contracts, the occurrence of one or more catastrophic events, such as an earthquake, hurricane, act of terrorism or cyber attack that causes losses insured by our insurance subsidiaries and/or losses to our business operations, changes in laws or regulations affecting our insurance, railroad, utilities and energy and finance subsidiaries, changes in federal income tax laws, and changes in general economic and market factors that affect the prices of securities or the industries in which we do business.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Reference is made to Berkshire's most recently issued Annual Report and in particular the "Market Risk Disclosures" included in "Management's Discussion and Analysis of Financial Condition and Results of Operations." As of September 30, 2019, there were no material changes in the market risks described in Berkshire's Annual Report on Form 10-K for the year ended December 31, 2018.

Item 4. Controls and Procedures

As of the end of the period covered by this Quarterly Report on Form 10-Q, the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Chairman (Chief Executive Officer) and the Senior Vice President (Chief Financial Officer), of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Exchange Act Rule 13a-15. Based upon that evaluation, the Chairman (Chief Executive Officer) and the Senior Vice President (Chief Financial Officer) concluded that the Company's disclosure controls and procedures are effective in timely alerting them to material information relating to the Company (including its consolidated subsidiaries) required to be included in the Company's periodic SEC filings. During the quarter, there have been no significant changes in the Company's internal control over financial reporting or in other factors that could significantly affect internal control over financial reporting.

Part II Other Information

Item 1. Legal Proceedings

Berkshire and its subsidiaries are parties in a variety of legal actions that routinely arise out of the normal course of business, including legal actions seeking to establish liability directly through insurance contracts or indirectly through reinsurance contracts issued by Berkshire subsidiaries. Plaintiffs occasionally seek punitive or exemplary damages. We do not believe that such normal and routine litigation will have a material effect on our consolidated financial condition or results of operations. Berkshire and certain of its subsidiaries are also involved in other kinds of legal actions, some of which assert or may assert claims or seek to impose fines and penalties. We believe that any liability that may arise as a result of other pending legal actions will not have a material effect on our consolidated financial condition or results of operations.

Item 1A. Risk Factors

Our significant business risks are described in Item 1A to Form 10-K for the year ended December 31, 2018 to which reference is made herein.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds and Issuer Repurchases of Equity Securities

For several years, Berkshire had a common stock repurchase program that permitted Berkshire to repurchase its Class A and Class B shares at prices no higher than a 20% premium over the book value of the shares. On July 17, 2018, Berkshire's Board of Directors authorized an amendment to the program, permitting Berkshire to repurchase shares any time that Warren Buffett, Berkshire's Chairman of the Board and Chief Executive Officer, and Charles Munger, Vice Chairman of the Board, believe that the repurchase price is below Berkshire's intrinsic value, conservatively determined. Repurchases may be in the open market or through privately negotiated transactions. Information with respect to Berkshire's Class A and Class B common stock repurchased during the third quarter of 2019 follows.

<u>Period</u>	<u>Total number of shares purchased</u>	<u>Average price paid per share</u>	<u>Total number of shares purchased as part of publicly announced program</u>	<u>Maximum number or value of shares that yet may be repurchased under the program</u>
August 5 through August 28:				
Class A common stock	64	\$ 300,166.13	64	*
Class B common stock	2,793,092	\$ 197.68	2,793,092	*
September 3 through September 30:				
Class A common stock	149	\$ 310,231.27	149	*
Class B common stock	375,771	\$ 206.50	375,771	*

* *The program does not specify a maximum number of shares to be repurchased or obligate Berkshire to repurchase any specific dollar amount or number of Class A or Class B shares and there is no expiration date to the repurchase program. Berkshire will not repurchase its common stock if the repurchases reduce the total value of Berkshire's consolidated cash, cash equivalents and U.S. Treasury Bills holdings to less than \$20 billion.*

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures

Information regarding the Company's mine safety violations and other legal matters disclosed in accordance with Section 1503(a) of the Dodd-Frank Reform Act is included in Exhibit 95 to this Form 10-Q.

Item 5. Other Information

None

Item 6. Exhibits

a. Exhibits

- 3(i) Restated Certificate of Incorporation
[Incorporated by reference to Exhibit 3\(i\) to Form 10-K filed on March 2, 2015.](#)
- 3(ii) By-Laws
[Incorporated by reference to Exhibit 3\(ii\) to Form 8-K filed on August 4, 2016.](#)
- 31.1 [Rule 13a-14\(a\)/15d-14\(a\) Certifications](#)
- 31.2 [Rule 13a-14\(a\)/15d-14\(a\) Certifications](#)
- 32.1 [Section 1350 Certifications](#)
- 32.2 [Section 1350 Certifications](#)
- 95 [Mine Safety Disclosures](#)
- 101 The following financial information from Berkshire Hathaway Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, formatted in iXBRL (Inline Extensible Business Reporting Language) includes: (i) the Cover Page (ii) the Consolidated Balance Sheets, (iii) the Consolidated Statements of Earnings, (iv) the Consolidated Statements of Comprehensive Income, (v) the Consolidated Statements of Changes in Shareholders' Equity, (vi) the Consolidated Statements of Cash Flows, and (vii) the Notes to Consolidated Financial Statements, tagged in summary and detail.
- 104 Cover Page Interactive Data File (formatted as iXBRL and contained in Exhibit 101)

SIGNATURE

Pursuant to the requirement 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.

BERKSHIRE HATHAWAY INC.
(Registrant)

Date: November 2, 2019

/S/ MARC D. HAMBURG

(Signature)
Marc D. Hamburg,
Senior Vice President and
Principal Financial Officer

Quarter ended September 30, 2019

Rule 13a-14(a)/15d-14(a) Certifications

CERTIFICATIONS

I, Warren E. Buffett, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Berkshire Hathaway 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 (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
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: November 2, 2019

/s/ WARREN E. BUFFETT

Chairman—Principal Executive Officer

Quarter ended September 30, 2019

Rule 13a-14(a)/15d-14(a) Certifications

CERTIFICATIONS

I, Marc D. Hamburg, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Berkshire Hathaway 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 (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
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: November 2, 2019

/s/ MARC D. HAMBURG

Senior Vice President—Principal Financial Officer

Section 1350 Certifications

Quarter ended September 30, 2019

I, Warren E. Buffett, Chairman and Chief Executive Officer of Berkshire Hathaway Inc. (the “Company”), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that to the best of my knowledge:

- (1) the Quarterly Report on Form 10-Q of the Company for the period ended September 30, 2019 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 2, 2019

/s/ WARREN E. BUFFETT

Warren E. Buffett
Chairman and Chief Executive Officer

Section 1350 Certifications

Quarter ended September 30, 2019

I, Marc D. Hamburg, Senior Vice President and Chief Financial Officer of Berkshire Hathaway Inc. (the “Company”), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that to the best of my knowledge:

- (1) the Quarterly Report on Form 10-Q of the Company for the period ended September 30, 2019 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 2, 2019

/s/ MARC D. HAMBURG

Marc D. Hamburg
Senior Vice President and Chief Financial Officer

**MINE SAFETY VIOLATIONS AND OTHER LEGAL MATTER DISCLOSURES
PURSUANT TO SECTION 1503(a) OF THE DODD-FRANK WALL STREET
REFORM AND CONSUMER PROTECTION ACT**

PacifiCorp and its subsidiaries operate coal mines and coal processing facilities and Acme Brick and its affiliates operate clay, shale and limestone excavation facilities (collectively, the “mining facilities”) that are regulated by the Federal Mine Safety and Health Administration (“MSHA”) under the Federal Mine Safety and Health Act of 1977 (the “Mine Safety Act”). MSHA inspects mining facilities on a regular basis. The total number of reportable Mine Safety Act citations, orders, assessments and legal actions for the three months ended September 30, 2019 are summarized in the table below and are subject to contest and appeal. The severity and assessment of penalties may be reduced or, in some cases, dismissed through the contest and appeal process. Amounts are reported regardless of whether PacifiCorp or Acme has challenged or appealed the matter. Mines that are closed or idled are not included in the information below if no reportable events occurred at those locations during the three months ended September 30, 2019. PacifiCorp and Acme have not received any notice of a pattern, or notice of the potential to have a pattern, of violations of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of coal or other mine health or safety hazards under Section 104(e) of the Mine Safety Act during the three months ended September 30, 2019.

Mining Facilities	Mine Safety Act					Total Value of Proposed MSHA Assessments (in thousands)	Total Number of Mining Related Fatalities	Legal Actions		
	Section 104 Significant and Substantial Citations ⁽¹⁾	Section 104(b) Orders ⁽²⁾	Section 104(d) Citations/Orders ⁽³⁾	Section 110(b)(2) Violations ⁽⁴⁾	Section 107(a) Imminent Danger Orders ⁽⁵⁾			Pending as of Last Day of Period ⁽⁶⁾	Instituted During Period	Resolved During Period
Coal:										
Bridger (surface)	—	—	—	—	—	—	—	—	—	
Bridger (underground)	1	—	2	—	—	\$ 7	—	1	1	
Wyodak Coal Crushing Facility	—	—	—	—	—	—	—	—	—	
Clay, shale and limestone:										
Malvern	—	—	—	—	—	—	—	—	—	
Wheeler	—	—	—	—	—	—	—	—	—	
Oklahoma City	1	—	—	—	—	—	—	—	—	
Tulsa	—	—	—	—	—	—	—	—	—	
Bennett	—	—	—	—	—	—	—	—	—	
Denton	—	—	—	—	—	—	—	—	—	
Elgin	—	—	—	—	—	—	—	—	—	
Sealy	—	—	—	—	—	—	—	—	—	
Texas Clay	—	—	—	—	—	—	—	—	—	
Leeds	—	—	—	—	—	—	—	—	—	
Montgomery	—	—	—	—	—	—	—	—	—	
Cordova	—	—	—	—	—	—	—	—	—	

⁽¹⁾ Citations for alleged violations of mandatory health and safety standards that could significantly or substantially contribute to the cause and effect of a safety or health hazard under Section 104 of the Mine Safety Act.

⁽²⁾ For alleged failure to totally abate the subject matter of a Mine Safety Act Section 104(a) citation within the period specified in the citation.

⁽³⁾ For alleged unwarrantable failure (i.e., aggravated conduct constituting more than ordinary negligence) to comply with a mandatory health or safety standard. Subsequently, MSHA modified the Section 104(d)(1) citation to a Section 104(a) citation and also vacated the Section 104(d)(1) order.

⁽⁴⁾ For alleged flagrant violations (i.e., reckless or repeated failure to make reasonable efforts to eliminate a known violation of a mandatory health or safety standard that substantially and proximately caused, or reasonably could have been expected to cause, death or serious bodily injury).

⁽⁵⁾ For the existence of any condition or practice in a coal or other mine which could reasonably be expected to cause death or serious physical harm before such condition or practice can be abated.

⁽⁶⁾ For the existence of any proposed penalties under Subpart C of the Federal Mine Safety and Health Review Commission’s procedural rules. The pending legal actions are not exclusive to citations, notices, orders and penalties assessed by MSHA during the reporting period.