
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2018

OR

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

For the transition period from _____ to _____
Commission file number 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)

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 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
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

Number of shares of common stock outstanding as of October 25, 2018:

Class A —	733,152
Class B —	1,362,792,906

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, 2018 (Unaudited)	December 31, 2017
ASSETS		
Insurance and Other:		
Cash and cash equivalents*	\$ 36,506	\$ 25,460
Short-term investments in U.S. Treasury Bills	59,947	78,515
Investments in fixed maturity securities	18,271	21,353
Investments in equity securities	201,226	164,026
Investment in The Kraft Heinz Company	17,453	17,635
Receivables	31,884	28,578
Inventories	16,793	16,187
Property, plant and equipment	24,357	20,104
Goodwill	54,985	54,985
Other intangible assets	31,626	32,518
Deferred charges under retroactive reinsurance contracts	14,451	15,278
Other	13,250	11,158
	<u>520,749</u>	<u>485,797</u>
Railroad, Utilities and Energy:		
Cash and cash equivalents*	3,297	2,910
Property, plant and equipment	130,387	128,184
Goodwill	24,790	24,780
Regulatory assets	2,928	2,950
Other	16,020	15,589
	<u>177,422</u>	<u>174,413</u>
Finance and Financial Products:		
Cash and cash equivalents*	1,635	3,213
Short-term investments in U.S. Treasury Bills	2,258	5,856
Loans and finance receivables	14,477	13,748
Property, plant and equipment and assets held for lease	10,273	9,931
Goodwill	1,552	1,493
Other	8,093	7,644
	<u>38,288</u>	<u>41,885</u>
	<u>\$ 736,459</u>	<u>\$ 702,095</u>

* Cash and cash equivalents includes U.S. Treasury Bills with maturities of three months or less when purchased of \$14.7 billion at September 30, 2018 and \$5.7 billion at December 31, 2017.

See accompanying Notes to Consolidated Financial Statements

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

	September 30, 2018 (Unaudited)	December 31, 2017
LIABILITIES AND SHAREHOLDERS' EQUITY		
<i>Insurance and Other:</i>		
Unpaid losses and loss adjustment expenses	\$ 64,263	\$ 61,122
Unpaid losses and loss adjustment expenses under retroactive reinsurance contracts	41,935	42,937
Unearned premiums	19,011	16,040
Life, annuity and health insurance benefits	18,368	17,608
Other policyholder liabilities	6,692	7,654
Accounts payable, accruals and other liabilities	27,178	23,099
Notes payable and other borrowings	24,271	27,324
	<u>201,718</u>	<u>195,784</u>
<i>Railroad, Utilities and Energy:</i>		
Accounts payable, accruals and other liabilities	11,269	11,334
Regulatory liabilities	7,723	7,511
Notes payable and other borrowings	62,599	62,178
	<u>81,591</u>	<u>81,023</u>
<i>Finance and Financial Products:</i>		
Accounts payable, accruals and other liabilities	1,752	1,470
Derivative contract liabilities	1,869	2,172
Notes payable and other borrowings	10,770	13,085
	<u>14,391</u>	<u>16,727</u>
Income taxes, principally deferred	59,340	56,607
Total liabilities	<u>357,040</u>	<u>350,141</u>
Shareholders' equity:		
Common stock	8	8
Capital in excess of par value	35,713	35,694
Accumulated other comprehensive income	(3,927)	58,571
Retained earnings	346,503	255,786
Treasury stock, at cost	(2,691)	(1,763)
Berkshire Hathaway shareholders' equity	<u>375,606</u>	<u>348,296</u>
Noncontrolling interests	3,813	3,658
Total shareholders' equity	<u>379,419</u>	<u>351,954</u>
	<u>\$ 736,459</u>	<u>\$ 702,095</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	
	2018	2017	2018	2017
	(Unaudited)		(Unaudited)	
Revenues:				
<i>Insurance and Other:</i>				
Insurance premiums earned	\$ 14,333	\$ 13,349	\$ 41,855	\$ 47,469
Sales and service revenues	33,249	32,055	98,128	94,017
Interest, dividend and other investment income	1,619	1,320	4,468	3,804
	<u>49,201</u>	<u>46,724</u>	<u>144,451</u>	<u>145,290</u>
<i>Railroad, Utilities and Energy operating and other revenues</i>	<u>11,818</u>	<u>10,633</u>	<u>32,815</u>	<u>29,833</u>
<i>Finance and Financial Products:</i>				
Sales and service revenues	2,057	1,790	5,742	4,936
Interest, dividend and other investment income	374	360	1,115	1,074
	<u>2,431</u>	<u>2,150</u>	<u>6,857</u>	<u>6,010</u>
Total revenues	<u>63,450</u>	<u>59,507</u>	<u>184,123</u>	<u>181,133</u>
Investment and derivative contract gains/losses:				
Investments gains (losses)	14,569	657	12,750	1,262
Derivative contract gains (losses)	137	308	303	703
	<u>14,706</u>	<u>965</u>	<u>13,053</u>	<u>1,965</u>
Costs and expenses:				
<i>Insurance and Other:</i>				
Insurance losses and loss adjustment expenses	9,932	12,137	28,296	39,450
Life, annuity and health insurance benefits	1,448	1,213	4,153	3,703
Insurance underwriting expenses	2,352	2,207	7,079	6,924
Cost of sales and services	26,789	25,815	78,684	75,594
Selling, general and administrative expenses	3,984	3,965	12,158	12,101
Interest expense	116	435	246	1,405
	<u>44,621</u>	<u>45,772</u>	<u>130,616</u>	<u>139,177</u>
<i>Railroad, Utilities and Energy:</i>				
Cost of sales and operating expenses	8,087	6,984	23,451	20,678
Interest expense	698	700	2,110	2,090
	<u>8,785</u>	<u>7,684</u>	<u>25,561</u>	<u>22,768</u>
<i>Finance and Financial Products:</i>				
Cost of sales and services	1,273	1,062	3,519	2,891
Selling, general and administrative expenses	564	531	1,549	1,442
Interest expense	82	98	253	305
	<u>1,919</u>	<u>1,691</u>	<u>5,321</u>	<u>4,638</u>
Total costs and expenses	<u>55,325</u>	<u>55,147</u>	<u>161,498</u>	<u>166,583</u>
Earnings before income taxes and equity method earnings	22,831	5,325	35,678	16,515
Equity method earnings	316	305	1,044	932
Earnings before income taxes	23,147	5,630	36,722	17,447
Income tax expense	4,440	1,427	7,009	4,750
Net earnings	18,707	4,203	29,713	12,697
Earnings attributable to noncontrolling interests	167	136	300	308
Net earnings attributable to Berkshire Hathaway shareholders	<u>\$ 18,540</u>	<u>\$ 4,067</u>	<u>\$ 29,413</u>	<u>\$ 12,389</u>
Net earnings per average equivalent Class A share*	\$ 11,280	\$ 2,473	\$ 17,885	\$ 7,533
Net earnings per average equivalent Class B share*	\$ 7.52	\$ 1.65	\$ 11.92	\$ 5.02
Average Class A shares outstanding	736,262	756,528	744,126	766,245
Average Class B shares outstanding	1,360,940,890	1,332,192,917	1,350,588,758	1,317,463,821

* 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 19.

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	
	2018	2017	2018	2017
	(Unaudited)		(Unaudited)	
Net earnings	\$ 18,707	\$ 4,203	\$ 29,713	\$ 12,697
Other comprehensive income:				
Net change in unrealized appreciation of investments	5	4,952	(132)	18,040
Applicable income taxes	(1)	(1,716)	19	(6,247)
Reclassification of investment appreciation in net earnings	(34)	(646)	(299)	(1,235)
Applicable income taxes	7	226	63	432
Foreign currency translation	(79)	771	(842)	2,127
Applicable income taxes	9	(24)	46	(116)
Prior service cost and actuarial gains/losses of defined benefit pension plans	(13)	(3)	50	(57)
Applicable income taxes	3	6	—	31
Other, net	(21)	32	(57)	38
Other comprehensive income, net	(124)	3,598	(1,152)	13,013
Comprehensive income	18,583	7,801	28,561	25,710
Comprehensive income attributable to noncontrolling interests	162	203	271	436
Comprehensive income attributable to Berkshire Hathaway shareholders	<u>\$ 18,421</u>	<u>\$ 7,598</u>	<u>\$ 28,290</u>	<u>\$ 25,274</u>

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

	Berkshire Hathaway shareholders' equity					Total
	Common stock and capital in excess of par value	Accumulated other comprehensive income	Retained earnings	Treasury stock	Non- controlling interests	
First nine months 2017:						
Balance at December 31, 2016	\$ 35,689	\$ 37,298	\$ 210,846	\$ (1,763)	\$ 3,358	\$ 285,428
Net earnings	—	—	12,389	—	308	12,697
Other comprehensive income, net	—	12,885	—	—	128	13,013
Issuance of common stock	58	—	—	—	—	58
Transactions with noncontrolling interests	(55)	—	—	—	(220)	(275)
Balance at September 30, 2017	<u>\$ 35,692</u>	<u>\$ 50,183</u>	<u>\$ 223,235</u>	<u>\$ (1,763)</u>	<u>\$ 3,574</u>	<u>\$ 310,921</u>
First nine months 2018:						
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	—	—	29,413	—	300	29,713
Other comprehensive income, net	—	(1,123)	—	—	(29)	(1,152)
Issuance (acquisition) of common stock	54	—	—	(928)	—	(874)
Transactions with noncontrolling interests	(35)	—	—	—	(116)	(151)
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>

See accompanying Notes to Consolidated Financial Statements

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

	First Nine Months	
	2018	2017
	(Unaudited)	
Cash flows from operating activities:		
Net earnings	\$ 29,713	\$ 12,697
Adjustments to reconcile net earnings to operating cash flows:		
Investment gains/losses	(12,750)	(1,262)
Depreciation and amortization	7,169	6,835
Other	(677)	1,110
Changes in operating assets and liabilities:		
Losses and loss adjustment expenses	2,272	22,615
Deferred charges reinsurance assumed	827	(5,525)
Unearned premiums	2,974	2,253
Receivables and originated loans	(4,781)	(2,890)
Other assets	(1,788)	(1,287)
Other liabilities	805	360
Income taxes	2,791	2,593
Net cash flows from operating activities	<u>26,555</u>	<u>37,499</u>
Cash flows from investing activities:		
Purchases of U.S. Treasury Bills and fixed maturity securities	(85,502)	(106,597)
Purchases of equity securities	(38,552)	(14,936)
Sales of U.S. Treasury Bills and fixed maturity securities	26,903	35,143
Redemptions and maturities of U.S. Treasury Bills and fixed maturity securities	83,742	65,666
Sales and redemptions of equity securities	14,164	10,572
Purchases of loans and finance receivables	(1,748)	(1,392)
Collections of loans and finance receivables	266	1,599
Acquisitions of businesses, net of cash acquired	(521)	(2,640)
Purchases of property, plant and equipment	(10,040)	(8,411)
Other	257	(150)
Net cash flows from investing activities	<u>(11,031)</u>	<u>(21,146)</u>
Cash flows from financing activities:		
Proceeds from borrowings of insurance and other businesses	55	1,321
Proceeds from borrowings of railroad, utilities and energy businesses	7,019	2,812
Proceeds from borrowings of finance businesses	2,339	1,298
Repayments of borrowings of insurance and other businesses	(2,661)	(1,763)
Repayments of borrowings of railroad, utilities and energy businesses	(3,658)	(1,944)
Repayments of borrowings of finance businesses	(4,661)	(3,605)
Changes in short term borrowings, net	(2,754)	122
Acquisition of treasury stock	(928)	—
Other	(277)	(108)
Net cash flows from financing activities	<u>(5,526)</u>	<u>(1,867)</u>
Effects of foreign currency exchange rate changes	(109)	222
Increase in cash and cash equivalents and restricted cash	9,889	14,708
Cash and cash equivalents and restricted cash at beginning of year	32,212	28,643
Cash and cash equivalents and restricted cash at end of third quarter *	<u>\$ 42,101</u>	<u>\$ 43,351</u>
<i>* Cash and cash equivalents and restricted cash are comprised of the following:</i>		
<i>Beginning of year—</i>		
Insurance and Other	\$ 25,460	\$ 23,581
Railroad, Utilities and Energy	2,910	3,939
Finance and Financial Products	3,213	528
Restricted cash, included in other assets	629	595
	<u>\$ 32,212</u>	<u>\$ 28,643</u>
<i>End of third quarter—</i>		
Insurance and Other	\$ 36,506	\$ 35,247
Railroad, Utilities and Energy	3,297	4,448
Finance and Financial Products	1,635	3,011
Restricted cash, included in other assets	663	645
	<u>\$ 42,101</u>	<u>\$ 43,351</u>

See accompanying Notes to Consolidated Financial Statements

**BERKSHIRE HATHAWAY INC.
and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
September 30, 2018**

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. Changes to those policies due to the adoption of new accounting standards effective January 1, 2018 are described in Note 2. Certain immaterial amounts related to equity method earnings were reclassified in the accompanying 2017 Consolidated Financial Statements to conform to current presentations.

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. Changes in market prices of the equity securities we own can produce significant effects on our consolidated shareholders’ equity. Beginning in 2018, those effects are included in our Consolidated Statements of Earnings, whereas in pre-2018 periods, such effects were included in other comprehensive income. 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 our periodic net earnings.

Note 2. New Accounting Pronouncements

On January 1, 2018, we adopted Accounting Standards Update (“ASU”) 2016-01 “Financial Instruments—Recognition and Measurement of Financial Assets and Financial Liabilities” (“ASU 2016-01”), ASU 2018-02 “Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income” (“ASU 2018-02”) and Accounting Standards Codification (“ASC”) 606 – “Revenues from Contracts with Customers” (“ASC 606”). A summary of the effects of the initial adoption of ASU 2016-01, ASU 2018-02 and ASC 606 follows (in millions).

	ASU 2016-01	ASU 2018-02	ASC 606	Total
Increase (decrease):				
Assets	\$ —	\$ —	\$ 3,382	\$ 3,382
Liabilities	—	—	3,453	3,453
Accumulated other comprehensive income	(61,459)	84	—	(61,375)
Retained earnings	61,459	(84)	(71)	61,304
Shareholders’ equity	—	—	(71)	(71)

With respect to ASU 2016-01, beginning in 2018, we are including unrealized gains and losses arising from the changes in the fair values of our equity securities during the period as a component of investment gains in the Consolidated Statements of Earnings. For periods ending prior to January 1, 2018, we recognized 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 for other-than-temporary impairment losses. We recorded unrealized gains and losses from the changes in fair value of available-for-sale equity securities in other comprehensive income. We continue to carry our investments in equity securities at fair value and there is no change to the asset values or total shareholders’ equity amounts we would have otherwise recorded. ASU 2016-01 prohibited the restatement of prior year financial statements. However, as of January 1, 2018, we reclassified net after-tax unrealized gains on equity securities from accumulated other comprehensive income to retained earnings.

Notes to Consolidated Financial Statements (Continued)

Note 2. New Accounting Pronouncements (Continued)

In connection with our adoption of ASU 2018-02, we reclassified the stranded deferred income tax effects that were included in accumulated other comprehensive income as of January 1, 2018 to retained earnings. These stranded income tax effects arose from the reduction in the U.S. statutory income tax rate under the U.S. Tax Cuts and Jobs Act enacted on December 22, 2017. The effect of the reduction in the statutory income tax rate on accumulated other comprehensive income items was recorded in earnings in December 2017. Prior year financial statements were not restated.

We adopted ASC 606 using the modified retrospective method, whereby the cumulative effect of the adoption was recorded as an adjustment to retained earnings. Prior year financial statements were not restated. The initial adoption of ASC 606 as of January 1, 2018 resulted in increases to assets and other liabilities, with a relatively minor reduction in 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 and not ASC 606. The principal effects of this re-characterization were to increase both property, plant and equipment and other liabilities by approximately \$3.5 billion. The re-characterization of these fractional ownership interests as operating leases did not have a material effect on our consolidated revenues or earnings for the first nine months of 2018.

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU 2016-02 "Leases," which together with subsequent amendments is included in ASC 842. 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. ASC 842 also addresses accounting and reporting by lessors, which is not significantly different from current accounting and reporting, and further provides for qualitative and quantitative disclosures. We intend to adopt ASC 842 as of January 1, 2019 under the modified retrospective method.

We are party to contracts where we are the lessee and other contracts where we are the lessor. For contracts where we are the lessee, we will record lease liabilities and right of use assets for contracts in effect on January 1, 2019 based on the facts and circumstances as of that date. While we continue to evaluate certain provisions of ASC 842, based on our current estimates, we expect to recognize right of use assets and lessee lease liabilities of approximately \$6 billion with respect to operating leases. We do not believe the adoption of ASC 842 will have a material effect on our consolidated financial position, results of operations or cash flows.

In June 2016, the 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 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 currently 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 fair value, 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 in the valuation of 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. Under current accounting guidance, the actuarial and discount rate assumptions are set at the contract inception date and not subsequently changed, except under limited circumstances. ASU 2018-12 also requires new disclosures and is effective for fiscal years beginning after December 15, 2020, 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. Revenues from contracts with customers

As discussed in Note 2, on January 1, 2018, we adopted ASC 606 “Revenues from Contracts with Customers.” Except as described in Note 2, our revenue recognition practices for contracts with customers under ASC 606 do not differ significantly from prior practices. 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. Our accounting policies related to revenue from contracts with customers follow.

We manufacture and/or distribute a wide variety of industrial, building and consumer products. Our sales contracts provide customers with these products through wholesale and retail channels in exchange for consideration specified under the contracts. Contracts generally represent customer orders for individual products at stated prices. Sales contracts may contain either single or multiple performance obligations. In instances where contracts contain multiple performance obligations, we allocate the revenue to each obligation based on the relative stand-alone selling prices of each product or service.

Sales revenue reflects reductions for returns, allowances, volume discounts and other incentives, some of which may be contingent on future events. In certain customer contracts of our grocery distribution business, sales revenue includes certain state and local excise taxes billed to customers on specified products when those taxes are levied directly upon us by the taxing authorities. Sales revenue excludes sales taxes and value-added taxes collected on behalf of taxing authorities. Sales revenue includes consideration for shipping and other fulfillment activities performed prior to the customer obtaining control of the goods. We also elect to treat consideration for such services performed after control has passed to the customer as sales revenue.

Our product sales revenues are generally recognized at a point in time when control of the product transfers to the customer, which coincides with customer pickup or product delivery or acceptance, depending on terms of the arrangement. We recognize sales revenues and related costs with respect to certain contracts over time, primarily from certain castings, forgings and aerostructures contracts. Control of the product units under these contracts transfers continuously to the customer as the product is manufactured. These products generally have no alternative use and the contract requires the customer to provide reasonable compensation if terminated for reasons other than breach of contract.

Our energy revenue derives primarily from tariff based sales arrangements approved by various regulatory bodies. These tariff based revenues are mainly comprised of energy, transmission, distribution and natural gas and have performance obligations to deliver energy products and services to customers which are satisfied over time as energy is delivered or services are provided. Our nonregulated energy revenue primarily relates to our renewable energy business. Energy revenues are equivalent to the amounts we have the right to invoice and correspond directly with the value to the customer of the performance to date and include billed and unbilled amounts. As of September 30, 2018 and December 31, 2017, trade receivables were approximately \$2.2 billion and \$2.0 billion, respectively, and were included in other assets of our railroad, utilities and energy businesses on the Consolidated Balance Sheets. Such amounts substantially relate to customer revenue and included unbilled revenue of \$624 million as of September 30, 2018 and \$665 million as of December 31, 2017. Payments from customers are generally due from the customer within 30 days of billing. Rates charged for energy products and services are established by regulators or contractual arrangements that establish the transaction price, as well as the allocation of price amongst the separate performance obligations. When preliminary regulated rates are permitted to be billed prior to final approval by the applicable regulator, certain revenue collected may be subject to refund and a liability for estimated refunds is accrued.

The primary performance obligation under our freight rail transportation service contracts is to move freight from a point of origin to a point of destination. The performance obligations are represented by bills of lading which create a series of distinct services that have a similar pattern of transfer to the customer. The revenues for each performance obligation are based on various factors including the product being shipped, the origin and destination pair, and contract incentives which are outlined in various private rate agreements, common carrier public tariffs, interline foreign road agreements and pricing quotes. The transaction price is generally a per car amount to transport railcars from a specified origin to a specified destination. Freight revenues are recognized over time as the service is performed because the customer simultaneously receives and consumes the benefits of the service. Revenues recognized represent the proportion of the service completed as of the balance sheet date. Receivables related to customer contracts were approximately \$1.3 billion at September 30, 2018 and \$1.2 billion at December 31, 2017 and were included in other assets of our railroad, utilities and energy businesses. Invoices for freight transportation services are generally issued to customers and paid within thirty days or less. Customer incentives, which are primarily provided for shipping a specified cumulative volume or shipping to/from specific locations, are recorded as a reduction to revenue on a pro-rata basis based on actual or projected future customer shipments.

Other service revenues derive from contracts with customers in which performance obligations are satisfied over time, where customers receive and consume benefits as we perform the services, or at a point in time when the services are provided. Other service revenues primarily derive from real estate brokerage, automotive repair, aircraft management, aviation training, franchising and news distribution services.

Notes to Consolidated Financial Statements (Continued)

Note 3. Revenues from contracts with customers (Continued)

The following table summarizes customer contract revenues disaggregated by reportable segment and the source of the revenue for the three and nine months ending September 30, 2018 (in millions). Other revenues included in our consolidated revenues were primarily insurance premiums earned, interest, dividend and other investment income and lease income which are not within the scope of ASC 606.

	Manufacturing	McLane Company	Service and Retail	BNSF	Berkshire Hathaway Energy	Finance and Financial Products	Insurance, Corporate and other	Total
Three months ending September 30, 2018								
Manufactured products:								
Industrial and commercial products	\$ 6,384	\$ —	\$ 47	\$ —	\$ —	\$ 82	\$ —	\$ 6,513
Building products	3,473	—	—	—	—	4	—	3,477
Consumer products	2,838	—	—	—	—	1,170	—	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	521	—	3,117	—	—	23	—	3,661
Service	262	16	965	6,099	1,140	148	—	8,630
Electricity and natural gas	—	—	—	—	4,267	—	—	4,267
Total	13,478	12,804	6,212	6,099	5,407	1,427	—	45,427
Other revenue	51	18	743	13	299	1,004	15,895	18,023
	<u>\$ 13,529</u>	<u>\$ 12,822</u>	<u>\$ 6,955</u>	<u>\$ 6,112</u>	<u>\$ 5,706</u>	<u>\$ 2,431</u>	<u>\$ 15,895</u>	<u>\$ 63,450</u>

	Manufacturing	McLane Company	Service and Retail	BNSF	Berkshire Hathaway Energy	Finance and Financial Products	Insurance, Corporate and other	Total
Nine months ending September 30, 2018								
Manufactured products:								
Industrial and commercial products	\$ 19,306	\$ —	\$ 155	\$ —	\$ —	\$ 503	\$ —	\$ 19,964
Building products	9,817	—	—	—	—	11	—	9,828
Consumer products	8,734	—	—	—	—	3,124	—	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	1,533	—	8,734	—	—	65	—	10,332
Service	759	53	2,912	17,510	3,026	174	—	24,434
Electricity and natural gas	—	—	—	—	11,357	—	—	11,357
Total	40,149	37,384	17,888	17,510	14,383	3,877	—	131,191
Other revenue	132	54	2,664	37	885	2,980	46,180	52,932
	<u>\$ 40,281</u>	<u>\$ 37,438</u>	<u>\$ 20,552</u>	<u>\$ 17,547</u>	<u>\$ 15,268</u>	<u>\$ 6,857</u>	<u>\$ 46,180</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, 2018 follows (in millions).

	Performance obligations expected to be satisfied:		Total
	Less than 12 months	Greater than 12 months	
Manufactured products:			
Industrial and commercial products	\$ 50	\$ 2,549	\$ 2,599
Electricity and natural gas	1,011	5,879	6,890

Notes to Consolidated Financial Statements (Continued)

Note 4. Investments in fixed maturity securities

Our investments in fixed maturity securities as of September 30, 2018 and December 31, 2017 are summarized by type below (in millions).

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
<i>September 30, 2018</i>				
U.S. Treasury, U.S. government corporations and agencies	\$ 3,626	\$ 8	\$ (35)	\$ 3,599
U.S. states, municipalities and political subdivisions	276	15	(1)	290
Foreign governments	7,362	45	(37)	7,370
Corporate bonds	6,029	436	(7)	6,458
Mortgage-backed securities	502	56	(4)	554
	<u>\$ 17,795</u>	<u>\$ 560</u>	<u>\$ (84)</u>	<u>\$ 18,271</u>
<i>December 31, 2017</i>				
U.S. Treasury, U.S. government corporations and agencies	\$ 3,975	\$ 4	\$ (26)	\$ 3,953
U.S. states, municipalities and political subdivisions	847	19	(12)	854
Foreign governments	8,572	274	(24)	8,822
Corporate bonds	6,279	588	(5)	6,862
Mortgage-backed securities	772	92	(2)	862
	<u>\$ 20,445</u>	<u>\$ 977</u>	<u>\$ (69)</u>	<u>\$ 21,353</u>

Investments in foreign government securities include securities issued by national and provincial government entities as well as instruments that are unconditionally guaranteed by such entities. As of September 30, 2018, approximately 89% of 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, 2018 are summarized below by contractual maturity dates. Amounts are 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	\$ 7,275	\$ 9,057	\$ 387	\$ 574	\$ 502	\$ 17,795
Fair value	7,274	9,108	435	900	554	18,271

Note 5. Investments in equity securities

Our investments in equity securities as of September 30, 2018 and December 31, 2017 are summarized based on the primary industry of the investee as follows (in millions).

	Cost Basis	Net Unrealized Gains	Fair Value
<i>September 30, 2018 *</i>			
Banks, insurance and finance	\$ 42,010	\$ 51,499	\$ 93,509
Consumer products	38,793	39,858	78,651
Commercial, industrial and other	21,035	14,137	35,172
	<u>\$ 101,838</u>	<u>\$ 105,494</u>	<u>\$ 207,332</u>

* Approximately 69% of the aggregate fair value was concentrated in five companies (American Express Company – \$16.1 billion; Apple Inc. – \$57.6 billion; Bank of America Corporation – \$26.5 billion; The Coca-Cola Company – \$18.5 billion and Wells Fargo & Company – \$24.4 billion).

Notes to Consolidated Financial Statements (Continued)

Note 5. Investments in equity securities (Continued)

	Cost Basis	Net Unrealized Gains	Fair Value
<i>December 31, 2017 *</i>			
Banks, insurance and finance	\$ 25,783	\$ 55,026	\$ 80,809
Consumer products	25,177	25,698	50,875
Commercial, industrial and other	23,716	15,140	38,856
	<u>\$ 74,676</u>	<u>\$ 95,864</u>	<u>\$ 170,540</u>

* Approximately 65% of the aggregate fair value was concentrated in five companies (American Express Company – \$15.1 billion; Apple Inc. – \$28.2 billion; Bank of America Corporation – \$20.7 billion; The Coca-Cola Company – \$18.4 billion and Wells Fargo & Company – \$29.3 billion).

Investments in equity securities are reflected in our Consolidated Balance Sheets as follows (in millions).

	September 30, 2018	December 31, 2017
Insurance and other	\$ 201,226	\$ 164,026
Railroad, utilities and energy *	1,616	1,961
Finance and financial products *	4,490	4,553
	<u>\$ 207,332</u>	<u>\$ 170,540</u>

* Included in other assets.

Note 6. Equity Method Investments

Berkshire holds 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 26.7% of the outstanding shares. The carrying value and fair value of this investment at September 30, 2018 was approximately \$17.5 billion and \$17.9 billion, respectively, and at December 31, 2017 was \$17.6 billion and \$25.3 billion, respectively. Our earnings determined under the equity method during the first nine months of 2018 and 2017 were \$635 million and \$800 million, respectively. We received dividends on the common stock of \$610 million in the first nine months of 2018 and \$594 million in the first nine months of 2017, which we recorded as reductions of our investment.

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

	September 29, 2018	December 30, 2017
Assets	\$ 119,730	\$ 120,232
Liabilities	54,152	53,985

	Third Quarter		First Nine Months	
	2018	2017	2018	2017
Sales	\$ 6,378	\$ 6,280	\$ 19,368	\$ 19,241
Net earnings attributable to Kraft Heinz common shareholders	\$ 630	\$ 944	\$ 2,379	\$ 2,996

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”). Our investments in these entities were approximately \$3.6 billion as of September 30, 2018 and \$3.4 billion as of December 31, 2017 and were included in other assets. Our equity method earnings in these entities for the first nine months were \$409 million in 2018 and \$132 million in 2017. Additional information concerning these investments follows.

Notes to Consolidated Financial Statements (Continued)

Note 6. Equity Method Investments (Continued)

We own a 50% interest in Berkadia with Jefferies Financial Group Inc. (“Jefferies”), formerly known as Leucadia National Corporation, 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. 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 more than \$20 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 7. Income taxes

Our consolidated effective income tax rates for the third quarter and first nine months of 2018 were 19.2% and 19.1%, respectively, and 25.3% and 27.2% in the third quarter and first nine months of 2017, respectively. Our effective income tax rate normally reflects recurring benefits from: (a) dividends received deductions applicable to certain investments in equity securities and (b) income production tax credits related to wind-powered electricity generation placed in service in the U.S. In 2018, our effective income tax rate reflects the current U.S. statutory rate of 21%, while the rate for 2017 reflects the then current U.S. statutory rate of 35%. The relative mix of pre-tax earnings or losses and underlying income tax rates applicable to the various taxing jurisdictions can also affect our periodic consolidated effective income tax rate.

In December 2017, the Securities and Exchange Commission issued Staff Accounting Bulletin 118 (“SAB 118”) to provide clarification in implementing the Tax Cuts and Jobs Act of 2017 (“TCJA”) when registrants do not have the necessary information available to complete the accounting for an element of the TCJA in the period of its enactment. SAB 118 provides for tax amounts to be classified as provisional and subject to remeasurement for up to one year from the enactment date for such elements when the accounting effect is not complete, but can be reasonably estimated. We recorded income tax expense of approximately \$1.4 billion in the fourth quarter of 2017, representing our provisional estimate of the U.S. Federal and state income taxes on the deemed repatriation of accumulated undistributed earnings of foreign subsidiaries. We continue to consider this estimate to be provisional and subject to remeasurement when we obtain the necessary additional information to complete the measurement. As of September 30, 2018, we had not finalized the inputs to the foreign earnings and profits calculations, the basis on which income taxes are determined. Our accounting for the repatriation tax under the TCJA will be completed during the fourth quarter of 2018. We do not anticipate significant adjustments to the provisional estimates.

Note 8. Investment gains/losses

A summary of investment gains and losses in the third quarter and first nine months of 2018 and 2017 follows (in millions).

	Third Quarter		First Nine Months	
	2018	2017	2018	2017
Equity securities:				
Unrealized investment gains/losses on securities held at the end of the period	\$ 14,294	\$ —	\$ 12,126	\$ —
Investment gains/losses during 2018 on securities sold in 2018	244	—	307	—
Gross realized gains	—	1,011	—	1,795
Gross realized losses	—	(419)	—	(626)
	<u>14,538</u>	<u>592</u>	<u>12,433</u>	<u>1,169</u>
Fixed maturity securities:				
Gross realized gains	44	56	451	82
Gross realized losses	(10)	(2)	(152)	(16)
Other	(3)	11	18	27
	<u>\$ 14,569</u>	<u>\$ 657</u>	<u>\$ 12,750</u>	<u>\$ 1,262</u>

Notes to Consolidated Financial Statements (Continued)

Note 8. Investment gains/losses (Continued)

Prior to 2018, we recognized investment gains and losses in earnings when we sold or otherwise disposed of equity securities based on the difference between the proceeds from the sale 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. See Note 2.

During the first nine months of 2018, as reflected on the Consolidated Statement of Cash Flows, we received proceeds of approximately \$14.2 billion from sales of equity securities. In the table above, investment gains/losses on equity securities sold during 2018 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 during the third quarter and first nine months of 2018, which are generally the difference between the proceeds from sales and our original cost, were \$1,329 million and \$2,688 million, respectively.

Note 9. Receivables

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

	September 30, 2018	December 31, 2017
Insurance premiums receivable	\$ 13,002	\$ 11,058
Reinsurance recoverable on unpaid losses	2,944	3,201
Trade receivables	13,197	11,756
Other	3,121	2,925
Allowances for uncollectible accounts	(380)	(362)
	<u>\$ 31,884</u>	<u>\$ 28,578</u>

A summary of loans and finance receivables of our finance and financial products businesses follows (in millions).

	September 30, 2018	December 31, 2017
Loans and finance receivables before allowances and discounts	\$ 14,832	\$ 14,126
Allowances for uncollectible loans	(183)	(180)
Unamortized acquisition discounts	(172)	(198)
	<u>\$ 14,477</u>	<u>\$ 13,748</u>

Loans and finance receivables are predominantly installment loans originated or acquired by our manufactured housing business. Provisions for loan losses in the first nine months of 2018 and 2017 were \$109 million and \$124 million, respectively. Loan charge-offs, net of recoveries, in the first nine months were \$106 million in 2018 and \$126 million in 2017. At September 30, 2018, we evaluated approximately 98% of the loan balances collectively for impairment. As part of the evaluation process, credit quality indicators were reviewed and loans were designated as performing or non-performing. At September 30, 2018, we considered approximately 99% of the loan balances to be performing and approximately 95% of the loan balances to be current as to payment status.

Note 10. Inventories

Inventories are comprised of the following (in millions).

	September 30, 2018	December 31, 2017
Raw materials	\$ 3,326	\$ 2,997
Work in process and other	2,232	2,315
Finished manufactured goods	4,150	4,179
Goods acquired for resale	7,085	6,696
	<u>\$ 16,793</u>	<u>\$ 16,187</u>

Notes to Consolidated Financial Statements (Continued)

Note 11. Property, plant and equipment and assets held for lease

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

	September 30, 2018	December 31, 2017
Land	\$ 2,272	\$ 2,292
Buildings and improvements	9,034	8,810
Machinery and equipment	28,594	21,935
Furniture, fixtures and other	4,972	4,387
	<u>44,872</u>	<u>37,424</u>
Accumulated depreciation	(20,515)	(17,320)
	<u>\$ 24,357</u>	<u>\$ 20,104</u>

In conjunction with the adoption of ASC 606, we recorded a net asset of approximately \$3.5 billion related to aircraft sold under fractional aircraft ownership programs in machinery and equipment. Such amount included cost of approximately \$5.3 billion, net of accumulated depreciation of \$1.8 billion. We also recorded other liabilities of approximately \$3.5 billion for estimated aircraft repurchase obligations and unearned lease revenues, substantially offsetting the amount recorded in machinery and equipment. See Note 2.

A summary of property, plant and equipment of our railroad and our 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, 2018	December 31, 2017
Railroad:		
Land, track structure and other roadway	\$ 58,755	\$ 57,408
Locomotives, freight cars and other equipment	12,731	12,543
Construction in progress	910	989
	<u>72,396</u>	<u>70,940</u>
Accumulated depreciation	(9,596)	(8,627)
	<u>62,800</u>	<u>62,313</u>
Utilities and energy:		
Utility generation, transmission and distribution systems	75,751	74,660
Interstate natural gas pipeline assets	7,295	7,176
Independent power plants and other assets	8,156	7,499
Construction in progress	3,724	2,556
	<u>94,926</u>	<u>91,891</u>
Accumulated depreciation	(27,339)	(26,020)
	<u>67,587</u>	<u>65,871</u>
	<u>\$ 130,387</u>	<u>\$ 128,184</u>

Notes to Consolidated Financial Statements (Continued)

Note 11. Property, plant and equipment and assets held for lease (Continued)

Assets held for lease and property, plant and equipment of our finance and financial products businesses are summarized below (in millions). Assets held for lease include railcars, intermodal tank containers, cranes, over-the-road trailers, storage units and furniture.

	September 30, 2018	December 31, 2017
Assets held for lease	\$ 12,736	\$ 12,318
Land	240	231
Buildings, machinery and other	1,527	1,444
	14,503	13,993
Accumulated depreciation	(4,230)	(4,062)
	<u>\$ 10,273</u>	<u>\$ 9,931</u>

A summary of depreciation expense for the first nine months of 2018 and 2017 follows (in millions).

	First Nine Months	
	2018	2017
Insurance and other	\$ 1,954	\$ 1,636
Railroad, utilities and energy	3,678	3,604
Finance and financial products	485	487
	<u>\$ 6,117</u>	<u>\$ 5,727</u>

Note 12. Goodwill and other intangible assets

A reconciliation of the change in the carrying value of goodwill is as follows (in millions).

	September 30, 2018	December 31, 2017
Balance at beginning of year	\$ 81,258	\$ 79,486
Acquisitions of businesses	250	1,545
Other, including foreign currency translation	(181)	227
Balance at end of period	<u>\$ 81,327</u>	<u>\$ 81,258</u>

Other intangible assets are summarized as follows (in millions).

	September 30, 2018		December 31, 2017	
	Gross carrying amount	Accumulated amortization	Gross carrying amount	Accumulated amortization
Insurance and other	\$ 40,288	\$ 8,662	\$ 40,225	\$ 7,707
Railroad, utilities and energy	1,026	362	988	324
	<u>\$ 41,314</u>	<u>\$ 9,024</u>	<u>\$ 41,213</u>	<u>\$ 8,031</u>
Trademarks and trade names	\$ 5,396	\$ 744	\$ 5,381	\$ 692
Patents and technology	4,408	2,716	4,341	2,493
Customer relationships	28,343	4,351	28,322	3,722
Other	3,167	1,213	3,169	1,124
	<u>\$ 41,314</u>	<u>\$ 9,024</u>	<u>\$ 41,213</u>	<u>\$ 8,031</u>

Amortization expense in the first nine months was \$1,052 million in 2018 and \$1,108 million in 2017. Intangible assets with indefinite lives were approximately \$18.9 billion as of September 30, 2018 and December 31, 2017.

Notes to Consolidated Financial Statements (Continued)

Note 13. Derivative contracts

We are party to derivative contracts primarily through our finance and financial products and our utilities and energy businesses. Currently, the derivative contracts of our finance and financial products businesses consist of equity index put option contracts written between 2004 and 2008. The liabilities and related notional values of such contracts follows (in millions).

	September 30, 2018		December 31, 2017	
	Liabilities	Notional Value	Liabilities	Notional Value
Equity index put options	\$ 1,869	\$ 27,434 ⁽¹⁾	\$ 2,172	\$ 28,753 ⁽¹⁾

⁽¹⁾ Represents the aggregate undiscounted amounts payable assuming that the value of each index is zero at each contract's expiration date. Certain of these contracts are denominated in foreign currencies. Notional amounts are based on the foreign currency exchange rates as of each balance sheet date.

We record equity index put option contract liabilities at fair value and include the changes in the fair values of such contracts in earnings as derivative contract gains/losses. A summary of derivative contract gains/losses included in our Consolidated Statements of Earnings follows (in millions).

	Third Quarter		First Nine Months	
	2018	2017	2018	2017
Equity index put options	\$ 137	\$ 308	\$ 303	\$ 703

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 April 2019 and January 2026. At September 30, 2018, the remaining weighted average life of all contracts was approximately 2.25 years. In the second quarter of 2018, one equity index put option contract expired with no payment to the counterparty.

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 approximately \$4.1 billion on the remaining contracts at the contract inception dates 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 \$919 million at September 30, 2018 and \$789 million at December 31, 2017. 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, 2018, 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 \$154 million as of September 30, 2018 and \$142 million as of December 31, 2017. Derivative contract liabilities are included in other liabilities and were \$80 million as of September 30, 2018 and \$82 million as of December 31, 2017.

Notes to Consolidated Financial Statements (Continued)

Note 14. Supplemental cash flow information

Supplemental cash flow information follows (in millions).

	First Nine Months	
	2018	2017
Cash paid during the period for:		
Income taxes	\$ 3,977	\$ 1,774
Interest:		
Insurance and other businesses	677	747
Railroad, utilities and energy businesses	2,129	2,111
Finance and financial products businesses	257	296
Non-cash investing and financing activities:		
Liabilities assumed in connection with business acquisitions	93	685
Equity securities surrendered in connection with warrant exercise	—	4,965

Note 15. 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 as of 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 16), for the nine months ending September 30, 2018 and 2017 follow (in millions).

	2018	2017
Balances – beginning of year:		
Gross liabilities	\$ 61,122	\$ 53,379
Reinsurance recoverable on unpaid losses	(3,201)	(3,338)
Net liabilities	57,921	50,041
Incurring losses and loss adjustment expenses:		
Current accident year events	29,071	28,632
Prior accident years’ events	(1,566)	(461)
Total incurred losses and loss adjustment expenses	27,505	28,171
Paid losses and loss adjustment expenses:		
Current accident year events	(12,474)	(11,539)
Prior accident years’ events	(11,516)	(9,952)
Total payments	(23,990)	(21,491)
Foreign currency translation adjustment	(117)	603
Balances – September 30:		
Net liabilities	61,319	57,324
Reinsurance recoverable on unpaid losses	2,944	3,254
Gross liabilities	\$ 64,263	\$ 60,578

Incurred losses and loss adjustment expenses in the first nine months of 2018 and 2017 included net reductions of estimated ultimate claim liabilities for prior accident years of \$1,566 million and \$461 million, respectively. We reduced estimated ultimate claim liabilities for prior accident years related to primary insurance by \$985 million in the first nine months of 2018 and \$569 million in the first nine months of 2017, which included reductions of \$478 million in 2018 and increases of \$37 million in 2017 related to private passenger automobile insurance coverages. We also reduced estimated ultimate claim liabilities with respect to prior accident years for property and casualty reinsurance by \$581 million in the first nine months of 2018, compared to an increase of \$108 million in the first nine months of 2017.

Notes to Consolidated Financial Statements (Continued)

Note 16. 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. Claims payments may commence immediately after the contract date or, if applicable, 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 the nine months ending September 30, 2018 and 2017 follows (in millions).

	2018		2017	
	Unpaid losses and loss adjustment expenses	Deferred charges reinsurance assumed	Unpaid losses and loss adjustment expenses	Deferred charges reinsurance assumed
Balances – beginning of year:	\$ 42,937	\$ (15,278)	\$ 24,972	\$ (8,047)
Incurring losses and loss adjustment expenses				
Current year contracts	—	—	17,213	(6,170)
Prior years’ contracts	(36)	827	(409)	645
Total	(36)	827	16,804	(5,525)
Paid losses and loss adjustment expenses	(966)	—	(783)	—
Balances – September 30:	\$ 41,935	\$ (14,451)	\$ 40,993	\$ (13,572)
Incurring losses and loss adjustment expenses, net of deferred charges	\$ 791		\$ 11,279	

In the preceding table, classifications of incurred losses and loss adjustment expenses are based on the inception dates of the contracts. We do not believe that analysis of losses incurred and paid by accident year of the underlying event is relevant or meaningful given that our exposure to losses incepts when the contract incepts. Further, we believe the classifications of reported claims and case development liabilities has little or no practical analytical value.

In the first quarter of 2017, National Indemnity Company (“NICO”), a wholly-owned subsidiary, entered into an agreement with various subsidiaries of American International Group, Inc. (collectively, “AIG”), which became effective on February 2, 2017. Under this agreement, NICO agreed to indemnify AIG for 80% of up to \$25 billion of losses and allocated loss adjustment expenses in excess of \$25 billion retained by AIG with respect to certain commercial insurance loss events occurring prior to 2016. As of the effective date, we recorded premiums earned of \$10.2 billion and losses incurred of \$10.2 billion, which consisted of liabilities for unpaid losses and loss adjustment expenses of \$16.4 billion and deferred charge reinsurance assumed assets of \$6.2 billion. Berkshire agreed to guarantee the timely payment of all amounts due to AIG under the agreement. Our estimated ultimate claim liabilities with respect to the AIG contract at September 30, 2018 and at December 31, 2017 were \$18.2 billion, which reflected an increase of \$1.8 billion in estimated ultimate claim liabilities recorded in the fourth quarter of 2017. Deferred charge assets related to the AIG contract were approximately \$7.1 billion at September 30, 2018 and \$7.5 billion at December 31, 2017, which included an additional \$1.7 billion arising from the aforementioned increase to ultimate claim liabilities in the fourth quarter.

Incurring losses and loss adjustment expenses related to contracts written in prior years were \$791 million in the first nine months of 2018 and \$236 million in the first nine months of 2017. Such losses included recurring amortization of deferred charge assets and net gains from reductions of estimated ultimate claim liabilities.

Note 17. Notes payable and other borrowings

Notes payable and other borrowings are summarized below (dollars in millions). The weighted average interest rates and maturity date ranges shown in the following tables are based on borrowings as of September 30, 2018.

	Weighted Average Interest Rate	September 30, 2018	December 31, 2017
<i>Insurance and other:</i>			
Issued by Berkshire:			
U.S. Dollar denominated borrowings due 2018-2047	3.1%	\$ 9,058	\$ 10,603
Euro denominated borrowings due 2020-2035	1.1%	7,897	8,164
Short-term subsidiary borrowings	4.1%	1,733	1,832
Other subsidiary borrowings due 2018-2045	4.0%	5,583	6,725
		\$ 24,271	\$ 27,324

Notes to Consolidated Financial Statements (Continued)

Note 17. Notes payable and other borrowings (Continued)

The carrying value of Berkshire's Euro denominated senior notes reflects the Euro/U.S. Dollar exchange rate as of the balance sheet date. The gains or losses arising from the changes in the Euro/U.S. Dollar exchange rate during the period are recorded in earnings as a component of interest expense. The change in the Euro/U.S. Dollar exchange rate in the first nine months of 2018 resulted in reductions of \$273 million in interest expense and to the carrying value of the Euro denominated senior notes compared to increases of \$860 million in interest expense and to the carrying value of the notes in the first nine months of 2017.

	Weighted Average Interest Rate	September 30, 2018	December 31, 2017
<i>Railroad, utilities and energy:</i>			
Issued by Berkshire Hathaway Energy Company ("BHE") and its subsidiaries:			
BHE senior unsecured debt due 2018-2049	4.5%	\$ 8,970	\$ 6,452
Subsidiary and other debt due 2019-2064	4.7%	28,588	28,739
Short-term debt	3.0%	1,784	4,488
Issued by BNSF due 2018-2097	4.7%	23,257	22,499
		<u>\$ 62,599</u>	<u>\$ 62,178</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, which pertain to leverage ratios, interest coverage ratios and/or debt service coverage ratios, among other covenants. During the first nine months of 2018, BHE and its subsidiaries issued approximately \$5.5 billion of long-term debt, including \$2.05 billion in the third quarter. The debt issued in 2018 has maturity dates ranging from 2020 to 2049 and a weighted average interest rate of 3.6%. 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 the first nine months of 2018, BNSF issued \$1.5 billion of senior unsecured debentures due in 2048, including \$750 million in the third quarter. These debentures have a weighted average interest rate of 4.1%. In 2018, BNSF repaid \$650 million of maturing debentures. As of September 30, 2018, 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.

	Weighted Average Interest Rate	September 30, 2018	December 31, 2017
<i>Finance and financial products:</i>			
Issued by Berkshire Hathaway Finance Corporation ("BHFC") due 2019-2048	3.3%	\$ 10,649	\$ 12,926
Issued by other subsidiaries due 2018-2028	3.6%	121	159
		<u>\$ 10,770</u>	<u>\$ 13,085</u>

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 assets held for lease of certain finance subsidiaries. In August 2018, BHFC issued \$2.35 billion of 4.2% senior notes due in 2048. Such borrowings are fully and unconditionally guaranteed by Berkshire. During the first nine months of 2018, BHFC repaid \$4.6 billion of maturing senior notes.

As of September 30, 2018, our subsidiaries had unused lines of credit and commercial paper capacity aggregating approximately \$8.4 billion to support short-term borrowing programs and provide additional liquidity. Such unused lines of credit included approximately \$6.8 billion related to BHE and its subsidiaries. In addition to BHFC's borrowings, Berkshire guaranteed approximately \$1.7 billion of other subsidiary borrowings at September 30, 2018. 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.

Notes to Consolidated Financial Statements (Continued)

Note 18. Fair value measurements

Our financial assets and liabilities are summarized below as of September 30, 2018 and December 31, 2017 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.

	Carrying Value	Fair Value	Quoted Prices (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
September 30, 2018					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 3,599	\$ 3,599	\$ 2,378	\$ 1,221	\$ —
U.S. states, municipalities and political subdivisions	290	290	—	290	—
Foreign governments	7,370	7,370	5,162	2,208	—
Corporate bonds	6,458	6,458	—	6,453	5
Mortgage-backed securities	554	554	—	554	—
Investments in equity securities	207,332	207,332	206,985	47	300
Investment in Kraft Heinz common stock	17,453	17,935	17,935	—	—
Loans and finance receivables	14,477	14,735	—	59	14,676
Derivative contract assets ⁽¹⁾	154	154	3	41	110
Derivative contract liabilities:					
Railroad, utilities and energy ⁽¹⁾	80	80	1	63	16
Equity index put options	1,869	1,869	—	—	1,869
Notes payable and other borrowings:					
Insurance and other	24,271	24,422	—	24,422	—
Railroad, utilities and energy	62,599	66,823	—	66,823	—
Finance and financial products	10,770	10,979	—	10,953	26
December 31, 2017					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 3,953	\$ 3,953	\$ 2,360	\$ 1,593	\$ —
U.S. states, municipalities and political subdivisions	854	854	—	854	—
Foreign governments	8,822	8,822	6,946	1,876	—
Corporate bonds	6,862	6,862	—	6,856	6
Mortgage-backed securities	862	862	—	862	—
Investments in equity securities	170,540	170,540	170,494	46	—
Investment in Kraft Heinz common stock	17,635	25,306	25,306	—	—
Loans and finance receivables	13,748	14,136	—	17	14,119
Derivative contract assets ⁽¹⁾	142	142	1	28	113
Derivative contract liabilities:					
Railroad, utilities and energy ⁽¹⁾	82	82	3	69	10
Equity index put options	2,172	2,172	—	—	2,172
Notes payable and other borrowings:					
Insurance and other	27,324	28,180	—	28,180	—
Railroad, utilities and energy	62,178	70,538	—	70,538	—
Finance and financial products	13,085	13,582	—	13,577	5

(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 18. 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 or quoted prices for identical assets or liabilities exchanged in inactive markets. In addition, other inputs considered in fair value determinations may include interest rates and yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates, and inputs 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 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 ending September 30, 2018 and 2017 follow (in millions).

	Investments in equity and fixed maturity securities	Net derivative contract liabilities
<u>Nine months ending September 30, 2018</u>		
Balance at December 31, 2017	\$ 6	\$ (2,069)
Gains (losses) included in:		
Earnings	—	446
Regulatory assets and liabilities	—	(11)
Acquisitions, dispositions and settlements	(1)	(141)
Balance at September 30, 2018	<u>\$ 5</u>	<u>\$ (1,775)</u>
<u>Nine months ending September 30, 2017</u>		
Balance at December 31, 2016	\$ 17,321	\$ (2,824)
Gains (losses) included in:		
Earnings	—	822
Other comprehensive income	1,157	(3)
Regulatory assets and liabilities	—	(5)
Acquisitions, dispositions and settlements	(58)	(78)
Transfers into/out of Level 3	(18,413)	—
Balance at September 30, 2017	<u>\$ 7</u>	<u>\$ (2,088)</u>

Gains and losses included in earnings are reported as components of investment gains/losses, derivative gains/losses and other revenues, as appropriate. In 2017, gains and losses included in other comprehensive income were primarily the net change in unrealized appreciation of investments and the reclassification of investment appreciation in net earnings in our Consolidated Statements of Comprehensive Income.

On June 30, 2017, we announced our intention to exercise our investment in Bank of America Corporation Warrants (“BAC Warrants”) for common stock in the third quarter of 2017 and that we expected to use our investment in Bank of America Corporation Preferred Stock as consideration. In the second quarter of 2017, Restaurant Brands International, Inc. (“RBI”) announced its intention to redeem our investment in RBI Preferred Shares in the fourth quarter of 2017. As of June 30, 2017, we based our valuations of these investments on such expectations and we significantly reduced expected durations and effectively eliminated the discounts for transferability and other restrictions. As a result, we concluded the Level 3 inputs used in the previous fair value determinations of our investments in BAC Warrants and RBI Preferred Shares were not significant and that the valuations of such investments were deemed Level 2 measurements.

Notes to Consolidated Financial Statements (Continued)

Note 18. Fair value measurements (Continued)

Quantitative information as of September 30, 2018, 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
Derivative contract liabilities – Equity index put options	\$ 1,869	Option pricing model	Volatility	16%

Our equity index put option 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 measure fair values 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 our longer duration contracts 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 19. Common stock

Changes in Berkshire's issued, treasury and outstanding common stock during the nine months ending September 30, 2018 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 at December 31, 2017	762,755	(11,680)	751,075	1,342,066,749	(1,409,762)	1,340,656,987
Conversions of Class A common stock to Class B common stock and exercises of replacement stock options issued in a business acquisition	(16,850)	—	(16,850)	25,886,063	—	25,886,063
Treasury stock acquired	—	(225)	(225)	—	(4,139,192)	(4,139,192)
Balance at September 30, 2018	745,905	(11,905)	734,000	1,367,952,812	(5,548,954)	1,362,403,858

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 1,642,269 shares outstanding as of September 30, 2018 and 1,644,846 shares outstanding as of December 31, 2017.

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, which 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, a 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 20. 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, 2018 and 2017 follows (in millions).

	Unrealized appreciation of investments, net	Foreign currency translation	Prior service and actuarial gains/losses of defined benefit pension plans	Other	Accumulated other comprehensive income
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	(236)	—	76	7	(153)
Balance at September 30, 2018	\$ 375	\$ (3,955)	\$ (341)	\$ (6)	\$ (3,927)
Reclassifications into net earnings:					
Reclassifications before income taxes	\$ (299)	\$ —	\$ 101	\$ 10	\$ (188)
Applicable income taxes	(63)	—	25	3	(35)
	\$ (236)	\$ —	\$ 76	\$ 7	\$ (153)
2017					
Balance at December 31, 2016	\$ 43,176	\$ (5,268)	\$ (593)	\$ (17)	\$ 37,298
Other comprehensive income, net before reclassifications	11,734	1,946	(90)	19	13,609
Reclassifications into net earnings	(803)	—	61	18	(724)
Balance at September 30, 2017	\$ 54,107	\$ (3,322)	\$ (622)	\$ 20	\$ 50,183
Reclassifications into net earnings:					
Reclassifications before income taxes	\$ (1,235)	\$ —	\$ 82	\$ 32	\$ (1,121)
Applicable income taxes	(432)	—	21	14	(397)
	\$ (803)	\$ —	\$ 61	\$ 18	\$ (724)

Note 21. Contingencies and Subsequent Event

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 as a result of other pending legal actions will not have a material effect on our consolidated financial condition or results of operations.

In 2016, NICO entered into a definitive agreement to acquire Medical Liability Mutual Insurance Company, (“Medical Liability Mutual”), a writer of medical professional liability insurance domiciled in New York. The acquisition price was approximately \$2.5 billion. The acquisition involved the conversion of Medical Liability Mutual from a mutual company to a stock company. The closing of the transaction was subject to various regulatory approvals, customary closing conditions and the approval of the Medical Liability Mutual policyholders eligible to vote on the proposed demutualization and sale. The acquisition closed on October 1, 2018, at which time, Medical Liability Mutual’s name was changed to the MLMIC Insurance Company (“MLMIC”). The results of MLMIC will be included in Berkshire’s consolidated results beginning as of that date. As of the acquisition date, the preliminary fair values of MLMIC’s assets were approximately \$6.3 billion, consisting primarily of cash and investments, and liabilities were approximately \$3.8 billion, consisting primarily of unpaid losses and loss adjustment expenses and unearned insurance premiums. We believe goodwill arising from this acquisition will be insignificant. MLMIC’s premiums earned for the first nine months of 2018 were approximately \$300 million.

Notes to Consolidated Financial Statements (Continued)

Note 22. Business segment data

Our operating businesses include a large and diverse group of insurance, railroad, utilities and energy, finance, manufacturing, service and retailing businesses. Our reportable business segments are organized in a manner that reflects how management views those business activities. Certain businesses have been 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. Revenues by segment for the third quarter and first nine months of 2018 and 2017 were as follows (in millions).

	Third Quarter		First Nine Months	
	2018	2017	2018	2017
Operating Businesses:				
Insurance:				
Underwriting:				
GEICO	\$ 8,506	\$ 7,543	\$ 24,705	\$ 21,632
Berkshire Hathaway Reinsurance Group	3,777	3,954	11,229	20,550
Berkshire Hathaway Primary Group	2,050	1,852	5,921	5,287
Investment income	1,446	1,248	4,058	3,664
Total insurance	15,779	14,597	45,913	51,133
BNSF	6,147	5,314	17,649	15,749
Berkshire Hathaway Energy	5,706	5,351	15,268	14,184
Manufacturing	13,552	12,819	40,339	37,654
McLane Company	12,822	12,798	37,438	37,480
Service and retailing	6,974	6,527	20,623	19,170
Finance and financial products	2,432	2,153	6,861	6,019
	63,412	59,559	184,091	181,389
Reconciliation of segments to consolidated amount:				
Corporate, eliminations and other	38	(52)	32	(256)
	\$ 63,450	\$ 59,507	\$ 184,123	\$ 181,133

Earnings before income taxes by segment for the third quarter and first nine months of 2018 and 2017 were as follows (in millions).

	Third Quarter		First Nine Months	
	2018	2017	2018	2017
Operating Businesses:				
Insurance:				
Underwriting:				
GEICO	\$ 627	\$ (416)	\$ 1,977	\$ (122)
Berkshire Hathaway Reinsurance Group	(163)	(1,845)	(124)	(2,963)
Berkshire Hathaway Primary Group	135	52	468	473
Investment income	1,455	1,246	4,052	3,658
Total insurance	2,054	(963)	6,373	1,046
BNSF	1,879	1,710	5,047	4,592
Berkshire Hathaway Energy	1,165	1,243	2,238	2,481
Manufacturing	2,012	2,002	6,002	5,428
McLane Company	44	45	171	202
Service and retailing	628	491	1,840	1,439
Finance and financial products	530	496	1,589	1,438
	8,312	5,024	23,260	16,626
Reconciliation of segments to consolidated amount:				
Investment and derivative contract gains/losses	14,706	965	13,053	1,965
Interest expense, not allocated to segments	(60)	(386)	(77)	(1,243)
Equity method investments	316	305	1,044	932
Corporate, eliminations and other	(127)	(278)	(558)	(833)
	\$ 23,147	\$ 5,630	\$ 36,722	\$ 17,447

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	
	2018	2017	2018	2017
Insurance – underwriting	\$ 441	\$ (1,439)	\$ 1,791	\$ (1,728)
Insurance – investment income	1,239	1,044	3,393	2,917
Railroad	1,393	1,042	3,847	2,838
Utilities and energy	1,091	952	2,257	1,941
Manufacturing, service and retailing	2,097	1,694	6,060	4,673
Finance and financial products	390	319	1,193	933
Investment and derivative gains/losses	11,660	623	10,352	1,270
Other	229	(168)	520	(455)
Net earnings attributable to Berkshire Hathaway shareholders	<u>\$ 18,540</u>	<u>\$ 4,067</u>	<u>\$ 29,413</u>	<u>\$ 12,389</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. Beginning in 2018, our periodic net earnings include changes in unrealized gains and losses on our investments in equity securities. These gains and losses are likely to be very significant given the size of our current holdings and the inherent volatility in securities prices. Prior to 2018, changes in unrealized gains and losses were recorded in other comprehensive income. Thus, the new accounting treatment has no effect on consolidated shareholders’ equity. The business segment data (Note 22 to the accompanying Consolidated Financial Statements) should be read in conjunction with this discussion.

Our after-tax earnings in the third quarter and first nine months of 2018 were favorably affected by lower U.S. income tax expense, primarily attributable to a reduction in the U.S. statutory income tax rate from 35% to 21% effective January 1, 2018 in connection with the Tax Cuts and Jobs Act of 2017 (“TCJA”) enacted on December 22, 2017. The effect of the lower U.S. statutory income tax rate in 2018 generally resulted in increased comparative after-tax earnings of our various business operations, although the effects varied, reflecting the differences in the mix of earnings subject to income tax, income tax credits and the varying effects of state and local income taxes.

Our insurance businesses generated after-tax earnings from underwriting of \$441 million and \$1.8 billion in the third quarter and first nine months of 2018, respectively, compared to losses of \$1.4 billion and \$1.7 billion, respectively, in the corresponding 2017 periods. Results in 2018 included reductions of estimated ultimate liabilities for prior years’ property/casualty loss events, gains from foreign currency exchange rate changes on certain non-U.S. Dollar denominated liabilities of U.S. subsidiaries and a lower effective income tax rate. Underwriting results in the third quarter of 2017 included estimated pre-tax losses of approximately \$3.0 billion (\$1.95 billion after-tax) attributable to three major hurricanes in the U.S. and Puerto Rico and an earthquake in Mexico. Underwriting results in 2017 also included foreign currency exchange rate losses from the revaluation of certain non-U.S. Dollar denominated liabilities.

Our railroad business generated increased after-tax earnings in the third quarter and first nine months of 2018 compared to 2017, reflecting an increase in unit volume, higher average revenue per car/unit and a lower effective income tax rate, partly offset by increased fuel and other operating costs. Our utilities and energy businesses produced higher after-tax earnings in the third quarter and first nine months of 2018 compared to 2017, primarily due to a lower overall effective income tax rate and increased pre-tax earnings from renewables and natural gas pipelines. After-tax earnings from our manufacturing, service and retailing businesses in the third quarter and first nine months of 2018 increased 24% and 30%, respectively, over 2017, due to lower effective income tax rates and a 13% increase in year-to-date pre-tax earnings.

After-tax gains in the third quarter and first nine months of 2018 from investments and derivative contracts were \$11.7 billion and \$10.4 billion, respectively. Investment gains/losses included after-tax gains of approximately \$11.4 billion in the third quarter and \$9.6 billion in the first nine months from changes in market values of our investments in equity securities held at September 30, 2018. In 2017, after-tax investment gains on equity securities arose from the disposition or exchange of securities during the period based on the cost of the disposed security. In the first nine months of 2017, we recorded after-tax unrealized gains on our investments in equity securities of approximately \$10.9 billion in other comprehensive income. We believe that investment and derivative gains/losses, whether realized from dispositions or unrealized from changes in market prices of equity securities, are generally meaningless in understanding our reported results or evaluating the economic performance of our businesses. 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 (Continued)

Insurance—Underwriting

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.

Our management views insurance businesses as possessing two distinct operations – 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 predictable or necessarily meaningful in understanding the operating results of our insurance businesses.

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 catastrophe losses in excess of \$100 million (pre-tax) from a current year event as significant. We incurred estimated pre-tax losses of \$372 million from two significant catastrophe events in the third quarter of 2018. In the third quarter of 2017, we incurred pre-tax losses of approximately \$3.0 billion from four significant catastrophe events. In October 2018, Hurricane Michael hit the Southeastern United States. Incurred losses in the fourth quarter from this event are currently estimated to be in the \$350 million to \$550 million range.

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 approximately \$106 billion as of September 30, 2018. 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.

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

	Third Quarter		First Nine Months	
	2018	2017	2018	2017
Underwriting gain (loss):				
GEICO	\$ 627	\$ (416)	\$ 1,977	\$ (122)
Berkshire Hathaway Reinsurance Group	(163)	(1,845)	(124)	(2,963)
Berkshire Hathaway Primary Group	135	52	468	473
Pre-tax underwriting gain (loss)	599	(2,209)	2,321	(2,612)
Income taxes and noncontrolling interests	158	(770)	530	(884)
Net underwriting gain (loss)	\$ 441	\$ (1,439)	\$ 1,791	\$ (1,728)
Effective income tax rate	25.9%	35.1%	22.6%	34.4%

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			
	2018		2017		2018		2017	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 8,952		\$ 8,130		\$ 25,878		\$ 22,987	
Premiums earned	\$ 8,506	100.0	\$ 7,543	100.0	\$ 24,705	100.0	\$ 21,632	100.0
Losses and loss adjustment expenses	6,725	79.1	6,933	91.9	19,305	78.1	18,631	86.1
Underwriting expenses	1,154	13.5	1,026	13.6	3,423	13.9	3,123	14.5
Total losses and expenses	7,879	92.6	7,959	105.5	22,728	92.0	21,754	100.6
Pre-tax underwriting gain (loss)	\$ 627		\$ (416)		\$ 1,977		\$ (122)	

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

Insurance—Underwriting (Continued)

GEICO (Continued)

Premiums written in the third quarter and first nine months of 2018 were approximately \$9.0 billion and \$25.9 billion, respectively, representing increases of 10.1% and 12.6%, respectively, compared to 2017. These increases reflected increases in voluntary auto policies-in-force of 3.7% and premiums per auto policy of approximately 7.8% over the past twelve months. The increase in premiums per policy was attributable to rate increases, coverage changes and changes in state and risk mix. The rate increases were in response to accelerating claim costs in recent years. Although policies-in-force increased 461,000 during the first nine months of 2018, the rate of increase slowed, as voluntary auto new business sales decreased 6.6% compared to 2017.

Losses and loss adjustment expenses decreased \$208 million (3.0%) in the third quarter and increased \$674 million (3.6%) in the first nine months of 2018 compared to 2017. Our ratios of losses and loss adjustment expenses to premiums earned (the “loss ratio”) for the third quarter and first nine months of 2018 were 79.1% and 78.1%, respectively, declines of 12.8 and 8.0 percentage points compared to the third quarter and first nine months of 2017, respectively. In the third quarter of 2018, we recorded estimated losses of \$30 million related to Hurricane Florence. In the third quarter of 2017, we incurred estimated losses related to Hurricanes Harvey and Irma of approximately \$500 million (6.6% of premiums earned in the third quarter and 2.3% in the first nine months).

Our losses and loss adjustment expenses incurred in the first nine months of 2018 also included reductions of \$478 million with respect to ultimate claim loss estimates for prior years’ loss events, which produced a corresponding increase in pre-tax underwriting gains. By comparison, we increased loss estimates for prior years’ events by \$37 million in the first nine months of 2017. Claims frequencies in the first nine months of 2018 for property damage, collision, and bodily and personal injury protection coverages declined (two to three percent range) compared to 2017. Average claims severities in the first nine months of 2018 increased for property damage and collision coverages (four to six percent range) and bodily injury coverage (five to seven percent range).

Our underwriting expenses in the first nine months of 2018 were approximately \$3.4 billion, an increase of \$300 million (9.6%) over 2017. Our expense ratio (underwriting expenses to premiums earned) for the first nine months of 2018 decreased 0.6 percentage points compared to 2017. The increases in underwriting expenses were primarily attributable to increases in advertising expenses, insurance premium taxes and employee-related costs, which included 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 legal entities, led by National Indemnity Company (“NICO Group”), Berkshire Hathaway Life Insurance Company of Nebraska (“BHLN Group”), and General Reinsurance Corporation, General Reinsurance AG and General Re Life Corporation (collectively, “General Re Group”). We also periodically assume property and casualty risks under retroactive reinsurance contracts written through NICO. In addition, the BHLN Group writes periodic payment annuity contracts.

With the exception of our retroactive reinsurance and periodic payment annuity businesses, we strive to generate pre-tax underwriting profits. Time-value-of-money concepts are important elements in establishing prices for our retroactive reinsurance and periodic payment annuity businesses due to the expected long durations of the liabilities. We expect to incur pre-tax underwriting losses from such businesses, primarily 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 the premiums and pre-tax underwriting results of our reinsurance business follows (in millions).

	Premiums earned				Pre-tax underwriting gain (loss)			
	Third Quarter		First Nine Months		Third Quarter		First Nine Months	
	2018	2017	2018	2017	2018	2017	2018	2017
Property/casualty	\$ 2,157	\$ 2,061	\$ 6,479	\$ 5,763	\$ 67	\$ (1,486)	\$ 535	\$ (1,856)
Retroactive reinsurance	1	550	1	10,736	(246)	(287)	(704)	(881)
	2,158	2,611	6,480	16,499	(179)	(1,773)	(169)	(2,737)
Life/health	1,307	1,146	3,855	3,404	108	113	324	302
Periodic payment annuity	312	197	894	647	(92)	(185)	(279)	(528)
	1,619	1,343	4,749	4,051	16	(72)	45	(226)
	\$ 3,777	\$ 3,954	\$ 11,229	\$ 20,550	\$ (163)	\$ (1,845)	\$ (124)	\$ (2,963)

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

Insurance—Underwriting (Continued)

Property/casualty

A summary of premiums and underwriting results of our property/casualty reinsurance businesses follows (in millions).

	Premiums earned				Pre-tax underwriting gain (loss)			
	Third Quarter		First Nine Months		Third Quarter		First Nine Months	
	2018	2017	2018	2017	2018	2017	2018	2017
NICO Group	\$ 1,077	\$ 1,217	\$ 3,394	\$ 3,488	\$ (29)	\$ (927)	\$ 272	\$ (1,144)
General Re Group	1,080	844	3,085	2,275	96	(559)	263	(712)
	<u>\$ 2,157</u>	<u>\$ 2,061</u>	<u>\$ 6,479</u>	<u>\$ 5,763</u>	<u>\$ 67</u>	<u>\$ (1,486)</u>	<u>\$ 535</u>	<u>\$ (1,856)</u>

NICO Group’s premiums earned in the third quarter and first nine months of 2018 decreased 11.5% and 2.7%, respectively, compared to 2017. Premiums earned in the third quarter of 2017 included additional amounts related to certain contracts where policy limits were fully exhausted due to catastrophe losses during the quarter. Such amounts would have been earned in future periods. The effect of significant catastrophe losses in 2018 on the timing of premiums earned was relatively insignificant. For the first nine months of 2018, approximately 40% of NICO Group’s premiums earned derived from a 10-year, 20% quota-share contract with Insurance Australia Group Ltd. that expires in 2025. General Re Group’s premiums earned in the third quarter and first nine months of 2018 increased \$236 million (28.0%) and \$810 million (35.6%), respectively, compared to 2017. The increases reflected higher direct and broker markets business, derived primarily from new business and increased participations for renewal business in both property and casualty lines.

On a combined basis, our property/casualty reinsurance business generated pre-tax underwriting gains of \$67 million and \$535 million in the third quarter and first nine months of 2018, respectively, and pre-tax losses of approximately \$1.5 billion in the third quarter and \$1.9 billion in the first nine months of 2017. We incurred estimated losses of approximately \$267 million in the third quarter of 2018 related to Hurricane Florence and Typhoon Jebi and approximately \$2.29 billion in the third quarter of 2017 related to Hurricanes Harvey, Irma and Maria and an earthquake in Mexico. Our losses from significant catastrophe events were approximately \$2.45 billion for the first nine months of 2017.

In addition, we reduced estimated ultimate claims liabilities in the first nine months of 2018 for prior years’ loss events by \$581 million. We increased estimated ultimate liabilities for prior years’ loss events by \$108 million in the first nine months of 2017, which reflected the U.K. Ministry of Justice’s decision in the first quarter to reduce the fixed discount rate required in lump sum settlement calculations of U.K. personal injury claims and unanticipated property claims from events in 2016.

Retroactive reinsurance

Premiums earned in the first nine months of 2017 included \$10.2 billion from an aggregate excess-of-loss retroactive reinsurance agreement with various subsidiaries of American International Group, Inc. (the “AIG Agreement”), which became effective on February 2, 2017. We also recorded losses and loss adjustment expenses incurred of \$10.2 billion at the inception of the AIG Agreement, representing our initial estimate of the unpaid losses and loss adjustment expenses assumed of \$16.4 billion, partly offset by an initial deferred charge asset of \$6.2 billion. Thus, on the effective date, the AIG Agreement had no effect on our pre-tax underwriting results.

Pre-tax underwriting losses from retroactive reinsurance contracts in the third quarter and first nine months of 2018 were \$246 million and \$704 million, respectively, compared to \$287 million and \$881 million, respectively, in the same periods in 2017. Certain liabilities relating to retroactive reinsurance contracts written by our U.S. subsidiaries are denominated in foreign currencies. Underwriting results include gains and losses from the re-measurement of such liabilities due to changes in foreign currency exchange rates. Changes in exchange rates generated pre-tax gains of \$35 million and \$99 million in the third quarter and first nine months of 2018, respectively, compared to pre-tax losses in the third quarter and first nine months of \$60 million and \$251 million, respectively, in 2017.

Pre-tax underwriting losses before foreign currency gains/losses in the first nine months of 2018 and 2017 were \$803 million and \$630 million, respectively. The increase in pre-tax losses was primarily due to amortization charges related to the AIG Agreement, which included the effects of increases to our ultimate claim liability estimates (approximately \$1.8 billion) and related deferred charge asset (approximately \$1.7 billion) in the fourth quarter of 2017.

Gross unpaid losses assumed under retroactive reinsurance contracts were approximately \$41.9 billion at September 30, 2018 and \$42.9 billion at December 31, 2017. Unamortized deferred charge assets related to such reinsurance contracts were approximately \$14.5 billion at September 30, 2018 and \$15.3 billion at December 31, 2017. Deferred charge asset balances will be amortized as charges to pre-tax earnings over the expected remaining claims settlement periods.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

Insurance—Underwriting (Continued)

Life/health

Premiums earned and pre-tax underwriting results of our life/health reinsurance businesses are further summarized as follows (in millions).

	Premiums earned				Pre-tax underwriting gain (loss)			
	Third Quarter		First Nine Months		Third Quarter		First Nine Months	
	2018	2017	2018	2017	2018	2017	2018	2017
General Re Group	\$ 964	\$ 786	\$ 2,819	\$ 2,324	\$ 38	\$ 57	\$ 152	\$ 96
BHLN Group	343	360	1,036	1,080	70	56	172	206
	<u>\$ 1,307</u>	<u>\$ 1,146</u>	<u>\$ 3,855</u>	<u>\$ 3,404</u>	<u>\$ 108</u>	<u>\$ 113</u>	<u>\$ 324</u>	<u>\$ 302</u>

General Re Group’s premiums earned in the third quarter and first nine months of 2018 increased \$178 million (22.6%) and \$495 million (21.3%), respectively, compared to 2017. The increases were primarily attributable to growth in Asia and Australia markets and foreign currency translation effects of a comparatively weaker U.S. Dollar. The General Re Group produced pre-tax underwriting gains in the first nine months of \$152 million in 2018 and \$96 million in 2017. The comparative increase in the first nine months reflected increased earnings from international business, primarily due to increased volumes and foreign currency translation, improved earnings from life business in North America and lower losses from the run-off of long-term care and disability business.

BHLN Group’s life reinsurance premiums earned in the third quarter and first nine months of 2018 were \$340 million and \$1,025 million, respectively, compared to \$355 million and \$1,067 million, respectively, in the corresponding 2017 periods. BHLN Group’s business during the last two years covered predominantly life risks in North America, with approximately two-thirds of the premiums earned deriving from one reinsurance contract. BHLN Group’s life reinsurance business produced near break-even results in each of the first nine months of 2018 and 2017.

BHLN Group’s pre-tax underwriting results in the first nine months of 2018 and 2017 included pre-tax gains of \$166 million and \$197 million, respectively, from the run-off of variable annuity reinsurance contracts that provide guarantees on closed blocks of variable annuity business. Periodic underwriting results from this business reflect changes in estimated liabilities for guaranteed benefits, which result from changes in securities markets and interest rates and from the periodic amortization of expected profit margins. Underwriting results from variable annuity contracts can be volatile, reflecting the volatility of securities markets, interest rates and foreign currency exchange rates. Estimated variable annuity guarantee liabilities were approximately \$1.6 billion at September 30, 2018 and \$1.8 billion at December 31, 2017.

Periodic payment annuity

Periodic payment annuity premiums earned in the third quarter and first nine months of 2018 increased \$115 million (58.4%) and \$247 million (38.2%), respectively, compared to 2017. Periodic payment annuity contracts produced pre-tax losses of \$92 million and \$279 million in the third quarter and first nine months of 2018, respectively, compared to pre-tax losses of \$185 million and \$528 million, respectively, for the same periods in 2017. Certain contracts written by our U.S. subsidiaries are denominated in foreign currencies, primarily the Great Britain Pound Sterling. Pre-tax underwriting results in 2018 included pre-tax gains of \$21 million in the third quarter and \$57 million in the first nine months from the re-measurement of such liabilities due to changes in exchange rates compared to pre-tax losses of \$63 million in the third quarter and \$173 million in the first nine months of 2017. Before the effect of foreign currency gains and losses, this business generated pre-tax underwriting losses of \$336 million in the first nine months of 2018 and \$355 million in the first nine months of 2017. These losses were primarily attributable to the recurring discount accretion of annuity liabilities. Discounted annuity liabilities approximated \$12.2 billion at September 30, 2018 and \$11.2 billion at December 31, 2017, reflecting a weighted average discount rate of approximately 4.1%.

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

Insurance—Underwriting (Continued)

Berkshire Hathaway Primary Group

The Berkshire Hathaway Primary Group (“BH Primary”) consists of a wide variety of independently managed insurance underwriting businesses that primarily provide 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 include 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 and Central States Indemnity Company.

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

	Third Quarter				First Nine Months			
	2018		2017		2018		2017	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 2,227		\$ 1,995		\$ 6,498		\$ 5,645	
Premiums earned	\$ 2,050	100.0	\$ 1,852	100.0	\$ 5,921	100.0	\$ 5,287	100.0
Losses and loss adjustment expenses	1,419	69.2	1,342	72.5	3,884	65.6	3,426	64.8
Underwriting expenses	496	24.2	458	24.7	1,569	26.5	1,388	26.3
Total losses and expenses	1,915	93.4	1,800	97.2	5,453	92.1	4,814	91.1
Pre-tax underwriting gain	\$ 135		\$ 52		\$ 468		\$ 473	

Premiums written in the third quarter and first nine months of 2018 increased 11.6% and 15.1%, respectively, compared to the corresponding 2017 periods. These increases were primarily attributable to BH Specialty, MedPro Group, GUARD and BHHC. Premiums earned in the first nine months of 2018 increased \$634 million (12.0%) compared to the first nine months of 2017, reflecting the written premium increases of these businesses.

BH Primary produced pre-tax underwriting gains of \$135 million and \$468 million in the third quarter and first nine months of 2018, respectively, compared to \$52 million and \$473 million in the third quarter and first nine months of 2017, respectively. Underwriting results in the third quarter included estimated losses of approximately \$75 million in 2018 from Hurricane Florence and \$225 million in 2017 from Hurricanes Harvey, Irma and Maria.

Losses and loss adjustment expenses in the first nine months also included net reductions of estimated ultimate liabilities for prior years’ loss events of \$507 million in 2018 and \$606 million in 2017, which produced corresponding increases in pre-tax underwriting gains. The liability reductions in each year primarily related to healthcare malpractice and workers’ compensation business. BH Primary writes 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, which could give rise to 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 generated from investments held by our insurance operations follows (in millions).

	Third Quarter		First Nine Months	
	2018	2017	2018	2017
Interest and other investment income	\$ 495	\$ 344	\$ 1,346	\$ 870
Dividend income	960	902	2,706	2,788
Investment income before income taxes and noncontrolling interests	1,455	1,246	4,052	3,658
Income taxes and noncontrolling interests	216	202	659	741
Net investment income	\$ 1,239	\$ 1,044	\$ 3,393	\$ 2,917
Effective income tax rate	14.7%	16.2%	16.2%	20.2%

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

Insurance—Investment Income (Continued)

Pre-tax interest and other investment income in the third quarter and first nine months of 2018 increased \$151 million (43.9%) and \$476 million (54.7%), respectively, compared to the same periods in 2017. The increases reflected the effect of higher short-term interest rates in 2018 and income from a limited partnership investment in the first quarter, partly offset by lower interest from reduced investments in fixed maturity securities. Our invested assets continue to include significant levels of short-term investments. We believe that maintaining ample liquidity is paramount and we insist on safety over yield with respect to such investments.

Dividend income increased \$58 million (6.4%) in the third quarter and decreased \$82 million (2.9%) in the first nine months of 2018 as compared to the same periods in 2017. The comparative changes in dividend income reflected the impact of Restaurant Brands International’s redemption of our \$3 billion investment in 9% preferred stock in December 2017 and increases in our portfolio of marketable equity securities.

Invested assets of our insurance businesses derive from shareholder capital, including reinvested earnings, and from net liabilities under insurance and reinsurance 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 insurance 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 approximated \$118 billion at September 30, 2018 and \$114 billion at December 31, 2017. Our combined insurance operations generated pre-tax underwriting earnings of \$2.3 billion in the first nine months of 2018, and consequently, the average cost of float for that period was negative. Our average cost of float for the year ending December 31, 2017 was approximately 3%, reflecting pre-tax underwriting losses of approximately \$3.2 billion, most of which was incurred in the second half of the year.

A summary of cash and investments held in our insurance businesses as of September 30, 2018 and December 31, 2017 follows (in millions).

	September 30, 2018	December 31, 2017
Cash, cash equivalents and U.S. Treasury Bills	\$ 59,292	\$ 73,285
Equity securities	199,860	163,134
Fixed maturity securities	18,057	21,092
	<u>\$ 277,209</u>	<u>\$ 257,511</u>

Fixed maturity investments as of September 30, 2018 were as follows (in millions).

	Amortized cost	Unrealized gains/losses	Carrying value
U.S. Treasury, U.S. government corporations and agencies	\$ 3,618	\$ (26)	\$ 3,592
States, municipalities and political subdivisions	259	14	273
Foreign governments	7,360	8	7,368
Corporate bonds, investment grade	5,321	388	5,709
Corporate bonds, non-investment grade	563	42	605
Mortgage-backed securities	457	53	510
	<u>\$ 17,578</u>	<u>\$ 479</u>	<u>\$ 18,057</u>

U.S. government obligations are rated AA+ or Aaa by the major rating agencies. Approximately 88% of all state, municipal and political subdivisions, foreign government obligations 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 (Continued)

Railroad (“Burlington Northern Santa Fe”)

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

	Third Quarter		First Nine Months	
	2018	2017	2018	2017
Revenues	\$ 6,147	\$ 5,314	\$ 17,649	\$ 15,749
Operating expenses:				
Compensation and benefits	1,378	1,173	4,021	3,725
Fuel	859	595	2,456	1,777
Purchased services	718	608	2,124	1,843
Depreciation and amortization	580	591	1,726	1,756
Equipment rents, materials and other	471	384	1,501	1,295
Total operating expenses	4,006	3,351	11,828	10,396
Interest expense	262	253	774	761
	4,268	3,604	12,602	11,157
Pre-tax earnings	1,879	1,710	5,047	4,592
Income taxes	486	668	1,200	1,754
Net earnings	\$ 1,393	\$ 1,042	\$ 3,847	\$ 2,838
Effective income tax rate	25.9%	39.1%	23.8%	38.2%

BNSF’s revenues in the third quarter and first nine months of 2018 were \$6.1 billion and \$17.6 billion, respectively, representing increases of \$833 million (15.7%) and \$1.9 billion (12.1%), respectively, versus the corresponding periods in 2017. During the first nine months of 2018, our overall average revenue per car/unit increased 6.1% and our aggregate volume increased 4.6%. Our year-to-date volume was approximately 8.0 million cars/units compared to 7.6 million in 2017. The increase in average revenue per car/unit was attributable to business mix changes, higher fuel surcharge revenue driven primarily by higher fuel prices, and increased rates per car/unit. Pre-tax earnings were approximately \$1.9 billion and \$5.0 billion in the third quarter and first nine months of 2018, respectively, increases of 9.9% compared to the corresponding periods in 2017.

Revenues from consumer products were \$2.0 billion in the third quarter and \$5.8 billion in the first nine months of 2018, representing increases of 11.7% and 12.0%, respectively, from 2017. The increases reflected higher average revenue per unit and volume increases of 0.9% in the third quarter and 3.9% in the first nine months. The volume increases were attributable to the intermodal business, due to general economic growth and tight truck capacity leading to conversion from highway to rail, as well as growth in imports and containerized agricultural product exports, partially offset by a sizable contract loss.

Revenues from industrial products in 2018 were \$1.6 billion in the third quarter and \$4.4 billion for the first nine months, or increases of 24.3% and 17.3%, respectively, from the comparable 2017 periods. These increases were attributable to volume increases of 13.1% in the third quarter and 10.9% in the first nine months as well as higher average revenue per car. Volumes in 2018 were higher primarily due to strength in the industrial and energy sectors, which drove higher demand for petroleum products, rocks, steel, and plastics. Volumes in the first nine months of 2018 were also higher for sand and taconite.

Revenues from agricultural products in 2018 increased 17.4% in the third quarter to \$1.2 billion and increased 10.2% to \$3.5 billion for the first nine months when compared to the same periods in 2017. The third quarter revenue increase reflected a 16.3% increase in volumes and higher average revenue per car. In the first nine months, the increase in revenues was attributable to volume increases of 10.5%, partially offset by slightly lower average revenue per car. Volumes in 2018 increased due to strong export and domestic grain shipments, as well as higher fertilizer and other grain products volumes.

Revenues from coal in 2018 increased 5.9% in the third quarter to \$1.1 billion and 1.6% in the first nine months to \$2.9 billion compared to 2017. These increases reflected higher average revenue per car partially offset by lower volumes of 4.6% in the third quarter and 2.6% year-to-date. The volume decreases in 2018 were due mainly to plant retirements combined with competition from natural gas and renewables, partially offset by market share gains and improved export volumes.

Operating expenses in the third quarter and first nine months of 2018 were \$4.0 billion and \$11.8 billion, respectively, increases of \$655 million (19.5%) and \$1.4 billion (13.8%), respectively, compared to the same periods in 2017. Our ratios of operating expenses to revenues were 65.2% in the third quarter and 67.0% for the first nine months of 2018, or increases of 2.1 and 1.0 percentage points, respectively, versus the corresponding prior year periods.

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

Railroad ("Burlington Northern Santa Fe") (Continued)

Compensation and benefits expenses increased \$205 million (17.5%) for the third quarter of 2018 and \$296 million (7.9%) for the first nine months of 2018, primarily due to wage inflation, including a change in estimate of the effect of a pending labor agreement recorded in 2017, increased headcount and higher training costs. Fuel expenses increased \$264 million (44.4%) for the third quarter and \$679 million (38.2%) for the first nine months of 2018, primarily due to higher average fuel prices and increased volumes.

Purchased services expenses increased \$110 million (18.1%) in the third quarter and \$281 million (15.2%) in the first nine months of 2018 as compared to 2017. The increases were due to higher purchased transportation costs of our logistics services business, as well as increased intermodal ramping, drayage and other volume-related costs.

In the third quarter and first nine months of 2018, equipment rents, materials and other expense increased \$87 million (22.7%) and \$206 million (15.9%), respectively, compared to 2017. These increases resulted from higher locomotive materials, personal injury expenses and property taxes. The first nine months also included higher derailment-related costs.

BNSF's effective income tax rate was 25.9% and 23.8% for the third quarter and first nine months of 2018, respectively, as compared to 39.1% and 38.2%, respectively, in the corresponding periods in 2017. The reduction in the U.S. statutory income tax rate under the TCJA, effective January 1, 2018, drove most of the effective income tax rate reduction. In addition, certain states enacted income tax rate reductions in 2018.

Utilities and Energy ("Berkshire Hathaway Energy Company")

We currently own 90.4% 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 second-largest residential real estate brokerage firm and one of the largest residential real estate brokerage franchise networks in the United States.

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 these regulated operations are not allowed to include such costs in the approved rates, operating results will be adversely affected. Among its provisions, the TCJA reduced the U.S. federal statutory income tax rate of our domestic regulated utilities from 35% to 21%. BHE's regulated subsidiaries anticipate passing the benefits of lower income tax expense attributable to the TCJA to customers through regulatory mechanisms, including lower rates and reductions to rate base, which would produce lower revenue and pre-tax earnings in 2018 and future years when compared to 2017. We do not expect the TCJA and related regulatory treatment to have a material adverse impact on BHE's long-term operating cash flows, subject to actual rulings by regulatory commissions that are expected in 2018 and 2019. Revenues and earnings of BHE are summarized below (in millions).

	Third Quarter				First Nine Months			
	Revenues		Earnings		Revenues		Earnings	
	2018	2017	2018	2017	2018	2017	2018	2017
PacifiCorp	\$ 1,386	\$ 1,443	\$ 319	\$ 389	\$ 3,786	\$ 3,991	\$ 704	\$ 912
MidAmerican Energy Company	857	832	251	250	2,354	2,209	347	402
NV Energy	1,071	1,057	268	347	2,456	2,412	403	539
Northern Powergrid	233	220	58	48	756	685	217	215
Natural gas pipelines	268	198	104	60	889	706	376	303
Other energy businesses	669	636	184	179	1,764	1,670	318	245
Real estate brokerage	1,222	965	83	81	3,263	2,511	180	197
Corporate interest	—	—	(102)	(111)	—	—	(307)	(332)
	<u>\$ 5,706</u>	<u>\$ 5,351</u>			<u>\$ 15,268</u>	<u>\$ 14,184</u>		
Pre-tax earnings			1,165	1,243			2,238	2,481
Income taxes			(49)	177			(279)	296
Net earnings			1,214	1,066			2,517	2,185
Noncontrolling interests			123	114			260	244
Net earnings attributable to Berkshire Hathaway shareholders			<u>\$ 1,091</u>	<u>\$ 952</u>			<u>\$ 2,257</u>	<u>\$ 1,941</u>
Effective income tax rate			<u>(4.2)%</u>	<u>14.2%</u>			<u>(12.5)%</u>	<u>11.9%</u>

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

Utilities and Energy ("Berkshire Hathaway Energy Company") (Continued)

PacifiCorp

PacifiCorp operates a regulated electric utility in portions of several Western states, including Utah, Oregon and Wyoming. Revenues in the third quarter and first nine months of 2018 decreased 4% and 5%, respectively, compared to the same periods in 2017. Retail revenues in the third quarter of 2018 decreased \$40 million and \$218 million in the first nine months, compared to 2017. The declines reflected the effects of lower average rates (\$185 million year-to-date), including the impact of the TCJA (\$53 million in the third quarter and \$159 million in the first nine months), and a year-to-date reduction in volumes (0.9%), largely attributable to the impacts of weather.

Pre-tax earnings decreased \$70 million (18%) in the third quarter and \$208 million (23%) in the first nine months of 2018 as compared to the same periods in 2017. Utility margin (operating revenues less fuel and purchased energy costs) in the third quarter and first nine months of 2018 were \$904 million and \$2,446 million, respectively, representing decreases of \$61 million (6%) and \$205 million (8%), respectively, versus the comparable periods in 2017. These decreases were primarily due to the declines in revenues, which included the effects of the TCJA. PacifiCorp's after-tax earnings in the third quarter and first nine months of 2018 were \$270 million and \$603 million, respectively, representing an increase of \$7 million (3%) in the third quarter and a decrease of \$15 million (2%) from the first nine months of 2017.

MidAmerican Energy Company

MEC operates a regulated electric and natural gas utility primarily in Iowa and Illinois. Revenues in the third quarter and first nine months of 2018 increased \$25 million (3%) and \$145 million (7%), respectively, as compared to the same periods in 2017. Electric operating revenues in 2018 increased \$20 million in the third quarter and \$108 million in the first nine months versus 2017. The third quarter increase was due to higher wholesale and other revenues due to increases in volumes and average prices. The increase in the first nine months was primarily attributable to higher retail revenues of \$96 million, reflecting higher recoveries through bill riders (substantially offset in cost of sales, operating expenses and income tax expense) and volumes, partially offset by lower average rates, predominantly from the impact of the TCJA. In the first nine months of 2018, natural gas revenues increased \$20 million, primarily due to increased volumes, partially offset by a lower average per-unit price and the effects of the TCJA.

Pre-tax earnings in the third quarter of 2018 were relatively unchanged and in the first nine months decreased \$55 million (14%) compared to the same periods in 2017. Electric utility margin in the third quarter and first nine months of 2018 was \$587 million and \$1,419 million, respectively, increases of \$10 million and \$84 million, respectively, over the corresponding 2017 periods, which were primarily due to the net increase in retail revenues in the first nine months. However, the year-to-date increase in electric utility margin was more than offset by increased depreciation, maintenance and other operating expenses. The year-to-date increase in depreciation expense included \$83 million from Iowa revenue sharing and \$47 million from additional wind generation and other plant placed in-service.

MEC's after-tax earnings in the third quarter and first nine months of 2018 were \$479 million and \$685 million, respectively, increases of \$96 million (25%) and \$69 million (11%), respectively, as compared to the same periods in 2017. MEC's after-tax earnings in 2018 and 2017 were significantly greater than pre-tax earnings due to the significant production income tax credits received relating to wind-powered generating facilities.

NV Energy

NV Energy operates regulated electric and natural gas utilities in Nevada. Revenues in the third quarter and first nine months of 2018 increased 1% and 2%, respectively, compared to the same periods in 2017. Electric operating revenues increased \$12 million in the third quarter and \$34 million in the first nine months of 2018, reflecting increased pass-through cost adjustments and higher volumes largely attributable to the impacts of weather and retail customer growth, partly offset by reductions from the impact of the TCJA and lower retail rates resulting from a 2017 regulatory rate review. Natural gas operating revenue increased \$8 million in the first nine months of 2018, primarily due to a higher average per-unit price, partially offset by lower customer usage.

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

Utilities and Energy ("Berkshire Hathaway Energy Company") (Continued)

NV Energy (Continued)

Pre-tax earnings in the third quarter and first nine months of 2018 decreased \$79 million (23%) and \$136 million (25%), respectively, compared to the same periods in 2017. The decreases were primarily due to lower electric utility margin and increased depreciation, maintenance and other operating costs. Electric utility margin in the third quarter and first nine months of 2018 was \$623 million and \$1,366 million, respectively, representing decreases of \$17 million (3%) and \$38 million (3%) versus the comparable periods in 2017. The decreases were primarily due to the effects of the TCJA offset by the higher sales volumes. NV Energy's after-tax earnings in the third quarter and first nine months of 2018 were \$201 million and \$311 million, respectively, declines of 10% from each of the corresponding 2017 periods.

Northern Powergrid

Revenues increased \$13 million and \$71 million in the third quarter and first nine months of 2018 compared to same periods in 2017, primarily due to the favorable foreign currency translation effects of a weaker U.S. Dollar in the first nine months of 2018 and increased smart meter and distribution revenues. Pre-tax earnings in the third quarter of 2018 increased \$10 million (21%) and \$2 million (1%) in the first nine months of 2018 compared to 2017, primarily due to favorable foreign currency translation effects and the increases in revenues, partly offset by higher depreciation and other operating expenses, including higher pension settlement losses in 2018.

Natural gas pipelines

Revenues increased \$70 million (35%) in the third quarter and \$183 million (26%) in the first nine months of 2018 compared to 2017, primarily due to higher transportation revenues of \$58 million and \$102 million, respectively, from higher volumes and rates due to unique market opportunities and increased gas sales volumes related to system balancing activities, which were largely offset in cost of sales. Pre-tax earnings increased \$44 million (73%) and \$73 million (24%) in the third quarter and first nine months of 2018, respectively, compared to 2017. The increases were primarily due to the increases in transportation revenues and lower depreciation expense, partly offset by comparative increases in operations and maintenance expenses.

Other energy businesses

Revenues increased \$33 million (5%) in the third quarter and \$94 million (6%) in the first nine months of 2018 compared to the same periods in 2017, reflecting comparative year-to-date increases from renewable energy of 10% and from AltaLink, L.P. of 4%. Pre-tax earnings in the third quarter and first nine months of 2018 increased \$5 million and \$73 million, respectively, compared to the same periods in 2017. The increases were primarily attributable to the increased revenues from renewable energy and AltaLink, L.P., partly offset by increased depreciation expense and higher other operating expenses.

Real estate brokerage

Revenues in the third quarter and first nine months of 2018 increased 27% and 30%, respectively, as compared to the same periods in 2017, primarily due to recent business acquisitions. Pre-tax earnings decreased \$17 million in the first nine months of 2018 compared to 2017, primarily due to higher operating costs and interest expense, partially offset by higher margin.

Corporate interest

Corporate interest includes interest on unsecured debt issued by the BHE holding company and borrowings from Berkshire insurance subsidiaries in connection with certain of BHE's business acquisitions. The borrowings from Berkshire insurance subsidiaries were repaid in the third quarter of 2017. Corporate interest declined 7.5% in the first nine months of 2018 as compared to 2017, primarily due to lower average borrowings.

Income taxes

BHE's consolidated effective income tax rate for the first nine months of 2018 and 2017 was (12.5)% and 11.9%, 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 2018 decreased primarily due to the reduction in the U.S. federal corporate income tax rate, as well as from lower state income tax expense, an increase in recognized production tax credits, lower U.S. income taxes on foreign earnings and impacts of rate making.

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

Manufacturing, Service and Retailing

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

	Third Quarter				First Nine Months			
	Revenues		Earnings *		Revenues		Earnings *	
	2018	2017	2018	2017	2018	2017	2018	2017
Manufacturing	\$ 13,552	\$ 12,819	\$ 2,012	\$ 2,002	\$ 40,339	\$ 37,654	\$ 6,002	\$ 5,428
Service and retailing	19,796	19,325	672	536	58,061	56,650	2,011	1,641
	<u>\$ 33,348</u>	<u>\$ 32,144</u>			<u>\$ 98,400</u>	<u>\$ 94,304</u>		
Pre-tax earnings			2,684	2,538			8,013	7,069
Income taxes and noncontrolling interests			587	844			1,953	2,396
			<u>\$ 2,097</u>	<u>\$ 1,694</u>			<u>\$ 6,060</u>	<u>\$ 4,673</u>
Effective income tax rate			<u>21.3%</u>	<u>32.7%</u>			<u>23.8%</u>	<u>33.3%</u>

* 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 \$192 million and \$614 million in the third quarter and first nine months of 2018, respectively, compared to \$184 million and \$485 million in the third quarter and first nine months of 2017, respectively. These expenses are included in "Other" in the summary of earnings on page 26 and in the "Other" earnings section on page 42.

Manufacturing

Our manufacturing group includes a variety of businesses that produce and distribute industrial, building and consumer products. Industrial products businesses include 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 products for diverse markets (Marmon, Scott Fetzer and LiquidPower Specialty Products ("LSPi")).

Our building products businesses include 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). Our consumer products businesses include 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 (in millions).

	Third Quarter				First Nine Months			
	Revenues		Pre-tax earnings		Revenues		Pre-tax earnings	
	2018	2017	2018	2017	2018	2017	2018	2017
Industrial products	\$ 7,119	\$ 6,657	\$ 1,297	\$ 1,247	\$ 21,483	\$ 19,802	\$ 4,012	\$ 3,508
Building products	3,389	3,124	375	407	9,563	8,983	1,042	1,057
Consumer products	3,044	3,038	340	348	9,293	8,869	948	863
	<u>\$ 13,552</u>	<u>\$ 12,819</u>	<u>\$ 2,012</u>	<u>\$ 2,002</u>	<u>\$ 40,339</u>	<u>\$ 37,654</u>	<u>\$ 6,002</u>	<u>\$ 5,428</u>

Aggregate revenues of our manufacturing businesses in the third quarter and first nine months of 2018 were approximately \$13.6 billion and \$40.3 billion, increases of \$733 million (5.7%) and approximately \$2.7 billion (7.1%), respectively, compared to the same periods in 2017. Pre-tax earnings in the third quarter of 2018 were approximately \$2.0 billion, relatively unchanged from 2017, and \$6.0 billion in the first nine months of 2018, an increase of \$574 million (10.6%) compared to 2017. Pre-tax earnings in the first nine months of 2017 included pre-tax losses of approximately \$190 million (predominantly in the first quarter) in connection with the disposition of an underperforming bolt-on business acquired by Lubrizol in 2014. Excluding these losses, pre-tax earnings in the first nine months of 2018 increased 6.8% compared to 2017. Results of our manufacturing businesses in 2018 generally reflected higher revenues compared to 2017. However, manufacturing costs and operating expenses were also higher, partly offsetting the revenue increases, particularly in the third quarter.

Industrial products

Revenues from industrial products businesses were approximately \$7.1 billion in the third quarter and \$21.5 billion in the first nine months of 2018, or increases of \$462 million (6.9%) and \$1.7 billion (8.5%), respectively, compared to 2017. PCC's revenues in the third quarter and first nine months of 2018 increased approximately 5.9% and 6.3%, respectively, over the same periods in 2017. The increases reflected increased demand in aerospace markets in connection with new aircraft programs, partly offset by lower demand for industrial gas turbine products.

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

Manufacturing, Service and Retailing (Continued)

Industrial products (Continued)

Lubrizol's revenues in the third quarter and first nine months of 2018 increased 7.3% and 7.6%, respectively, compared to 2017, primarily due to higher prices, changes in product mix and favorable foreign currency translation. Lubrizol experienced a significant increase in average material unit costs during 2018 and 2017, necessitating increases in sales prices. Lubrizol's consolidated sales volumes increased 6% and 3%, respectively, in the third quarter and first nine months of 2018, as compared to 2017. IMC's revenues increased 11.7% in the third quarter and 20.0% in the first nine months of 2018 compared to 2017, due to a combination of factors, including increased unit sales (particularly over the first half of the year), business acquisitions and foreign currency translation effects from a weaker U.S. Dollar in the first half of 2018.

Marmon's revenues in the third quarter and first nine months of 2018 increased 4.0% and 7.6%, respectively, as compared to 2017. Revenue increases were primarily attributable to higher average metals prices, business acquisitions and growth in heavy-duty transportation product lines, partially offset by lower sales from the beverage and retail products businesses and lower steel distribution volume. CTB's revenues increased 6.0% in the first nine months of 2018 versus 2017, due to favorable foreign currency effects and modest sales growth in protein production and grain systems during the third quarter.

Pre-tax earnings of the industrial products group were \$1.3 billion in the third quarter and \$4.0 billion in the first nine months of 2018, representing increases of \$50 million (4.0%) and \$504 million (14.4%), respectively, compared to 2017. Our results in the first nine months of 2017 included pre-tax losses of approximately \$190 million, substantially all of which were in the first quarter, related to Lubrizol's disposition of an underperforming bolt-on business and related intangible asset impairments and restructuring charges. Excluding the effects of these losses, pre-tax earnings of the industrial products group increased 8.5% in the first nine months of 2018 as compared to 2017.

PCC's pre-tax earnings decreased 2.0% in the third quarter and 6.2% in the first nine months of 2018 compared to 2017. Results in 2018 were negatively affected by costs associated with the temporary unplanned shut-downs of certain metals facilities, metal press outages and lower earnings from the industrial gas turbine business. The closed facilities are gradually resuming production, with most expected to becoming fully operational by the end of 2018. In addition, the aforementioned new aircraft programs involve relatively complex manufacturing processes and manufacturing costs (including personnel training costs) have been relatively high to-date, but we expect costs will decline as processes and efficiencies develop.

Lubrizol's pre-tax earnings, excluding the effects of the losses on the disposition of a bolt-on business in 2017, increased approximately 16% in the first nine months of 2018 compared to 2017. The increase was primarily due to increases in sales volumes and selling prices, as well as by lower interest expense and the favorable effects of foreign currency translation, somewhat offset by higher raw material costs and operating expenses. IMC's pre-tax earnings increased significantly in the first nine months of 2018 compared to the same periods in 2017, reflecting a combination of increased sales, increased manufacturing efficiencies, the effects of business acquisitions and ongoing expense control efforts, partly offset by the effects of rising raw material costs.

Marmon's pre-tax earnings in 2018 increased 3.2% in the third quarter and 12.3% in the first nine months compared to the same periods in 2017. The increase in the first nine months was primarily due to a non-recurring gain of \$43 million from the sale of certain assets of its beverage products business in the second quarter.

Building products

Revenues of the building products group in the third quarter and first nine months of 2018 were approximately \$3.4 billion and \$9.6 billion, respectively, increases of \$265 million (8.5%) and \$580 million (6.5%), respectively, compared to the corresponding 2017 periods. For the third quarter and first nine months of 2018, the increases reflected higher average selling prices, product mix changes and unit increases with respect to certain flooring and insulation products. The selling price increases in 2018 were in response to significant material cost increases over the past two years.

Pre-tax earnings of the building products group in the third quarter and first nine months of 2018 were \$375 million and \$1,042 million, respectively, decreases of 7.9% and 1.4%, respectively, versus the corresponding 2017 periods. Raw material and production costs rose over the first nine months of 2018, which together with increased facilities closure costs, more than offset most of the increases in revenues. In particular, costs for steel, titanium dioxide and petrochemicals were substantially higher in 2018 than in 2017. The increases in selling prices have lagged the increases in raw materials costs and, consequently, gross margin rates have deteriorated.

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

Manufacturing, Service and Retailing (Continued)

Consumer products

Revenues of the consumer products group in the third quarter of 2018 were approximately \$3.0 billion, essentially unchanged from 2017. Our apparel and footwear businesses generated a comparative third quarter revenue increase of 6%, offset by lower revenues from Forest River and Duracell. These increases and decreases were primarily attributable to changes in unit sales, and to a lesser extent, selling prices and sales mix changes. Most significantly, Forest River experienced a comparative 7% decline in third quarter unit sales. Revenues in the first nine months of 2018 were approximately \$9.3 billion, an increase of \$424 million (4.8%) compared to the first nine months of 2017. The year-to-date increase included increases from Forest River (5%) and our apparel and footwear businesses (6%), which were primarily due to increased volume from Brooks Sports and Garan.

Pre-tax earnings of the consumer products group were \$340 million in the third quarter of 2018, a decrease of 2.3% from 2017. The decline reflected lower earnings from Forest River (24%), partially offset by increased earnings from the apparel and footwear businesses (5%) and Duracell (8%). Pre-tax earnings for the first nine months of 2018 were \$948 million, an increase of \$85 million (9.8%) compared to 2017. The comparative increase in year-to-date earnings reflected increases from Duracell (47%) and the apparel and footwear businesses (9%), partly offset by lower earnings from Forest River and Larson Juhl.

During 2018, and in the third quarter in particular, Forest River's results were affected by higher material costs, which together with the effects of lower sales volume in the third quarter, contributed to reductions in its gross sales margin rates and pre-tax earnings. The comparative earnings increases of the apparel and footwear businesses in 2018 were primarily attributable to revenue increases. Duracell's earnings increases in 2018 reflected the favorable effects of ongoing operational restructuring efforts and comparatively lower restructuring charges.

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	
	2018	2017	2018	2017	2018	2017	2018	2017
Service	\$ 3,141	\$ 2,775	\$ 444	\$ 315	\$ 9,219	\$ 8,184	\$ 1,268	\$ 926
Retailing	3,833	3,752	184	176	11,404	10,986	572	513
McLane Company	12,822	12,798	44	45	37,438	37,480	171	202
	<u>\$ 19,796</u>	<u>\$ 19,325</u>	<u>\$ 672</u>	<u>\$ 536</u>	<u>\$ 58,061</u>	<u>\$ 56,650</u>	<u>\$ 2,011</u>	<u>\$ 1,641</u>

Service

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

Revenues of the service group were approximately \$3.1 billion in the third quarter and \$9.2 billion in the first nine months of 2018, representing increases of \$366 million (13.2%) and \$1.0 billion (12.6%), respectively, as compared to the same periods in 2017. TTI's revenues in the third quarter and first nine months of 2018 increased approximately 35% compared to the same periods in 2017. The increases reflected an industry-wide increase in demand throughout 2018 for electronic components in many geographic markets around the world, and from the effects of business acquisitions and foreign currency translation due to a weaker U.S. Dollar. While TTI's revenue increases were significant, we believe that demand is beginning to moderate. Otherwise, Charter Brokerage, FlightSafety and WPLG generated comparative revenue increases in the first nine months of 2018, while the revenues from most of our other service businesses declined from 2017.

Pre-tax earnings of the service group in the third quarter and first nine months of 2018 were \$444 million and \$1.3 billion, respectively, increases of \$129 million (41.0%) and \$342 million (36.9%), respectively, compared to the same periods in 2017. The comparative increases in earnings in 2018 were driven by the aforementioned revenue increases at TTI, which accounted for almost 70% of these increases, as well as from earnings increases at Charter Brokerage and NetJets.

Retailing

Our retailers include Berkshire Hathaway Automotive ("BHA"). BHA includes 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. Our retailing businesses also include four home furnishings retailing businesses (Nebraska Furniture Mart, R.C. Willey, Star Furniture and Jordan's), which sell furniture, appliances, flooring and electronics.

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

Manufacturing, Service and Retailing (Continued)

Retailing (Continued)

Our other retailing businesses include three jewelry retailing 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.

Revenues of the retailing business in the third quarter and first nine months of 2018 were \$3.8 billion and \$11.4 billion, respectively, increases of \$81 million (2.2%) and \$418 million (3.8%), respectively, compared to the same periods in 2017. BHA's revenues, which represented approximately 64% of the year-to-date retailing revenues in 2018, increased 2.1% in the third quarter and 4.0% in the first nine months of 2018 as compared to 2017. The increases derived primarily from increased pre-owned vehicle sales. Revenues from new vehicle sales were down 2.3% in the third quarter and relatively unchanged for the first nine months. In addition, Louis revenues increased 9.1% in the first nine months of 2018, due primarily to foreign currency translation effects and comparatively higher sales. Revenues of our home furnishings businesses increased 5.4% in the first nine months of 2018 compared to 2017, due to higher volumes in certain geographic markets and the effect of a new store, which opened in 2018.

Pre-tax earnings in the third quarter and first nine months of 2018 from retailing were \$184 million and \$572 million, respectively, increases of \$8 million (4.5%) and \$59 million (11.5%), respectively, over 2017. The increases were primarily attributable to BHA and Louis. The earnings increases of BHA were primarily from finance and insurance activities, while the increases at Louis were primarily attributable to the revenue increases.

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 units generate high sales volumes and very low operating margins and have several significant customers, including Wal-Mart, 7-Eleven and Yum! Brands. A curtailment of purchasing by any of its significant customers could have an adverse impact on McLane's periodic revenues and earnings.

Revenues for the third quarter and first nine months of 2018 were \$12.8 billion and \$37.4 billion, respectively, relatively unchanged compared to the same periods in 2017. On a year-to-date basis, grocery sales increased 0.8% and foodservice sales declined 2.4%, compared to 2017. The decline in foodservice revenues was primarily due to a net loss of customers.

Pre-tax earnings in the third quarter of 2018 were \$44 million, essentially unchanged from 2017, while pre-tax earnings in the first nine months of 2018 of \$171 million declined \$31 million (15.3%), compared to 2017. McLane's grocery and foodservice businesses continue to operate in a highly competitive business environment, which is negatively affecting its operating results. Gross margin rates increased slightly over the first nine months of 2018, but were more than offset by increases in fuel, depreciation and certain other operating expenses, producing a decline in its operating margin rate compared to 2017. We expect the current unfavorable operating conditions will continue into 2019.

Finance and Financial Products

Our finance and financial products businesses include manufactured and site built housing and finance (Clayton Homes), transportation equipment manufacturing and leasing businesses (UTLX and XTRA, and together, "transportation equipment leasing"), as well as other leasing and financing activities. A summary of earnings from our finance and financial products businesses follows (in millions).

	Third Quarter				First Nine Months			
	Revenues		Earnings		Revenues		Earnings	
	2018	2017	2018	2017	2018	2017	2018	2017
Manufactured housing and finance	\$ 1,580	\$ 1,318	\$ 205	\$ 173	\$ 4,336	\$ 3,591	\$ 634	\$ 546
Transportation equipment leasing	674	652	209	219	2,000	1,928	624	649
Other	178	183	116	104	525	500	331	243
	<u>\$ 2,432</u>	<u>\$ 2,153</u>			<u>\$ 6,861</u>	<u>\$ 6,019</u>		
Pre-tax earnings			530	496			1,589	1,438
Income taxes and noncontrolling interests			140	177			396	505
			<u>\$ 390</u>	<u>\$ 319</u>			<u>\$ 1,193</u>	<u>\$ 933</u>
Effective income tax rate			<u>26.6%</u>	<u>35.6%</u>			<u>25.0%</u>	<u>35.1%</u>

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

Finance and Financial Products (Continued)

Manufactured housing and finance

Clayton Homes' revenues in the third quarter and first nine months of 2018 were approximately \$1.6 billion and \$4.3 billion, respectively, increases of \$262 million (19.9%) and \$745 million (20.7%), respectively, over the corresponding 2017 periods. The increases reflected year-to-date increases in home sales of 29% and in financial services revenue of approximately 4%. The increase in home sales was primarily due to a 104% year-to-date increase in unit sales of site built homes attributable to business acquisitions during the last two years, and to increased unit sales of manufactured homes. Average unit prices of site built homes are considerably higher than our traditional manufactured homes. The increase in financial services revenue was primarily attributable to increased interest income from a comparative increase in average loan balances of approximately 5% over the first nine months of 2018 as compared to 2017. As of September 30, 2018, Clayton Homes' loan balances were approximately \$14.4 billion.

Pre-tax earnings in the third quarter and first nine months of 2018 were \$205 million and \$634 million, respectively, increases of \$32 million (18.5%) and \$88 million (16.1%), respectively, compared to the same periods in 2017. The increases in earnings reflected increased manufactured and site built home sales and financial services interest income, lower corporate overhead costs and credit losses, partly offset by increased interest expense and the effects of an \$11 million gain from a legal settlement in 2017.

Transportation equipment leasing

Transportation equipment leasing revenues in 2018 were \$674 million in the third quarter and \$2.0 billion in the first nine months, increases of 3.4% and 3.7%, respectively, over the comparable 2017 periods. Revenues in 2018 of our over-the-road trailer leasing business increased 14% in the third quarter and 13% in the first nine months over the same periods in 2017, primarily due to increased units on lease. Revenues in the third quarter of 2018 of our railcar and crane services businesses were relatively unchanged compared to 2017, while revenues in the first nine months increased \$32 million (2%) compared to 2017. The increase in year-to-date revenues was attributable to increased railcar equipment sales, railcar repair services and crane services, partly offset by lower railcar lease revenues. Throughout 2018, we have experienced negative impacts from lower railcar lease renewal rates versus the higher rates on expiring leases.

Pre-tax earnings in 2018 were \$209 million in the third quarter and \$624 million in the first nine months, decreases of \$10 million (4.6%) and \$25 million (3.9%), respectively, compared to the same periods in 2017. The decreases were due to lower earnings from the railcar leasing business, attributable to the decline in lease revenues and higher repair costs, partly offset by increased earnings of our over-the-road trailer and crane services businesses. Significant components of the operating costs of these businesses, such as depreciation, interest and certain other operating costs, do not vary proportionately to revenue changes. Thus, changes in revenues can disproportionately affect earnings.

Other

Other earnings from our finance activities include CORT furniture leasing and other investment income. Other earnings also include interest income on loans to finance Clayton Homes' loan portfolio and transportation equipment held for lease (charged as interest expense in the results of those businesses) and interest expense on related borrowings of Berkshire Hathaway Finance Corporation ("BHFC"). The net interest (income, net of expense) related to such loans increased \$81 million in the first nine months of 2018 compared to 2017, which reflected increased interest income and lower interest expense of BHFC.

Investment and Derivative Gains/Losses

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

	Third Quarter		First Nine Months	
	2018	2017	2018	2017
Investment gains/losses	\$ 14,569	\$ 657	\$ 12,750	\$ 1,262
Derivative gains/losses	137	308	303	703
Gains/losses before income taxes and noncontrolling interests	14,706	965	13,053	1,965
Income taxes and noncontrolling interests	3,046	342	2,701	695
Net gains/losses	\$ 11,660	\$ 623	\$ 10,352	\$ 1,270
Effective income tax rate	20.5%	35.3%	20.8%	35.3%

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

Investment and Derivative Gains/Losses (Continued)

Investment gains/losses

As discussed in Note 2 to the accompanying Consolidated Financial Statements, on January 1, 2018, we adopted a new accounting pronouncement ("ASU 2016-01"), which requires the recognition of unrealized gains and losses arising from changes in market values of investments in equity securities in the Consolidated Statements of Earnings. Prior to 2018, investment gains/losses related to equity securities were generally recorded as the securities were sold, redeemed or exchanged and were based on the cost of the disposed securities. While ASU 2016-01 does not affect our consolidated shareholders' equity or total comprehensive income, it is expected to significantly increase the volatility of our periodic net earnings given the magnitude of our existing equity securities portfolio and the inherent volatility of equity securities prices. Investment gains and losses have caused and will continue to cause significant volatility in earnings reported in our Consolidated Statements of Earnings.

Pre-tax investment gains/losses reflected in earnings in 2018 included net unrealized gains of approximately \$14.3 billion in the third quarter and \$12.1 billion for the first nine months from investments in equity securities still held at September 30, 2018. Prior to the adoption of ASU 2016-01, such unrealized gains and losses were included in other comprehensive income. ASU 2016-01 did not permit the restatement of prior years' statements of 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 results or evaluating our periodic economic performance. We continue to believe the amount of investment gains/losses included in earnings in any given period typically has little analytical or predictive value. The effects of changes in market prices for equity securities now reported in earnings are unpredictable over any quarterly or annual period.

Derivative gains/losses

Derivative contract gains/losses represent the changes in fair value of our equity index put option contract liabilities. These liabilities relate to contracts entered into before March 2008 and that will expire between April 2019 and January 2026. The periodic changes in the fair values of these liabilities are recorded in earnings and can be significant, reflecting the volatility of underlying equity markets and the changes in the inputs used to measure such liabilities.

As of September 30, 2018, the intrinsic value of our equity index put option contracts was approximately \$919 million and our recorded liabilities at fair value were approximately \$1.9 billion. Our ultimate payment obligations, if any, under our contracts will be determined as of the contract expiration dates and will be based on the intrinsic value as defined under the contracts. Derivative contracts produced pre-tax gains in the first nine months of 2018 of \$303 million, which were primarily due to foreign currency exchange rate changes and the effects of shorter average contract durations, partially offset by lower values on certain indexes. Derivative contracts produced pre-tax gains of \$703 million in the first nine months of 2017, which were primarily attributable to higher equity index values and shorter contract durations, partly offset by unfavorable foreign currency exchange rate changes.

Other

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

	Third Quarter		First Nine Months	
	2018	2017	2018	2017
Equity method earnings	\$ 269	\$ 248	\$ 894	\$ 807
Acquisition accounting expenses	(199)	(196)	(637)	(518)
Corporate interest expense, before foreign currency exchange rate effects	(77)	(66)	(236)	(198)
Corporate interest expense, Euro note foreign currency exchange rate effects	56	(172)	216	(571)
Other	180	18	283	25
Net earnings (losses) attributable to Berkshire Hathaway shareholders	<u>\$ 229</u>	<u>\$ (168)</u>	<u>\$ 520</u>	<u>\$ (455)</u>

After-tax equity method earnings includes Berkshire's share of earnings attributable to Kraft Heinz, Pilot Flying J, Berkadia and Electric Transmission of Texas. After-tax other earnings (losses) also include charges arising from the application of the acquisition method in connection with Berkshire's past business acquisitions. Such charges were primarily from the amortization of intangible assets recorded in connection with those business acquisitions. Berkshire issued Euro denominated debt in 2015, 2016 and 2017 and at September 30, 2018, the aggregate par amount outstanding was €6.85 billion. Changes in foreign currency exchange rates in 2018 and 2017 produced sizable non-cash gains and losses from the periodic revaluation of these liabilities into U.S. Dollars.

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

Financial Condition

Our consolidated balance sheet continues to reflect significant liquidity and a strong capital base. Our consolidated shareholders' equity at September 30, 2018 was \$375.6 billion, increases of \$17.5 billion since June 30, 2018 and \$27.3 billion since December 31, 2017. Net earnings attributable to Berkshire shareholders in the first nine months of 2018 were \$29.4 billion, which included after-tax gains on our investments of approximately \$10.1 billion. Most of these gains derived from changes in market prices for securities we owned at September 30, 2018.

At September 30, 2018, our insurance and other businesses held cash, cash equivalents and U.S. Treasury Bills of approximately \$96.5 billion, which included \$74.5 billion in U.S. Treasury Bills. Investments in securities (excluding our investment in Kraft Heinz) were \$219.5 billion. Berkshire parent company debt outstanding at September 30, 2018 was approximately \$17.0 billion, a decrease of \$1.8 billion from December 31, 2017, reflecting maturities of \$1.55 billion in term debt and a \$273 million year-to-date decrease attributable to foreign currency exchange rate changes applicable to the €6.85 billion par amount of Euro denominated senior notes. The next maturity of Berkshire parent company debt is August 2019.

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. We forecast capital expenditures of these two operations will approximate \$9.8 billion for the year ending December 31, 2018, of which approximately \$6.4 billion was expended during the first nine months.

BNSF's outstanding debt approximated \$23.3 billion as of September 30, 2018, an increase of \$758 million since December 31, 2017. In August 2018, BNSF issued \$750 million of 4.15% senior unsecured debentures due in 2048. Outstanding borrowings of BHE and its subsidiaries were approximately \$39.3 billion at September 30, 2018, a decrease of \$337 million since December 31, 2017. In July 2018, BHE issued \$1.0 billion of 4.45% senior unsecured debt that matures in 2049. BHE subsidiaries also issued debt in July 2018, aggregating \$1.05 billion and due in 2049. The proceeds from these financings were used to repay borrowings and for other general corporate purposes. Approximately \$500 million of BHE subsidiary term debt will mature in the fourth quarter of 2018, and another \$1.4 billion will mature in the first 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.

Finance and financial products assets were approximately \$38.3 billion as of September 30, 2018, a decrease of \$3.6 billion since December 31, 2017. Finance assets consist primarily of loans and finance receivables, various types of property held for lease, cash, cash equivalents and U.S. Treasury Bills. Finance and financial products liabilities declined \$2.3 billion in the first nine months of 2018 to approximately \$14.4 billion at September 30, 2018, primarily attributable to a net decrease in borrowings of a wholly-owned financing subsidiary, Berkshire Hathaway Finance Corporation ("BHFC"). During the first nine months of 2018, BHFC repaid \$4.6 billion of maturing senior notes and in August 2018 issued \$2.35 billion of 4.2% senior notes due in 2048. In the first quarter of 2019, an additional \$2.7 billion of BHFC senior notes will mature. BHFC's senior note 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. Berkshire guarantees the full and timely payment of principal and interest with respect to BHFC's senior notes.

Berkshire has a common stock repurchase program which, as amended on July 17, 2018, permits 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, a 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 third quarter of 2018, Berkshire paid \$928 million to repurchase shares of Class A and B common stock under the program.

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, such as minimum rentals under operating leases and certain purchase obligations not currently reflected in the financial statements, will be recognized in future periods as the goods are delivered or services are provided. The timing and amount of the payments under certain contracts, such as insurance and reinsurance contracts, are contingent upon the outcome of future events and claim settlements. Actual payments will likely vary, perhaps materially, from the estimated liabilities currently recorded in our Consolidated Balance Sheet.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations (Continued)

Contractual Obligations (Continued)

Our contractual obligations as of December 31, 2017 were 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, 2017. During the first nine months of 2018, our subsidiaries issued term debt of approximately \$9.4 billion, which included approximately \$5.2 billion in the third quarter. The borrowings in 2018 were used to repay existing debt, as well as for other corporate purposes. Interest and principal payments in connection with these new borrowings in the aggregate are due as follows: 2019 and 2020 — \$1.3 billion; 2021 and 2022 — \$1.1 billion; and thereafter \$16.4 billion.

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, 2017.

Our Consolidated Balance Sheet as of September 30, 2018 includes estimated liabilities for unpaid losses and loss adjustment expenses from property and casualty insurance and reinsurance contracts of approximately \$106 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, 2018 includes goodwill of acquired businesses of approximately \$81 billion. We evaluate goodwill for impairment at least annually and we conducted our most recent annual review during the fourth quarter of 2017. Although we believe that the goodwill reflected in the accompanying Consolidated Balance Sheet is not impaired, goodwill may subsequently become impaired as a result of changes in facts and circumstances affecting the valuation of the reporting unit. A goodwill impairment charge could have a material effect on periodic earnings.

Our Consolidated Balance Sheets include derivative contract liabilities with respect to our equity index put option contracts. The fair values recorded for these liabilities are based on valuation models that utilize various inputs and assumptions that we believe are used by market participants. We further believe that fair values based on such models are inherently subjective and the values in an actual transaction may differ significantly from the model values. Changes in the assumptions utilized within the valuation models may have a significant effect on recorded fair values and 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 that are predictive in nature, which depend upon or refer to future events or conditions and may 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 as well as 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 important 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, 2018, 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, 2017.

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 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, 2017 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, which 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, a 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 2018 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 7 through August 24:				
Class A common stock	225	\$312,806.74	225	*
Class B common stock	4,139,192	\$207.09	4,139,192	*

* 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.

BERKSHIRE HATHAWAY INC.
Calculation of Ratio of Consolidated Earnings to Consolidated Fixed Charges
(Dollars in millions)

	Nine Months Ending September 30, 2018	Year Ended December 31,				
		2017	2016	2015	2014	2013
Net earnings attributable to Berkshire Hathaway shareholders ⁽¹⁾	\$ 29,413	\$ 44,940	\$ 24,074	\$ 24,083	\$ 19,872	\$ 19,476
Income tax expense (benefit) ⁽¹⁾	7,009	(21,515)	9,240	10,532	7,935	8,951
Earnings attributable to noncontrolling interests	300	413	353	331	298	369
Equity method net (earnings) losses	(1,044)	(2,938)	(923)	122	26	262
Dividends from equity method investments	830	797	952	366	—	—
Fixed charges	3,353	4,529	4,439	4,065	3,882	3,386
Earnings available for fixed charges	\$ 39,861	\$ 26,226	\$ 38,135	\$ 39,499	\$ 32,013	\$ 32,444
Fixed charges						
Interest expense, including amortization ⁽²⁾	\$ 2,882	\$ 3,927	\$ 3,741	\$ 3,446	\$ 3,253	\$ 2,801
Rentals representing interest and capitalized interest	471	602	698	619	629	585
	\$ 3,353	\$ 4,529	\$ 4,439	\$ 4,065	\$ 3,882	\$ 3,386
Ratio of earnings to fixed charges	11.89x	5.79x	8.59x	9.72x	8.25x	9.58x

(1) Effective January 1, 2018, changes in the fair values of investments in equity securities are included in earnings, including unrealized gains and losses on securities still held. Berkshire's earnings for the first nine months of 2018, included net pre-tax gains on investments in equity securities of approximately \$12.4 billion (\$9.8 billion after-tax), which was predominantly related to market value changes during the first nine months of 2018 on securities still held at September 30, 2018.

(2) Includes recurring interest expense and excludes foreign currency exchange gains and losses related to Berkshire's Euro denominated debt and losses from prepayments of debt.

Quarter ended September 30, 2018

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 3, 2018

/s/ WARREN E. BUFFETT

Chairman—Principal Executive Officer

Quarter ended September 30, 2018

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 3, 2018

/s/ MARC D. HAMBURG

Senior Vice President—Principal Financial Officer

Section 1350 Certifications

Quarter ended September 30, 2018

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, 2018 (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 3, 2018

/S/ WARREN E. BUFFETT

Warren E. Buffett
Chairman and Chief Executive Officer

Section 1350 Certifications

Quarter ended September 30, 2018

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, 2018 (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 3, 2018

/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-month period ended September 30, 2018 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-month period ended September 30, 2018. 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-month period ended September 30, 2018.

	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
Mining Facilities										
Coal:										
Bridger (surface)	—	—	—	—	—	\$ —	—	—	—	—
Bridger (underground)	—	—	—	—	—	79	—	1	1	2
Wyodak Coal Crushing Facility	—	—	—	—	—	—	—	—	—	—
Clay, shale and limestone:										
Malvern	—	—	—	—	—	—	—	—	—	—
Wheeler	—	—	—	—	—	—	—	—	—	—
Fort Smith	—	—	—	—	—	—	—	—	—	—
Oklahoma City	—	—	—	—	—	—	—	—	—	—
Tulsa	—	—	—	—	—	—	—	—	—	—
Denver	—	—	—	—	—	—	—	—	—	—
Bennett	—	—	—	—	—	—	—	—	—	—
Denton	—	—	—	—	—	—	—	—	—	—
Elgin	—	—	—	—	—	—	—	—	—	—
Sealy	—	—	—	—	—	—	—	—	—	—
Texas Clay	—	—	—	—	—	—	—	—	—	—
Leeds	—	—	—	—	—	—	—	—	—	—
Montgomery	—	—	—	—	—	—	—	—	—	—
Lueders	—	—	—	—	—	—	—	—	—	—
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.
- (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) Amounts include one contest of 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.