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

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2017

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post 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 July 27, 2017:

Class A —
Class B —

755,437
1,333,772,187

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)

	June 30, 2017 <small>(Unaudited)</small>	December 31, 2016
ASSETS		
<i>Insurance and Other:</i>		
Cash and cash equivalents	\$ 20,142	\$ 23,581
Short-term investments in U.S. Treasury Bills	66,008	47,338
Investments in fixed maturity securities	23,381	23,432
Investments in equity securities	135,355	120,471
Investment in The Kraft Heinz Company (Fair Value: June 30, 2017 – \$27,871; December 31, 2016 – \$28,418)	15,584	15,345
Other investments	16,838	14,364
Receivables	28,953	27,097
Inventories	16,442	15,727
Property, plant and equipment	19,790	19,325
Goodwill	54,471	53,994
Other intangible assets	33,220	33,481
Deferred charges reinsurance assumed	13,597	8,047
Other	7,560	7,126
	<u>451,341</u>	<u>409,328</u>
<i>Railroad, Utilities and Energy:</i>		
Cash and cash equivalents	4,962	3,939
Property, plant and equipment	125,328	123,759
Goodwill	24,306	24,111
Regulatory assets	4,644	4,457
Other	14,129	13,550
	<u>173,369</u>	<u>169,816</u>
<i>Finance and Financial Products:</i>		
Cash and cash equivalents	1,314	528
Short-term investments in U.S. Treasury Bills	7,323	10,984
Investments in equity and fixed maturity securities	408	408
Other investments	3,396	2,892
Loans and finance receivables	14,559	13,300
Property, plant and equipment and assets held for lease	9,791	9,689
Goodwill	1,398	1,381
Other	2,691	2,528
	<u>40,880</u>	<u>41,710</u>
	<u>\$ 665,590</u>	<u>\$620,854</u>

See accompanying Notes to Consolidated Financial Statements

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

	June 30, 2017	December 31, 2016
	(Unaudited)	
Insurance and Other:		
Losses and loss adjustment expenses	\$ 95,307	\$ 76,918
Unearned premiums	16,129	14,245
Life, annuity and health insurance benefits	16,663	15,977
Other policyholder liabilities	7,357	6,714
Accounts payable, accruals and other liabilities	21,024	22,164
Notes payable and other borrowings	27,781	27,175
	<u>184,261</u>	<u>163,193</u>
Railroad, Utilities and Energy:		
Accounts payable, accruals and other liabilities	11,273	11,434
Regulatory liabilities	3,156	3,121
Notes payable and other borrowings	60,701	59,085
	<u>75,130</u>	<u>73,640</u>
Finance and Financial Products:		
Accounts payable, accruals and other liabilities	1,510	1,444
Derivative contract liabilities	2,494	2,890
Notes payable and other borrowings	13,788	15,384
	<u>17,792</u>	<u>19,718</u>
Income taxes, principally deferred	84,314	77,944
Total liabilities	<u>361,497</u>	<u>334,495</u>
Shareholders' equity:		
Common stock	8	8
Capital in excess of par value	35,663	35,681
Accumulated other comprehensive income	46,652	37,298
Retained earnings	220,099	211,777
Treasury stock, at cost	(1,763)	(1,763)
Berkshire Hathaway shareholders' equity	300,659	283,001
Noncontrolling interests	3,434	3,358
Total shareholders' equity	<u>304,093</u>	<u>286,359</u>
	<u>\$ 665,590</u>	<u>\$ 620,854</u>

See accompanying Notes to Consolidated Financial Statements

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

	Second Quarter		First Six Months	
	2017 (Unaudited)	2016 (Unaudited)	2017 (Unaudited)	2016 (Unaudited)
Revenues:				
<i>Insurance and Other:</i>				
Insurance premiums earned	\$ 12,367	\$ 10,799	\$ 34,120	\$ 21,923
Sales and service revenues	31,733	30,542	61,962	58,821
Interest, dividend and other investment income	1,322	1,411	2,484	2,562
Investment gains/losses	287	640	599	2,486
	<u>45,709</u>	<u>43,392</u>	<u>99,165</u>	<u>85,792</u>
<i>Railroad, Utilities and Energy:</i>				
Revenues	9,843	8,851	19,247	17,696
<i>Finance and Financial Products:</i>				
Sales and service revenues	1,664	1,577	3,178	2,969
Interest, dividend and other investment income	364	411	714	743
Investment gains/losses	3	3	6	7
Derivative gains/losses	(65)	20	395	(790)
	<u>1,966</u>	<u>2,011</u>	<u>4,293</u>	<u>2,929</u>
Total revenues	<u>57,518</u>	<u>54,254</u>	<u>122,705</u>	<u>106,417</u>
Costs and expenses:				
<i>Insurance and Other:</i>				
Insurance losses and loss adjustment expenses	8,747	7,178	27,313	14,710
Life, annuity and health insurance benefits	1,263	1,241	2,490	2,408
Insurance underwriting expenses	2,378	1,870	4,717	3,947
Cost of sales and services	25,419	24,349	49,779	47,145
Selling, general and administrative expenses	4,020	4,066	8,136	7,788
Interest expense	700	28	970	415
	<u>42,527</u>	<u>38,732</u>	<u>93,405</u>	<u>76,413</u>
<i>Railroad, Utilities and Energy:</i>				
Cost of sales and operating expenses	6,940	6,339	13,694	12,658
Interest expense	697	596	1,390	1,281
	<u>7,637</u>	<u>6,935</u>	<u>15,084</u>	<u>13,939</u>
<i>Finance and Financial Products:</i>				
Cost of sales and services	962	875	1,829	1,643
Selling, general and administrative expenses	469	443	911	836
Interest expense	103	103	207	204
	<u>1,534</u>	<u>1,421</u>	<u>2,947</u>	<u>2,683</u>
Total costs and expenses	<u>51,698</u>	<u>47,088</u>	<u>111,436</u>	<u>93,035</u>
Earnings before income taxes and equity in earnings of Kraft Heinz Company				
Equity in earnings of Kraft Heinz Company	5,820	7,166	11,269	13,382
	<u>309</u>	<u>206</u>	<u>548</u>	<u>446</u>
Earnings before income taxes				
Income tax expense	6,129	7,372	11,817	13,828
	<u>1,774</u>	<u>2,290</u>	<u>3,323</u>	<u>3,089</u>
Net earnings				
Less: Earnings attributable to noncontrolling interests	4,355	5,082	8,494	10,739
	<u>93</u>	<u>81</u>	<u>172</u>	<u>149</u>
Net earnings attributable to Berkshire Hathaway shareholders	\$ 4,262	\$ 5,001	\$ 8,322	\$ 10,590
Net earnings per share attributable to Berkshire Hathaway shareholders *	\$ 2,592	\$ 3,042	\$ 5,060	\$ 6,443
Average equivalent Class A Shares outstanding *	1,644,580	1,643,745	1,644,503	1,643,616

* Equivalent Class B shares outstanding are 1,500 times the equivalent Class A amount. Net earnings per equivalent Class B share outstanding are one-fifteen-hundredth (1/1,500) of the equivalent Class A amount.

See accompanying Notes to Consolidated Financial Statements

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

	Second Quarter		First Six Months	
	2017	2016	2017	2016
	(Unaudited)		(Unaudited)	
Net earnings	\$ 4,355	\$ 5,082	\$ 8,494	\$ 10,739
Other comprehensive income:				
Net change in unrealized appreciation of investments	4,711	(271)	13,088	(2,962)
Applicable income taxes	(1,659)	94	(4,531)	993
Reclassification of investment appreciation in net earnings	(284)	(9)	(589)	(1,816)
Applicable income taxes	99	4	206	636
Foreign currency translation	798	(607)	1,356	(114)
Applicable income taxes	(23)	44	(92)	14
Prior service cost and actuarial gains/losses of defined benefit pension plans	(44)	51	(54)	55
Applicable income taxes	18	(19)	25	(19)
Other, net	3	16	6	(6)
Other comprehensive income, net	<u>3,619</u>	<u>(697)</u>	<u>9,415</u>	<u>(3,219)</u>
Comprehensive income	7,974	4,385	17,909	7,520
Comprehensive income attributable to noncontrolling interests	130	61	233	135
Comprehensive income attributable to Berkshire Hathaway shareholders	<u>\$ 7,844</u>	<u>\$ 4,324</u>	<u>\$ 17,676</u>	<u>\$ 7,385</u>

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Unaudited)
(dollars in millions)

	Berkshire Hathaway shareholders' equity				
	Common stock and capital in excess of par value	Accumulated other comprehensive income	Retained earnings	Treasury stock	Non- controlling interests
Balance at December 31, 2015	\$ 35,628	\$ 33,982	\$ 187,703	\$ (1,763)	\$ 3,077
Net earnings	—	—	10,590	—	149
Other comprehensive income, net	—	(3,205)	—	—	(14)
Issuance of common stock	52	—	—	—	52
Transactions with noncontrolling interests	38	—	—	—	21
Balance at June 30, 2016	<u>\$ 35,718</u>	<u>\$ 30,777</u>	<u>\$ 198,293</u>	<u>\$ (1,763)</u>	<u>\$ 3,233</u>
Balance at December 31, 2016	\$ 35,689	\$ 37,298	\$ 211,777	\$ (1,763)	\$ 3,358
Net earnings	—	—	8,322	—	172
Other comprehensive income, net	—	9,354	—	—	61
Issuance of common stock	40	—	—	—	40
Transactions with noncontrolling interests	(58)	—	—	—	(157)
Balance at June 30, 2017	<u>\$ 35,671</u>	<u>\$ 46,652</u>	<u>\$ 220,099</u>	<u>\$ (1,763)</u>	<u>\$ 3,434</u>

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC.
and Subsidiaries

CONSOLIDATED STATEMENTS OF CASH FLOWS
(dollars in millions)

	First Six Months	
	2017	2016
	(Unaudited)	
Cash flows from operating activities:		
Net earnings	\$ 8,494	\$ 10,739
Adjustments to reconcile net earnings to operating cash flows:		
Investment gains/losses	(605)	(2,493)
Depreciation and amortization	4,539	4,359
Other	403	(119)
Changes in operating assets and liabilities:		
Losses and loss adjustment expenses	18,075	1,769
Deferred charges reinsurance assumed	(5,550)	35
Unearned premiums	1,830	1,444
Receivables and originated loans	(1,608)	(2,716)
Derivative contract assets and liabilities	(395)	790
Income taxes	1,893	1,822
Other	(449)	(366)
Net cash flows from operating activities	<u>26,627</u>	<u>15,264</u>
Cash flows from investing activities:		
Purchases of U.S. Treasury Bills and fixed maturity securities	(68,547)	(33,029)
Purchases of equity securities	(13,628)	(4,129)
Sales of U.S. Treasury Bills and fixed maturity securities	20,164	2,625
Redemptions and maturities of U.S. Treasury Bills and fixed maturity securities	34,164	8,828
Sales and redemptions of equity securities	7,815	12,444
Purchases of loans and finance receivables	(1,350)	(188)
Collections of loans and finance receivables	393	174
Acquisitions of businesses, net of cash acquired	(1,721)	(30,440)
Purchases of property, plant and equipment	(5,149)	(6,144)
Other	(112)	(397)
Net cash flows from investing activities	<u>(27,971)</u>	<u>(50,256)</u>
Cash flows from financing activities:		
Proceeds from borrowings of insurance and other businesses	1,295	8,600
Proceeds from borrowings of railroad, utilities and energy businesses	2,413	2,211
Proceeds from borrowings of finance businesses	1,298	3,494
Repayments of borrowings of insurance and other businesses	(1,180)	(1,148)
Repayments of borrowings of railroad, utilities and energy businesses	(1,768)	(1,781)
Repayments of borrowings of finance businesses	(2,897)	(195)
Changes in short term borrowings, net	462	618
Other	(92)	(46)
Net cash flows from financing activities	<u>(469)</u>	<u>11,753</u>
Effects of foreign currency exchange rate changes	183	2
Increase in cash and cash equivalents	(1,630)	(23,237)
Cash and cash equivalents at beginning of year *	28,048	67,161
Cash and cash equivalents at June 30 *	<u>\$ 26,418</u>	<u>\$ 43,924</u>
* Cash and cash equivalents are comprised of the following:		
Beginning of year—		
Insurance and Other	\$23,581	\$ 56,612
Railroad, Utilities and Energy	3,939	3,437
Finance and Financial Products	528	7,112
	<u>\$28,048</u>	<u>\$ 67,161</u>
June 30—		
Insurance and Other	\$20,142	\$ 33,033
Railroad, Utilities and Energy	4,962	3,036
Finance and Financial Products	1,314	7,855
	<u>\$26,418</u>	<u>\$ 43,924</u>

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC.
and Subsidiaries

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2017

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. At December 31, 2016, we began presenting U.S. Treasury Bills with maturity dates greater than three months from their purchase dates separately in our Consolidated Balance Sheets. Accordingly, we revised the comparative 2016 Consolidated Statement of Cash Flows to reflect this change.

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. Variations in the amount and timing of investment gains/losses can cause significant variations in periodic net earnings. In addition, changes in the fair values of liabilities associated with derivative contracts and gains and losses associated with the periodic revaluation of certain assets and liabilities denominated in foreign currencies can cause significant variations in periodic net earnings.

Note 2. New accounting pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued ASU 2014-09 “Revenue from Contracts with Customers.” ASU 2014-09 applies to contracts with customers, excluding, most notably, insurance and leasing contracts. The framework prescribed by ASU 2014-09 includes (a) identifying the contract, (b) identifying the related performance obligations, (c) determining the transaction price, (d) allocating the transaction price to the identified performance obligations and (e) recognizing revenues as the identified performance obligations are satisfied. Based on our evaluations to-date, we do not currently believe the adoption of ASU 2014-09 will have a material effect on our Consolidated Financial Statements. However, timing of the recognition of revenue and related costs may change with respect to certain of our contracts with customers. For instance, revenues and costs for certain contracts may be recognized over time rather than when the product or service is delivered, as is the current practice. In addition, certain contracts may be treated as leases for accounting purposes, rather than contracts with customers subject to ASU 2014-09. Our evaluations of these and other issues and implementation efforts concerning ASU 2014-09 are ongoing and also include consideration of the new disclosure requirements. We will adopt ASU 2014-09 as of January 1, 2018, under the modified retrospective method.

In January 2016, the FASB issued ASU 2016-01 “Financial Instruments—Recognition and Measurement of Financial Assets and Financial Liabilities.” ASU 2016-01 generally requires that equity securities (excluding equity method investments) be measured at fair value with changes in fair value recognized in net income. Under existing GAAP, changes in fair value of available-for-sale equity investments are recorded in other comprehensive income. Given the current magnitude of our investments in equity securities, the adoption of ASU 2016-01 will have a significant impact on the periodic net earnings reported in our Consolidated Statement of Earnings, although it will not significantly affect our comprehensive income or total shareholders’ equity. We will adopt ASU 2016-01 as of January 1, 2018. As of that date, the accumulated unrealized appreciation relating to our investments in equity securities, which is currently included in accumulated other comprehensive income, will be reclassified to retained earnings.

In February 2016, the FASB issued ASU 2016-02 “Leases.” ASU 2016-02 requires a lessee to recognize in the statement of financial position a liability to make lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term, along with additional qualitative and quantitative disclosures. ASU 2016-02 is effective for reporting periods beginning after December 15, 2018, with early adoption permitted. We are currently evaluating the effect this standard will have on our Consolidated Financial Statements.

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.

Notes to Consolidated Financial Statements (*Continued*)

Note 2. New accounting pronouncements (*Continued*)

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, 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.

Note 3. Significant business acquisitions

Our long-held acquisition strategy is to acquire businesses at sensible prices that have consistent earning power, good returns on equity and able and honest management. Financial results attributable to business acquisitions are included in our Consolidated Financial Statements beginning on their respective acquisition dates.

On January 29, 2016, Berkshire acquired all outstanding common stock of Precision Castparts Corp. (“PCC”) for \$235 per share in cash pursuant to a merger agreement dated August 8, 2015. The aggregate consideration paid was approximately \$32.7 billion, which included the value of PCC shares we already owned. We funded the acquisition with a combination of existing cash balances and proceeds from a short-term credit facility. PCC is a worldwide, diversified manufacturer of complex metal components and products. It serves the aerospace, power and general industrial markets. PCC is a market leader in manufacturing complex structural investment castings and forged components for aerospace markets, machined airframe components and highly engineered critical fasteners for aerospace applications, and in manufacturing airfoil castings for the aerospace and industrial gas turbine markets. PCC also is a leading producer of titanium and nickel superalloy melted and mill products for the aerospace, chemical processing, oil and gas and pollution control industries, and manufactures extruded seamless pipe, fittings and forgings for power generation and oil and gas applications.

On February 29, 2016, we acquired the Duracell business from The Procter & Gamble Company (“P&G”) pursuant to an agreement entered into in November 2014. Pursuant to the agreement, we received a recapitalized Duracell Company in exchange for shares of P&G common stock held by Berkshire subsidiaries, which had a fair value of approximately \$4.2 billion. Duracell is a leading manufacturer of high-performance alkaline batteries and is an innovator in wireless charging technologies.

Pro forma consolidated revenues and net earnings data for 2016 was not materially different from the amounts reflected in the accompanying Consolidated Financial Statements. Goodwill from these acquisitions is not amortizable for income tax purposes. The fair values of identified assets acquired and liabilities assumed and residual goodwill of PCC and Duracell at their respective acquisition dates are summarized as follows (in millions).

	PCC	Duracell
Cash and cash equivalents	\$ 250	\$1,807
Inventories	3,430	319
Property, plant and equipment	2,765	359
Goodwill	16,011	866
Other intangible assets	23,527	1,550
Other assets	1,916	242
Assets acquired	<u>\$47,899</u>	<u>\$5,143</u>
Accounts payable, accruals and other liabilities	\$ 2,442	\$ 410
Notes payable and other borrowings	5,251	—
Income taxes, principally deferred	7,548	494
Liabilities assumed	<u>\$15,241</u>	<u>\$ 904</u>
Net assets	<u>\$32,658</u>	<u>\$4,239</u>

Notes to Consolidated Financial Statements (Continued)

Note 4. Investments in fixed maturity securities

Investments in securities with fixed maturities as of June 30, 2017 and December 31, 2016 are summarized by type below (in millions).

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
<i>June 30, 2017</i>				
U.S. Treasury, U.S. government corporations and agencies	\$ 4,800	\$ 6	\$ (14)	\$ 4,792
States, municipalities and political subdivisions	1,050	54	(1)	1,103
Foreign governments	8,726	223	(27)	8,922
Corporate bonds	6,897	668	(6)	7,559
Mortgage-backed securities	924	115	(4)	1,035
	<u>\$ 22,397</u>	<u>\$ 1,066</u>	<u>\$ (52)</u>	<u>\$ 23,411</u>
<i>December 31, 2016</i>				
U.S. Treasury, U.S. government corporations and agencies	\$ 4,519	\$ 16	\$ (8)	\$ 4,527
States, municipalities and political subdivisions	1,159	58	(1)	1,216
Foreign governments	8,860	207	(66)	9,001
Corporate bonds	6,899	714	(9)	7,604
Mortgage-backed securities	997	126	(6)	1,117
	<u>\$ 22,434</u>	<u>\$ 1,121</u>	<u>\$ (90)</u>	<u>\$ 23,465</u>

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

	June 30, 2017	December 31, 2016
Insurance and other	\$ 23,381	\$ 23,432
Finance and financial products	30	33
	<u>\$ 23,411</u>	<u>\$ 23,465</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 June 30, 2017, approximately 93% of foreign government holdings were rated AA or higher by at least one of the major rating agencies. Approximately 81% of foreign government holdings were issued or guaranteed by the United Kingdom, Germany, Australia or Canada.

The amortized cost and estimated fair value of securities with fixed maturities at June 30, 2017 are summarized below by contractual maturity dates. Actual maturities may differ from contractual maturities due to early call or prepayment rights held by issuers. Amounts are in millions.

	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	\$8,690	\$10,009	\$ 607	\$2,167	\$ 924	\$22,397
Fair value	8,762	10,280	660	2,674	1,035	23,411

Notes to Consolidated Financial Statements (Continued)

Note 5. Investments in equity securities

Investments in equity securities as of June 30, 2017 and December 31, 2016 are summarized based on the primary industry of the investee in the table below (in millions).

	<u>Cost Basis</u>	<u>Unrealized Gains</u>	<u>Unrealized Losses</u>	<u>Fair Value</u>
<i>June 30, 2017 *</i>				
Banks, insurance and finance	\$ 20,887	\$ 32,754	\$ —	\$ 53,641
Consumer products	19,495	22,267	—	41,762
Commercial, industrial and other	31,540	10,946	(776)	41,710
	<u>\$ 71,922</u>	<u>\$ 65,967</u>	<u>\$ (776)</u>	<u>\$ 137,113</u>

* Approximately 62% of the aggregate fair value was concentrated in the equity securities of five companies: American Express Company - \$12.8 billion, Apple Inc. - \$19.4 billion, The Coca-Cola Company - \$17.9 billion, International Business Machines Corporation ("IBM") - \$8.3 billion and Wells Fargo & Company - \$27.3 billion.

	<u>Cost Basis</u>	<u>Unrealized Gains</u>	<u>Unrealized Losses</u>	<u>Fair Value</u>
<i>December 31, 2016*</i>				
Banks, insurance and finance	\$ 19,852	\$ 30,572	\$ —	\$ 50,424
Consumer products	10,657	16,760	(9)	27,408
Commercial, industrial and other	35,868	9,033	(701)	44,200
	<u>\$ 66,377</u>	<u>\$ 56,365</u>	<u>\$ (710)</u>	<u>\$ 122,032</u>

* Approximately 62% of the aggregate fair value was concentrated in the equity securities of five companies: American Express Company - \$11.2 billion, Apple Inc. - \$7.1 billion, The Coca-Cola Company - \$16.6 billion, IBM - \$13.5 billion and Wells Fargo & Company - \$27.6 billion.

As of June 30, 2017 and December 31, 2016, unrealized losses on equity securities in a continuous unrealized loss position for more than twelve consecutive months were \$110 million and \$551 million, respectively.

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

	<u>June 30, 2017</u>	<u>December 31, 2016</u>
Insurance and other	\$ 135,355	\$ 120,471
Railroad, utilities and energy *	1,380	1,186
Finance and financial products	378	375
	<u>\$ 137,113</u>	<u>\$ 122,032</u>

* Included in other assets.

Note 6. Investments in The Kraft Heinz Company

In June 2013, Berkshire invested \$12.25 billion in a newly-formed company, H.J. Heinz Holding Corporation ("Heinz Holding"), consisting of 425 million shares of common stock, warrants to acquire approximately 46 million additional shares of common stock at \$0.01 per share and cumulative compounding preferred stock ("Preferred Stock") with a liquidation preference of \$8 billion. An affiliate of the global investment firm 3G Capital (such affiliate, "3G") also acquired 425 million shares of Heinz Holding common stock for \$4.25 billion. At that time, Berkshire and 3G each owned a 50% share of Heinz Holding common stock. Heinz Holding then acquired H.J. Heinz Company.

Notes to Consolidated Financial Statements (*Continued*)

Note 6. Investments in The Kraft Heinz Company (*Continued*)

In March 2015, Heinz Holding entered into an agreement to acquire all of the outstanding common stock of Kraft Foods Group, Inc. ("Kraft"). In June 2015, Berkshire exercised the aforementioned common stock warrants. On July 1, 2015, Berkshire and 3G also acquired new shares of Heinz Holding common stock for \$5.26 billion and \$4.74 billion, respectively. After these transactions, Berkshire owned approximately 52.5% of the outstanding shares of Heinz Holding. On July 2, 2015, Heinz Holding completed its acquisition of Kraft, at which time Heinz Holding was renamed The Kraft Heinz Company ("Kraft Heinz"). In connection with its acquisition of Kraft, Kraft Heinz issued one new share of Kraft Heinz common stock for each share of Kraft common stock, which reduced Berkshire's and 3G's ownership interests in Kraft Heinz to 26.8% and 24.2%, respectively.

Berkshire currently owns 26.7% of the outstanding shares of Kraft Heinz common stock. We account for our investment in Kraft Heinz common stock pursuant to the equity method. The carrying value of this investment was approximately \$15.6 billion at June 30, 2017 and \$15.3 billion at December 31, 2016. Our earnings determined under the equity method for the first six months were \$548 million in 2017 and \$446 million in 2016. We received dividends on the common stock of \$391 million in the first six months of 2017 and \$374 million in the first six months of 2016, which we recorded as reductions of our investment. In the second quarter of 2016, we also received dividends of \$180 million on our Preferred Stock investment, which Kraft Heinz redeemed for cash of \$8.32 billion on June 7, 2016.

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

	July 1, 2017	December 31, 2016
Assets	\$119,416	\$120,480
Liabilities	60,870	62,906
	Second Quarter	First Six Months
	2017	2016
Sales	<u>\$ 6,677</u>	<u>\$ 6,793</u>
Net earnings attributable to Kraft Heinz common shareholders	<u>\$ 1,159</u>	<u>\$ 770</u>
	<u><u>\$ 13,041</u></u>	<u><u>\$ 13,363</u></u>
	<u><u>\$ 2,052</u></u>	<u><u>\$ 1,666</u></u>

Note 7. Other investments

Other investments include preferred stock of Bank of America Corporation ("BAC"), warrants to purchase common stock of BAC and preferred stock of Restaurant Brands International, Inc. ("RBI"). Other investments are classified as available-for-sale and carried at fair value and are shown in our Consolidated Balance Sheets as follows (in millions).

	Cost		Fair Value	
	June 30, 2017	December 31, 2016	June 30, 2017	December 31, 2016
Insurance and other	\$ 6,720	\$ 6,720	\$ 16,838	\$ 14,364
Finance and financial products	1,000	1,000	3,396	2,892
	<u>\$ 7,720</u>	<u>\$ 7,720</u>	<u>\$ 20,234</u>	<u>\$ 17,256</u>

We currently own 50,000 shares of 6% Non-Cumulative Perpetual Preferred Stock of BAC ("BAC Preferred") with a liquidation value of \$100,000 per share and warrants to purchase 700,000,000 shares of common stock of BAC ("BAC Warrants"). The BAC Preferred is redeemable at the option of BAC beginning on May 7, 2019 at a redemption price of \$105,000 per share (or \$5.25 billion in aggregate). The BAC Warrants expire in 2021 and are exercisable for an aggregate cost of \$5 billion (\$7.142857/share). On June 28, 2017, BAC's Board of Directors announced plans to increase the quarterly dividend on BAC's common stock to \$0.12 per share, beginning in the third quarter of 2017. On June 30, 2017, we announced our intention to exercise all of the BAC Warrants we currently own when the BAC quarterly dividend increase occurs. We currently expect to use substantially all of our BAC Preferred as consideration for the \$5 billion cost to exercise the BAC Warrants.

We currently own Class A 9% Cumulative Compounding Perpetual Preferred Shares of RBI ("RBI Preferred") having a stated value of \$3 billion. RBI, domiciled in Canada, franchises and operates quick service restaurants. The RBI Preferred is entitled to dividends on a cumulative basis of 9% per annum plus an additional amount, if necessary, to produce an after-tax yield to Berkshire as if the dividends were paid by a U.S.-based company. The RBI Preferred is redeemable at the option of RBI beginning on December 12, 2017. In the second quarter of 2017, RBI announced its intention to redeem all or a portion of our RBI Preferred investment. If not redeemed prior to December 12, 2024, we can cause RBI to redeem the RBI Preferred. In either case, the redemption price will be 109.9% of the stated value of such shares.

Notes to Consolidated Financial Statements (*Continued*)

Note 8. Income taxes

Our consolidated effective income tax rates for the second quarter and first six months of 2017 were 28.9% and 28.1%, respectively, and 31.1% and 22.3%, respectively, in the second quarter and first six months of 2016. Our effective income tax rate normally reflects recurring benefits from: (a) dividends received deductions applicable to certain investments in equity securities, (b) income production tax credits related to wind-powered electricity generation placed in service in the U.S. and (c) lower income tax rates applicable to earnings of certain foreign subsidiaries.

On February 29, 2016, we exchanged our long-held investment in P&G common stock for the common stock of Duracell. This exchange produced a pre-tax gain of \$1.1 billion for financial reporting purposes. The exchange transaction was structured as a tax-free reorganization under the Internal Revenue Code. As a result, no income taxes were payable on the excess of the fair value of the business received over the tax basis of the P&G shares exchanged, and we recorded a one-time reduction of certain deferred income tax liabilities (approximately \$750 million) that were recorded in 2005 in connection with our exchange of The Gillette Company common stock for P&G common stock upon the merger of those two companies. The P&G/Duracell exchange produced an 8.3 percentage point reduction in our consolidated effective income tax rate for the first six months of 2016.

Note 9. Investment gains/losses

Investment gains/losses included in earnings are summarized below (in millions).

	Second Quarter		First Six Months	
	2017	2016	2017	2016
Fixed maturity securities—				
Gross gains from sales and redemptions	\$ 15	\$ 20	\$ 26	\$ 39
Gross losses from sales and redemptions	(8)	(14)	(14)	(17)
Equity securities—				
Gross gains from sales and redemptions	359	740	784	2,547
Gross losses from sales and redemptions	(82)	(53)	(207)	(63)
Other-than-temporary impairment losses	—	(63)	—	(63)
Other	6	13	16	50
	\$ 290	\$ 643	\$ 605	\$ 2,493

We record investments in equity and fixed maturity securities classified as available-for-sale at fair value and record the difference between fair value and cost in other comprehensive income. We recognize investment gains and losses when we sell or otherwise dispose such securities. Gains from sales and redemptions of equity securities in the second quarter of 2016 included \$610 million from the redemption of our investment in Kraft Heinz Preferred Stock. Gains in the first six months of 2016 also included approximately \$1.1 billion from the exchange of our P&G common stock in connection with the acquisition of Duracell.

Note 10. Inventories

Inventories are comprised of the following (in millions).

	June 30, 2017	December 31, 2016
Raw materials	\$ 2,935	\$ 2,789
Work in process and other	2,787	2,506
Finished manufactured goods	4,199	4,033
Goods acquired for resale	6,521	6,399
	\$16,442	\$ 15,727

Note 11. Receivables

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

	June 30, 2017	December 31, 2016
Insurance premiums receivable	\$11,124	\$ 10,462
Reinsurance recoverable on unpaid losses	3,076	3,338
Trade and other receivables	15,089	13,630
Allowances for uncollectible accounts	(336)	(333)
	\$28,953	\$ 27,097

Notes to Consolidated Financial Statements (*Continued*)

Note 11. Receivables (*Continued*)

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

	June 30, 2017	December 31, 2016
Loans and finance receivables before allowances and discounts	\$ 14,967	\$ 13,728
Allowances for uncollectible loans	(177)	(182)
Unamortized acquisition discounts	(231)	(246)
	<u>\$ 14,559</u>	<u>\$ 13,300</u>

Loans and finance receivables are primarily installment loans originated or acquired by our manufactured housing business. In June 2017, we agreed to provide a Canada-based financial institution with a C\$2 billion (approximately \$1.5 billion) one-year secured revolving credit facility. The agreement expires on June 29, 2018. The outstanding loan balance of C\$1.4 billion at June 30, 2017 was repaid during July. Provisions for loan losses in both the first six months of 2017 and 2016 were \$78 million. Loan charge-offs, net of recoveries, in the first six months were \$83 million in 2017 and \$78 million in 2016. At June 30, 2017, we evaluated approximately 98% of the manufactured housing loan balances collectively for impairment. As a part of the evaluation process, credit quality indicators are reviewed and loans are designated as performing or non-performing. At June 30, 2017, we considered approximately 99% of the loan balances to be performing and approximately 95% of the loan balances current as to payment status.

Note 12. 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).

	Ranges of estimated useful life	June 30, 2017	December 31, 2016
Land	—	\$ 2,213	\$ 2,108
Buildings and improvements	5 – 40 years	8,538	8,360
Machinery and equipment	3 – 25 years	21,220	20,463
Furniture, fixtures and other	2 – 15 years	4,395	4,080
		36,366	35,011
Accumulated depreciation		(16,576)	(15,686)
		<u>\$ 19,790</u>	<u>\$ 19,325</u>

A summary of property, plant and equipment of our railroad and our utilities and energy businesses follows (in millions).

	Ranges of estimated useful life	June 30, 2017	December 31, 2016
Railroad:			
Land	—	\$ 6,074	\$ 6,063
Track structure and other roadway	7 – 100 years	50,344	48,277
Locomotives, freight cars and other equipment	6 – 41 years	12,264	12,075
Construction in progress	—	896	965
		69,578	67,380
Accumulated depreciation		(7,936)	(6,130)
		<u>61,642</u>	<u>61,250</u>
Utilities and energy:			
Utility generation, transmission and distribution systems	5 – 80 years	72,317	71,536
Interstate natural gas pipeline assets	3 – 80 years	6,969	6,942
Independent power plants and other assets	3 – 30 years	7,044	6,596
Construction in progress	—	2,607	2,098
		88,937	87,172
Accumulated depreciation		(25,251)	(24,663)
		<u>63,686</u>	<u>62,509</u>
		<u>\$ 125,328</u>	<u>\$ 123,759</u>

Notes to Consolidated Financial Statements (*Continued*)

Note 12. Property, plant and equipment and assets held for lease (*Continued*)

The utility generation, transmission and distribution systems and interstate natural gas pipeline assets are owned by regulated public utility and natural gas pipeline subsidiaries.

Assets held for lease and property, plant and equipment of our finance and financial products businesses are summarized below (in millions).

	Ranges of estimated useful life	June 30, 2017	December 31, 2016
Assets held for lease	5 – 35 years	\$ 12,110	\$ 11,902
Land	—	226	224
Buildings, machinery and other	3 – 50 years	1,365	1,302
		13,701	13,428
Accumulated depreciation		(3,910)	(3,739)
		<u>\$ 9,791</u>	<u>\$ 9,689</u>

A summary of depreciation expense follows (in millions).

	First Six Months	
	2017	2016
Insurance and other	\$ 1,089	\$ 1,037
Railroad, utilities and energy	2,389	2,298
Finance and financial products	321	308
	<u>\$ 3,799</u>	<u>\$ 3,643</u>

Note 13. Goodwill and other intangible assets

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

	June 30, 2017	December 31, 2016
Balance at beginning of year	\$ 79,486	\$ 62,708
Acquisitions of businesses	616	17,650
Other, including foreign currency translation	73	(872)
Balance at end of period	<u>\$ 80,175</u>	<u>\$ 79,486</u>

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

	June 30, 2017		December 31, 2016	
	Gross carrying amount	Accumulated amortization	Gross carrying amount	Accumulated amortization
Insurance and other	\$40,419	\$7,199	\$39,976	\$6,495
Railroad, utilities and energy	903	312	898	293
	<u>\$41,322</u>	<u>\$7,511</u>	<u>\$40,874</u>	<u>\$6,788</u>
Trademarks and trade names	\$ 5,275	\$ 653	\$ 5,175	\$ 616
Patents and technology	4,435	2,512	4,341	2,328
Customer relationships	28,457	3,299	28,243	2,879
Other	3,155	1,047	3,115	965
	<u>\$41,322</u>	<u>\$7,511</u>	<u>\$40,874</u>	<u>\$6,788</u>

Amortization expense in the first six months was \$740 million in 2017 and \$716 million in 2016. Intangible assets with indefinite lives were approximately \$18.8 billion as of June 30, 2017 and \$18.7 billion as of December 31, 2016.

Notes to Consolidated Financial Statements (*Continued*)

Note 14. 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 include equity index put option contracts written between 2004 and 2008. The liabilities and related notional values of such contracts follows (in millions).

	June 30, 2017	December 31, 2016		
	Liabilities	Notional Value	Liabilities	Notional Value
Equity index put options	\$ 2,494	\$27,911 ⁽¹⁾	\$ 2,890	\$26,497 ⁽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 derivative contract liabilities at fair value and include the changes in the fair values of such contracts in earnings as derivative gains/losses. We entered into these contracts with the expectation that the premiums received would exceed the amounts ultimately paid to counterparties. A summary of the derivative gains/losses included in our Consolidated Statements of Earnings follows (in millions).

	Second Quarter		First Six Months	
	2017	2016	2017	2016
Equity index put options	\$ (65)	\$ (83)	\$ 395	\$ (879)
Credit default	—	103	—	89
	<u>\$ (65)</u>	<u>\$ 20</u>	<u>\$ 395</u>	<u>\$ (790)</u>

The equity index put option contracts are European style options written on four major equity indexes and expire between June 2018 and January 2026. 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 \$4.2 billion on these contracts at the contract inception dates and therefore 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 \$842 million at June 30, 2017 and \$1.0 billion at December 31, 2016. However, these contracts may not be unilaterally terminated or fully settled before the expiration dates. Therefore, the ultimate amount of cash basis gains or losses on these contracts will not be determined for several years. The remaining weighted average life of all contracts was approximately 3.4 years at June 30, 2017.

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 June 30, 2017, 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.

In July 2016, our last remaining credit default contract was terminated by mutual agreement with the counterparty. We paid \$195 million upon termination of the contract.

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. Derivative instruments, including forward purchases and sales, futures, swaps and options, are used to manage a portion of these price risks. Derivative contract assets are included in other assets and were \$123 million as of June 30, 2017 and \$142 million as of December 31, 2016. Derivative contract liabilities are included in accounts payable, accruals and other liabilities and were \$139 million as of June 30, 2017 and \$145 million as of December 31, 2016. Net derivative contract assets or liabilities of our regulated utilities that are probable of recovery through rates, are offset by regulatory liabilities or assets. Unrealized gains or losses on contracts accounted for as cash flow or fair value hedges are recorded in other comprehensive income or in net earnings, as appropriate.

Notes to Consolidated Financial Statements (Continued)

Note 15. Supplemental cash flow information

Supplemental cash flow information follows (in millions).

	First Six Months	
	2017	2016
Cash paid during the period for:		
Income taxes	\$ 1,082	\$ 1,055
Interest:		
Insurance and other businesses	390	253
Railroad, utilities and energy businesses	1,410	1,406
Finance and financial products businesses	211	184
Non-cash investing and financing activities:		
Liabilities assumed in connection with business acquisitions	167	16,997
Equity securities exchanged in connection with business acquisition	—	4,239

Note 16. Unpaid losses and loss adjustment expenses

The liabilities for unpaid losses and loss adjustment expenses (also referred to as “claim liabilities”) under our 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 for the six months ending June 30, 2017 and 2016 follows (in millions).

	2017	2016
Unpaid losses and loss adjustment expenses—beginning of year:		
Gross liabilities	\$ 76,918	\$ 73,144
Reinsurance recoverable and deferred charges	(11,385)	(10,994)
Net balance	<u>65,533</u>	<u>62,150</u>
Incurred losses and loss adjustment expenses with respect to:		
Current accident year events	16,980	14,898
Prior accident years' events	(199)	(1,071)
Retroactive reinsurance and discount accretion	10,532	883
Total incurred losses and loss adjustment expenses	<u>27,313</u>	<u>14,710</u>
Paid losses and loss adjustment expenses with respect to:		
Current accident year events	(6,656)	(6,049)
Prior accident years' events	(7,265)	(6,512)
Retroactive reinsurance	(618)	(534)
Total payments	<u>(14,539)</u>	<u>(13,095)</u>
Foreign currency translation adjustment	<u>327</u>	<u>(168)</u>
Unpaid losses and loss adjustment expenses—June 30:		
Net balance	78,634	63,597
Reinsurance recoverable and deferred charges	16,673	11,111
Gross liabilities	<u>\$ 95,307</u>	<u>\$ 74,708</u>

Incurred losses and loss adjustment expenses in the preceding table reflect the losses and loss adjustment expenses recorded in earnings in each period related to insured events occurring in the current year and in prior years. We present incurred and paid losses under retroactive reinsurance contracts and discount accretion separately. Such amounts relate to prior accident years.

Notes to Consolidated Financial Statements (*Continued*)

Note 16. Unpaid losses and loss adjustment expenses (*Continued*)

Incurred losses and loss adjustment expenses in the first six months of 2017 and 2016 reflected decreases of \$199 million and \$1,071 million, respectively, in the estimated ultimate liabilities for prior accident years' events. In the first six months of 2017, the decrease included a \$532 million decrease related to primary insurance operations (primarily private passenger automobile, healthcare malpractice and workers' compensation coverages), which was partly offset by an increase attributable to reinsurance operations. The increase related to our reinsurance operations included \$215 million with respect to certain personal injury claims in the United Kingdom due to a regulatory decision that increases calculated lump sum settlement amounts. In addition, during 2017, we increased ultimate liability estimates under certain reinsurance contracts due to higher than expected reported losses from hurricane and earthquake events that occurred in 2016. In the first six months of 2016, we reduced estimated ultimate liabilities for prior accident years' events for reinsurance operations (\$619 million) and primary insurance (\$452 million). The reductions related to reinsurance operations were primarily attributable to lower than expected reported losses, while the reductions for primary insurance primarily related to private passenger automobile, healthcare malpractice and workers' compensation coverages.

In January 2017, a Berkshire subsidiary, National Indemnity Company ("NICO"), entered into a retroactive reinsurance agreement with various subsidiaries of American International Group, Inc. (collectively, "AIG"). NICO received cash consideration of \$10.2 billion and agreed to indemnify AIG for 80% of up to \$25 billion, excess of \$25 billion retained by AIG, of losses and allocated loss adjustment expenses with respect to certain commercial insurance loss events occurring in years prior to 2016. The transaction became effective on February 2, 2017. Berkshire agreed to guarantee the timely payment of all amounts due to AIG under the agreement.

We accounted for the AIG agreement as retroactive reinsurance of short-duration insurance contracts. As of the effective date, we recorded premiums earned and losses and loss adjustment expenses incurred of \$10.2 billion. We also recorded a liability for unpaid losses and loss adjustment expenses of \$16.4 billion, representing the estimated ultimate liabilities assumed, and a deferred charge reinsurance assumed asset of \$6.2 billion, representing the excess of the liability over the premiums earned. This deferred charge asset will be amortized over the estimated claims settlement period using the interest method based on the estimated timing and amount of future loss payments. Amortization charges are included in losses and loss adjustment expenses in the Consolidated Statements of Earnings.

Note 17. Notes payable and other borrowings

Notes payable and other borrowings are summarized below (in millions). The weighted average interest rates and maturity date ranges shown in the following tables are based on borrowings as of June 30, 2017.

	Weighted Average Interest Rate	June 30, 2017	December 31, 2016
<i>Insurance and other:</i>			
Issued by Berkshire:			
U.S. Dollar denominated borrowings due 2017-2047	2.8%	\$10,615	\$11,709
Euro denominated borrowings due 2020-2035	1.1%	7,766	5,994
Short-term subsidiary borrowings	3.0%	2,013	2,094
Other subsidiary borrowings due 2017-2045	3.9%	7,387	7,378
		<u>\$27,781</u>	<u>\$27,175</u>

In January 2017, Berkshire issued €1.1 billion in senior unsecured notes. The notes consisted of €550 million of 0.25% notes due in 2021 and €550 million of 0.625% notes due in 2023. In January 2017, senior notes of \$1.1 billion matured. The increase in the carrying value of Berkshire's Euro denominated senior notes in the first six months of 2017 included \$597 million that was charged to earnings as additional interest expense for the first six months of 2017 (including \$526 million in the second quarter) and resulted from the revaluation attributable to changes in foreign currency exchange rates.

Notes to Consolidated Financial Statements (Continued)

Note 17. Notes payable and other borrowings (Continued)

	Weighted Average Interest Rate	June 30, 2017	December 31, 2016
<i>Railroad, utilities and energy:</i>			
Issued by Berkshire Hathaway Energy Company (“BHE”) and its subsidiaries:			
BHE senior unsecured debt due 2018-2045	5.4%	\$ 7,420	\$ 7,818
Subsidiary and other debt due 2017-2064	4.6%	30,729	29,223
Issued by BNSF due 2017-2097	4.8%	<u>22,552</u>	<u>22,044</u>
		<u><u>\$60,701</u></u>	<u><u>\$ 59,085</u></u>

BHE subsidiary debt represents amounts issued pursuant to separate financing agreements. Substantially all of the assets of certain BHE subsidiaries are, or may be, pledged or encumbered to support or otherwise secure debt. These borrowing arrangements generally contain various covenants including, but not limited to, leverage ratios, interest coverage ratios and debt service coverage ratios. During the first six months of 2017, BHE and its subsidiaries issued approximately \$1.275 billion of debt with maturity dates ranging from 2027 to 2057 and a weighted average interest rate of 3.7%.

BNSF's borrowings are primarily senior unsecured debentures. In March 2017, BNSF issued \$1.25 billion of senior unsecured debentures consisting of \$500 million of 3.25% debentures due in 2027 and \$750 million of 4.125% debentures due in 2047. In May 2017, \$650 million of BNSF debentures matured. As of June 30, 2017, 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	June 30, 2017	December 31, 2016
<i>Finance and financial products:</i>			
Issued by Berkshire Hathaway Finance Corporation (“BHFC”) due 2017-2043	2.7%	\$13,323	\$ 14,423
Issued by other subsidiaries due 2017-2036	4.7%	<u>465</u>	<u>961</u>
		<u><u>\$13,788</u></u>	<u><u>\$ 15,384</u></u>

In January 2017, BHFC issued \$1.3 billion of senior notes consisting of \$950 million of floating rate notes due in 2019 and \$350 million of floating rate notes due in 2020. In the first six months of 2017, senior notes of \$2.4 billion matured. The borrowings of BHFC, a wholly owned finance subsidiary of Berkshire, are fully and unconditionally guaranteed by Berkshire.

As of June 30, 2017, 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 about \$4.8 billion related to BHE and its subsidiaries. In addition to BHFC's borrowings, at June 30, 2017, Berkshire guaranteed approximately \$2.6 billion of other subsidiary borrowings. 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 June 30, 2017 and December 31, 2016 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)
<u>June 30, 2017</u>					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 4,792	\$ 4,792	\$ 3,326	\$ 1,466	\$ —
States, municipalities and political subdivisions	1,103	1,103	—	1,103	—
Foreign governments	8,922	8,922	7,143	1,779	—
Corporate bonds	7,559	7,559	—	7,552	7
Mortgage-backed securities	1,035	1,035	—	1,035	—
Investments in equity securities	137,113	137,113	137,104	8	1
Investment in Kraft Heinz common stock	15,584	27,871	27,871	—	—
Other investments	20,234	20,234	—	20,234	—
Loans and finance receivables	14,559	15,015	—	1,095	13,920
Derivative contract assets ⁽¹⁾	123	123	2	15	106
Derivative contract liabilities:					
Railroad, utilities and energy ⁽¹⁾	139	139	2	120	17
Equity index put options	2,494	2,494	—	—	2,494
Notes payable and other borrowings:					
Insurance and other	27,781	28,489	—	28,489	—
Railroad, utilities and energy	60,701	68,603	—	68,603	—
Finance and financial products	13,788	14,296	—	13,973	323
<u>December 31, 2016</u>					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 4,527	\$ 4,527	\$ 3,099	\$ 1,428	\$—
States, municipalities and political subdivisions	1,216	1,216	—	1,216	—
Foreign governments	9,001	9,001	7,237	1,764	—
Corporate bonds	7,604	7,604	—	7,540	64
Mortgage-backed securities	1,117	1,117	—	1,117	—
Investments in equity securities	122,032	122,032	122,031	—	1
Investment in Kraft Heinz common stock	15,345	28,418	28,418	—	—
Other investments	17,256	17,256	—	—	17,256
Loans and finance receivables	13,300	13,717	—	13	13,704
Derivative contract assets ⁽¹⁾	142	142	5	43	94
Derivative contract liabilities:					
Railroad, utilities and energy ⁽¹⁾	145	145	3	114	28
Equity index put options	2,890	2,890	—	—	2,890
Notes payable and other borrowings:					
Insurance and other	27,175	27,712	—	27,712	—
Railroad, utilities and energy	59,085	65,774	—	65,774	—
Finance and financial products	15,384	15,825	—	15,469	356

⁽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. Considerable judgment may be required in interpreting market data used to develop the estimates of fair value. Accordingly, the fair values presented are not necessarily indicative of the amounts that could be realized in an actual current market exchange. The use of alternative market assumptions and/or estimation methodologies may have a material effect on the estimated fair value. The hierarchy for measuring fair value consists of Levels 1 through 3, which are described below.

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

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

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

Reconciliations of assets and liabilities measured and carried at fair value on a recurring basis with the use of significant unobservable inputs (Level 3) for the six months ending June 30, 2017 and 2016 follow (in millions).

	Investments in fixed maturity securities	Investments in equity securities and other investments	Net derivative contract liabilities
Six months ending June 30, 2017			
Balance at December 31, 2016	\$ 64	\$ 17,257	\$ (2,824)
Gains (losses) included in:			
Earnings	—	—	473
Other comprehensive income	1	1,156	(2)
Regulatory assets and liabilities	—	—	(2)
Acquisitions, dispositions and settlements	(58)	—	(50)
Transfers into/out of Level 3	—	(18,412)	—
Balance at June 30, 2017	<u>\$ 7</u>	<u>\$ 1</u>	<u>\$ (2,405)</u>
Six months ending June 30, 2016			
Balance at December 31, 2015	\$100	\$ 21,403	\$ (3,785)
Gains (losses) included in:			
Earnings	—	—	(737)
Other comprehensive income	1	(927)	—
Regulatory assets and liabilities	—	—	(11)
Acquisitions, dispositions and settlements	5	—	(35)
Transfers into/out of Level 3	(1)	—	195
Balance at June 30, 2016	<u>\$105</u>	<u>\$ 20,476</u>	<u>\$ (4,373)</u>

Gains and losses included in earnings are included as components of investment gains/losses, derivative gains/losses and other revenues, as appropriate and are primarily related to changes in the values of derivative contracts and settlement transactions. Gains and losses included in other comprehensive income are primarily the net change in unrealized appreciation of investments and the reclassification of investment appreciation in net earnings, as appropriate in our Consolidated Statements of Comprehensive Income.

Notes to Consolidated Financial Statements (*Continued*)

Note 18. Fair value measurements (*Continued*)

As disclosed in Note 7, we expect to exercise our BAC Warrants in the third quarter of 2017 using the BAC Preferred as consideration and additionally, RBI intends to redeem our RBI Preferred investment. As of June 30, 2017, we based our valuations of these investments on these 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 were not significant and that the valuations of such investments were Level 2 measurements as of June 30, 2017.

Quantitative information as of June 30, 2017, with respect to significant 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
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Derivative contract liabilities:

Equity index put options	\$2,494	Option pricing model	Volatility	19%
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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. The methods we use to value these contracts are those that we believe market participants would use in determining exchange prices with respect to our contracts.

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

Note 19. Common stock

Changes in Berkshire's issued, treasury and outstanding common stock during the first six months of 2017 are shown in the table below.

	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, 2016	788,058	(11,680)	776,378	1,303,323,927	(1,409,762)	1,301,914,165
Conversions of Class A common stock to Class B common stock and exercises of replacement stock options issued in a business acquisition						
Class B common stock and exercises of replacement stock options issued in a business acquisition	(8,124)	—	(8,124)	12,609,748	—	12,609,748
Balance at June 30, 2017	<u>779,934</u>	<u>(11,680)</u>	<u>768,254</u>	<u>1,315,933,675</u>	<u>(1,409,762)</u>	<u>1,314,523,913</u>

Each Class A common share is entitled to one vote per share. Class B common stock possesses dividend and distribution rights equal to one-fifteen-hundredth (1/1,500) of such rights of Class A common stock. Each Class B common share possesses voting rights equivalent to one-ten-thousandth (1/10,000) of the voting rights of a Class A share. Unless otherwise required under Delaware General Corporation Law, Class A and Class B common shares vote as a single class. Each share of Class A common stock is convertible, at the option of the holder, into 1,500 shares of Class B common stock. Class B common stock is not convertible into Class A common stock. On an equivalent Class A common stock basis, there were 1,644,603 shares outstanding as of June 30, 2017 and 1,644,321 shares outstanding as of December 31, 2016. In addition to our common stock, 1,000,000 shares of preferred stock are authorized, but none are issued.

Notes to Consolidated Financial Statements (*Continued*)

Note 19. Common stock (*Continued*)

Berkshire's Board of Directors ("Berkshire's Board") has approved a common stock repurchase program under which Berkshire may repurchase its Class A and Class B shares at prices no higher than a 20% premium over the book value of the shares. Berkshire may repurchase shares in the open market or through privately negotiated transactions. Berkshire's Board authorization 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 dollar amount or number of Class A or Class B shares and there is no expiration date to the program.

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 significant amounts reclassified out of accumulated other comprehensive income for the six months ending June 30, 2017 and 2016 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
2017					
Balance at December 31, 2016	\$43,176	\$ (5,268)	\$(593)	\$ (17)	\$ 37,298
Other comprehensive income, net before reclassifications	8,540	1,221	(64)	(7)	9,690
Reclassifications from accumulated other comprehensive income into net earnings	(383)	—	34	13	(336)
Balance at June 30, 2017	<u>\$51,333</u>	<u>\$ (4,047)</u>	<u>\$(623)</u>	<u>\$ (11)</u>	<u>\$ 46,652</u>
Reclassifications into net earnings:					
Investment gains/losses	\$ (589)	\$ —	\$ —	\$ —	\$ (589)
Other	—	—	45	24	69
Reclassifications before income taxes	(589)	—	45	24	(520)
Applicable income taxes	(206)	—	11	11	(184)
	<u>\$ (383)</u>	<u>\$ —</u>	<u>\$ 34</u>	<u>\$ 13</u>	<u>\$ (336)</u>
2016					
Balance at December 31, 2015	\$38,598	\$ (3,856)	\$(762)	\$ 2	\$ 33,982
Other comprehensive income, net before reclassifications	(1,971)	(78)	(5)	(22)	(2,076)
Reclassifications from accumulated other comprehensive income into net earnings	(1,180)	—	35	16	(1,129)
Balance at June 30, 2016	<u>\$35,447</u>	<u>\$ (3,934)</u>	<u>\$(732)</u>	<u>\$ (4)</u>	<u>\$ 30,777</u>
Reclassifications into net earnings:					
Investment gains/losses	\$ (1,816)	\$ —	\$ —	\$ —	\$ (1,816)
Other	—	—	51	35	86
Reclassifications before income taxes	(1,816)	—	51	35	(1,730)
Applicable income taxes	(636)	—	16	19	(601)
	<u>\$ (1,180)</u>	<u>\$ —</u>	<u>\$ 35</u>	<u>\$ 16</u>	<u>\$ (1,129)</u>

Notes to Consolidated Financial Statements (*Continued*)

Note 21. Contingencies and Commitments

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

In the third quarter of 2016, NICO entered into a definitive agreement to acquire Medical Liability Mutual Insurance Company (“MLMIC”), a writer of medical professional liability insurance domiciled in New York. MLMIC’s assets and policyholders’ surplus determined under statutory accounting principles as of March 31, 2017 were approximately \$5.6 billion and \$2.1 billion, respectively. The acquisition price will be an amount equal to the sum of: (i) the tangible book value of MLMIC at the closing date (determined under U.S. GAAP); plus (ii) \$100 million. The acquisition will involve the conversion of MLMIC from a mutual company to a stock company. The closing of the transaction is subject to various regulatory approvals, customary closing conditions and the approval of the MLMIC policyholders eligible to vote on the proposed demutualization and sale. We currently expect this transaction will be completed in late 2017.

We own a 50% interest in a joint venture, Berkadia Commercial Mortgage LLC (“Berkadia”), with Leucadia National Corporation (“Leucadia”) owning the other 50% interest. Berkadia is a servicer of commercial real estate loans in the U.S. A significant source of funding for Berkadia’s operations is through the issuance of commercial paper, which is limited to \$1.5 billion. Berkadia’s commercial paper outstanding is supported by a surety policy issued by a Berkshire insurance subsidiary. Leucadia has agreed to indemnify us for one-half of any losses we incur under the policy.

On July 7, 2017, Berkshire Hathaway Energy Company (“BHE”) agreed to acquire 80.03% of the outstanding equity interests of Oncor Electric Delivery Company LLC (“Oncor”) for \$9 billion pursuant to an agreement between BHE and Energy Future Holdings Corp. (“EFH”). Since April 2014, EFH and the substantial majority of its direct and indirect subsidiaries, excluding Oncor, have operated as debtors-in-possession under the jurisdiction of the U.S. Bankruptcy Court and pursuant to Chapter 11 of the U.S. Bankruptcy Code.

Oncor is a regulated electricity transmission and distribution company that operates the largest transmission and distribution system in Texas, delivering electricity to more than 3.4 million homes and businesses and operating more than 122,000 miles of transmission and distribution lines. Texas Transmission Investment LLC owns 19.75% and certain Oncor directors, employees and retirees own the remaining 0.22% of Oncor’s equity interests. BHE intends to acquire the remaining 19.97% minority interest positions in Oncor through transactions separate from the agreement with EFH.

The completion of this transaction is subject to numerous approvals, rulings and conditions, including those from the U.S. Bankruptcy Court, the Public Utility Commission of Texas and the Federal Energy Regulatory Commission (“FERC”), and the expiration of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976. Subject to obtaining the necessary approvals, we expect the transaction between BHE and EFH will close in the fourth quarter of 2017.

Notes to Consolidated Financial Statements (Continued)

Note 22. Business segment data

Our operating businesses include a large and diverse group of insurance, 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 second quarter and first six months of 2017 and 2016 were as follows (in millions).

	Second Quarter		First Six Months	
	2017	2016	2017	2016
Operating Businesses:				
Insurance group:				
Underwriting:				
GEICO	\$ 7,244	\$ 6,247	\$ 14,089	\$ 12,297
General Re	1,578	1,389	2,969	2,779
Berkshire Hathaway Reinsurance Group	1,786	1,652	13,627	3,895
Berkshire Hathaway Primary Group	1,759	1,511	3,435	2,952
Investment income	1,284	1,236	2,416	2,385
Total insurance group	13,651	12,035	36,536	24,308
BNSF	5,250	4,585	10,435	9,352
Berkshire Hathaway Energy	4,623	4,299	8,880	8,417
Manufacturing	12,738	12,201	24,835	22,755
McLane Company	12,581	12,049	24,682	23,850
Service and retailing	6,550	6,385	12,643	12,276
Finance and financial products	2,033	1,989	3,898	3,715
	57,426	53,543	121,909	104,673
Reconciliation of segments to consolidated amount:				
Investment and derivative gains/losses	225	663	1,000	1,703
Eliminations and other	(133)	48	(204)	41
	<u>\$ 57,518</u>	<u>\$ 54,254</u>	<u>\$ 122,705</u>	<u>\$ 106,417</u>

Earnings before income taxes by segment were as follows (in millions).

	Second Quarter		First Six Months	
	2017	2016	2017	2016
Operating Businesses:				
Insurance group:				
Underwriting:				
GEICO	\$ 119	\$ 150	\$ 294	\$ 414
General Re	25	2	(118)	44
Berkshire Hathaway Reinsurance Group	(400)	184	(1,000)	105
Berkshire Hathaway Primary Group	232	174	421	295
Investment income	1,283	1,235	2,412	2,377
Total insurance group	1,259	1,745	2,009	3,235
BNSF	1,537	1,238	2,882	2,496
Berkshire Hathaway Energy	670	666	1,285	1,235
Manufacturing	1,939	1,687	3,426	3,169
McLane Company	69	129	157	265
Service and retailing	555	457	948	781
Finance and financial products	508	583	974	1,061
	6,537	6,505	11,681	12,242
Reconciliation of segments to consolidated amount:				
Investment and derivative gains/losses	225	663	1,000	1,703
Income from Kraft Heinz	309	386	548	626
Interest expense, not allocated to segments	(646)	31	(857)	(317)
Eliminations and other	(296)	(213)	(555)	(426)
	<u>\$ 6,129</u>	<u>\$ 7,372</u>	<u>\$ 11,817</u>	<u>\$ 13,828</u>

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

Results of Operations

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

	Second Quarter		First Six Months	
	2017	2016	2017	2016
Insurance – underwriting	\$ (22)	\$ 337	\$ (289)	\$ 550
Insurance – investment income	965	978	1,873	1,897
Railroad	958	772	1,796	1,556
Utilities and energy	516	482	1,017	923
Manufacturing, service and retailing	1,662	1,493	2,979	2,759
Finance and financial products	332	396	635	707
Investment and derivative gains/losses	143	394	647	2,246
Other	(292)	149	(336)	(48)
Net earnings attributable to Berkshire Hathaway shareholders	<u>\$ 4,262</u>	<u>\$ 5,001</u>	<u>\$ 8,322</u>	<u>\$ 10,590</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 (such as sales, marketing, purchasing, legal or human resources) 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. It also is responsible for establishing and monitoring Berkshire's corporate governance practices, including, but not limited to, communicating the appropriate "tone at the top" messages to employees and associates, monitoring governance efforts, including those at the operating businesses, and participating in the resolution of governance-related issues as needed. The business segment data (Note 22 to the accompanying Consolidated Financial Statements) should be read in conjunction with this discussion.

Our insurance businesses generated after-tax losses from underwriting in the second quarter and first six months of 2017. These losses included foreign currency exchange rate losses from the revaluation of reinsurance liabilities denominated in foreign currencies of \$122 million in the second quarter and \$196 million in the first six months of 2017. Our after-tax underwriting earnings in 2016 included foreign currency exchange rate gains of \$185 million in the second quarter and \$223 million in the first six months. Additionally, underwriting results in 2017 declined as compared to 2016 due to decreased earnings from the re-estimation of ultimate liabilities for prior years' loss events, higher losses from current year catastrophe events and increased deferred charge amortization on retroactive reinsurance contracts. Our railroad business generated comparative increases in earnings in the second quarter and first six months of 2017 compared to 2016, reflecting increased unit volume, partly offset by increased fuel and other costs. Our utility and energy business produced higher earnings in the second quarter and first six months of 2017 compared to 2016, reflecting lower effective income tax rates. Earnings of our manufacturing, service and retailing businesses in 2017 increased 11.3% in the second quarter and 8.0% in the first six months compared to the same periods in 2016. These increases reflected comparatively higher earnings from several of our larger operations and the impact of businesses acquired in 2016 (PCC and Duracell), partly offset by losses and impairment charges related to the disposition of a prior bolt-on acquisition by one of our manufacturing businesses.

After-tax investment and derivative gains in the second quarter and first six months of 2017 were \$143 million and \$647 million, respectively, and \$394 million and \$2.25 billion in the second quarter and first six months of 2016, respectively. After-tax investment gains in the first six months of 2016 included a non-cash gain of approximately \$1.9 billion related to the exchange of P&G common stock for 100% of the common stock of Duracell. We believe that investment and derivative gains/losses are often meaningless in terms of understanding our reported results or evaluating our economic performance. Investment and derivative gains and losses have caused and will likely continue to cause significant volatility in our periodic earnings. Other earnings in 2017 are net of after-tax foreign currency exchange rate losses of \$342 million in the second quarter and \$399 million for the first six months from the revaluation of parent company Euro denominated notes payable. In 2016, other earnings included after-tax foreign currency exchange rate gains of \$101 million in the second quarter and losses of \$60 million in the first six months from the revaluation of Euro denominated notes payable.

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 disaggregated as follows: GEICO, General Re, Berkshire Hathaway Reinsurance Group ("BHRG") and Berkshire Hathaway Primary Group.

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

Insurance—Underwriting (Continued)

Our management views insurance businesses as possessing two distinct operations – underwriting and investing. Underwriting decisions are the responsibility of the unit managers; investing decisions, with limited exceptions, are the responsibility of Berkshire's Chairman and CEO, Warren E. Buffett. Accordingly, we evaluate performance of underwriting operations without any allocation of investment income or investment gains/losses.

The timing and amount of catastrophe losses can produce significant volatility in our periodic underwriting results, particularly with respect to our reinsurance businesses. Our periodic underwriting results may be affected significantly by changes in estimates for unpaid losses and loss adjustment expenses, including amounts established for occurrences in prior years. Actual claim settlements and revised loss estimates will develop over time and the unpaid loss estimates recorded as of the balance sheet date will develop upward or downward in future periods, producing a corresponding decrease or increase to pre-tax earnings. Our periodic underwriting results may also include significant 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 as a result of foreign currency exchange rate fluctuations. Foreign currency exchange rates can be volatile and the resulting impact on our underwriting earnings can be relatively significant. Underwriting results of our insurance businesses are summarized below. Amounts are in millions.

	Second Quarter		First Six Months	
	2017	2016	2017	2016
Underwriting gain (loss) attributable to:				
GEICO	\$ 119	\$ 150	\$ 294	\$ 414
General Re	25	2	(118)	44
Berkshire Hathaway Reinsurance Group	(400)	184	(1,000)	105
Berkshire Hathaway Primary Group	232	174	421	295
Pre-tax underwriting gain (loss)	(24)	510	(403)	858
Income taxes and noncontrolling interests	(2)	173	(114)	308
Net underwriting gain (loss)	<u>\$ (22)</u>	<u>\$ 337</u>	<u>\$ (289)</u>	<u>\$ 550</u>

GEICO

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

	Second Quarter				First Six Months			
	2017		2016		2017		2016	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 7,270		\$ 6,229		\$ 14,857		\$ 12,794	
Premiums earned	\$ 7,244	100.0	\$ 6,247	100.0	\$ 14,089	100.0	\$ 12,297	100.0
Losses and loss adjustment expenses	6,108	84.3	5,173	82.8	11,698	83.0	9,996	81.3
Underwriting expenses	1,017	14.1	924	14.8	2,097	14.9	1,887	15.3
Total losses and expenses	7,125	98.4	6,097	97.6	13,795	97.9	11,883	96.6
Pre-tax underwriting gain	<u>\$ 119</u>		<u>\$ 150</u>		<u>\$ 294</u>		<u>\$ 414</u>	

Premiums written in the second quarter and first six months of 2017 increased \$1.0 billion (16.7%) and \$2.1 billion (16.1%), respectively, compared to 2016. Over the past year, voluntary auto policies-in-force grew approximately 10.2% and premiums per auto policy increased 5.0%. The increase in average premiums per policy was attributable to rate increases, coverage changes and changes in state and risk mix. Voluntary auto new business sales in 2017 increased 17.8% in the second quarter and 24.1% in the first six months compared to the same periods in 2016. Voluntary auto policies-in-force increased approximately 876,000 during the first six months of 2017. Premiums earned in 2017 increased 16.0% in the second quarter and 14.6% in the first six months compared to the same periods in 2016.

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

Insurance—Underwriting (Continued)

GEICO (Continued)

In the second quarter and first six months of 2017, our pre-tax underwriting gains declined compared to 2016, as claim costs grew faster than premiums earned. Losses and loss adjustment expenses in 2017 increased \$935 million (18.1%) in the second quarter and \$1.7 billion (17.0%) in the first six months over the corresponding periods in 2016. Our loss ratio (the ratio of losses and loss adjustment expenses to earned premiums) increased 1.5 percentage points in the second quarter and 1.7 percentage points in the first six months of 2017 as compared to 2016. Claims frequencies in the first six months of 2017 were relatively flat for property damage and collision coverages, increased approximately three percent for bodily injury coverage and decreased about two percent for personal injury protection coverage compared to 2016. Average claims severities were higher in the first six months of 2017 for property damage and collision coverages (four to five percent range) and bodily injury coverage (four to six percent range). Losses and loss adjustment expenses in the first six months of 2017 and 2016 included reductions of \$106 million and \$216 million, respectively, from the re-estimation of liabilities for prior years' claims. In addition, in the first six months of 2017, we incurred storm losses of approximately \$268 million (1.9% of premiums earned), compared to \$290 million (2.4% of premiums earned) in the first six months of 2016.

Underwriting expenses in the second quarter and first six months of 2017 increased \$93 million (10.1%) and \$210 million (11.1%), respectively, compared to 2016. Our expense ratios (underwriting expenses to premiums earned) in 2017 declined 0.7 percentage points in the second quarter and 0.4 percentage points in the first six months compared to 2016. The largest components of underwriting expenses are employee-related expenses (salaries and benefits) and advertising costs.

General Re

General Re conducts a reinsurance business offering property and casualty coverages to clients worldwide through General Reinsurance Corporation, Germany-based General Reinsurance AG, Faraday Holdings in London and other wholly-owned affiliates. We also write life and health reinsurance primarily on a direct basis through General Re Life Corporation and General Reinsurance AG. We strive to generate underwriting profits in essentially all of our product lines. General Re's underwriting results are summarized in the following table (in millions).

	Premiums earned				Pre-tax underwriting gain (loss)			
	Second Quarter		First Six Months		Second Quarter		First Six Months	
	2017	2016	2017	2016	2017	2016	2017	2016
Property/casualty	\$ 777	\$ 624	\$1,431	\$1,276	\$ (14)	\$ 23	\$ (157)	\$ 53
Life/health	801	765	1,538	1,503	39	(21)	39	(9)
	<u>\$1,578</u>	<u>\$1,389</u>	<u>\$2,969</u>	<u>\$2,779</u>	<u>\$ 25</u>	<u>\$ 2</u>	<u>\$ (118)</u>	<u>\$ 44</u>

Property/casualty

In the second quarter and first six months of 2017, property/casualty premiums earned increased \$153 million (25%) and \$155 million (12%), respectively, as compared to 2016. The increases reflected higher written premiums in both direct and broker markets, primarily attributable to new business and increased participations for renewals. Despite the increase in premiums in 2017, industry capacity dedicated to property and casualty markets remains high and price competition in most reinsurance markets persists. We continue to decline business when we believe prices are inadequate.

Our property/casualty operations generated pre-tax underwriting losses of \$14 million in the second quarter and \$157 million in the first six months of 2017 compared to pre-tax underwriting gains of \$23 million and \$53 million, respectively, in the comparable 2016 periods. In the first six months of 2017, we increased our estimates for unpaid losses approximately \$140 million with respect to certain United Kingdom ("U.K.") liability business written in prior years. The increase was the result of 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. The discount rate, referred to as the Ogden rate, was reduced from 2.5% to negative 0.75%. We expect the Ogden rate decrease will significantly increase claim costs associated with currently unsettled cases, as well as for future cases. Underwriting results in the first six months of 2017 also included estimated losses of \$50 million from a cyclone in Australia. General Re incurred no losses from significant catastrophe loss events in the first six months of 2016.

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

Insurance—Underwriting (Continued)

General Re (Continued)

Life/health

Life/health premiums earned in the second quarter and first six months of 2017 increased \$36 million (5%) and \$35 million (2%), respectively, compared to 2016. The increases reflected growth in North America and certain international markets. Our life/health operations produced pre-tax underwriting gains of \$39 million in the second quarter and first six months of 2017 compared to pre-tax underwriting losses of \$21 million in the second quarter and \$9 million in the first six months of 2016. The improved underwriting results in 2017 reflected lower underwriting expenses and the impact of increasing liabilities for estimated premium deficiencies on certain disability business in 2016. Underwriting results in the first six months of 2017 and 2016 included pre-tax losses from the runoff of U.S. long-term care and disability business of \$38 million and \$37 million, respectively, which were primarily due to the periodic discount accretion on long-term care liabilities.

Berkshire Hathaway Reinsurance Group

BHRG underwrites excess-of-loss reinsurance and quota-share coverages on property and casualty risks for insurers and reinsurers worldwide, including property catastrophe insurance and reinsurance. BHRG also writes retroactive reinsurance on property/casualty exposures as well as life reinsurance and periodic payment annuity business. A summary of BHRG's underwriting results follows (in millions).

	Premiums earned				Pre-tax underwriting gain (loss)			
	Second Quarter		First Six Months		Second Quarter		First Six Months	
	2017	2016	2017	2016	2017	2016	2017	2016
Property/casualty	\$ 1,183	\$ 1,067	\$ 2,271	\$ 2,194	\$ 52	\$ 249	\$ (217)	\$ 375
Retroactive reinsurance	1	2	10,186	582	(331)	9	(590)	(82)
Life and annuity	602	583	1,170	1,119	(121)	(74)	(193)	(188)
	\$ 1,786	\$ 1,652	\$ 13,627	\$ 3,895	\$ (400)	\$ 184	\$ (1,000)	\$ 105

Property/casualty

In the second quarter and first six months of 2017, premiums earned increased \$116 million (11%) and \$77 million (4%), respectively, compared to 2016. Approximately half of our premiums written and earned in the first six months of 2017 derived from two contracts. Our premium volume was constrained for most reinsurance coverages, as rates, in our view, were generally inadequate. We have the capacity and desire to write more business when prices are appropriate.

Our property/casualty business generated pre-tax underwriting gains of \$52 million in the second quarter and pre-tax losses of \$217 million in the first six months of 2017, compared to pre-tax gains of \$249 million in the second quarter and \$375 million in the first six months of 2016. In the first six months of 2017, we incurred losses of approximately \$250 million related to prior years' loss events, which included losses from unanticipated reported claims from hurricane and earthquake events in 2016 and increased liability estimates attributable to the Ogden discount rate decrease. In the first six months of 2016, we reduced estimated ultimate liabilities for prior years' loss events by approximately \$375 million, primarily due to lower than expected reported losses. In the first six months of 2017, we also incurred estimated losses of approximately \$115 million from a cyclone in Australia. In the first six months of 2016, we incurred no significant losses from catastrophe loss events.

Retroactive reinsurance

We periodically write retroactive reinsurance contracts, which provide indemnification of losses and loss adjustment expenses with respect to past loss events. In January 2017, NICO entered into an aggregate excess-of-loss retroactive reinsurance agreement with AIG (the "AIG Agreement") that became effective on February 2, 2017. In connection with the AIG Agreement, we received cash premiums of \$10.2 billion. As of the effective date, we recorded losses and loss adjustment expenses incurred of \$10.2 billion, representing our initial estimate of the unpaid losses and loss adjustment expenses assumed of \$16.4 billion, partly offset by a deferred charge asset of \$6.2 billion. Thus, on the effective date, the AIG Agreement had no effect on our pre-tax underwriting results. See Note 16 to the accompanying Consolidated Financial Statements.

Pre-tax underwriting results in 2017 included losses of \$102 million in the second quarter and \$191 million in the first six months from changes in foreign currency exchange rates, which increased foreign currency denominated liabilities of U.S. subsidiaries. In 2016, foreign currency exchange rate changes reduced such liabilities and resulted in pre-tax gains of \$158 million in the second quarter and \$177 million in the first six months.

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

Insurance—Underwriting (Continued)

Berkshire Hathaway Reinsurance Group (Continued)

Retroactive reinsurance (Continued)

Before foreign currency gains/losses, retroactive reinsurance contracts produced pre-tax underwriting losses of \$229 million and \$399 million in the second quarter and first six months of 2017, respectively, and \$149 million and \$259 million, respectively, in the comparable 2016 periods. The comparative increases in such losses in 2017 were primarily due to deferred charge amortization related to the AIG Agreement and another retroactive reinsurance contract written in December 2016, partly offset by a small net gain from a contract commuted in the first quarter of 2017 and comparatively lower deferred charge amortization from other contracts. We currently estimate pre-tax deferred charge amortization for the year ending December 31, 2017 will approximate \$975 million, which includes the aforementioned AIG Agreement.

Liabilities for losses and loss adjustment expenses associated with our retroactive reinsurance contracts were approximately \$40.1 billion at June 30, 2017 and \$24.7 billion at December 31, 2016. Unamortized deferred charges related to these contracts were approximately \$13.5 billion at June 30, 2017 and \$8.0 billion at December 31, 2016.

Life and annuity

A summary of BHRG's life and annuity underwriting results follows (in millions).

	Premiums earned				Pre-tax underwriting gain (loss)			
	Second Quarter		First Six Months		Second Quarter		First Six Months	
	2017	2016	2017	2016	2017	2016	2017	2016
Periodic payment annuity	\$ 230	\$ 195	\$ 450	\$ 404	\$ (198)	\$ 8	\$ (343)	\$ (62)
Life reinsurance	368	383	712	706	3	3	(2)	14
Variable annuity guaranteee	4	5	8	9	74	(85)	152	(140)
	<u>\$ 602</u>	<u>\$ 583</u>	<u>\$ 1,170</u>	<u>\$ 1,119</u>	<u>\$ (121)</u>	<u>\$ (74)</u>	<u>\$ (193)</u>	<u>\$ (188)</u>

Periodic payment annuity premiums consist of upfront consideration received under direct and assumed contracts that provide for structured settlement annuity payments, typically over very long periods. Pre-tax underwriting losses in 2017 included losses of \$86 million in the second quarter and \$110 million in the first six months from changes in foreign currency exchange rates. In 2016, foreign currency exchange rate changes resulted in pre-tax gains of \$126 million in the second quarter and \$166 million in the first six months.

Before foreign currency gains and losses, pre-tax underwriting losses from periodic payment annuity contracts were \$112 million in the second quarter and \$233 million in the first six months of 2017 and \$118 million and \$228 million, respectively, in the second quarter and first six months of 2016. We expect these contracts will generate pre-tax underwriting losses over time attributable to the accretion of discounted annuity liabilities. Discounted periodic payment annuity liabilities were approximately \$10.6 billion at June 30, 2017, reflecting a weighted average interest rate of approximately 4.1%.

Our underwriting results in 2017 from life reinsurance included higher than expected mortality, partially offset by decreased benefit liabilities for certain blocks of business. Underwriting gains in 2016 reflected lower claims and underwriting expenses.

Underwriting results of our variable annuity business (reinsurance contracts that provide guarantees on closed blocks of variable annuity business) in the second quarter and first six months of 2017 produced pre-tax underwriting gains of \$74 million and \$152 million, respectively, and pre-tax underwriting losses of \$85 million and \$140 million, respectively, in the corresponding periods of 2016. Underwriting gains and losses in each period reflected changes in liabilities for guaranteed benefits, resulting from changes in securities markets and interest rates and from the periodic recognition of expected profit margins, which together, affected our liability estimates. Our estimated liabilities for variable annuity guarantees were approximately \$1.9 billion at June 30, 2017 and \$2.1 billion at December 31, 2016. Periodic underwriting results from these contracts can be volatile reflecting the volatility of securities markets.

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 products, 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 the MedPro Group, National Indemnity Company ("NICO Primary"), Berkshire Hathaway Homestate

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

Insurance—Underwriting (Continued)

Companies (“BHHC”), Berkshire Hathaway Specialty Insurance (“BH Specialty”) and Berkshire Hathaway GUARD Insurance Companies (“GUARD”). Other BH Primary insurers include U.S. Liability Insurance Company, Applied Underwriters and Central States Indemnity Company. A summary of BH Primary’s underwriting results follows (dollars in millions).

	Second Quarter				First Six Months			
	2017		2016		2017		2016	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 1,801		\$ 1,654		\$ 3,650		\$ 3,223	
Premiums earned	\$ 1,759	100.0	\$ 1,511	100.0	\$ 3,435	100.0	\$ 2,952	100.0
Losses and loss adjustment expenses	1,047	59.5	921	61.0	2,084	60.7	1,832	62.1
Underwriting expenses	480	27.3	416	27.5	930	27.0	825	27.9
Total losses and expenses	1,527	86.8	1,337	88.5	3,014	87.7	2,657	90.0
Pre-tax underwriting gain	\$ 232		\$ 174		\$ 421		\$ 295	

Premiums written in the second quarter and first six months in 2017 increased 8.9% and 13.2%, respectively, over the same periods in 2016. All of the BH Primary insurers generated increased premiums written in the first six months of 2017, led by BH Specialty (23%), GUARD (28%) and BHHC (11%). Premiums earned increased \$248 million (16.4%) in the second quarter and \$483 million (16.4%) in the first six months as compared to 2016 reflecting the increases in premiums written.

The BH Primary insurers produced pre-tax underwriting gains of \$232 million in the second quarter and \$421 million in the first six months of 2017. Losses and loss adjustment expenses for the first six months of 2017 included net reductions of estimated ultimate liabilities for prior years’ loss events of \$426 million, which produced a corresponding increase in pre-tax underwriting gains. Underwriting results in the first six months of 2016 included gains of \$236 million from the net reductions of estimated ultimate claims liabilities for prior years’ events. The gains from the development of prior years’ claim estimates in 2017 were primarily attributable to healthcare malpractice and workers’ compensation business. Many of our businesses write primarily liability and workers’ compensation business and the related claim costs may be subject to higher severity and longer-claims tails, which may contribute to significant claims development gains or losses in the future.

Insurance—Investment Income

A summary of net investment income generated by investments held by our insurance operations follows (in millions).

	Second Quarter		First Six Months	
	2017	2016	2017	2016
Interest income	\$ 280	\$ 214	\$ 526	\$ 444
Dividend income	1,003	1,021	1,886	1,933
Investment income before income taxes and noncontrolling interests	1,283	1,235	2,412	2,377
Income taxes and noncontrolling interests	318	257	539	480
Net investment income	\$ 965	\$ 978	\$ 1,873	\$ 1,897

Pre-tax investment income in the second quarter and first six months of 2017 increased \$48 million (4%) and \$35 million (1%), respectively, from the same periods in 2016. These increases reflected increased interest income, partly offset by lower dividend income. We continue to hold significant amounts of cash and cash equivalents and U.S. Treasury Bills earning very low yields. While still historically low, the yields were higher in 2017 than in 2016. We believe that maintaining ample liquidity is paramount and we insist on safety over yield with respect to such balances. The decrease in dividends in 2017 reflected Dow Chemical Company’s redemption of our \$3 billion investment in 8.5% preferred stock in December 2016, partly offset by increased dividend income from investments in other equity securities attributable to increased dividend rates of certain issuers and increased overall investment levels.

Invested assets of our insurance businesses derive from shareholder capital, including reinvested earnings, and from net liabilities under insurance contracts or “float.” The major components of float are unpaid losses, life, annuity and health benefit liabilities, unearned premiums and other liabilities to policyholders less premium and reinsurance receivables, deferred charges assumed under retroactive reinsurance contracts and deferred policy acquisition costs. Float approximated \$107 billion at June 30, 2017 and \$91 billion at December 31, 2016. The increase in float in 2017 was primarily attributable to the AIG Agreement. Our average cost of float was approximately 0.4% in the first six months of 2017, as we generated an aggregate pre-tax underwriting loss of \$403 million.

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

Insurance—Investment Income (Continued)

A summary of cash and investments held in our insurance businesses follows (in millions).

	June 30, 2017	December 31, 2016
Cash and cash equivalents and U.S. Treasury Bills	\$ 60,198	\$ 48,888
Equity securities	134,525	119,780
Fixed maturity securities	22,696	22,778
Other investments	16,838	14,364
	<u>\$234,257</u>	<u>\$205,810</u>

Fixed maturity securities as of June 30, 2017 were as follows (in millions).

	Amortized cost	Unrealized gains(losses)	Carrying value
U.S. Treasury, U.S. government corporations and agencies	\$ 4,444	\$ (7)	\$ 4,437
States, municipalities and political subdivisions	1,022	52	1,074
Foreign governments	8,724	196	8,920
Corporate bonds, investment grade	5,715	441	6,156
Corporate bonds, non-investment grade	989	219	1,208
Mortgage-backed securities	793	108	901
	<u>\$21,687</u>	<u>\$ 1,009</u>	<u>\$22,696</u>

U.S. government obligations are rated AA+ or Aaa by the major rating agencies and approximately 88% of all state, municipal and political subdivisions, foreign government obligations and mortgage-backed securities were rated AA or higher by the major rating agencies. 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.

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’s major business groups are classified by type of product shipped and include consumer products, coal, industrial products and agricultural products. A summary of BNSF’s earnings follows (in millions).

	Second Quarter		First Six Months	
	2017	2016	2017	2016
Revenues	\$ 5,250	\$ 4,585	\$ 10,435	\$ 9,352
Operating expenses:				
Compensation and benefits	1,242	1,134	2,525	2,342
Fuel	577	431	1,182	826
Purchased services	609	589	1,235	1,227
Depreciation and amortization	592	530	1,165	1,050
Equipment rents, materials and other	437	414	938	917
Total operating expenses	3,457	3,098	7,045	6,362
Interest expense	256	249	508	494
	3,713	3,347	7,553	6,856
Pre-tax earnings	1,537	1,238	2,882	2,496
Income taxes	579	466	1,086	940
Net earnings	<u>\$ 958</u>	<u>\$ 772</u>	<u>\$ 1,796</u>	<u>\$ 1,556</u>

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

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

Consolidated revenues in the second quarter and first six months of 2017 were \$5.3 billion and \$10.4 billion, respectively, representing increases of \$665 million (14.5%) and \$1,083 million (11.6%), respectively, versus the corresponding periods in 2016. Pre-tax earnings in the second quarter and first six months of 2017 increased 24.2% and 15.5%, respectively, compared to the same periods in 2016.

In the first six months of 2017, revenues reflected a 4.1% comparative increase in average revenue per car/unit and a 7.6% increase in volume. Our year-to-date volume was 5.0 million cars/units compared to 4.7 million in 2016. We currently expect our overall volume growth will moderate in the second half of 2017 compared to the growth experienced in the first six months of 2017. The increase in average revenue per car/unit was primarily attributable to higher fuel surcharge revenue and business mix changes, as well as increased rates per car/unit.

Freight revenues from consumer products in 2017 were \$1.7 billion in the second quarter and \$3.4 billion in the first six months, representing increases of 8.4% and 8.6%, respectively, compared to 2016. The revenue increases reflected volume increases of 5.8% in the second quarter and 5.7% in the first six months as well as higher average revenue per car/unit. The volume increases were primarily attributable to higher market share, improving economic conditions, and normalizing of retail inventories, which benefited domestic intermodal, international intermodal and automotive volumes.

Freight revenues from industrial products in 2017 were \$1.3 billion in the second quarter and \$2.5 billion for the first six months, or increases of 7.4% and 5.7%, respectively, from the comparable 2016 periods. The increases were attributable to higher average revenue per car/unit, as well as volume increases of 4.1% in the second quarter and 2.3% in the first six months. Volumes in 2017 were higher for minerals, steel and other commodities that support domestic drilling activity as well as higher taconite, partly offset by lower petroleum products volume, due to pipeline displacement of U.S. crude traffic, and lower plastics volume.

Freight revenues from agricultural products in 2017 increased 18.0% in the second quarter to \$1.1 billion and increased 11.4% to \$2.2 billion in the first six months compared to the same periods in 2016. The revenue growth reflected higher volumes, 14.5% in the second quarter and 7.8% for the first six months, as well as higher revenue per car/unit. The volume growth in 2017 was primarily due to higher grain exports.

Freight revenues from coal in 2017 increased 39.2% in the second quarter to \$912 million and 30.5% in the first six months to \$1.9 billion compared to 2016. The increase in revenues reflected higher volumes, 20.7% in the second quarter and 19.5% year-to-date, as well as higher average revenue per car/unit. The volume increases in 2017 were due to mild winter weather in the first quarter of 2016 and higher natural gas prices in the first half of 2017. Together, these factors led to increased utility coal usage in 2017, which were partly offset by the effects of unit retirements of coal generating facilities.

Operating expenses in the second quarter and first six months of 2017 were \$3.5 billion and \$7.0 billion, respectively, increases of \$359 million (11.6%) and \$683 million (10.7%), respectively, compared to the same periods in 2016. Our ratios of operating expenses to revenues decreased 1.7 percentage points to 65.8% in the second quarter and 0.5 percentage points to 67.5% for the first six months of 2017 versus the corresponding 2016 periods.

Compensation and benefits expenses increased \$108 million (9.5%) for the second quarter and \$183 million (7.8%) for the first six months compared to 2016. The increases were primarily due to higher health and welfare costs, wage inflation and volume-related increases. Fuel expenses increased \$146 million (33.9%) for the second quarter and \$356 million (43.1%) for the first six months compared to 2016, due to higher average fuel prices and increased volumes, partially offset by improved efficiency. Depreciation and amortization expense increased \$62 million (11.7%) for the second quarter and \$115 million (11.0%) for the first six months compared to 2016 due to a larger base of depreciable assets in service.

Utilities and Energy ("Berkshire Hathaway Energy Company")

We hold a 90.2% ownership interest in 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 AltaLink, L.P. ("AltaLink"), a regulated electricity transmission-only business in Alberta, Canada and a diversified portfolio of 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.

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

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

The rates our regulated businesses charge customers for energy and services are based, in large part, on the costs of business operations, including a return on capital, and are subject to regulatory approval. To the extent these operations are not allowed to include such costs in the approved rates, operating results will be adversely affected. Revenues and earnings of BHE are summarized below (in millions).

	Second Quarter				First Six Months			
	Revenues		Earnings		Revenues		Earnings	
	2017	2016	2017	2016	2017	2016	2017	2016
PacifiCorp	\$ 1,256	\$ 1,243	\$ 258	\$ 258	\$ 2,548	\$ 2,507	\$ 523	\$ 502
MidAmerican Energy Company	669	593	90	95	1,377	1,225	152	148
NV Energy	761	714	141	118	1,355	1,338	192	150
Northern Powergrid	220	250	64	92	465	529	167	217
Natural gas pipelines	190	189	43	49	508	505	243	229
Other energy businesses	568	466	72	78	1,081	974	113	132
Real estate brokerage	959	844	113	95	1,546	1,339	116	98
	<u>\$ 4,623</u>	<u>\$ 4,299</u>			<u>\$ 8,880</u>	<u>\$ 8,417</u>		
Earnings before corporate interest and income taxes ("EBIT")			781	785			1,506	1,476
Corporate interest			111	119			221	241
Income taxes and noncontrolling interests			154	184			268	312
Net earnings attributable to Berkshire Hathaway shareholders			<u>\$ 516</u>	<u>\$ 482</u>			<u>\$ 1,017</u>	<u>\$ 923</u>

PacifiCorp

PacifiCorp operates a regulated electric utility in portions of several Western states, including Utah, Oregon and Wyoming. Revenues in the second quarter and first six months of 2017 increased \$13 million (1%) and \$41 million (2%), respectively, compared with 2016. In the second quarter and first six months of 2017, wholesale and other revenues increased due to higher volumes and average rates. In the second quarter of 2017, retail revenues declined slightly and for the first six months increased \$14 million, due to higher volumes, partly offset by lower average rates.

EBIT in the second quarter of 2017 was unchanged from 2016, as a slight increase in gross margins and lower operations and maintenance expenses were substantially offset by increased depreciation and amortization expense. EBIT increased \$21 million (4%) in the first six months of 2017, as compared to 2016. The comparative increase in EBIT was primarily due to an increase in gross margins (\$18 million) and lower operations and maintenance expenses (\$22 million), partially offset by increased depreciation, amortization and property tax expenses (\$18 million).

MidAmerican Energy Company

MEC operates a regulated electric and natural gas utility primarily in Iowa and Illinois. Revenues in the second quarter of 2017 increased \$76 million (13%) compared to 2016. The increase was primarily due to increases in electric operating revenues (\$56 million), due principally to higher wholesale volumes and rates, and natural gas revenues (\$18 million) due to higher average per-unit cost of gas sold (offset in cost of sales). EBIT in the second quarter of 2017 decreased \$5 million (5%) compared to 2016. Although revenues and gross margin dollars increased in the second quarter, average gross margin percentages declined due to higher coal-fueled generation and purchased power costs. In addition, in the second quarter of 2017, operating expenses increased \$42 million compared to 2016, which included an increase in depreciation and amortization expense of \$31 million attributable to higher regulatory provisions and increased assets in service.

Revenues in the first six months of 2017 increased \$152 million (12%) compared to 2016. The increase reflected increases in electric operating revenues (\$90 million) and natural gas operating revenues (\$54 million). The increase in electric revenues was attributable to higher wholesale and other revenue (\$67 million), substantially due to higher wholesale volumes and average rates, and increased retail revenues (\$23 million). The increase in retail revenues reflected increased recoveries through bill riders (which are substantially offset by increases in costs and expenses) and from non-weather usage and rate factors, partially offset by the unfavorable impact of temperatures in 2017. EBIT in the first six months of 2017 increased \$4 million (3%) compared to 2016. The increase in EBIT reflected the increases in revenues substantially offset by higher coal-fueled generation and purchased power costs, higher per-unit cost of natural gas sold and increased depreciation, maintenance and other operating expenses.

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

NV Energy operates regulated electric and natural gas utilities in Nevada. Revenues increased \$47 million (7%) in the second quarter and \$17 million (1%) in the first six months of 2017 compared to the same periods in 2016. These increases were due primarily to increases in retail electric operating revenues, which reflected a combination of increased rates from pass-through cost adjustments and higher volumes, partly offset by lower revenues from energy efficiency programs, which are offset by lower operating expenses. In 2017, NV Energy also experienced declines in operating revenues from commercial and industrial customers electing to purchase power from alternative sources and, thus, becoming distribution service only customers. Natural gas operating revenue decreased in the first six months of 2017 primarily due to lower rates, partially offset by higher customer usage.

EBIT increased \$23 million (19%) in the second quarter and \$42 million (28%) in the first six months of 2017 compared to the corresponding 2016 periods. These increases were primarily due to increased gross margins and lower interest expense.

Northern Powergrid

Revenues in the second quarter and first six months of 2017 declined \$30 million (12%) and \$64 million (12%) compared to 2016, primarily due to the unfavorable currency translation effect of a comparatively stronger U.S. Dollar in 2017 and lower distribution revenue, partially offset by higher smart metering revenue. Changes in the average foreign currency exchange rates accounted for \$27 million and \$65 million of the comparative revenue declines in the second quarter and first six months of 2017, respectively. Distribution revenues in the first six months of 2017 declined primarily due to the recovery in the first quarter of 2016 of the December 2013 customer rebate (\$11 million), unfavorable movements in regulatory provisions and lower distribution volumes (\$12 million), partially offset by higher tariff rates (\$15 million). EBIT in the first six months of 2017 declined \$50 million (23%) compared to 2016, primarily due to foreign currency translation effects, as well as higher depreciation expense from additional assets placed in-service and increased pension expenses.

Natural gas pipelines

Revenues in the second quarter and first six months of 2017 were relatively unchanged from 2016. In the first six months of 2017, higher gas sales, primarily from system balancing activities (largely offset in cost of sales), and higher transportation revenues at Northern Natural Gas were offset by lower transportation revenues at Kern River. EBIT in the first six months of 2017 increased \$14 million (6%) compared to 2016. The increase was primarily due to a reduction in expenses and regulatory liabilities related to the impact of an alternative rate structure approved by Kern River's regulators in the first quarter of 2017 and from the changes in transportation revenues.

Other energy businesses

Revenues in the second quarter and first six months of 2017 increased \$102 million (22%) and \$107 million (11%), respectively, compared to the same periods in 2016. These increases were primarily due to the effects of a decision in May 2016 by AltaLink's regulator, which changed the timing of when construction-in-progress expenditures included in rate base are billable to customers and earned in revenues. The decision resulted in a one-time net reduction in revenue in the second quarter of 2016, with an offsetting reduction in expenses. Otherwise, operating revenues from renewable energy increased 18% in the first six months of 2017 due to increased assets in service and increased solar generation, while revenues from the unregulated retail services business declined 9%. EBIT in the second quarter and first six months of 2017 declined 8% and 14%, respectively, compared to 2016. The declines reflected higher other operating costs, partly offset by increased earnings from renewable energy.

Real estate brokerage

Revenues in the first six months of 2017 increased \$207 million (15%) compared to 2016. The increase was primarily due to recent business acquisitions, and modest increases in closed sales units and average transaction prices for existing businesses. EBIT in the first six months of 2017 increased \$18 million as compared to 2016.

Corporate interest and income taxes

Corporate interest includes interest on unsecured debt issued by BHE and borrowings from certain Berkshire insurance subsidiaries. BHE's consolidated effective income tax rates for the first six months of 2017 and 2016 were approximately 11% and 16%, respectively. The effective tax rate decreased primarily due to an increase in production tax credits recognized and lower consolidated deferred state income tax expenses due to changes in the tax status of certain subsidiaries.

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).

	Second Quarter				First Six Months			
	Revenues		Earnings *		Revenues		Earnings *	
	2017	2016	2017	2016	2017	2016	2017	2016
Manufacturing	\$ 12,738	\$ 12,201	\$ 1,939	\$ 1,687	\$ 24,835	\$ 22,755	\$ 3,426	\$ 3,169
Service and retailing	19,131	18,434	624	586	37,325	36,126	1,105	1,046
	<u>\$ 31,869</u>	<u>\$ 30,635</u>			<u>\$ 62,160</u>	<u>\$ 58,881</u>		
Pre-tax earnings			2,563	2,273			4,531	4,215
Income taxes and noncontrolling interests			901	780			1,552	1,456
			<u>\$ 1,662</u>	<u>\$ 1,493</u>			<u>\$ 2,979</u>	<u>\$ 2,759</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 above for the second quarter and first six months of 2017 were \$169 million and \$301 million, respectively, compared to \$114 million and \$205 million for the second quarter and first six months of 2016, respectively. These expenses are included in "other" in the summary of earnings on page 25 and in the "other" earnings section on page 40.

Manufacturing

Our manufacturing group includes a variety of businesses that produce industrial, building and consumer products. Industrial products businesses include specialty chemicals (The Lubrizol Corporation ("Lubrizol")), metal cutting tools/systems (IMC International Metalworking Companies ("IMC")), equipment and systems for the livestock and agricultural industries (CTB International ("CTB")), and a variety of industrial products for diverse markets (Marmon, Scott Fetzer and LiquidPower Specialty Products ("LSPI")). Beginning on January 29, 2016, our industrial products group also includes Precision Castparts Corp. ("PCC"), a leading manufacturer of complex metal products for aerospace, power and general industrial markets.

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 beginning on February 29, 2016, the Duracell Company ("Duracell"), a leading 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).

	Second Quarter				First Six Months			
	Revenues		Pre- tax earnings		Revenues		Pre- tax earnings	
	2017	2016	2017	2016	2017	2016	2017	2016
Industrial products	\$ 6,637	\$ 6,505	\$ 1,267	\$ 1,133	\$ 13,145	\$ 12,199	\$ 2,261	\$ 2,187
Building products	3,125	2,847	401	305	5,859	5,308	650	547
Consumer products	2,976	2,849	271	249	5,831	5,248	515	435
	<u>\$ 12,738</u>	<u>\$ 12,201</u>	<u>\$ 1,939</u>	<u>\$ 1,687</u>	<u>\$ 24,835</u>	<u>\$ 22,755</u>	<u>\$ 3,426</u>	<u>\$ 3,169</u>

Aggregate revenues from manufacturing increased \$537 million (4%) in the second quarter and \$2.1 billion (9%) in the first six months of 2017 compared to the same periods in 2016. Pre-tax earnings in the second quarter and first six months of 2017 were \$1.9 billion and \$3.4 billion, respectively, representing increases of \$252 million (15%) and \$257 million (8%), respectively, over earnings in the corresponding 2016 periods. In 2016, operating results of our industrial products and consumer products businesses included the results of PCC and Duracell from their respective acquisition dates. Pre-tax earnings in the first six months of 2017 also included pre-tax losses of \$193 million in connection with the disposition of an underperforming bolt-on business acquired by Lubrizol in 2014.

Industrial products

Revenues in the second quarter and first six months of 2017 increased \$132 million (2%) and \$946 million (8%), respectively, compared to the corresponding 2016 periods. In the second quarter, revenues of the IMC group increased 9%, PCC and Marmon each increased 2% and LSPI increased 36%, while revenues of Lubrizol declined 2%. The increases from IMC and LSPI were primarily due to increased unit sales. PCC's revenues increased 17% in the first six months of 2017 compared to the five-month post-acquisition period in 2016. Comparatively higher unit sales drove year-to-date revenue increases of LSPI (17%) and IMC (8%), while increases from business acquisitions, partly offset by lower average selling prices and mix changes accounted for CTB's 5% year-to-date revenue

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

Manufacturing, Service and Retailing (Continued)

Industrial products (Continued)

increase. Marmon's revenues increased 3% in the first six months of 2017 versus 2016, reflecting a mixture of increases from business acquisitions and higher average metal prices, partly offset by lower demand at some of its business units, particularly those that provide products for the retail, industrial equipment, agricultural, wire products and grocery store markets. On a comparable full year-to-date basis, PCC's revenues increased approximately 3% compared to 2016. In 2017, PCC experienced revenue increases from structural castings, airfoils and industrial gas turbine products and from new business acquisitions, which were partly offset by lower revenues from airframe products.

Pre-tax earnings in the second quarter and first six months of 2017 increased \$134 million (12%) and \$74 million (3%), respectively, compared to the second quarter and first six months of 2016. In the second quarter and first six months of 2017, PCC, IMC and LSPI generated earnings increases, while earnings from Lubrizol and CTB were lower. Lubrizol recognized pre-tax losses of \$193 million in the first six months of 2017, substantially all of which was in the first quarter, related to the disposition of an underperforming bolt-on business and related intangible asset impairment and restructuring charges. Over the first six months of 2017, Lubrizol, CTB, as well as certain other businesses, experienced selling price pressures and higher manufacturing costs, driven by increased prices for petroleum-based materials and certain metals, which contributed to comparative pre-tax earnings declines. We continue to implement cost containment and other initiatives intended to improve productivity at several of our businesses.

Building products

Revenues in the second quarter and first six months of 2017 increased \$278 million (10%) and \$551 million (10%), respectively, compared to 2016. The increases were primarily due to the effect of bolt-on business acquisitions (Shaw and MiTek) and sales volume increases (MiTek and Johns Manville), partly offset by lower average sales prices and changes in product mix.

Pre-tax earnings in the second quarter and first six months of 2017 increased \$96 million (31%) and \$103 million (19%), respectively, compared to 2016. These increases were attributable to asset impairment, pension settlement and environmental claim charges recorded in the second quarter of 2016 by Shaw and Benjamin Moore (aggregating about \$90 million), and earnings from recent bolt-on acquisitions, partly offset by comparative declines in the average gross margin rates. Over the first six months of 2017, a combination of lower average selling prices and higher average raw materials costs negatively affected the operating results of our building products businesses.

Consumer products

Revenues increased \$127 million (4%) in the second quarter and \$583 million (11%) in the first six months of 2017 compared to the corresponding 2016 periods. The second quarter revenue increase included a 12% comparative increase at Forest River, attributable to an 11% increase in unit sales. The increase in revenues for the first six months reflected a 74% increase in revenues of Duracell, which we acquired February 29, 2016, and a 9% increase in Forest River's revenues, primarily due to a 10% increase in unit sales. Apparel revenues in the first six months of 2017 declined slightly (1%) compared to 2016.

Pre-tax earnings in the second quarter and first six months of 2017 increased \$22 million (9%) and \$80 million (18%), respectively, compared to 2016. The increases in earnings in the second quarter and first six months of 2017 were primarily due to increased earnings from Duracell and Forest River, partly offset by lower apparel earnings. Duracell's comparative results in the 2017 periods reflected significant decreases in transition and integration costs arising from the acquisition in 2016 and otherwise improved operating results. The declines in apparel earnings were primarily attributable to Fruit of the Loom, reflecting the impact of lower gross margins and higher operating expenses.

Service and retailing

Our service and retailing businesses are comprised of a large group of independently managed businesses engaged in a variety of activities. A summary of revenues and pre-tax earnings of these operations follows (in millions).

	Second Quarter				First Six Months			
	Revenues		Pre-tax earnings		Revenues		Pre-tax earnings	
	2017	2016	2017	2016	2017	2016	2017	2016
Service	\$ 2,792	\$ 2,577	\$ 351	\$ 296	\$ 5,409	\$ 4,938	\$ 611	\$ 521
Retailing	3,758	3,808	204	161	7,234	7,338	337	260
McLane Company	12,581	12,049	69	129	24,682	23,850	157	265
	\$ 19,131	\$ 18,434	\$ 624	\$ 586	\$ 37,325	\$ 36,126	\$ 1,105	\$ 1,046

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

Manufacturing, Service and Retailing (Continued)

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 service a network of quick service restaurant franchises (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 in the second quarter and first six months of 2017 increased \$215 million (8%) and 471 million (10%), respectively, as compared to 2016. The increases were primarily due to increases from NetJets and TTI. The revenue increases at NetJets reflected increases in aircraft sales and lease revenues and a 4% year-to-date increase in revenue flight hours. The increases in TTI's revenues were primarily due to unit volume increases in most of its markets.

Pre-tax earnings in the second quarter and first six months of 2017 increased \$55 million (19%) and \$90 million (17%), respectively, compared to 2016. The increases in earnings were primarily attributable to increased earnings of NetJets and TTI partly offset by lower earnings from media and logistics services businesses.

Retailing

Our retailing businesses include four distinct home furnishings retailing businesses (Nebraska Furniture Mart, R.C. Willey, Star Furniture and Jordan's), which sell furniture, appliances, flooring and electronics. Our retailers also include Berkshire Hathaway Automotive ("BHA"). BHA includes 83 auto dealerships, which sell new and pre-owned automobiles and offer repair and other related services and products. BHA also includes two related insurance businesses, two auto auctions and a distributor of automotive fluid maintenance products.

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 our retailing businesses in the second quarter and first six months of 2017 decreased (1%) as compared to the same periods in 2016. These decreases were primarily due to lower revenues at BHA as a result of lower vehicle units sold, partly offset by increases in revenues of our home furnishings retailers, Pampered Chef and See's Candies.

Pre-tax earnings in the second quarter and first six months of 2017 from retailing increased \$43 million (27%) and \$77 million (30%) over 2016. These increases reflected higher earnings from BHA, our home furnishings retailers, Pampered Chef and See's Candies. The earnings increases of BHA were primarily due to increased earnings from service, finance and insurance activities, partly offset by lower auto sales margins. The earnings increases from our home furnishings retailers were attributable to overall increases in the gross margin rates and relatively lower operating expenses. The increases from Pampered Chef and See's Candies were primarily attributable to year-to-date revenue increases of 13% and 4%, respectively, and cost management efforts.

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 are marked by high sales volumes and very low profit 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 second quarter and first six months of 2017 were \$12.6 billion and \$24.7 billion, respectively, increases of 4.4% and 3.5% over the second quarter and first six months of 2016, respectively. The increase in revenues for the first six months of 2017 was primarily due to a 4.6% increase in grocery sales. Pre-tax earnings in the second quarter and first six months of 2017 were \$69 million and \$157 million, respectively, decreases of \$60 million (47%) and \$108 million (41%) compared to corresponding 2016 periods. The earnings declines reflected a 59% decline in year-to-date earnings of our grocery operations. In 2017, significant pricing pressures and an increasingly competitive business environment negatively affected our operating results, particularly with respect to our grocery business. These conditions, together with increased fuel, trucking, insurance and depreciation expenses contributed to a 47 basis point decline in our overall operating margin (ratio of pre-tax earnings to revenues) for the first six months of 2017.

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

Finance and Financial Products

Our finance and financial products businesses include manufactured 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).

	Second Quarter				First Six Months			
	Revenues		Earnings		Revenues		Earnings	
	2017	2016	2017	2016	2017	2016	2017	2016
Manufactured housing and finance	\$ 1,199	\$ 1,065	\$ 197	\$ 179	\$ 2,273	\$ 1,958	\$ 373	\$ 349
Transportation equipment leasing	652	671	221	245	1,276	1,354	430	496
Other	182	253	90	159	349	403	171	216
	<u><u>\$ 2,033</u></u>	<u><u>\$ 1,989</u></u>	<u><u>\$ 508</u></u>	<u><u>\$ 583</u></u>	<u><u>\$ 3,898</u></u>	<u><u>\$ 3,715</u></u>	<u><u>\$ 974</u></u>	<u><u>\$ 1,061</u></u>
Income taxes and noncontrolling interests			176	187			339	354
			<u><u>\$ 332</u></u>	<u><u>\$ 396</u></u>			<u><u>\$ 635</u></u>	<u><u>\$ 707</u></u>

Manufactured housing and finance

Clayton Homes' revenues in the second quarter and first six months of 2017 increased \$134 million (13%) and \$315 million (16%), respectively, compared to the second quarter and first six months of 2016. These increases were primarily due to higher home sales, attributable a 14% year-to-date increase in unit sales and higher average prices, which were primarily due to sales mix changes. In 2017, home sales included a higher mix of site built homes, which have a higher land content and therefore unit prices tend to be higher. Site built gross sales margin rates, however, are typically lower than manufactured homes. Pre-tax earnings increased \$18 million (10%) in the second quarter and \$24 million (7%) in the first six months of 2017 compared to the corresponding 2016 periods. Earnings in the first six months of 2017 included a gain of \$11 million from a legal settlement. The earnings increases in 2017 also reflected increased earnings from manufacturing and retailing activities, comparatively lower servicing asset impairment charges and increased earnings from insurance services, partly offset by increased employee healthcare, technology, marketing and legal expenses.

Transportation equipment leasing

Transportation equipment leasing revenues in the second quarter and first six months of 2017 decreased \$19 million (3%) and \$78 million (6%), respectively, compared to 2016. The declines were primarily due to comparative declines in leasing revenues, attributable to lower railcar and trailer fleet utilization rates, lower railcar rental renewal rates, and lower volume for crane services, partly offset by increases in repair revenues and lease termination fees. In the first six months of 2017, we also experienced lower tank car sales to third parties, although demand increased during the second quarter.

Pre-tax earnings in the second quarter and first six months of 2017 declined \$24 million (10%) and \$66 million (13%), respectively, compared to 2016. These decreases reflected the aforementioned revenue declines and higher railcar repair and storage costs. In 2017, interest expense also increased due to increased borrowings from a Berkshire financing subsidiary, partly offset by lower interest expense on third party borrowings. Significant components of our operating costs, such as depreciation expense, do not vary proportionately to revenue changes. Therefore, changes in revenues can disproportionately impact earnings.

Other

Earnings from other finance activities include CORT furniture leasing, our share of the earnings of a commercial mortgage servicing business (“Berkadia”) in which we own a 50% joint venture interest, and interest and dividends from a portfolio of investments. Pre-tax earnings in the first six months of 2017 declined \$45 million compared to 2016, reflecting lower interest and dividend income from investments and lower earnings from CORT. Other earnings also includes income from interest rate spreads charged on borrowings by a Berkshire financing subsidiary that are used to finance loans and assets held for lease. The corresponding expenses are included in the results of our manufactured housing and finance and transportation equipment business groups. Pre-tax interest rate spreads charged to these businesses were \$39 million in the first six months of 2017 and \$35 million in 2016.

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

Investment and Derivative Gains/Losses

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

	Second Quarter		First Six Months	
	2017	2016	2017	2016
Investment gains/losses	\$ 290	\$ 643	\$ 605	\$ 2,493
Derivative gains/losses	(65)	20	395	(790)
Gains/losses before income taxes and noncontrolling interests	225	663	1,000	1,703
Income taxes and noncontrolling interests	82	269	353	(543)
Net gains/losses	<u>\$ 143</u>	<u>\$ 394</u>	<u>\$ 647</u>	<u>\$ 2,246</u>

Investment gains/losses

Investment gains/losses arise primarily from the sale, redemption or exchange of investments. The timing of gains or losses can have a material effect on periodic earnings. Investment gains and losses included in earnings usually have minimal impact on the periodic changes in our consolidated shareholders' equity since most of our investments are recorded at fair value with the unrealized gains and losses included in shareholders' equity as a component of accumulated other comprehensive income.

We believe the amount of investment gains/losses included in earnings in any given period typically has little analytical or predictive value. Our decisions to sell securities are not motivated by the impact that the resulting gains or losses will have on our reported earnings. Although we do not consider investment gains and losses as necessarily meaningful or useful in evaluating our periodic results, we are providing information to explain the nature of such gains and losses when reflected in our earnings.

Pre-tax investment gains in the first six months of 2017 and 2016 were \$605 million and \$2.5 billion, respectively. Pre-tax investment gains in the first quarter of 2016 included \$1.1 billion realized in connection with the tax-free exchange of shares of P&G common stock for 100% of the common stock of Duracell. Income tax expense allocated to investment gains included a benefit from the reduction of certain deferred income tax liabilities in connection with the exchange of P&G common stock for Duracell. Our after-tax gain from this transaction was approximately \$1.9 billion. In addition, investment gains in the second quarter and first six months of 2016 included a pre-tax gain of \$610 million from the redemption of our Kraft Heinz Preferred Stock investment for cash of \$8.32 billion.

As of January 1, 2018, we will adopt a new accounting standard that changes the reporting of unrealized gains and losses on investments in equity securities and certain other investments. Upon adoption of this accounting standard, we will reclassify the net unrealized gains from such investments, which are presently reflected in accumulated other comprehensive income, to retained earnings. The amount of the reclassification will be based on our equity investments at December 31, 2017. As of June 30, 2017, accumulated after-tax net unrealized appreciation related to our equity securities and other investments was approximately \$50.6 billion. After December 31, 2017, the unrealized gains and losses on equity securities currently reported in other comprehensive income, as well as gains and losses realized from sales and dispositions, will be included in our periodic Consolidated Statements of Earnings. We do not expect the adoption of this standard will affect our total consolidated shareholders' equity. However, it will likely produce a very significant increase in the volatility of our periodic net earnings given the magnitude of our existing equity securities portfolio and the inherent volatility of equity securities prices. In the first six months of 2017, our other comprehensive income included after-tax unrealized gains from equity securities and other investments of approximately \$8.2 billion, compared to after-tax unrealized losses of approximately \$3.4 billion in the first six months of 2016. These amounts would be included in earnings under the new accounting standard.

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

Investment and Derivative Gains/Losses (Continued)

Derivative gains/losses

Derivative gains/losses currently represent the changes in fair value of our equity index put option contract liabilities. The periodic changes in the fair values of these contracts 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.

Derivative contracts produced pre-tax gains of \$395 million in the first six months of 2017 and pre-tax losses of \$790 million in 2016. In July 2016, our last remaining credit default contract was terminated and thereafter, all of our derivative contract gains and losses derived from our equity index put option contracts. The gains in the first six months of 2017 were primarily attributable to increased index values and shorter contract durations, partly offset by unfavorable foreign currency exchange rate changes. The losses in 2016 were driven by lower index values and interest rates. As of June 30, 2017, equity index put option intrinsic values were \$842 million and our recorded liabilities at fair value were approximately \$2.5 billion. Our ultimate payment obligations, if any, under our equity index put option contracts will be determined as of the contract expiration dates (beginning in 2018), and will be based on the intrinsic value as defined under the contracts.

Other

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

	Second Quarter		First Six Months	
	2017	2016	2017	2016
Kraft Heinz earnings	\$ 288	\$ 247	\$ 510	\$ 406
Acquisition accounting expenses	(180)	(126)	(322)	(260)
Corporate interest expense	(407)	32	(531)	(181)
Other	7	(4)	7	(13)
Net earnings (losses) attributable to Berkshire Hathaway shareholders	<u>\$ (292)</u>	<u>\$ 149</u>	<u>\$ (336)</u>	<u>\$ (48)</u>

Our after-tax Kraft Heinz earnings includes Berkshire's share of Kraft Heinz's earnings attributable to common shareholders determined pursuant to the equity method. In the second quarter and first six months of 2016, Kraft Heinz earnings also included \$180 million in pre-tax dividend income from our Preferred Stock investment, which was redeemed in June 2016. 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.

In each of the last three years, Berkshire issued Euro-denominated debt and at June 30, 2017, the aggregate par outstanding was €6.85 billion. Changes in foreign currency exchange rates can produce sizable non-cash gains and losses from the periodic revaluation of these liabilities into U.S. Dollars. After-tax corporate interest expense included foreign currency exchange rate losses in the second quarter and first six months of 2017 of \$342 million and \$399 million, respectively, with respect to the revaluation of the Euro denominated debt. In 2016, after-tax corporate interest included foreign currency exchange rate gains of \$101 million in the second quarter and losses of \$60 million in the first six months. Excluding these foreign currency gains and losses, after-tax corporate interest expense in the first six months of 2017 and 2016 was \$131 million and \$121 million, respectively. The increase was attributable to increased average outstanding borrowings.

Financial Condition

Our balance sheet reflects significant liquidity and a strong capital base. Our consolidated shareholders' equity at June 30, 2017 was approximately \$300.7 billion, an increase of about \$17.7 billion since December 31, 2016. Net earnings attributable to Berkshire shareholders in the first six months of 2017 were \$8.3 billion. Net unrealized appreciation of investments and foreign currency translation gains included in other comprehensive income in the first six months of 2017 were approximately \$8.2 billion and \$1.2 billion, respectively.

At June 30, 2017, our insurance and other businesses held cash, cash equivalents and U.S. Treasury Bills of approximately \$86.1 billion and investments (excluding our investment in Kraft Heinz) of \$175.6 billion. In January 2017, Berkshire issued new senior notes aggregating €1.1 billion and repaid \$1.1 billion of maturing senior notes. Berkshire term debt of \$800 million will mature in February 2018. Berkshire's debt outstanding at June 30, 2017 was \$18.4 billion, an increase of \$678 million from December 31, 2016, which was primarily due to foreign currency exchange rate changes applicable to €6.85 billion par of Euro-denominated senior notes.

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

Financial Condition (Continued)

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. In the first six months of 2017, capital expenditures were \$1.8 billion by BHE and \$1.5 billion by BNSF. We forecast the aggregate capital expenditures of these businesses for the remainder of 2017 will approximate \$4.8 billion and we currently expect to fund such future capital expenditures with cash flows from operations and debt issuances. In July 2017, BHE agreed to acquire approximately 80% of Oncor for \$9 billion in cash and intends to acquire the remaining 20% in separate transactions. See Note 21 to the accompanying Consolidated Financial Statements.

BNSF's outstanding debt approximated \$22.6 billion as of June 30, 2017, an increase of \$508 million since December 31, 2016. In March 2017, BNSF issued \$1.25 billion of senior unsecured debentures with \$500 million due in 2027 and \$750 million due in 2047. Approximately \$650 million of BNSF debentures matured in May 2017 and another \$650 million mature in March 2018. Outstanding borrowings of BHE and its subsidiaries, excluding its borrowings from Berkshire insurance subsidiaries, were approximately \$38.1 billion at June 30, 2017, an increase of \$1.1 billion since December 31, 2016. During the first six months of 2017, BHE and its subsidiaries issued approximately \$1.275 billion of debt with maturity dates ranging from 2027 to 2057. 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 \$40.9 billion as of June 30, 2017, a decrease of \$830 million from December 31, 2016. Finance assets consist primarily of loans and finance receivables, various types of property held for lease, cash, cash equivalents, U.S. Treasury Bills and other investments. Finance and financial products liabilities decreased approximately \$1.9 billion to approximately \$17.8 billion as of June 30, 2017. The decrease was primarily due to a reduction in borrowings of approximately \$1.6 billion, reflecting repayments and maturities of \$2.9 billion, partly offset by \$1.3 billion of senior unsecured notes issued in January by a wholly-owned financing subsidiary, Berkshire Hathaway Finance Corporation ("BHFC"). The new BHFC notes mature in 2019 and 2020. BHFC's outstanding borrowings were \$13.2 billion at June 30, 2017. Over the remainder of 2017, \$400 million of BHFC senior notes will mature and an additional \$4.1 billion will mature in the first six months of 2018. 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's Board of Directors has authorized Berkshire management to repurchase, at its discretion, Berkshire Class A and Class B common stock at prices no higher than a 20% premium over book value. There is no obligation to repurchase any stock and 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. There were no repurchases in 2017.

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 pertain to the acquisition of goods or services in the future, such as minimum rentals under operating leases and certain purchase obligations, and are not currently reflected in the financial statements, but 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. As previously discussed, we entered into a retroactive reinsurance agreement with AIG, which became effective in February 2017. In connection with this agreement, we recorded liabilities of \$16.4 billion for unpaid losses and loss adjustment expenses, representing our current estimate of the claims we ultimately expect to pay under the agreement. We estimate future payments under this agreement as follows: 2020-2021 – \$3.6 billion and thereafter – \$12.8 billion; however, as generally noted above, actual payments under this agreement will likely vary, perhaps materially, from these estimates.

Except as otherwise disclosed in this Quarterly Report, our contractual obligations as of June 30, 2017 were, in the aggregate, not materially different from those disclosed in the "Contractual Obligations" section of "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in Berkshire's Annual Report on Form 10-K for the year ended December 31, 2016.

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

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, 2016.

Our Consolidated Balance Sheet as of June 30, 2017 includes estimated liabilities for unpaid losses from property and casualty insurance and reinsurance contracts of approximately \$95 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 June 30, 2017 includes goodwill of acquired businesses of approximately \$80 billion. We evaluate goodwill for impairment at least annually and we conducted our most recent annual review during the fourth quarter of 2016. Although we believe that the goodwill reflected in the 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 significant derivative contract liabilities with respect to our long-duration 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 which are predictive in nature, which depend upon or refer to future events or conditions, which include words such as "expects," "anticipates," "intends," "plans," "believes," "estimates" or similar expressions. In addition, any statements concerning future financial performance (including future revenues, earnings or growth rates), ongoing business strategies or prospects and possible future Berkshire actions, which may be provided by management, are also forward-looking statements as defined by the Act. Forward-looking statements are based on current expectations and projections about future events and are subject to risks, uncertainties and assumptions about Berkshire and its subsidiaries, economic and market factors and the industries in which we do business, among other things. These statements are not guarantees of future performance and we have no specific intention to update these statements.

Actual events and results may differ materially from those expressed or forecasted in forward-looking statements due to a number of factors. The 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 June 30, 2017, 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, 2016.

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, 2016 to which reference is made herein.

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

Berkshire's Board of Directors ("Berkshire's Board") has approved a common stock repurchase program under which Berkshire may repurchase its Class A and Class B shares at prices no higher than a 20% premium over the book value of the shares. Berkshire may repurchase shares in the open market or through privately negotiated transactions. Berkshire's Board authorization 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 is expected to continue indefinitely and the amount of repurchases will depend entirely upon the level of cash available, the attractiveness of investment and business opportunities either at hand or on the horizon, and the degree of discount of the market price relative to management's estimate of intrinsic value. The repurchase program does not obligate Berkshire to repurchase any dollar amount or number of Class A or Class B shares and there is no expiration date to the program. There were no share repurchases under the program in the first six months of 2017.

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures

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

Item 5. Other Information

None

Item 6. Exhibits

- a. Exhibits
 - 12 Calculation of Ratio of Consolidated Earnings to Consolidated Fixed Charges
 - 31.1 Rule 13a-14(a)/15d-14(a) Certifications
 - 31.2 Rule 13a-14(a)/15d-14(a) Certifications
 - 32.1 Section 1350 Certifications
 - 32.2 Section 1350 Certifications
 - 95 Mine Safety Disclosures
- 101 The following financial information from Berkshire Hathaway Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, formatted in XBRL (Extensible Business Reporting Language) includes: (i) the Consolidated Balance Sheets as of June 30, 2017 and December 31, 2016, (ii) the Consolidated Statements of Earnings for each of the three-month and six-month periods ended June 30, 2017 and 2016, (iii) the Consolidated Statements of Comprehensive Income for each of the three-month and six-month periods ended June 30, 2017 and 2016, (iv) the Consolidated Statements of Changes in Shareholders' Equity for each of the six-month periods ended June 30, 2017 and 2016, (v) the Consolidated Statements of Cash Flows for each of the six-month periods ended June 30, 2017 and 2016, and (vi) the Notes to Consolidated Financial Statements, tagged in summary and detail.

SIGNATURE

Pursuant to the requirement of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned thereunto duly authorized.

BERKSHIRE HATHAWAY INC.
(Registrant)

Date: August 4, 2017

/S/ MARC D. HAMBURG

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

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

	Six Months Ending June 30, 2017	Year Ended December 31,				
		2016	2015	2014	2013	2012
Net earnings attributable to Berkshire Hathaway shareholders	\$ 8,322	\$ 24,074	\$ 24,083	\$ 19,872	\$ 19,476	\$ 14,824
Income tax expense	3,323	9,240	10,532	7,935	8,951	6,924
Earnings attributable to noncontrolling interests	172	353	331	298	369	488
Equity in net (earnings) loss of Kraft Heinz Company	(548)	(923)	122	26	262	—
Dividends from Kraft Heinz Company	391	952	366	—	—	—
Fixed charges	<u>2,852</u>	<u>4,195</u>	<u>4,134</u>	<u>3,882</u>	<u>3,386</u>	<u>3,304</u>
Earnings available for fixed charges	<u><u>\$ 14,512</u></u>	<u><u>\$ 37,891</u></u>	<u><u>\$ 39,568</u></u>	<u><u>\$ 32,013</u></u>	<u><u>\$ 32,444</u></u>	<u><u>\$ 25,540</u></u>
Fixed charges						
Interest expense, including amortization ⁽¹⁾	\$ 2,567	\$ 3,497	\$ 3,515	\$ 3,253	\$ 2,801	\$ 2,744
Rentals representing interest and capitalized interest	<u>285</u>	<u>698</u>	<u>619</u>	<u>629</u>	<u>585</u>	<u>560</u>
	<u><u>\$ 2,852</u></u>	<u><u>\$ 4,195</u></u>	<u><u>\$ 4,134</u></u>	<u><u>\$ 3,882</u></u>	<u><u>\$ 3,386</u></u>	<u><u>\$ 3,304</u></u>
Ratio of earnings to fixed charges	<u><u>5.09x</u></u>	<u><u>9.03x</u></u>	<u><u>9.57x</u></u>	<u><u>8.25x</u></u>	<u><u>9.58x</u></u>	<u><u>7.73x</u></u>

(1) Includes non-cash foreign currency exchange losses of \$614 million for the first six months of 2017, gains of \$244 million in 2016 and losses of \$69 million in 2015 with respect to Berkshire's Euro denominated debt.

Quarter ended June 30, 2017

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: August 4, 2017

/S/ WARREN E. BUFFETT

Chairman—Principal Executive Officer

Quarter ended June 30, 2017

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: August 4, 2017

/S/ MARC D. HAMBURG

Senior Vice President—Principal Financial Officer

Section 1350 Certifications

Quarter ended June 30, 2017

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 June 30, 2017 (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: August 4, 2017

/S/ WARREN E. BUFFETT

Warren E. Buffett
Chairman and Chief Executive Officer

EXHIBIT 32.2

Section 1350 Certifications

Quarter ended June 30, 2017

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 June 30, 2017 (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: August 4, 2017

/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**

PaciCorp 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 June 30, 2017 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 PaciCorp or Acme has challenged or appealed the matter. Clay and other reserves that are not yet mined and mines that are closed or idled are not included in the information below as no reportable events occurred at those locations during the three-month period ended June 30, 2017. PaciCorp 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 June 30, 2017.

Mining Facilities	Mine Safety Act					Total Value of Proposed MSHA Assessments (in thousands)	Total Number of Mining Related Fatalities	Legal Actions		
	Section 104 Significant and Substantial Citations ⁽¹⁾	Section 104(b) Orders ⁽²⁾	Section 104(d) Citations/Orders ⁽³⁾	Section 110(b)(2) Violations ⁽⁴⁾	Section 107(a) Imminent Danger Orders ⁽⁵⁾			Pending as of Last Day of Period ⁽⁶⁾	Instituted During Period	Resolved During Period
Coal:										
Bridger (surface)	—	—	—	—	—	\$ 1	—	1	1	—
Bridger (underground)	3	—	—	—	—	25	—	7	2	3
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 six contests of proposed penalties under Subpart C and two contests of citations or orders under Subpart B 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.