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

FORM 10-Q

(Mark One)

OUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT \boxtimes **OF 1934**

For the quarterly period ended June 30, 2018

OR

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

to

For the transition period from

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 \boxtimes No \square

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 \boxtimes 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. \Box

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 26, 2018:

Class A —	734,527
Class B —	1,365,840,748

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, December 31, 2018 2017 (Unaudited) ASSETS Insurance and Other: Cash and cash equivalents* \$ 57,918 \$ 25,460 Short-term investments in U.S. Treasury Bills 45,243 78,515 Investments in fixed maturity securities 18,524 21,353 Investments in equity securities 174,033 164.026 Investment in The Kraft Heinz Company 17,530 17,635 Receivables 31,280 28,578 16,194 Inventories 16,187 Property, plant and equipment 23,948 20,104 Goodwill 54,955 54,985 Other intangible assets 31,925 32,518 Deferred charges under retroactive reinsurance contracts 14,730 15,278 Other 11,619 11,158 497,899 485,797 Railroad, Utilities and Energy: Cash and cash equivalents* 3,363 2,910 Property, plant and equipment 129.216 128.184 Goodwill 24,772 24,780 Regulatory assets 2,929 2,950 Other 15,590 15,589 175,870 174,413 Finance and Financial Products: Cash and cash equivalents* 3,280 3,213 Short-term investments in U.S. Treasury Bills 1,295 5,856 Loans and finance receivables 14,211 13,748 Property, plant and equipment and assets held for lease 9,931 10,065 Goodwill 1,523 1,493 Other 7,789 7,644 38,163 41,885 \$ 711,932 702,095 \$

* Cash and cash equivalents includes U.S. Treasury Bills with maturities of three months or less when purchased of \$41.6 billion at June 30, 2018 and \$5.7 billion at December 31, 2017.

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC. and Subsidiaries CONSOLIDATED BALANCE SHEETS

(dollars in millions)

	June 30, 2018		Dee	cember 31, 2017
	J)	U naudited)		
LIABILITIES AND SHAREHOLDERS' EQUITY Insurance and Other:				
Unpaid losses and loss adjustment expenses	¢	62,737	¢	61,122
Unpaid losses and loss adjustment expenses under retroactive reinsurance contracts	\$	42,115	\$	42,937
Unearned premiums		18,292		16,040
Life, annuity and health insurance benefits		18,292		17,608
Other policyholder liabilities		6,900		7,654
Accounts payable, accruals and other liabilities		26,384		23,099
Notes payable and other borrowings				
Notes payable and other borrowings		25,158		27,324
		199,647		195,784
Railroad, Utilities and Energy:				
Accounts payable, accruals and other liabilities		10,986		11,334
Regulatory liabilities		7,744		7,511
Notes payable and other borrowings		62,664		62,178
		81,394		81,023
Finance and Financial Products:				
Accounts payable, accruals and other liabilities		1,662		1,470
Derivative contract liabilities		2,006		2,172
Notes payable and other borrowings		8,951		13,085
		12,619		16,727
Income taxes, principally deferred		56,514		56,607
Total liabilities	_	350,174		350,141
Shareholders' equity:		550,171	_	550,111
Common stock		8		8
Capital in excess of par value		35,694		35,694
Accumulated other comprehensive income		(3,808)		58,571
Retained earnings		327,963		255,786
Treasury stock, at cost		(1,763)		(1,763)
Berkshire Hathaway shareholders' equity		358,094	_	348,296
Noncontrolling interests		3,664		3,658
Total shareholders' equity		361,758		351,954
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	\$	711,932	\$	702,095

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC. and Subsidiaries CONSOLIDATED STATEMENTS OF EARNINGS

(dollars in millions except per share amounts)

		Second	Quart	er	First Six Months					
		2018		2017		2018 2017				
-		(Unau	udited)		_	(Unau	idited)		
Revenues:										
Insurance and Other:	¢	14 140	¢	10.277	¢	27.522	¢	24.12		
Insurance premiums earned	\$	14,149	\$	12,367	\$	27,522	\$	34,12		
Sales and service revenues Interest, dividend and other investment income		33,256 1,534		31,733 1,322		64,879 2,849		61,96 2,48		
Interest, dividend and other investment income		48,939		45,422		95,250		· · · · · · · · · · · · · · · · · · ·		
		,		,		,		98,56		
Railroad, Utilities and Energy operating and other revenues		10,895		9,822	_	20,997	-	19,20		
Finance and Financial Products:										
Sales and service revenues		1,992		1,648		3,685		3,14		
Interest, dividend and other investment income		374		364		741		71		
		2,366		2,012		4,426		3,86		
Total revenues		62,200		57,256		120,673		121,62		
Investment and derivative contract gains/losses:										
Investments gains (losses)		5,990		290		(1,819)		60		
Derivative contract gains (losses)		372		(65)		166		39		
		6,362		225		(1,653)		1,00		
Costs and expenses:										
Insurance and Other:										
Insurance losses and loss adjustment expenses		9,401		8,747		18,364		27,31		
Life, annuity and health insurance benefits		1,418		1,263		2,705		2,49		
Insurance underwriting expenses		2,123		2,378		4,727		4,71		
Cost of sales and services		26,480		25,419		51,895		49,77		
Selling, general and administrative expenses		4,150		4,020		8,174		8,13		
Interest expense		(260)		700		130		97		
		43,312		42,527		85,995		93,40		
Railroad, Utilities and Energy:										
Cost of sales and operating expenses		7,963		6,940		15,364		13,69		
Interest expense		702		697		1,412		1,39		
		8,665		7,637		16,776		15,08		
Finance and Financial Products:										
Cost of sales and services		1,217		962		2,246		1,82		
Selling, general and administrative expenses		518		469		985		91		
Interest expense		79		103		171		20		
		1,814	_	1,534	_	3,402	_	2,94		
Total costs and expenses		53,791		51,698		106,173		111,43		
Earnings before income taxes and equity method earnings		14,771		5,783		12,847		11,19		
Equity method earnings		327		346		728		62		
Earnings before income taxes		15,098		6,129		13,575	-	11,81		
Income tax expense		3,021		1,774		2,569		3,32		
Net earnings		12,077	-	4,355	-	11,006	-	8,49		
Earnings attributable to noncontrolling interests		66		93		133		17		
Net earnings attributable to Berkshire Hathaway shareholders	\$	12,011	\$	4,262	\$	10,873	\$	8,32		
5 ·	\$	· · · · ·	_			· · · ·		/		
Net earnings per average equivalent Class A share		7,301	\$	2,592	\$ ¢	6,610	\$ ¢	5,06		
Net earnings per average equivalent Class B share*	\$	4.87	\$	1.73	\$	4.41	\$	3.3		
Average equivalent Class A shares outstanding	2	1,645,057	2.4	1,644,580	2	1,645,008	2	1,644,50		
Average equivalent Class B shares outstanding	2,	467,585,853	2,4	66,870,080	2,	467,511,782	2,	466,754,15		

* Net earnings per average equivalent Class B share outstanding are one-fifteen-hundredth 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
	2018	2017	2018	2017
	(Unau	dited)	(Unau	dited)
Net earnings	\$ 12,077	\$ 4,355	\$ 11,006	\$ 8,494
Other comprehensive income:				
Net change in unrealized appreciation of investments	(92)	4,711	(137)	13,088
Applicable income taxes	22	(1,659)	20	(4,531)
Reclassification of investment appreciation in net earnings	(44)	(284)	(265)	(589)
Applicable income taxes	10	99	56	206
Foreign currency translation	(1,364)	798	(763)	1,356
Applicable income taxes	43	(23)	37	(92)
Prior service cost and actuarial gains/losses of defined benefit pension plans	87	(44)	63	(54)
Applicable income taxes	(20)	18	(3)	25
Other, net	(5)	3	(36)	6
Other comprehensive income, net	(1,363)	3,619	(1,028)	9,415
Comprehensive income	10,714	7,974	9,978	17,909
Comprehensive income attributable to noncontrolling interests	34	130	109	233
Comprehensive income attributable to Berkshire Hathaway shareholders	\$ 10,680	\$ 7,844	\$ 9,869	\$ 17,676

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(Unaudited)

(dollars in millions)

		Ber	kshi	re Hathaway	sha	reholders' eq	uity				
	and exce	mon stock capital in ess of par value	con	cumulated other prehensive income		Retained earnings	Т	reasury stock	Non- controlling interests		Total
Balance at December 31, 2016	\$	35,689	\$	37,298	\$	210,846	\$	(1,763)	\$ 3,358	\$	285,428
Net earnings		—		—		8,322		_	172		8,494
Other comprehensive income, net		_		9,354		_		_	61		9,415
Issuance of common stock		40									40
Transactions with noncontrolling interests		(58)			_				(157)	_	(215)
Balance at June 30, 2017	\$	35,671	\$	46,652	\$	219,168	\$	(1,763)	\$ 3,434	\$	303,162
Balance at December 31, 2017	\$	35,702	\$	58,571	\$	255,786	\$	(1,763)	\$ 3,658	\$	351,954
Adoption of new accounting pronouncements		_		(61,375)		61,304					(71)
Net earnings		_				10,873			133		11,006
Other comprehensive income, net		—		(1,004)				_	(24)		(1,028)
Issuance of common stock		32									32
Transactions with noncontrolling interests		(32)		—				—	(103)		(135)
Balance at June 30, 2018	\$	35,702	\$	(3,808)	\$	327,963	\$	(1,763)	\$ 3,664	\$	361,758

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC. and Subsidiaries CONSOLIDATED STATEMENTS OF CASH FLOWS

(dollars in millions)

	First Six	Months
	2018	2017
	(Unau	dited)
Cash flows from operating activities: Net earnings	\$ 11,006	\$ 8,494
Adjustments to reconcile net earnings to operating cash flows:	\$ 11,000	\$ 0,47-
Investment gains/losses	1,819	(605
Depreciation and amortization	4,774	4,539
Other	(421)	403
Changes in operating assets and liabilities:		
Losses and loss adjustment expenses	924	18,075
Deferred charges reinsurance assumed Unearned premiums	549 2,253	(5,550
Receivables and originated loans	(3,413)	(1,608
Other assets	(1,367)	(960
Other liabilities	(45)	111
Income taxes	12	1,893
let cash flows from operating activities	16,091	26,622
Cash flows from investing activities: Purchases of U.S. Treasury Bills and fixed maturity securities	(50,227)	(68,547
Purchases of equity securities	(20,845)	(13,628
Sales of U.S. Treasury Bills and fixed maturity securities	19,374	20,164
Redemptions and maturities of U.S. Treasury Bills and fixed maturity securities	71,486	34,164
Sales and redemptions of equity securities	9,011	7,815
Purchases of loans and finance receivables	(81)	(1,350
Collections of loans and finance receivables	188	393
Acquisitions of businesses, net of cash acquired	(373)	(1,721
Purchases of property, plant and equipment	(6,329)	(5,149
Other	226	(138
Jet cash flows from investing activities	22,430	(27,997
Cash flows from financing activities:		
Proceeds from borrowings of insurance and other businesses	28	1,295
Proceeds from borrowings of railroad, utilities and energy businesses	4,239	2,413
Proceeds from borrowings of finance businesses	21	1,298
Repayments of borrowings of insurance and other businesses	(1,882)	(1,180
Repayments of borrowings of railroad, utilities and energy businesses	(2,428)	(1,768
Repayments of borrowings of finance businesses Changes in short term borrowings, net	(4,161) (1,080)	(2,897
Other	(1,080) (253)	(92
Jet cash flows from financing activities	(5,516)	(469
č	(41)	183
iffects of foreign currency exchange rate changes		_
crease (decrease) in cash and cash equivalents and restricted cash Cash and cash equivalents and restricted cash at beginning of year	32,964 32,212	(1,661 28,643
Cash and cash equivalents and restricted cash at end of second quarter *	\$ 65,176	\$ 26,982
•	\$ 03,170	\$ 20,982
Cash and cash equivalents and restricted cash are comprised of the following: Beginning of year—		
Insurance and Other	\$ 25,460	\$ 23,581
Railroad, Utilities and Energy	2,910	3,939
Finance and Financial Products	3,213	528
Restricted cash, included in other assets	629	595
	\$ 32,212	\$ 28,643
End of second quarter—		
Insurance and Other	\$ 57,918	\$ 20,142
Railroad, Utilities and Energy	3,363	4,962
Finance and Financial Products	3,280	1,314
Restricted cash, included in other assets	615	564
	\$ 65,176	\$ 26,982

See accompanying Notes to Consolidated Financial Statements

BERKSHIRE HATHAWAY INC. and Subsidiaries

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS June 30, 2018

Note 1. General

The accompanying unaudited Consolidated Financial Statements include the accounts of Berkshire Hathaway Inc. ("Berkshire" or "Company") consolidated with the accounts of all its subsidiaries and affiliates in which Berkshire holds controlling financial interests as of the financial statement date. In these notes, the terms "us," "we" or "our" refer to Berkshire and its consolidated subsidiaries. Reference is made to Berkshire's most recently issued Annual Report on Form 10-K ("Annual Report"), which includes information necessary or useful to understanding Berkshire's businesses and financial statement presentations. Our significant accounting policies and practices were presented as Note 1 to the Consolidated Financial Statements included in the Annual Report. Changes to those policies due to the adoption of new accounting standards effective January 1, 2018 are described in Note 2. Certain immaterial amounts related to equity method earnings were reclassified in the accompanying 2017 Consolidated Financial Statements to conform to current presentations.

Financial information in this Quarterly Report reflects all adjustments (consisting only of normal recurring adjustments) that are, in the opinion of management, necessary to a fair statement of results for the interim periods in accordance with accounting principles generally accepted in the United States ("GAAP"). For a number of reasons, our results for interim periods are not normally indicative of results to be expected for the year. The timing and magnitude of catastrophe losses incurred by insurance subsidiaries and the estimation error inherent to the process of determining liabilities for unpaid losses of insurance subsidiaries can be more significant to results of interim periods than to results for a full year. Changes in market prices of the equity securities we own can produce significant effects on our consolidated shareholders' equity. Beginning in 2018, those effects are included in our Consolidated Statements of Earnings, whereas in pre-2018 periods, such effects were included in other comprehensive income. In addition, changes in the fair values of certain derivative contract liabilities and gains and losses from the periodic revaluation of certain assets and liabilities denominated in foreign currencies can cause significant variations in our periodic net earnings.

Note 2. New Accounting Pronouncements

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

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

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

Note 2. New Accounting Pronouncements (Continued)

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

We adopted ASC 606 using the modified retrospective method, whereby the cumulative effect of the adoption was recorded as an adjustment to retained earnings. Prior year financial statements were not restated. The initial adoption of ASC 606 resulted in an increase to both assets (primarily property, plant and equipment) and other liabilities and a relatively minor reduction in retained earnings as of the beginning of 2018. ASC 606 also provides for certain other disclosures which are included in Note 3.

In February 2016, the Financial Accounting Standards Board ("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 and also requires 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.

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

Note 3. Revenues from contracts with customers

As discussed in Note 2, on January 1, 2018, we adopted ASC 606 "Revenues from Contracts with Customers." Our revenue recognition practices under ASC 606 do not differ materially from prior practices. Under ASC 606, revenues are recognized when a good or service is transferred to a customer. A good or service is transferred when (or as) the customer obtains control of that good or service. Revenues are based on the consideration we expect to receive in connection with our promises to deliver goods and services to our customers. Our accounting policies related to revenue from contracts with customers follow.

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

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

Note 3. Revenues from contracts with customers (Continued)

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

Our energy revenue derives primarily from tariff based sales arrangements approved by various regulatory bodies. These tariff based revenues are mainly comprised of energy, transmission, distribution and natural gas and have performance obligations to deliver energy products and services to customers which are satisfied over time as energy is delivered or services are provided. Our nonregulated energy revenue primarily relates to our renewable energy business. Energy revenues are equivalent to the amounts we have the right to invoice and correspond directly with the value to the customer of the performance to date and include billed and unbilled amounts. As of June 30, 2018 and December 31, 2017, trade receivables were approximately \$2.0 billion and were included in other assets of our railroad, utilities and energy businesses on the Consolidated Balance Sheets. Such amounts relate substantially to customer revenue, and included unbilled revenue of \$722 million as of June 30, 2018 and \$665 million as of December 31, 2017. Payments from customers are generally due from the customer within 30 days of billing. Rates charged for energy products and services are established by regulators or contractual arrangements that establish the transaction price, as well as the allocation of price amongst the separate performance obligations. When preliminary regulated rates are permitted to be billed prior to final approval by the applicable regulator, certain revenue collected may be subject to refund and a liability for estimated refunds is accrued.

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

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

Prior to January 1, 2018, we recognized revenues from the sales of fractional ownership interests in aircraft over the terms of the related management services agreements, as the transfers of the ownership interests were inseparable from the management services agreements. These agreements also include provisions that require us to repurchase the fractional interest at fair market value at contract termination or upon the customer's request following the minimum commitment period. ASC 606 provides that such contracts are subject to accounting guidance for lease contracts and not ASC 606. The principal effects of this re-characterization were to increase both assets (primarily property, plant and equipment) and other liabilities by approximately \$3.5 billion with a small reduction to retained earnings as of January 1, 2018. The re-categorization of these contracts as operating leases did not have a significant effect on our consolidated revenues or earnings for the first six months of 2018.

Note 3. Revenues from contracts with customers (Continued)

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

	Mai	nufacturing	McLane Company		Service and Retail		BNSF		Berkshire Hathaway Energy		Fir	Finance and Financial Products		Insurance, Corporate and other		Total
Manufactured products:																
Industrial and commercial products	\$	12,922	\$	—	\$	108	\$		\$		\$	421	\$		\$	13,451
Building products		6,344		—				—				7				6,351
Consumer products		5,896		_								1,954				7,850
Grocery and convenience store distribution				16,419												16,419
Food and beverage distribution		_		8,124												8,124
Auto sales				—	4	4,004										4,004
Other retail and wholesale distribution		1,012		—	:	5,617						42				6,671
Service		497		37		1,947		11,411	1	,886		26				15,804
Electricity and natural gas									7	,090				—		7,090
Total		26,671		24,580	1	1,676		11,411	8	,976		2,450		_		85,764
Other revenue		81		36		1,921		24		586		1,976	30),285		34,909
	\$	26,752	\$	24,616	\$ 1.	3,597	\$	11,435	\$ 9	,562	\$	4,426	\$ 30),285	\$	120,673

A summary of the transaction price allocated to the significant unsatisfied remaining performance obligations relating to contracts with expected durations in excess of one year as of June 30, 2018 follows (in millions).

			bligations satisfied:		
	Less thanGreater than12 months12 months				Fotal
Manufactured products:		-			
Industrial and commercial products	\$ 59	\$	2,970	\$	3,029
Electricity and natural gas	1,160		5,955		7,115

Note 4. Investments in fixed maturity securities

Investments in securities with fixed maturities as of June 30, 2018 and December 31, 2017 are summarized by type below (in millions).

	A	mortized Cost	Unrealized Gains		realized losses	Fair Value
June 30, 2018						
U.S. Treasury, U.S. government corporations and agencies	\$	3,463	\$ 10	\$	(35)	\$ 3,438
U.S. states, municipalities and political subdivisions		452	17		(5)	464
Foreign governments		7,551	56		(42)	7,565
Corporate bonds		5,968	453		(8)	6,413
Mortgage-backed securities		585	62		(3)	644
	\$	18,019	\$ 598	\$	(93)	\$ 18,524
December 31, 2017						
U.S. Treasury, U.S. government corporations and agencies	\$	3,975	\$ 4	\$	(26)	\$ 3,953
U.S. states, municipalities and political subdivisions		847	19		(12)	854
Foreign governments		8,572	274		(24)	8,822
Corporate bonds		6,279	588		(5)	6,862
Mortgage-backed securities		772	92		(2)	862
	\$	20,445	\$ 977	\$	(69)	\$ 21,353

Note 4. Investments in fixed maturity securities (Continued)

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, 2018, approximately 92% of foreign government holdings were rated AA or higher by at least one of the major rating agencies.

The amortized cost and estimated fair value of fixed maturity securities at June 30, 2018 are summarized below by contractual maturity dates. Amounts are in millions. Actual maturities may differ from contractual maturities due to early call or prepayment rights held by issuers.

	e in one r or less	Due after one year through five years						Mortgage- backed securities		Total
Amortized cost	\$ 6,863	\$	9,439	\$	399	\$	733	\$ 58	5	\$ 18,019
Fair value	6,876		9,507		448		1,049	64	4	18,524

Note 5. Investments in equity securities

Investments in equity securities as of June 30, 2018 and December 31, 2017 are summarized based on the primary industry of the investee in the table below (in millions).

	Cost Basis	Net Unrealized Gains	Fair Value
June 30, 2018 *			
Banks, insurance and finance	\$ 27,003	\$ 50,770	\$ 77,773
Consumer products	40,199	28,502	68,701
Commercial, industrial and other	20,256	12,999	33,255
	\$ 87,458	\$ 92,271	\$ 179,729

* Approximately 70% of the aggregate fair value was concentrated in five companies (American Express Company – \$14.9 billion; Apple Inc. – \$47.2 billion; Bank of America Corporation – \$19.7 billion; The Coca-Cola Company – \$17.5 billion and Wells Fargo & Company – \$26.4 billion).

			Net	Unrealized	Fair						
	Cost	Cost Basis		Cost Basis		Cost Basis		Cost Basis		Gains	 Value
December 31, 2017 *											
Banks, insurance and finance	\$ 2	5,783	\$	55,026	\$ 80,809						
Consumer products	2	5,177		25,698	50,875						
Commercial, industrial and other	2	3,716		15,140	 38,856						
	\$ 7	4,676	\$	95,864	\$ 170,540						

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

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

	ne 30, 2018	ember 31, 2017
Insurance and other	\$ 174,033	\$ 164,026
Railroad, utilities and energy *	1,364	1,961
Finance and financial products *	4,332	4,553
	\$ 179,729	\$ 170,540

* Included in other assets.

Note 6. Equity Method Investments

Berkshire holds investments in certain businesses that are accounted for pursuant to the equity method. Currently, the most significant of these is our investment in the common stock of The Kraft Heinz Company ("Kraft Heinz"). Kraft Heinz is one of the world's largest manufacturers and marketers of food and beverage products, including condiments and sauces, cheese and dairy, meals, meats, refreshment beverages, coffee and other grocery products. Berkshire currently owns 325,442,152 shares of Kraft Heinz common stock representing 26.7% of the outstanding shares. The carrying value and fair value of this investment at June 30, 2018 was approximately \$17.5 billion and \$20.4 billion, respectively, and at December 31, 2017 was \$17.6 billion and \$25.3 billion, respectively. Our earnings determined under the equity method during the first six months of 2018 and 2017 were \$467 million and \$548 million, respectively. We received dividends on the common stock of \$407 million in the first six months of 2018 and \$391 million in the first six months of 2017, which we recorded as reductions of our investment.

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

					June 30, 2018		De	cember 30, 2017
Assets					\$	121,896	\$	120,232
Liabilities						56,024		53,985
		Second	Quar	ter		First Six	Mon	ths
	<u> </u>	Second 2018	Quar	ter 2017		First Six 2018	Mon	2017
Sales	\$		Quar \$		\$		x Mont	

Other investments accounted for pursuant to the equity method include our investments in Berkadia Commercial Mortgage LLC ("Berkadia"), Pilot Travel Centers LLC, d/b/a Pilot Flying J ("Pilot Flying J"), and Electric Transmission Texas, LLC ("ETT"). Our investments in these entities were approximately \$3.5 billion as of June 30, 2018 and \$3.4 billion as of December 31, 2017 and were included in other assets. Our equity method earnings in these entities for the first six months were \$261 million in 2018 and \$79 million in 2017. Additional information concerning these investments follows.

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

On October 3, 2017, we entered into an investment agreement and an equity purchase agreement whereby we acquired a 38.6% interest in Pilot Flying J, headquartered in Knoxville, Tennessee. Pilot Flying J is one of the largest operators of travel centers in North America, with more than 27,000 team members, 750 locations across the U.S. and Canada, and approximately \$20 billion in annual revenues. The Haslam family currently owns a 50.1% interest in Pilot Flying J and a third party owns the remaining 11.3% interest. We also entered into an agreement to acquire in 2023 an additional 41.4% interest in Pilot Flying J with the Haslam family retaining a 20% interest. As a result, Berkshire will become the majority owner of Pilot Flying J in 2023.

Note 7. Income taxes

Our consolidated effective income tax rates for the second quarter and first six months of 2018 were 20.0% and 18.9%, respectively, and 28.9% and 28.1%, respectively, in the second quarter and first six months of 2017. Our effective income tax rate normally reflects recurring benefits from: (a) dividends received deductions applicable to certain investments in equity securities and (b) income production tax credits related to wind-powered electricity generation placed in service in the U.S. In 2018, our effective income tax rate reflects the current U.S. statutory rate of 21%, while the rate for 2017 reflects the then current U.S. statutory rate of 35%. In addition, the relative mix of pre-tax earnings or losses and underlying income tax rates applicable to the various taxing jurisdictions can also affect our periodic consolidated effective income tax rate.

Note 7. Income taxes (Continued)

In December 2017, the Securities and Exchange Commission issued Staff Accounting Bulletin 118 ("SAB 118") to provide clarification in implementing the Tax Cuts and Jobs Act of 2017 ("TCJA") when registrants do not have the necessary information available to complete the accounting for an element of the TCJA in the period of its enactment. SAB 118 provides for tax amounts to be classified as provisional and subject to remeasurement for up to one year from the enactment date for such elements when the accounting effect is not complete, but can be reasonably estimated. We consider our estimate of the tax on accumulated undistributed earnings of foreign subsidiaries to be provisional and subject to remeasurement when we obtain the necessary additional information to complete the accounting. While we believe our estimate is reasonable, it will take additional time to validate the inputs to the foreign earnings and profits calculations, the basis on which the repatriation tax is determined, and how the applicable states will address the U.S. repatriation tax. We currently expect that our accounting for the repatriation tax under the TCJA will be completed by the end of 2018.

Note 8. Investment gains/losses

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

	Second (Quarter	r First Six Mont		
	2018	2017	2018	2017	
Equity securities:					
Unrealized investment gains/losses on securities held at the end of the period	\$ 5,585	\$ —	\$ (2,146)	\$ —	
Investment gains/losses during 2018 on securities sold in 2018	357	_	41		
Gross realized gains		359	—	784	
Gross realized losses		(82)	—	(207)	
	5,942	277	(2,105)	577	
Fixed maturity securities:					
Gross realized gains	48	15	407	26	
Gross realized losses	(4)	(8)	(142)	(14)	
Other	4	6	21	16	
	\$ 5,990	\$ 290	\$ (1,819)	\$ 605	

Prior to 2018, we recognized investment gains and losses in earnings when we sold or otherwise disposed of equity securities based on the difference between the proceeds from the sale and the cost of the securities or when we recognized other-than-temporary impairment losses. Beginning in 2018, equity securities gains and losses include unrealized gains and losses from changes in fair values during the period on equity securities we still own. See Note 2. Prior to 2018, we recorded the changes in unrealized gains and losses on our investments in equity securities in other comprehensive income.

During the first six months of 2018, as reflected on the Consolidated Statement of Cash Flows, we received proceeds of approximately \$9.0 billion from sales of equity securities. In the table above, investment gains/losses on equity securities sold during 2018 reflect the difference between proceeds from sales and the fair value of the equity security sold at the beginning of the period or the purchase date, if later. Our taxable gains on equity securities sold during the second quarter and first six months of 2018, which are generally the difference between the proceeds from sales and our original cost, were \$629 million and \$1,359 million, respectively.

Note 9. Receivables

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

	June 30, 2018	Do	ecember 31, 2017
Insurance premiums receivable	\$ 12,638	\$	11,058
Reinsurance recoverable on unpaid losses	2,989		3,201
Trade receivables	12,945		11,756
Other	3,074		2,925
Allowances for uncollectible accounts	(366)		(362)
	\$ 31,280	\$	28,578

Note 9. Receivables (Continued)

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

	June 30, 2018	Dec	ember 31, 2017
Loans and finance receivables before allowances and discounts	\$ 14,564	\$	14,126
Allowances for uncollectible loans	(180)		(180)
Unamortized acquisition discounts	(173)		(198)
	\$ 14,211	\$	13,748

Loans and finance receivables are predominantly installment loans originated or acquired by our manufactured housing business. Provisions for loan losses in the first six months of 2018 and 2017 were \$70 million and \$78 million, respectively. Loan charge-offs, net of recoveries, in the first six months were \$70 million in 2018 and \$83 million in 2017. At June 30, 2018, approximately 98% of the loan balances were evaluated collectively for impairment. As part of the evaluation process, credit quality indicators are reviewed and loans are designated as performing or non-performing. At June 30, 2018, we considered approximately 99% of the loan balances to be current as to payment status. In June 2017, we agreed to provide a Canada-based financial institution with a C\$2 billion one-year secured revolving credit facility. The agreement expired on June 29, 2018.

Note 10. Inventories

Inventories are comprised of the following (in millions).

	June 30, 2018	December 31, 2017
Raw materials	\$ 3,172	\$ 2,997
Work in process and other	2,213	2,315
Finished manufactured goods	4,117	4,179
Goods acquired for resale	6,692	6,696
	\$ 16,194	\$ 16,187

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

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

	June 30, 2018	December 31, 2017
Land	\$ 2,289	\$ 2,292
Buildings and improvements	9,041	8,810
Machinery and equipment	27,932	21,935
Furniture, fixtures and other	4,695	4,387
	43,957	37,424
Accumulated depreciation	(20,009)	(17,320)
	\$ 23,948	\$ 20,104



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

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

	June 30, 2018	December 31, 2017
Railroad:		
Land	\$ 6,093	\$ 6,088
Track structure and other roadway	51,994	51,320
Locomotives, freight cars and other equipment	12,640	12,543
Construction in progress	1,039	989
	71,766	70,940
Accumulated depreciation	(9,259)	(8,627)
	62,507	62,313
Utilities and energy:		
Utility generation, transmission and distribution systems	74,975	74,660
Interstate natural gas pipeline assets	7,240	7,176
Independent power plants and other assets	8,142	7,499
Construction in progress	3,204	2,556
	93,561	91,891
Accumulated depreciation	(26,852)	(26,020)
	66,709	65,871
	\$ 129,216	\$ 128,184

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

	June 30 2018	December 31, 2017
Assets held for lease	\$ 12,5	07 \$ 12,318
Land	2	34 231
Buildings, machinery and other	1,4	89 1,444
	14,2	30 13,993
Accumulated depreciation	(4,1	65) (4,062)
	\$ 10,0	65 \$ 9,931

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

	F	First Six Months		
	2018			2017
Insurance and other	\$ 1,	302	\$	1,089
Railroad, utilities and energy	2,	444		2,389
Finance and financial products		321		321
	\$ 4,	067	\$	3,799

Note 12. Goodwill and other intangible assets

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

	June 30, 2018	De	cember 31, 2017
Balance at beginning of year	\$ 81,258	\$	79,486
Acquisitions of businesses	177		1,545
Other, including foreign currency translation	(185)		227
Balance at end of period	\$ 81,250	\$	81,258

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

	June 30, 2018				December 31, 2017																						
	Gross carrying amount																					cumulated ortization	Gross carrying amount			Accumulated amortization	
Insurance and other	\$	40,267	\$	8,342	\$	40,225	\$	7,707																			
Railroad, utilities and energy		1,018		349		988		324																			
	\$	41,285	\$	8,691	\$	41,213	\$	8,031																			
Trademarks and trade names	\$	5,398	\$	729	\$	5,381	\$	692																			
Patents and technology		4,380		2,635		4,341		2,493																			
Customer relationships		28,335		4,140		28,322		3,722																			
Other		3,172		1,187		3,169		1,124																			
	\$	41,285	\$	8,691	\$	41,213	\$	8,031																			

Amortization expense in the first six months was \$707 million in 2018 and \$740 million in 2017. Intangible assets with indefinite lives were approximately \$18.9 billion as of June 30, 2018 and December 31, 2017.

Note 13. Derivative contracts

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

	June 3	0, 2018	Decembe	r 31, 2017
		Notional		Notional
	Liabilities	Value	Liabilities	Value
x put options	\$ 2,006	\$ 27,658 ⁽¹⁾	\$ 2,172	\$ 28,753 ⁽¹⁾

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

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

	Second Quarter			First Six Months				
		2018		2017	2	2018		2017
Equity index put options	\$	372	\$	(65)	\$	166	\$	395

Note 13. Derivative contracts (Continued)

The equity index put option contracts are European style options written prior to March 2008 on four major equity indexes. The remaining contracts expire between April 2019 and January 2026. The remaining weighted average life of all contracts was approximately 2.5 years at June 30, 2018. In the second quarter of 2018, one equity index put option contract expired with no payment due to the counterparty.

Future payments, if any, under any given contract will be required if the prevailing index value is below the contract strike price at the expiration date. We received aggregate premiums of approximately \$4.1 billion on the remaining contracts at the contract inception dates and we have no counterparty credit risk. The aggregate intrinsic value (the undiscounted liability assuming the contracts are settled based on the index values and foreign currency exchange rates as of the balance sheet date) was \$930 million at June 30, 2018 and \$789 million at December 31, 2017. These contracts may not be unilaterally terminated or fully settled before the expiration dates and the ultimate amount of cash basis gains or losses on these contracts will not be determined until the contract expiration dates.

A limited number of our equity index put option contracts contain collateral posting requirements with respect to changes in the fair value or intrinsic value of the contracts and/or a downgrade of Berkshire's credit ratings. As of June 30, 2018, we did not have any collateral posting requirements. If Berkshire's credit ratings (currently AA from Standard & Poor's and Aa2 from Moody's) are downgraded below either A- by Standard & Poor's or A3 by Moody's, collateral of up to \$1.1 billion could be required to be posted.

Our regulated utility subsidiaries are exposed to variations in the prices of fuel required to generate electricity, wholesale electricity purchased and sold and natural gas supplied for customers. We may use forward purchases and sales, futures, swaps and options to manage a portion of these price risks. Most of the net derivative contract assets or liabilities of our regulated utilities are probable of recovery through rates and are offset by regulatory liabilities or assets. Derivative contract assets are included in other assets and were \$149 million as of June 30, 2018 and \$142 million as of December 31, 2017. Derivative contract liabilities are included in other liabilities and were \$93 million as of June 30, 2018 and \$82 million as of December 31, 2017.

Note 14. Supplemental cash flow information

Supplemental cash flow information follows (in millions).

	First Six N			iths
	2018			2017
Cash paid during the period for:				
Income taxes	\$ 2,3	58	\$	1,082
Interest:				
Insurance and other businesses	4	-64		390
Railroad, utilities and energy businesses	1,4	02		1,410
Finance and financial products businesses	1	82		211
Non-cash investing and financing activities:				
Liabilities assumed in connection with business acquisitions		76		167

Note 15. Unpaid losses and loss adjustment expenses

Our liabilities for unpaid losses and loss adjustment expenses (also referred to as "claim liabilities") under short-duration property and casualty insurance and reinsurance contracts are based upon estimates of the ultimate claim costs associated with claim occurrences as of the balance sheet date and include estimates for incurred-but-not-reported ("IBNR") claims. Reconciliations of the changes in claim liabilities, excluding liabilities under retroactive reinsurance contracts (see Note 16), for the six months ending June 30, 2018 and 2017 follow (in millions).

	2018	2017
Balances – beginning of year:		
Gross liabilities	\$ 61,122	\$ 53,379
Reinsurance recoverable on unpaid losses	(3,201)	(3,338)
Net liabilities	57,921	50,041
Incurred losses and loss adjustment expenses:		
Current accident year events	18,905	16,980
Prior accident years' events	(1,054)	(166)
Total incurred losses and loss adjustment expenses	17,851	16,814
Paid losses and loss adjustment expenses:		
Current accident year events	(7,332)	(6,656)
Prior accident years' events	(8,581)	(7,253)
Total payments	(15,913)	(13,909)
Foreign currency translation adjustment	(111)	327
Balances – June 30:		
Net liabilities	59,748	53,273
Reinsurance recoverable on unpaid losses	2,989	3,076
Gross liabilities	\$ 62,737	\$ 56,349

Incurred losses and loss adjustment expenses in the first six months of 2018 included net reductions of estimated ultimate liabilities for prior accident years of \$1,054 million compared to \$166 million in 2017. We reduced estimated ultimate liabilities for prior accident years related to primary insurance by \$768 million in the first six months of 2018 compared to \$532 million in the first six months of 2017. In the first six months of 2018, estimated liabilities for prior accident years for private passenger automobile insurance coverages were reduced \$430 million compared to \$106 million in 2017. In each period, we also reduced prior years' claim liabilities for medical professional liability and workers' compensation insurance coverages.

In the first six months of 2018, we reduced estimated ultimate liabilities with respect to prior accident years for property and casualty reinsurance by \$286 million, compared to an increase of \$366 million in the first six months of 2017. The comparative change reflected the impact in the 2017 period of unanticipated property claims and increases in estimated liabilities for certain U.K. personal injury claims resulting from the U.K. Ministry of Justice's decision to reduce the fixed discount rate to be used by insurers in lump sum settlement calculations.

Note 16. Retroactive reinsurance contracts

Retroactive reinsurance policies provide indemnification of losses and loss adjustment expenses of short-duration insurance contracts with respect to underlying loss events that occurred prior to the contract inception date. Claims payments may commence immediately after the contract date or, if applicable, once a contractual retention amount has been reached. Reconciliations of the changes in estimated liabilities for retroactive reinsurance unpaid losses and loss adjustment expenses ("claim liabilities") and related deferred charge reinsurance assumed assets for the six months ending June 30, 2018 and 2017 follows (in millions).

	2()18	20	17
	Unpaid losses and loss adjustment expenses	Deferred charges reinsurance assumed	Unpaid losses and loss adjustment expenses	Deferred charges reinsurance assumed
Balances – beginning of year:	\$ 42,937	\$ (15,278)	\$ 24,972	\$ (8,047)
Incurred losses and loss adjustment expenses				
Current year contracts			16,448	(6,078)
Prior years' contracts	(35)	548	(399)	528
Total	(35)	548	16,049	(5,550)
Paid losses and loss adjustment expenses	(787)		(630)	
Balances – June 30:	\$ 42,115	\$ (14,730)	\$ 40,391	\$ (13,597)
Incurred losses and loss adjustment expenses, net of deferred charges	\$ 513		\$ 10,499	

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

In the first quarter of 2017, National Indemnity Company ("NICO"), a wholly-owned subsidiary, entered into an agreement with various subsidiaries of American International Group, Inc. (collectively, "AIG"), which became effective on February 2, 2017. Under this agreement, NICO agreed to indemnify AIG for 80% of up to \$25 billion of losses and allocated loss adjustment expenses in excess of \$25 billion retained by AIG, with respect to certain commercial insurance loss events occurring prior to 2016. As of the effective date, we recorded premiums earned of \$10.2 billion, a liability for unpaid losses and loss adjustment expenses of \$16.4 billion and a deferred charge reinsurance assumed asset of \$6.2 billion. Berkshire agreed to guarantee the timely payment of all amounts due to AIG under the agreement. Our estimated ultimate claim liabilities with respect to the AIG contract at June 30, 2018 and at December 31, 2017 were \$18.2 billion, which reflected an increase of \$1.8 billion in estimated ultimate liabilities recorded in the fourth quarter of 2017. Deferred charge assets related to the AIG contract were approximately \$7.2 billion at June 30, 2018 and \$7.5 billion at December 31, 2017.

Incurred losses and loss adjustment expenses related to contracts written in prior years were \$513 million in the first six months of 2018 and \$129 million in the first six months of 2017. Such losses included recurring amortization of deferred charge assets and net gains from reductions of estimated ultimate claim liabilities.

Note 17. Notes payable and other borrowings

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

	Weighted Average Interest Rate	June 30, 2018	December 31, 2017
Insurance and other:			
Issued by Berkshire:			
U.S. Dollar denominated borrowings due 2018-2047	3.0%	\$ 9,809	\$ 10,603
Euro denominated borrowings due 2020-2035	1.1%	7,950	8,164
Short-term subsidiary borrowings	3.9%	1,795	1,832
Other subsidiary borrowings due 2018-2045	4.0%	5,604	6,725
		\$ 25,158	\$ 27,324

Note 17. Notes payable and other borrowings (Continued)

In the first six months of 2018, the carrying value of Berkshire's Euro denominated senior notes decreased \$219 million due to changes in the Euro/U.S. Dollar exchange rates, which produced a corresponding increase to pre-tax earnings of \$219 million as a reduction of interest expense. During the first six months of 2018, \$800 million of Berkshire U.S. Dollar denominated notes matured.

	Weighted Average Interest Rate	June 30, 2018	December 31, 2017
Railroad, utilities and energy:			
Issued by Berkshire Hathaway Energy Company ("BHE") and its subsidiaries:			
BHE senior unsecured debt due 2018-2048	4.5%	\$ 7,979	\$ 6,452
Subsidiary and other debt due 2018-2064	4.7%	28,727	28,739
Short-term debt	2.7%	3,424	4,488
Issued by BNSF due 2018-2097	4.7%	22,534	22,499
		\$ 62,664	\$ 62,178

BHE subsidiary debt represents amounts issued pursuant to separate financing agreements. Substantially all of the assets of certain BHE subsidiaries are, or may be, pledged or encumbered to support or otherwise secure debt. These borrowing arrangements generally contain various covenants, which pertain to leverage ratios, interest coverage ratios and/or debt service coverage ratios, among other covenants. During the first six months of 2018, BHE and its subsidiaries issued \$3.5 billion of long-term debt with maturity dates ranging from 2020 to 2048 with a weighted average interest rate of 3.2%. In July 2018, BHE and subsidiaries issued an additional \$2.05 billion of debt with maturities in 2049 with a weighted average interest rate of 4.3%. Proceeds from these debt issuances were used to repay debt, to fund capital expenditures and for general corporate purposes.

BNSF's borrowings are primarily senior unsecured debentures. In the first quarter of 2018, BNSF issued \$750 million of 4.05% senior unsecured debentures due in 2048 and \$650 million of debentures matured. In August 2018, BNSF issued \$750 million of 4.15% debentures due in 2048. As of June 30, 2018, BNSF, BHE and their subsidiaries were in compliance with all applicable debt covenants. Berkshire does not guarantee any debt, borrowings or lines of credit of BNSF, BHE or their subsidiaries.

	Weighted Average Interest Rate	June 30, 2018		Dec	ember 31, 2017
Finance and financial products:					
Issued by Berkshire Hathaway Finance Corporation ("BHFC") due 2018-2043	3.0%	\$	8,829	\$	12,926
Issued by other subsidiaries due 2018-2028	3.6%		122		159
		\$	8,951	\$	13,085

Borrowings of BHFC, a wholly owned finance subsidiary of Berkshire, consist of senior unsecured notes used to fund manufactured housing loans originated or acquired and assets held for lease of certain finance subsidiaries. Such borrowings are fully and unconditionally guaranteed by Berkshire. During the first six months of 2018, \$4.1 billion of BHFC senior notes matured.

As of June 30, 2018, our subsidiaries had unused lines of credit and commercial paper capacity aggregating approximately \$6.6 billion to support short-term borrowing programs and provide additional liquidity. Such unused lines of credit included about \$5.1 billion related to BHE and its subsidiaries. In addition to BHFC's borrowings, Berkshire guaranteed approximately \$1.8 billion of other subsidiary borrowings at June 30, 2018. Generally, Berkshire's guarantee of a subsidiary's debt obligation is an absolute, unconditional and irrevocable guarantee for the full and prompt payment when due of all payment obligations.



Note 18. Fair value measurements

Our financial assets and liabilities are summarized below as of June 30, 2018 and December 31, 2017 with fair values shown according to the fair value hierarchy (in millions). The carrying values of cash and cash equivalents, U.S. Treasury Bills, receivables and accounts payable, accruals and other liabilities are considered to be reasonable estimates of their fair values.

	Carrying Value	Fair Value	Quoted Prices (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
June 30, 2018					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 3,438	\$ 3,438	\$ 2,413		\$ —
U.S. states, municipalities and political subdivisions	464	464	—	464	_
Foreign governments	7,565	7,565	5,715	1,850	—
Corporate bonds	6,413	6,413	_	6,408	5
Mortgage-backed securities	644	644		644	—
Investments in equity securities	179,729	179,729	179,681	48	—
Investment in Kraft Heinz common stock	17,530	20,444	20,444	—	—
Loans and finance receivables	14,211	14,485		87	14,398
Derivative contract assets ⁽¹⁾	149	149	1	30	118
Derivative contract liabilities:					
Railroad, utilities and energy ⁽¹⁾	93	93		75	18
Equity index put options	2,006	2,006	—	_	2,006
Notes payable and other borrowings:					
Insurance and other	25,158	25,422	—	25,422	_
Railroad, utilities and energy	62,664	67,284	—	67,284	—
Finance and financial products	8,951	9,148	—	9,121	27
<u>December 31, 2017</u>					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 3,953	\$ 3,953	\$ 2,360		\$ —
U.S. states, municipalities and political subdivisions	854	854	_	854	_
Foreign governments	8,822	8,822	6,946	1,876	—
Corporate bonds	6,862	6,862	—	6,856	6
Mortgage-backed securities	862	862	—	862	—
Investments in equity securities	170,540	170,540	170,494	46	
Investment in Kraft Heinz common stock	17,635	25,306	25,306		_
Loans and finance receivables	13,748	14,136		17	14,119
Derivative contract assets ⁽¹⁾	142	142	1	28	113
Derivative contract liabilities:					
Railroad, utilities and energy ⁽¹⁾	82	82	3	69	10
Equity index put options	2,172	2,172	—		2,172
Notes payable and other borrowings:					
Insurance and other	27,324	28,180	—	28,180	
Railroad, utilities and energy	62,178	70,538	—	70,538	
Finance and financial products	13,085	13,582	_	13,577	5

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

Note 18. Fair value measurements (Continued)

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

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

<u>Level 2</u> – 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.

<u>Level 3</u> – 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, 2018 and 2017 follow (in millions).

	Investments in equity and fixed maturity securities		Net privative contract abilities
Six months ending June 30, 2018			
Balance at December 31, 2017	\$	6	\$ (2,069)
Gains (losses) included in:			
Earnings			256
Regulatory assets and liabilities			(14)
Acquisitions, dispositions and settlements		(1)	 (79)
Balance at June 30, 2018	\$	5	\$ (1,906)
Six months ending June 30, 2017			
Balance at December 31, 2016	\$ 17	7,321	\$ (2,824)
Gains (losses) included in:			
Earnings			473
Other comprehensive income	1	1,157	(2)
Regulatory assets and liabilities		—	(2)
Acquisitions, dispositions and settlements		(58)	(50)
Transfers into/out of Level 3	(18	3,412)	
Balance at June 30, 2017	\$	8	\$ (2,405)

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

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

Note 18. Fair value measurements (Continued)

Quantitative information as of June 30, 2018, with respect to assets and liabilities measured and carried at fair value on a recurring basis with the use of significant unobservable inputs (Level 3) follows (in millions).

	Fair Value	Principal Valuation Technique	Unobservable Input	Weighted Average
Derivative liabilities:				
Equity index put options	\$ 2,006	Option pricing model	Volatility	17%

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 six months ending June 30, 2018 are shown in the table below.

		ass A, \$5 Par Value 000 shares authori			s B, \$0.0033 Par V 00,000 shares auth	
	Issued	Treasury	Outstanding	Issued	Treasury	Outstanding
Balance at December 31, 2017	762,755	(11,680)	751,075	1,342,066,749	(1,409,762)	1,340,656,987
Conversions of Class A common stock to Class B common stock and exercises of replacement stock options issued in a						
business acquisition	(4,560)	_	(4,560)	7,181,203		7,181,203
Balance at June 30, 2018	758,195	(11,680)	746,515	1,349,247,952	(1,409,762)	1,347,838,190

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 1,645,074 shares outstanding as of June 30, 2018 and 1,644,846 shares outstanding as of December 31, 2017. In addition to our common stock, 1,000,000 shares of preferred stock are authorized, but none are issued.

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



Note 20. Accumulated other comprehensive income

A summary of the net changes in after-tax accumulated other comprehensive income attributable to Berkshire Hathaway shareholders and amounts reclassified out of accumulated other comprehensive income for the six months ending June 30, 2018 and 2017 follows (in millions).

	app	nrealized reciation of stments, net	c	Foreign urrency anslation	and gair defir	or service l actuarial ns/losses of ned benefit ision plans	Other	 cumulated other prehensive income
<u>2018</u>								
Balance at December 31, 2017	\$	62,093	\$	(3,114)	\$	(420)	\$ 12	\$ 58,571
Reclassifications to retained earnings		(61,340)		(65)		36	(6)	(61,375)
Other comprehensive income, net before reclassifications		(144)		(705)		(8)	5	(852)
Reclassifications into net earnings		(209)				62	 (5)	 (152)
Balance at June 30, 2018	\$	400	\$	(3,884)	\$	(330)	\$ 6	\$ (3,808)
Reclassifications into net earnings:								
Reclassifications before income taxes	\$	(265)	\$		\$	84	\$ (8)	\$ (189)
Applicable income taxes		(56)				22	 (3)	(37)
	\$	(209)	\$		\$	62	\$ (5)	\$ (152)
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 into net earnings		(383)				34	13	(336)
Balance at June 30, 2017	\$	51,333	\$	(4,047)	\$	(623)	\$ (11)	\$ 46,652
Reclassifications into net earnings:								
Reclassifications before income taxes	\$	(589)	\$		\$	45	\$ 24	\$ (520)
Applicable income taxes		(206)				11	11	(184)
	\$	(383)	\$		\$	34	\$ 13	\$ (336)

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 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. The acquisition price will be approximately \$2.5 billion. 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 acquisition will be completed in the third quarter of 2018.

Note 22. Business segment data

Our operating businesses include a large and diverse group of insurance, railroad, utilities and energy, finance, manufacturing, service and retailing businesses. Our reportable business segments are organized in a manner that reflects how management views those business activities. Certain businesses have been grouped together for segment reporting based upon similar products or product lines, marketing, selling and distribution characteristics, even though those business units are operated under separate local management. Revenues by segment for the second quarter and first six months of 2018 and 2017 were as follows (in millions).

		Second Q	uarte	r		First Siz	ix Months	
	2018			2017		2018		2017
Operating Businesses:								
Insurance:								
Underwriting:								
GEICO	\$	8,284	\$	7,244	\$	16,199	\$	14,089
Berkshire Hathaway Reinsurance Group		3,912		3,364		7,452		16,596
Berkshire Hathaway Primary Group		1,953		1,759		3,871		3,435
Investment income		1,399		1,284		2,612		2,416
Total insurance		15,548		13,651		30,134		36,536
BNSF		5,878		5,250		11,502		10,435
Berkshire Hathaway Energy		5,050		4,602		9,562		8,833
Manufacturing		13,853		12,738		26,787		24,835
McLane Company		12,427		12,581		24,616		24,682
Service and retailing		7,062		6,550		13,649		12,643
Finance and financial products		2,366		2,017		4,429		3,866
		62,184		57,389		120,679		121,830
Reconciliation of segments to consolidated amount:								
Corporate, eliminations and other		16		(133)		(6)		(204)
	\$	62,200	\$	57,256	\$	120,673	\$	121,626

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

	Second Q	uarte	r		S		
	 2018		2017		2018		2017
Operating Businesses:							
Insurance:							
Underwriting:							
GEICO	\$ 673	\$	119	\$	1,350	\$	294
Berkshire Hathaway Reinsurance Group	297		(375)		39		(1,118)
Berkshire Hathaway Primary Group	234		232		333		421
Investment income	1,392		1,283		2,597		2,412
Total insurance	2,596		1,259		4,319		2,009
BNSF	1,655		1,537		3,168		2,882
Berkshire Hathaway Energy	586		649		1,073		1,238
Manufacturing	2,135		1,939		3,990		3,426
McLane Company	67		69		127		157
Service and retailing	697		555		1,212		948
Finance and financial products	 565		492		1,059		942
	8,301		6,500		14,948		11,602
Reconciliation of segments to consolidated amount:							
Investment and derivative contract gains/losses	6,362		225		(1,653)		1,000
Interest expense, not allocated to segments	320		(646)		(17)		(857)
Equity method investments	327		346		728		627
Corporate, eliminations and other	(212)		(296)		(431)		(555)
	\$ 15,098	\$	6,129	\$	13,575	\$	11,817

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
	2018 2017		2018	2017
Insurance – underwriting	\$ 943	\$ (22)	\$ 1,350	\$ (289)
Insurance – investment income	1,142	965	2,154	1,873
Railroad	1,309	958	2,454	1,796
Utilities and energy	581	509	1,166	989
Manufacturing, service and retailing	2,141	1,662	3,963	2,979
Finance and financial products	429	323	803	614
Investment and derivative gains/losses	5,118	143	(1,308)	647
Other	348	(276)	291	(287)
Net earnings attributable to Berkshire Hathaway shareholders	\$ 12,011	\$ 4,262	\$ 10,873	\$ 8,322

Through our subsidiaries, we engage in a number of diverse business activities. We manage our operating businesses on an unusually decentralized basis. There are essentially no centralized or integrated business functions and there is minimal involvement by our corporate headquarters in the day-to-day business activities of the operating businesses. Our senior corporate management team participates in and is ultimately responsible for significant capital allocation decisions, investment activities and the selection of the Chief Executive to head each of the operating businesses. Beginning in 2018, our periodic net earnings include changes in unrealized gains and losses on our investments in equity securities. These gains and losses are likely to be very significant given the size of our current holdings and the volatility inherent in securities prices. Prior to 2018, these gains and losses were recorded in other comprehensive income. Thus, the new accounting treatment has no effect on the consolidated shareholders' equity we would have otherwise reported. The business segment data (Note 22 to the accompanying Consolidated Financial Statements) should be read in conjunction with this discussion.

Our after-tax earnings in the second quarter and first six months of 2018 were favorably affected by lower U.S. income tax expense, primarily attributable to a reduction in the U.S. statutory income tax rate from 35% to 21% effective January 1, 2018 in connection with the Tax Cuts and Jobs Act of 2017 ("TCJA") enacted on December 22, 2017. The effect of the lower U.S. statutory income tax rate in 2018, generally resulted in increased comparative after-tax earnings of our various business operations, although the effects varied, reflecting the differences in the mix of earnings subject to tax in the U.S. and internationally and the varying effects of U.S. state and local income taxes. Further, the effective U.S. income tax rates on dividend income under the TCJA are not significantly different from the prior income tax law.

Our insurance businesses generated after-tax earnings from underwriting of \$943 million and \$1,350 million in the second quarter and first six months of 2018, respectively, compared to losses of \$22 million and \$289 million, respectively, in 2017. Results in 2018 included reductions of estimated ultimate liabilities for prior years' property/casualty loss events, the favorable effects of foreign currency exchange rate changes on certain non-U.S. denominated liabilities of U.S subsidiaries and a lower effective income tax rate.

Our railroad business generated increased earnings in the second quarter and first six months of 2018 compared to 2017, reflecting an increase in unit volume, higher average revenue per car/unit and a lower effective income tax rate, partly offset by increased fuel and other operating costs. Our utilities and energy businesses produced higher after-tax earnings in the second quarter and first six months of 2018 compared to 2017, primarily due to a lower overall effective income tax rate and increased pre-tax earnings from renewables and natural gas pipelines. Earnings from our manufacturing, service and retailing businesses in the second quarter and first six months of 2018 increased 29% and 33%, respectively, over 2017, due to lower effective income tax rates and an 18% increase in year-to-date pre-tax earnings.

In the second quarter of 2018, after-tax gains from investments and derivative contracts were \$5.1 billion, while in the first six months of 2018, we incurred after-tax losses of \$1.3 billion. Investment gains/losses included after-tax gains of approximately \$4.5 billion in the second quarter and after-tax losses of approximately \$1.7 billion in the first six months from changes in market values on our investments in equity securities held at June 30, 2018. In 2017, after-tax investment gains on equity securities arose from the disposition or exchange of securities during the period based on the cost of the disposed security. In the first six months of 2017, we also recorded after-tax unrealized gains on our investments in equity securities of approximately \$8.2 billion in other comprehensive income. We believe that investment and derivative gains/losses, whether realized from dispositions or unrealized from changes in market prices of equity securities, are generally meaningless in understanding our reported results or evaluating the economic performance of our businesses. These gains and losses have caused and will continue to cause significant volatility in our periodic earnings.



Insurance—Underwriting

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

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

The timing and amount of catastrophe losses can produce significant volatility in our periodic underwriting results, particularly with respect to our reinsurance businesses. Generally, we consider catastrophe losses in excess of \$100 million from a current year event as significant. Changes in estimates for unpaid losses and loss adjustment expenses, including amounts established for occurrences in prior years can also significantly affect our periodic underwriting results. Unpaid loss estimates, including estimates under retroactive reinsurance contracts were approximately \$105 billion as of June 30, 2018. Our periodic underwriting results may also include significant foreign currency transaction gains and losses arising from the changes in the valuation of non-U.S. Dollar denominated reinsurance liabilities of our U.S. based insurance subsidiaries due to foreign currency exchange rate fluctuations.

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

		Second Q	uarte	er		First Six M	lontl	IS
	2018 2017				2018			2017
Underwriting gain (loss):								
GEICO	\$	673	\$	119	\$	1,350	\$	294
Berkshire Hathaway Reinsurance Group		297		(375)		39		(1,118)
Berkshire Hathaway Primary Group		234		232		333		421
Pre-tax underwriting gain (loss)		1,204		(24)		1,722		(403)
Income taxes and noncontrolling interests		261		(2)		372		(114)
Net underwriting gain (loss)	\$	943	\$	(22)	\$	1,350	\$	(289)
Effective income tax rate		21.4%		34.4%		21.4%	_	30.8%

GEICO

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

			Second (Quar	ter		First Six Months								
		2018			2017	7		201	8	2017					
	A	mount	%	A	Amount	%	Α	mount	%	Amount	%				
Premiums written	\$	8,237		\$	7,270		\$	16,926		\$ 14,857					
Premiums earned	\$	8,284	100.0	\$	7,244	100.0	\$	16,199	100.0	\$ 14,089	100.0				
Losses and loss adjustment expenses		6,505	78.5		6,108	84.3		12,580	77.7	11,698	83.0				
Underwriting expenses		1,106	13.4		1,017	14.1		2,269	14.0	2,097	14.9				
Total losses and expenses		7,611	91.9		7,125	98.4		14,849	91.7	13,795	97.9				
Pre-tax underwriting gain	\$	673		\$	119		\$	1,350		\$ 294					

Insurance—Underwriting (Continued)

GEICO (Continued)

Premiums written in the second quarter and first six months of 2018 were approximately \$8.2 billion and \$16.9 billion, respectively, representing increases of 13.3% and 13.9%, respectively, compared to 2017. These increases reflected voluntary auto policy-in-force growth of 4.9% and increased premiums per auto policy of approximately 8.7% over the past twelve months. The increase in premiums per policy was attributable to rate increases, coverage changes and changes in state and risk mix. The rate increases were in response to accelerating losses in recent years. Voluntary auto new business sales in the first six months of 2018 decreased 9.3% compared to our record growth over the first half of 2017, while our voluntary auto policies-in-force increased approximately 369,000 during the first six months of 2018.

Losses and loss adjustment expenses increased \$397 million (6.5%) in the second quarter and \$882 million (7.5%) in the first six months of 2018 compared to 2017. Our ratio of losses and loss adjustment expenses to premiums earned (the "loss ratio") in the first six months of 2018 was 77.7%, a decline of 5.3 percentage points compared to 2017. The decline in the loss ratio reflected the effects of premium rate increases and comparatively lower storm-related losses.

We also reduced ultimate claim loss estimates for prior years' loss events by \$430 million in the first six months of 2018 and \$106 million in the first six months of 2017. These reductions produced corresponding increases in pre-tax underwriting gains. The comparative increase in gains relating to prior years' claims was primarily related to collision and property damage losses, which usually have short claim-tails. Claims frequencies in the first six months of 2018 for property damage, collision and personal injury protection coverages declined approximately two percent compared to 2017, and decreased approximately three percent for bodily injury coverage. Average claims severities in the first six months of 2018 were higher for property damage and collision coverages (four to six percent range) and bodily injury coverage (five to seven percent range).

Our underwriting expenses in the first six months of 2018 were approximately \$2.3 billion, an increase of \$172 million (8.2%) over 2017. Our expense ratio (underwriting expenses to premiums earned) for the first six months of 2018 decreased 0.9 percentage points compared to 2017. The largest components of underwriting expenses are employee-related expenses (salaries and benefits) and advertising costs. The increase in underwriting expenses reflects the increase in policies-in-force.

Berkshire Hathaway Reinsurance Group

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

With the exception of our retroactive reinsurance and periodic payment annuity businesses, we strive to generate pre-tax underwriting profits. Time-value-of-money concepts are important elements in establishing prices for our retroactive reinsurance and periodic payment annuity businesses due to the expected long durations of the liabilities. We expect to incur pre-tax underwriting losses from such businesses, primarily through deferred charge amortization and discount accretion charges. Premiums received at inception under these contracts are often large, which are then available for investment. A summary of the premiums and pre-tax underwriting results of our reinsurance business follows (in millions).

	Premiums earned									Pre-tax underwriting gain (loss)									
		Second	Quar	ter	First Six Months					Second	ter	First Six Months			onths				
		2018 2017			2018		2017		2018		2017		2018		2017				
Property/casualty	\$	2,296	\$	1,960	\$	4,322	\$	3,702	\$	338	\$	40	\$	468	\$	(370)			
Retroactive reinsurance				1				10,186		(147)		(333)		(458)	_	(594)			
		2,296		1,961		4,322		13,888		191		(293)		10		(964)			
Life/health		1,314		1,173		2,548		2,258		120		116		216		189			
Periodic payment annuity		302		230		582		450		(14)		(198)		(187)		(343)			
		1,616		1,403		3,130		2,708		106		(82)		29		(154)			
	\$	3,912	\$	3,364	\$	7,452	\$	16,596	\$	297	\$	(375)	\$	39	\$	(1,118)			



Insurance—Underwriting (Continued)

Property/casualty

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

	 Premiums earned									Pre-ta	ax underv	writing	g gain (los	5)	
	Second	Quart	er	First Six Months					Second (Quarte	r		First Si	x Months	
	 2018		2017		2018		2017	:	2018	2	2017	2	2018		2017
NICO Group	\$ 1,263	\$	1,183	\$	2,317	\$	2,271	\$	278	\$	52	\$	301	\$	(217)
General Re Group	1,033		777		2,005		1,431		60		(12)		167		(153)
	\$ 2,296	\$	1,960	\$	4,322	\$	3,702	\$	338	\$	40	\$	468	\$	(370)

NICO Group's premiums earned in the second quarter and first six months of 2018 increased 7% and 2%, respectively, compared to 2017. For the first six months of 2018, nearly half of NICO Group's premiums written and earned derived from two contracts, which included a 10-year, 20% quota-share contract with Insurance Australia Group Ltd. that incepted in July 2015. General Re Group's premiums earned in the second quarter and first six months of 2018 increased \$256 million (33%) and \$574 million (40%), respectively, compared to 2017. The increases reflected higher direct and broker markets business, derived primarily from new business and increased participations for renewal business. 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.

On a combined basis, our property/casualty reinsurance business generated pre-tax underwriting gains of \$338 million and \$468 million in the second quarter and first six months of 2018, respectively, compared to pre-tax gains of \$40 million in the second quarter and pre-tax losses of \$370 million in the first six months of 2017. There were no significant catastrophe loss events in 2018. In the first six months of 2017, we incurred estimated losses of \$165 million from a cyclone in Australia.

In the first six months of 2018, we also decreased estimated ultimate claims liabilities for prior years' loss events by \$286 million, compared to an increase of \$366 million in the first six months of 2017. The increase in prior years' losses in 2017 was driven by the U.K. Ministry of Justice's decision in the first quarter to reduce the fixed discount rate required in lump sum settlement calculations of U.K. personal injury claims and by unanticipated property claims from events in 2016.

Retroactive reinsurance

Premiums earned in the first six months of 2017 included \$10.2 billion from an aggregate excess-of-loss retroactive reinsurance agreement with various subsidiaries of American International Group, Inc. (the "AIG Agreement"), which became effective on February 2, 2017. At the inception of the AIG Agreement, we also 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 an initial deferred charge asset of \$6.2 billion. Thus, on the effective date, the AIG Agreement had no effect on our pre-tax underwriting results.

Pre-tax underwriting losses from retroactive reinsurance contracts in the second quarter and first six months of 2018 were \$147 million and \$458 million, respectively, compared to \$333 million and \$594 million, respectively, in the same periods in 2017. Certain liabilities relating to retroactive reinsurance contracts written by our U.S. subsidiaries are denominated in foreign currencies. Underwriting results include gains and losses from the re-measurement of such liabilities from changes in foreign currency exchange rates. Changes in exchange rates generated pre-tax gains of \$124 million and \$64 million in the second quarter and first six months of 2018, respectively, compared to pre-tax losses in the second quarter and first six months of \$102 million and \$191 million, respectively, in 2017.

Pre-tax underwriting losses before foreign currency gains/losses in the first six months of 2018 and 2017 were \$522 million and \$403 million, respectively. The increase in pre-tax losses was primarily due to amortization charges related to the AIG Agreement, which included the effects of a previously reported increase to our ultimate claim liability estimates of approximately \$1.8 billion and an increase in the related deferred charge asset of \$1.7 billion in the fourth quarter of 2017.

Gross unpaid losses assumed under retroactive reinsurance contracts were approximately \$42.1 billion at June 30, 2018 and \$42.9 billion at December 31, 2017. Unamortized deferred charge assets related to such reinsurance contracts were approximately \$14.7 billion at June 30, 2018 and \$15.3 billion at December 31, 2017. Deferred charge asset balances will be amortized as charges to pre-tax earnings over the expected remaining claims settlement periods.



Insurance—Underwriting (Continued)

Life/health

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

		Premiun	ns earned			Pre-tax unde	erwriting gain	
	Second	Quarter	First Si	x Months	Second	Quarter	First Siz	x Months
	2018	2017	2018	2017	2018	2017	2018	2017
General Re Group	\$ 936	\$ 801	\$ 1,855	\$ 1,538	\$ 67	\$ 39	\$ 114	\$ 39
BHLN Group	378	372	693	720	53	77	102	150
	\$ 1,314	\$ 1,173	\$ 2,548	\$ 2,258	\$ 120	\$ 116	\$ 216	\$ 189

General Re Group's premiums earned in the second quarter and first six months of 2018 increased \$135 million (17%) and \$317 million (21%), respectively, compared to 2017. The increases were primarily attributable to growth in Asia and Australia markets and foreign currency translation effects of a comparatively weaker U.S. Dollar. The General Re Group produced pre-tax underwriting gains in the first six months of \$114 million in 2018 and \$39 million in 2017. Underwriting results in 2018 reflected increased pre-tax gains from international life business, attributable to increased volumes and foreign currency translation effects, and lower claim losses from run-off and life business in North America.

BHLN Group's pre-tax underwriting results in the first six months of 2018 and 2017 included pre-tax gains of \$100 million and \$152 million, respectively, from the run-off of variable annuity reinsurance contracts that provide guarantees on closed blocks of variable annuity business. Periodic underwriting results from this business reflect changes in estimated liabilities for guaranteed benefits, which result from changes in securities markets and interest rates and from the periodic amortization of expected profit margins. Underwriting results from variable annuity contracts can be volatile, reflecting the volatility of securities markets, interest rates and foreign currency exchange rates. Estimated liabilities for variable annuity guarantees were approximately \$1.7 billion at June 30, 2018 and \$1.8 billion at December 31, 2017.

BHLN Group's life reinsurance premiums earned in the second quarter and first six months of 2018 were \$374 million and \$685 million, respectively, compared to \$368 million and \$712 million, respectively, in the corresponding 2017 periods. This business produced near break-even pre-tax underwriting results in each period.

Periodic payment annuity

Periodic payment annuity premiums earned in the second quarter and first six months of 2018 increased \$72 million (31%) and \$132 million (29%), respectively, compared to 2017. Periodic payment annuity contracts produced pre-tax losses of \$14 million and \$187 million in the second quarter and first six months of 2018, respectively, compared to pre-tax losses of \$198 million and \$343 million, respectively, for the same periods in 2017. Certain periodic payment annuity contracts written by our U.S. subsidiaries are denominated in foreign currencies, primarily the Great Britain Pound Sterling. Pre-tax underwriting results in 2018 included pre-tax gains of \$106 million in the second quarter and \$36 million in the first six months from the re-measurement of such liabilities due to changes in exchange rates compared to pre-tax losses of \$86 million in the second quarter and \$110 million in the first six months of 2017.

Before the effect of foreign currency gains and losses, this business had pre-tax underwriting losses of \$223 million in the first six months of 2018 and \$233 million in the first six months of 2017. These losses were primarily attributable to the recurring discount accretion of annuity liabilities. Discounted annuity liabilities approximated \$11.8 billion at June 30, 2018 and \$11.2 billion at December 31, 2017, reflecting a weighted average discount rate of approximately 4.1%.

Insurance—Underwriting (Continued)

Berkshire Hathaway Primary Group

The Berkshire Hathaway Primary Group ("BH Primary") consists of a wide variety of independently managed insurance underwriting businesses that primarily provide a variety of commercial insurance solutions, including healthcare malpractice, workers' compensation, automobile, general liability, property and various specialty coverages for small, medium and large clients. The largest of these insurers include Berkshire Hathaway Specialty Insurance ("BH Specialty"), Berkshire Hathaway Homestate Companies ("BHHC"), MedPro Group, Berkshire Hathaway GUARD Insurance Companies ("GUARD") and National Indemnity Company ("NICO Primary"). Other BH Primary insurers include U.S. Liability Insurance Company, Applied Underwriters and Central States Indemnity Company.

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

		Second	Quarter	First Six Months							
	201	8	20	17	20	18	2017				
	Amount	%	Amount	%	Amount	%	Amount	%			
Premiums written	\$ 2,110		\$ 1,801		\$ 4,271		\$ 3,650				
Premiums earned	\$ 1,953	100.0	\$ 1,759	100.0	\$ 3,871	100.0	\$ 3,435	100.0			
Losses and loss adjustment expenses	1,214	62.2	1,047	59.5	2,465	63.7	2,084	60.7			
Underwriting expenses	505	25.9	480	27.3	1,073	27.7	930	27.0			
Total losses and expenses	1,719	88.1	1,527	86.8	3,538	91.4	3,014	87.7			
Pre-tax underwriting gain	\$ 234		\$ 232		\$ 333		\$ 421				

Premiums written in both the second quarter and first six months of 2018 increased 17% compared to the corresponding 2017 periods. These increases were primarily attributable to BH Specialty, MedPro Group, and GUARD. Premiums earned in the first six months of 2018 increased \$436 million (13%) compared to the first six months of 2017, reflecting the growth of written premiums of these businesses over the past year.

BH Primary produced pre-tax underwriting gains of \$234 million and \$333 million in the second quarter and first six months of 2018, respectively, compared to \$232 million and \$421 million in the second quarter and first six months of 2017, respectively. Losses and loss adjustment expenses in the first six months included net reductions of estimated ultimate liabilities for prior years' loss events of \$338 million in 2018 and \$426 million in 2017, which produced corresponding increases in pre-tax underwriting gains. The liability reductions in each year primarily related to healthcare malpractice and workers' compensation business. BH Primary writes significant levels of commercial liability and workers' compensation insurance and the related claim costs may be subject to higher severity and longer claim-tails, which could give rise to significant increases in claims liabilities in the future attributable to higher than expected claim settlements, adverse litigation or judicial rulings and other factors not currently anticipated.

Insurance—Investment Income

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

	Second	Quarter	First Six Months				
	2018	2017	2018	2017			
Interest and other investment income	\$ 399	\$ 280	\$ 851	\$ 526			
Dividend income	993	1,003	1,746	1,886			
Investment income before income taxes and noncontrolling interests	1,392	1,283	2,597	2,412			
Income taxes and noncontrolling interests	250	318	443	539			
Net investment income	\$ 1,142	\$ 965	\$ 2,154	\$ 1,873			
Effective income tax rate	17.9%	24.7%	17.0%	22.3%			

Insurance—Investment Income (Continued)

Pre-tax interest and other investment income increased \$119 million (43%) in the second quarter and \$325 million (62%) in the first six months of 2018 compared to the same periods in 2017. The increases reflected higher short-term interest rates and fair value adjustments related to a limited partnership investment in the first quarter, partly offset by lower interest from reduced investments in fixed maturity securities. Dividend income declined \$10 million (1%) in the second quarter and \$140 million (7%) in the first six months of 2018 as compared to the same periods in 2017. The comparative changes in dividend income reflected the impact of Restaurant Brands International's redemption of our \$3 billion investment in 9% preferred stock in December 2017 and other changes in our portfolio of equity securities. Our invested assets continue to include significant levels of short-term investments. We believe that maintaining ample liquidity is paramount and we insist on safety over yield with respect to such investments.

Invested assets of our insurance businesses derive from shareholder capital, including reinvested earnings, and from net liabilities under insurance and reinsurance contracts or "float." The major components of float are unpaid losses and loss adjustment expenses, including liabilities under retroactive reinsurance contracts, life, annuity and health benefit liabilities, unearned premiums and other liabilities due to policyholders, less premium and reinsurance receivables, deferred charges assumed under retroactive reinsurance contracts and deferred policy acquisition costs. Float approximated \$116 billion at June 30, 2018 and \$114 billion at December 31, 2017. Our average cost of float in the first six months of 2018 was negative, as our underwriting operations generated pre-tax earnings of \$1.7 billion. Our average cost of float for the year ending December 31, 2017 was approximately 3%, reflecting pre-tax underwriting losses of approximately \$3.2 billion, most of which was incurred in the last half of the year.

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

	 June 30, 2018	De	cember 31, 2017
Cash, cash equivalents and U.S. Treasury Bills	\$ 69,279	\$	73,285
Equity securities	173,154		163,134
Fixed maturity securities	18,298		21,092
	\$ 260,731	\$	257,511

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

	Aı	nortized cost	Unrealized gains/losses		Carrying value	
U.S. Treasury, U.S. government corporations and agencies	\$	3,456	\$ (2	5)	\$ 3,431	
States, municipalities and political subdivisions		445	1	2	457	
Foreign governments		7,549	1	4	7,563	
Corporate bonds, investment grade		5,127	29	6	5,423	
Corporate bonds, non-investment grade		680	15	0	830	
Mortgage-backed securities		535	5	9	594	
	\$	17,792	\$ 50	6	\$ 18,298	

U.S. government obligations are rated AA+ or Aaa by the major rating agencies. Approximately 89% of all state, municipal and political subdivisions, foreign government obligations and mortgage-backed securities were rated AA or higher. Non-investment grade securities represent securities rated below BBB- or Baa3. Foreign government securities include obligations issued or unconditionally guaranteed by national or provincial government entities.

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				
	2018	2017	2018	2017			
Revenues	\$ 5,878	\$ 5,250	\$ 11,502	\$ 10,435			
Operating expenses:							
Compensation and benefits	1,328	1,255	2,643	2,552			
Fuel	830	577	1,597	1,182			
Purchased services	714	609	1,406	1,235			
Depreciation and amortization	575	592	1,146	1,165			
Equipment rents, materials and other	520	424	1,030	911			
Total operating expenses	3,967	3,457	7,822	7,045			
Interest expense	256	256	512	508			
	4,223	3,713	8,334	7,553			
Pre-tax earnings	1,655	1,537	3,168	2,882			
Income taxes	346	579	714	1,086			
Net earnings	\$ 1,309	\$ 958	\$ 2,454	\$ 1,796			
Effective income tax rate	20.9%	37.7%	22.5%	37.7%			

BNSF's revenues in the second quarter and first six months of 2018 were \$5.9 billion and \$11.5 billion, respectively, representing increases of \$628 million (12.0%) and \$1,067 million (10.2%), respectively, versus the corresponding periods in 2017. During the first six months of 2018, revenues reflected a 3.6% comparative increase in aggregate average revenue per car/unit and a 5.2% increase in volume. Our year-to-date volume was approximately 5.3 million cars/units compared to 5.0 million in 2017. The increase in average revenue per car/unit was attributable to higher fuel surcharge revenue driven primarily by higher fuel prices, increased rates per car/unit, and business mix changes. Pre-tax earnings were approximately \$1.7 billion and \$3.2 billion in the second quarter and first six months of 2018, respectively, increases of 7.7% and 9.9%, respectively, compared to the corresponding periods in 2017.

Revenues from consumer products were \$2.0 billion in the second quarter and \$3.8 billion in the first six months of 2018, representing increases of 13.6% and 12.2%, respectively, from 2017. The increases reflected higher average revenue per unit and volume increases of 4.7% in the second quarter and 5.4% in the first six months. The increases were attributable to higher intermodal volumes due to general economic growth and tight truck capacity leading to conversion from highway to rail, as well as strength in imports and containerized agricultural product exports, partly offset by a sizable contract loss.

Revenues from industrial products in 2018 were \$1.5 billion in the second quarter and \$2.8 billion for the first six months, or increases of 16.3% and 13.7%, respectively, from the comparable 2017 periods. The increases were attributable to volume increases of 10.4% in the second quarter and 9.8% in the first six months as well as higher average revenue per car/unit. Volumes in 2018 were higher primarily due to the energy and industrial sectors which drove demand for sand, petroleum products, steel, and plastics. The first six months of 2018 also included higher taconite volume.

Revenues from agricultural products in 2018 increased 10.1% in the second quarter to \$1.2 billion and increased 7.0% to \$2.3 billion for the first six months when compared to the same periods in 2017. The second quarter increase reflected higher volumes of 9.1% and higher average revenue per car/unit. In the first six months, higher volumes of 7.8% were partially offset by slightly lower average revenue per car/unit. Volumes increased due to strong export and domestic grain shipments, as well as higher fertilizer and other grain products volumes.

Revenues from coal in 2018 decreased 0.1% in the second quarter to \$911 million and 0.7% in the first six months to \$1.9 billion compared to 2017. The decline reflected lower volumes of 0.5% in the second quarter and 1.4% year-to-date partially offset by slightly higher average revenue per car/unit. The volume decreases in 2018 were due mainly to utility plant retirements, partially offset by market share gains and increased export volumes.

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

Operating expenses in the second quarter and first six months of 2018 were \$4.0 billion and \$7.8 billion, respectively, increases of \$510 million (14.8%) and \$777 million (11.0%), respectively, compared to the same periods in 2017. Our ratios of operating expenses to revenues increased 1.7 percentage points to 67.5% in the second quarter and 0.5 percentage points to 68.0% for the first six months of 2018 versus the corresponding prior year periods.

Compensation and benefits expenses increased \$73 million (5.8%) for the second quarter and increased \$91 million (3.6%) for the first six months of 2018, primarily due to wage inflation, volume-related increases, and higher training costs. Fuel expenses increased \$253 million (43.8%) for the second quarter and increased \$415 million (35.1%) for the first six months of 2018 primarily due to higher average fuel prices and increased volumes.

Purchased services expenses increased \$105 million (17.2%) in the second quarter and \$171 million (13.8%) in the first six months of 2018 as compared to 2017. The increases are due to higher purchased transportation costs of our logistics services business, as well as increased intermodal ramping, drayage and other volume-related costs.

In the second quarter and first six months of 2018, equipment rents, materials and other expense increased \$96 million (22.6%) and \$119 million (13.1%), respectively, compared to 2017. These increases resulted from higher locomotive materials, derailment-related costs, property taxes and personal injury expenses.

BNSF's effective income tax rate was 20.9% and 22.5% for the second quarter and first six months of 2018, respectively, as compared to 37.7% in both corresponding periods in 2017. The decrease was driven by the reduction in the U.S. statutory income tax rate under the TCJA, effective January 1, 2018, as well as various state income tax rate reductions enacted in 2018.

Utilities and Energy ("Berkshire Hathaway Energy Company")

We currently own 90.4% of the outstanding common stock of Berkshire Hathaway Energy Company ("BHE"), which operates a global energy business. BHE's domestic regulated utility interests are comprised of PacifiCorp, MidAmerican Energy Company ("MEC") and NV Energy. In Great Britain, BHE subsidiaries operate two regulated electricity distribution businesses referred to as Northern Powergrid. BHE also owns two domestic regulated interstate natural gas pipeline companies. Other energy businesses include a regulated electricity transmission-only business in Alberta, Canada ("AltaLink, L.P.") and a diversified portfolio of independent power projects. In addition, BHE also operates the second-largest residential real estate brokerage firm and one of the largest residential real estate brokerage franchise networks in the United States.

The rates our regulated businesses charge customers for energy and services are based, in large part, on the costs of business operations, including income taxes and a return on capital, and are subject to regulatory approval. To the extent these regulated operations are not allowed to include such costs in the approved rates, operating results will be adversely affected. The Tax Cuts and Jobs Act of 2017 reduced the U.S. federal statutory income tax rate of our domestic regulated utilities from 35% to 21%. The resulting effects of the lower U.S. income tax expense of those regulated utilities are expected to be substantially offset over time by lower revenues and pre-tax earnings. Revenues and earnings of BHE are summarized below (in millions).

	Second Quarter						First Six Months									
	Revenues				Earnings			Revenues								
		2018	2017		2018		2017		2018		2017		2018			2017
PacifiCorp	\$	1,198	\$	1,256	\$	212	\$	258	\$	2,400	\$	2,548	\$	385	\$	523
MidAmerican Energy Company		730		669		56		90		1,497		1,377		96		152
NV Energy		760		761		95		141		1,385		1,355		135		192
Northern Powergrid		248		220		50		64		523		465		159		167
Natural gas pipelines		242		190		53		43		621		508		272		243
Other energy businesses		595		547		114		51		1,095		1,034		134		66
Real estate brokerage		1,277		959		107		113		2,041		1,546		97		116
Corporate interest						(101)		(111)						(205)		(221)
	\$	5,050	\$	4,602					\$	9,562	\$	8,833				
Pre-tax earnings						586		649						1,073		1,238
Income taxes						(63)		72						(230)		119
Net earnings						649		577						1,303		1,119
Noncontrolling interests						68		68						137		130
Net earnings attributable to Berkshire Hathaway sha	reho	lders			\$	581	\$	509					\$	1,166	\$	989
Effective income tax rate						(10.7)%		11.1%					(2	21.4)%		9.6%

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

PacifiCorp

PacifiCorp operates a regulated electric utility in portions of several Western states, including Utah, Oregon and Wyoming. Revenues in the second quarter and first six months of 2018 decreased 5% and 6%, respectively, compared to the same periods in 2017. Retail revenues in the second quarter of 2018 decreased \$67 million and \$178 million in the first six months, compared to 2017. The declines reflected the effects of lower average rates (\$125 million year-to-date), primarily due to refund accruals related to 2017 tax reform (\$53 million in the second quarter and \$106 million in the first six months), and a year-to-date reduction in volumes (2.3%), largely attributable to the impacts of weather. Wholesale and other revenues increased due to higher volumes partially offset by lower market rates.

Pre-tax earnings decreased \$46 million (18%) in the second quarter and \$138 million (26%) in the first six months of 2018 as compared to the same periods in 2017. Utility margins (operating revenues less fuel and purchased energy costs) in the second quarter and first six months of 2018 were \$791 million and \$1,542 million, respectively, representing decreases of \$55 million (7%) and \$144 million (9%) versus the comparable periods in 2017. These decreases were primarily due to the declines in revenues, which included the refund accruals relating to 2017 tax reform. PacifiCorp's after-tax earnings in the second quarter and first six months of 2018 were \$185 million and \$333 million, respectively, representing an increase of \$9 million (5%) in the second quarter and a decrease of \$22 million (6%) from the first six months of 2017.

MidAmerican Energy Company

MEC operates a regulated electric and natural gas utility primarily in Iowa and Illinois. Revenues in the second quarter of 2018 were \$730 million, an increase of \$61 million (9%) as compared to the same period in 2017. Electric operating revenues increased \$52 million compared to 2017. The increase in electric revenues was attributable to higher retail revenues (\$62 million), reflecting comparative increases from higher recoveries through bill riders (substantially offset in cost of sales, operating expenses and income tax expense) and volumes, partially offset by lower average rates predominantly due to refund accruals related to 2017 tax reform. Pre-tax earnings in the second quarter of 2018 decreased \$34 million (38%) compared to the same period in 2017. Electric utility margins in the second quarter of 2018 were \$471 million, an increase of \$44 million compared to 2017, which was primarily due to the net increase in retail revenues. However, this increase was more than offset by increased depreciation, maintenance and other operating expenses. The increase in depreciation included \$51 million from Iowa revenue sharing and \$15 million from wind generation and other plant placed in-service.

Revenues in the first six months of 2018 increased \$120 million (9%) compared to 2017. The increase reflected increases in electric operating revenues (\$88 million) and natural gas operating revenues (\$20 million). The increase in electric revenues was attributable to higher retail revenues (\$94 million), reflecting comparative increases from higher recoveries through bill riders and volumes, partially offset by refund accruals related to 2017 tax reform. The increase in natural gas revenues was primarily due to increased volumes, partially offset by a lower average per-unit price and refund accruals related to 2017 tax reform. Pre-tax earnings in the first six months of 2018 decreased \$56 million (37%) compared to the same period in 2017. Electric utility margins in the first six months of 2018 were \$832 million, an increase of \$74 million compared to 2017, which was primarily due to the net increase in retail revenues. However, this increase was more than offset by increased depreciation, maintenance and other operating expenses. The increase in depreciation included \$79 million from Iowa revenue sharing and \$29 million from wind generation and other plant placed in-service.

MEC's after-tax earnings in 2018 and 2017 were significantly greater than pre-tax earnings due to the significant production income tax credits it receives related to its wind-powered generating facilities. MEC's after-tax earnings in the second quarter and first six months of 2018 were \$103 million and \$206 million, respectively, declines of \$28 million (21%) and \$27 million (12%), respectively, as compared to the same periods in 2017.

NV Energy

NV Energy operates regulated electric and natural gas utilities in Nevada. Revenues were unchanged in the second quarter and increased \$30 million (2%) in the first six months of 2018 compared to the same periods in 2017. In the first six months of 2018, electric operating revenues increased \$21 million, reflecting increased pass-through cost adjustments and retail customer growth, partly offset by reductions due to the effects of 2017 tax reform and lower retail rates attributable to a 2017 regulatory rate review. Natural gas operating revenue increased \$9 million in the first six months of 2018, primarily due to higher rates, partially offset by lower customer usage.

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

Pre-tax earnings in the second quarter and first six months of 2018 decreased \$46 million (33%) and \$57 million (30%), respectively, compared to the same periods in 2017. The decreases were primarily due to lower electric utility margins and increased depreciation, maintenance and other operating costs. Electric utility margins in the second quarter and first six months of 2018 were \$414 million and \$743 million, respectively, representing decreases of \$21 million (5%) and \$22 million (3%) versus the comparable periods in 2017. The decreases were primarily due to the declines in revenues from the effects of 2017 tax reform. NV Energy's after-tax earnings in the second quarter and first six months of 2018 were \$77 million and \$110 million, respectively, declines of 15% and 11%, respectively, from the corresponding 2017 periods.

Northern Powergrid

Revenues increased \$28 million and \$58 million in the second quarter and first six months of 2018 compared to same periods in 2017, primarily due to the favorable foreign currency translation effects of a weaker U.S. Dollar in 2018 and increased smart meter and distribution revenues. Pre-tax earnings in the second quarter of 2018 decreased \$14 million (22%) and \$8 million (5%) in the first six months of 2018 compared to 2017, primarily due to higher depreciation and other operating expenses, including pension settlement losses in 2018, partly offset by favorable foreign currency translation effects.

Natural gas pipelines

Revenues increased \$52 million (27%) in the second quarter of 2018 and increased \$113 million (22%) in the first six months compared to 2017, primarily due to higher transportation revenues and increased gas sales volumes related to system balancing activities, which were largely offset in cost of sales. Pre-tax earnings increased \$10 million (23%) and \$29 million (12%) in the second quarter and first six months of 2018, respectively, compared to 2017. The increases were primarily due to the increases in transportation revenues, partly offset by comparative increases in operations and maintenance expenses.

Other energy businesses

Revenues increased \$48 million (9%) in the second quarter of 2018 and \$61 million (6%) in the first six months compared to the same periods in 2017, reflecting comparative increases of 9% and 10%, respectively, from renewable energy and comparative increases of 10% and 9%, respectively, from AltaLink, L.P. Pre-tax earnings in the second quarter and first six months of 2018 increased \$63 million and \$68 million, respectively, compared to the same periods in 2017. The increases were primarily attributable to the increased revenues from renewable energy and AltaLink, L.P. as well as lower other operating expenses, partly offset by increased depreciation expense.

Real estate brokerage

Revenues in the second quarter and first six months of 2018 increased 33% and 32%, respectively, as compared to the same periods in 2017, primarily due to recent business acquisitions. Pre-tax earnings declined \$6 million in the second quarter and \$19 million in the first six months of 2018 compared to 2017, primarily due to higher operating costs and interest expense.

Corporate interest

Corporate interest includes interest on unsecured debt issued by the BHE holding company and borrowings from Berkshire insurance subsidiaries in connection with certain of BHE's business acquisitions, which were fully repaid in the third quarter of 2017. Corporate interest declined 7% in the first six months of 2018 as compared to 2017, primarily due to lower average borrowings.

Income taxes

BHE's consolidated effective income tax rates for the first six months of 2018 and 2017 were (21.4)% and 9.6%, respectively. BHE's effective income tax rates regularly reflect significant production tax credits from wind-powered electricity generation placed in service by our domestic regulated utilities and other energy businesses. The effective tax rate in the first six months of 2018 decreased primarily due to the reduction in the U.S. federal corporate income tax rate, as well as from lower state income tax expense, an increase in recognized production tax credits, lower U.S. income taxes on foreign earnings and favorable impacts of rate making.

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				Earnin			*		
	2018		2017		2018		2017		2018		2017	2018			2017	
Manufacturing	\$ 13,853	\$	12,738	\$	2,135	\$	1,939	\$	26,787	\$	24,835	\$	3,990	\$	3,426	
Service and retailing	19,489		19,131		764		624		38,265		37,325		1,339		1,105	
	\$ 33,342	\$	31,869					\$	65,052	\$	62,160					
Pre-tax earnings					2,899		2,563			_			5,329		4,531	
Income taxes and noncontrolling interests					758		901						1,366		1,552	
				\$	2,141	\$	1,662					\$	3,963	\$	2,979	
Effective income tax rate					25.5%		34.5%						25.0%		33.6%	

* Excludes certain acquisition accounting expenses, which were primarily from the amortization of identified intangible assets recorded in connection with our business acquisitions. The after-tax acquisition accounting expenses excluded from earnings in the preceding table were \$213 million and \$422 million in the second quarter and first six months of 2018, respectively, compared to \$169 million and \$301 million in the second quarter and first six months of 2018, respectively, compared to \$169 million and \$301 million in the second quarter and first six months of 2017, respectively. These expenses are included in "Other" in the summary of earnings on page 26 and in the "Other" earnings section on page 42.

Manufacturing

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

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

	Second Quarter							First Six Months								
		Revenues				Pre-tax e	earnings	Reve	enues	Pre-tax	earnings					
		2018		2017		2018	2017	2018	2017	2018	2017					
Industrial products	\$	7,287	\$	6,637	\$	1,404	\$ 1,267	\$ 14,364	\$ 13,145	\$ 2,715	\$ 2,261					
Building products		3,340		3,125		415	401	6,174	5,859	667	650					
Consumer products		3,226		2,976		316	271	6,249	5,831	608	515					
	\$	13,853	\$	12,738	\$	2,135	\$ 1,939	\$ 26,787	\$ 24,835	\$ 3,990	\$ 3,426					

Aggregate revenues of our manufacturing businesses in the second quarter and first six months of 2018 were approximately \$13.85 billion and \$26.8 billion, increases of approximately \$1.1 billion (8.8%) and \$1.95 billion (7.9%), respectively, compared to the same periods in 2017. Pre-tax earnings in the second quarter and first six months of 2018 were approximately \$2.1 billion and \$4.0 billion, respectively, representing increases of \$196 million (10.1%) and \$564 million (16.5%), respectively, over the corresponding 2017 periods. Pre-tax earnings in the first six months of 2017 included pre-tax losses of \$193 million (predominantly in the first quarter) in connection with the disposition of an underperforming bolt-on business acquired by Lubrizol in 2014. Excluding these losses, pre-tax earnings in the first six months of 2017.

Manufacturing, Service and Retailing (Continued)

Industrial products

Revenues from industrial products businesses were approximately \$7.3 billion in the second quarter and \$14.4 billion in the first six months of 2018, or increases of \$650 million (9.8%) and \$1.2 billion (9.3%), respectively, versus the same periods in 2017. PCC's revenues in the second quarter and first six months of 2018 increased approximately 6.5% over the same periods in 2017. The increases reflected increased demand in aerospace markets in connection with new aircraft programs, partly offset by lower industrial gas turbine demand. Lubrizol's revenues in the second quarter and first six months of 2018 increased 9.5% and 7.8%, respectively, compared to 2017, primarily due to higher prices, changes in product mix and favorable foreign currency translation. Overall, Lubrizol's sales volumes in 2018 increased 5% in the second quarter and 2% in the first six months compared to 2017.

Marmon's revenues in the second quarter and first six months of 2018 increased 10.2% and 9.6%, respectively, as compared to 2017. Revenue increases were attributable to higher average copper and steel prices, business acquisitions, growth in heavy-duty transportation and HVAC product lines and favorable foreign currency translation. These increases were partially offset by lower retail food, beverage and store products sales and lower steel distribution volume. IMC's revenues increased 21.4% in the second quarter and 24.3% in the first six months of 2018 compared to 2017 due to a combination of factors, including increased unit sales, business acquisitions and translation effects from a weaker U.S. Dollar. CTB's revenues increased 2.2% in the first six months of 2018 versus 2017, due to favorable foreign currency effects, partly offset by lower organic sales.

Pre-tax earnings of the industrial products group were \$1.4 billion in the second quarter and \$2.7 billion in the first six months of 2018, representing increases of \$137 million (10.8%) and \$454 million (20.1%), respectively, compared to 2017. The comparative increase in earnings for the first six months of 2018 reflected the effects of pre-tax losses of \$193 million recognized by Lubrizol in 2017 in connection with the disposition of an underperforming business and the recognition of intangible asset impairments and restructuring charges. Excluding the effects of these losses, the industrial products group pre-tax earnings increased 10.6% in the first six months of 2018 compared to 2017.

Excluding the effects of the aforementioned losses, Lubrizol's pre-tax earnings increased 20.7% in the first six months of 2018 compared to 2017, which was primarily due to lower interest expense, the favorable effects of foreign currency translation, past restructuring and ongoing cost containment efforts. Lubrizol experienced a significant increase in year-over-year average material unit costs for the first six months of 2018, necessitating increases in sales prices.

IMC's pre-tax earnings increased significantly in the second quarter and first six months of 2018 compared to the same periods in 2017, reflecting a combination of increased sales, increased manufacturing efficiencies, the effects of business acquisitions and ongoing expense control efforts, partly offset by the effects of rising raw material costs. IMC's raw material costs have risen significantly over the past year, and we anticipate margin pressures will increase over the second half of 2018. PCC's pre-tax earnings decreased 8.9% in the second quarter and 8.2% in the first six months of 2018 compared to 2017. Results in 2018 were negatively affected by costs associated with temporary unplanned plant shut-downs of certain metals facilities, metal press outages and lower earnings from industrial gas turbine business in 2018. In addition, the aforementioned new aircraft programs involve relatively complex manufacturing processes and manufacturing costs are initially high, but we expect they will decline as processes and efficiencies develop. Marmon's pre-tax earnings increased 35% in the second quarter and 17% in the first six months of 2018, reflecting a non-recurring gain of \$44 million from the sale of certain assets of its beverage products business.

Building products

Revenues of the building products group in the second quarter and first six months of 2018 were approximately \$3.3 billion and \$6.2 billion, respectively, increases of \$215 million (6.9%) and \$315 million (5.4%), respectively, compared to the corresponding 2017 periods. For the second quarter and first six months of 2018, the increases reflected cost-driven increases in average selling prices, product mix changes and the favorable effects of foreign currency translation.

Pre-tax earnings of the building products group in the second quarter and first six months of 2018 were \$415 million and \$667 million, respectively, increases of 3.5% and 2.6%, respectively, over the same periods in 2017. Raw material and production costs continued to rise over the first six months of 2018, which offset most of the increase in revenues and contributed to declines in our overall operating margins. In particular, our costs in 2018 for steel, titanium dioxide and petrochemicals increased substantially compared to 2017.

Manufacturing, Service and Retailing (Continued)

Consumer products

Revenues of the consumer products group were approximately \$3.2 billion in the second quarter and \$6.25 billion in the first six months of 2018, representing increases of \$250 million (8.4%) and \$418 million (7.2%), respectively, over the same periods in 2017. The comparative revenue increases in 2018 were primarily due to unit volume increases at Forest River, Brooks Sports, Duracell and Garan and favorable foreign currency translation effects of a weaker U.S. Dollar, partly offset by lower unit sales at Fruit of the Loom.

Pre-tax earnings of the consumer products group were \$316 million in the second quarter and \$608 million in the first six months of 2018, increases of \$45 million (16.6%) and \$93 million (18.1%), respectively, over the corresponding periods in 2017. The increases reflected the changes in revenues previously described. Duracell's increases in earnings in the 2018 periods also reflected the effects of ongoing operational restructuring efforts and comparatively lower restructuring charges.

Service and retailing

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

		Second Quarter							First Six Months									
	Reve	Revenues				Pre-tax earnings						ngs						
	2018	2017		2018		2017		2018		2017		2018		2017				
Service	\$ 3,133	\$ 2,792	\$	467	\$	351	\$	6,078	\$	5,409	\$	824	\$	611				
Retailing	3,929	3,758		230		204		7,571		7,234		388		337				
McLane Company	12,427	12,581		67		69		24,616		24,682		127		157				
	\$19,489	\$19,131	\$	764	\$	624	\$	38,265	\$	37,325	\$	1,339	\$	1,105				

Service

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

Revenues of the services group were approximately \$3.1 billion in the second quarter and \$6.1 billion in the first six months of 2018, representing increases of \$341 million (12.2%) and \$669 million (12.4%), respectively, as compared to the same periods in 2017. Revenues in the first six months of 2018 of TTI increased 35.7% compared to 2017, reflecting an industry-wide increase in demand for electronic components in many geographic markets around the world, and from the effects of business acquisitions and foreign currency translation due to a weaker U.S. Dollar. In addition, FlightSafety and Charter Brokerage generated comparative revenue increases in the 2018 periods.

Pre-tax earnings of the services group in the second quarter and first six months of 2018 were \$467 million and \$824 million, respectively, increases of \$116 million (33.0%) and \$213 million (34.9%), respectively, compared to the same periods in 2017. The comparative increases in earnings in 2018 were driven by the aforementioned revenue increases at TTI and Charter Brokerage and increased earnings at NetJets.

Retailing

Our retailers include Berkshire Hathaway Automotive ("BHA"). BHA includes over 80 auto dealerships that sell new and pre-owned automobiles, and offer repair services and related products. BHA also operates two insurance businesses, two auto auctions and an automotive fluid maintenance products distributor. Our retailing businesses also include four home furnishings retailing businesses (Nebraska Furniture Mart, R.C. Willey, Star Furniture and Jordan's), which sell furniture, appliances, flooring and electronics.

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.

Manufacturing, Service and Retailing (Continued)

Retailing (Continued)

Retailing business revenues in the second quarter and first six months of 2018 were \$3.9 billion and \$7.6 billion, respectively, increases of \$171 million (4.6%) and \$337 million (4.7%), respectively, compared to the same periods in 2017. BHA's revenues, which represent approximately 63% of the year-to-date retailing revenues in 2018, increased 5.4% in the second quarter and 5.0% in the first six months of 2018 as compared to 2017. The increases were primarily from increased pre-owned vehicle sales and, to a lesser extent, new vehicle sales. In addition, Louis revenues increased 20% in the second quarter and 14% in the first six months of 2018, due primarily to comparatively higher second quarter sales and foreign currency translation effects. See's Candies comparative second quarter revenues decreased 25% compared to 2017 due to the timing of the Easter holiday, while its revenues for the first six months of 2018 were relatively unchanged from 2017. Revenues of our home furnishings businesses increased 7% in the second quarter and 6% in the first six months of 2018 compared to 2017, due to higher volumes in certain geographic markets and the effect of a new store, which opened in 2018.

Pre-tax earnings in the second quarter and first six months of 2018 from retailing were \$230 million and \$388 million, respectively, increases of \$26 million (12.7%) and \$51 million (15.1%), respectively, over 2017. The increases were primarily attributable to BHA and Louis. The earnings increases of BHA were primarily from finance and insurance activities, while the increases at Louis were primarily due to the revenue increases.

McLane Company

McLane operates a wholesale distribution business that provides grocery and non-food consumer products to retailers and convenience stores ("grocery") and to restaurants ("foodservice"). McLane also operates businesses that are wholesale distributors of distilled spirits, wine and beer ("beverage"). The grocery and foodservice units generate high sales volumes and very low 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 2018 were \$12.4 billion and \$24.6 billion, respectively, representing decreases of 1.2% in the second quarter and 0.3% in the first six months compared to the same periods in 2017. On a year-to-date basis, grocery sales increased slightly compared to 2017 and foodservice sales declined 2.5%, which was primarily due to a net loss of customers. Pre-tax earnings in the second quarter and first six months of 2018 were \$67 million and \$127 million, respectively, decreases of \$2 million (2.9%) and \$30 million (19.1%), respectively, compared to the same periods in 2017. McLane continues to operate in an intensely competitive business environment, which is negatively affecting its current operating results. These conditions contributed to declining gross margin rates over the first six months of 2018, which together with increases in fuel, depreciation and certain other operating expenses produced a 12 basis point decline in its operating margin rate (ratio of pre-tax earnings to revenues) compared to 2017. We expect our grocery and foodservice businesses will continue to be subject to intense competition over the remainder of 2018.

Finance and Financial Products

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

	Second Quarter							First Six Months										
	 Revenues				Earnings				Reve			Earı	nings					
	2018		2017		2018		2017		2018	_	2017		2018	_	2017			
Manufactured housing and finance	\$ 1,509	\$	1,199	\$	234	\$	197	\$	2,756	\$	2,273	\$	429	\$	373			
Transportation equipment leasing	675		652		210		221		1,326		1,276		415		430			
Other	182		166		121		74		347		317		215		139			
	\$ 2,366	\$	2,017					\$	4,429	\$	3,866							
Pre-tax earnings					565		492						1,059		942			
Income taxes and noncontrolling interests					136		169						256		328			
				\$	429	\$	323					\$	803	\$	614			
Effective income tax rate					24.1%		34.2%						24.2%		34.8%			



Finance and Financial Products (Continued)

Manufactured housing and finance

Clayton Homes' revenues in the second quarter and first six months of 2018 were approximately \$1.5 billion and \$2.8 billion, respectively, increases of \$310 million (26%) and \$483 million (21%), respectively, over the corresponding 2017 periods. The increases reflected year-to-date increases in home sales of 31% and in financial services revenue of approximately 4%. The increase in home sales was primarily due to increased sales of site built homes and to increased unit sales of manufactured homes. Average unit prices of site built homes are considerably higher than our traditional manufactured homes. The increase in financial services revenue was primarily attributable to increased interest income from a comparative increase in average loan balances of approximately 4% over the first six months. As of June 30, 2018, Clayton Homes' loan balances were approximately \$14.2 billion.

Pre-tax earnings in the second quarter and first six months of 2018 were \$234 million and \$429 million, respectively, increases of \$37 million (19%) and \$56 million (15%), respectively, compared to the same periods in 2017. The increases in earnings reflected increased manufactured and site built home sales and financial services interest income, lower corporate overhead costs and credit losses, partly offset by increased interest expense.

Transportation equipment leasing

Transportation equipment leasing revenues increased \$23 million (3.5%) in the second quarter and \$50 million (3.9%) in the first six months of 2018, as compared to 2017. The increases were primarily due to increased crane services, over-the-road trailer units on lease, and equipment sales and favorable foreign currency translation effects, partly offset by decreased railcar lease revenue. Excess railcar capacity for lease continues to contribute to fewer units on lease and relatively low lease rates.

Pre-tax earnings were \$210 million in the second quarter and \$415 million in the first six months of 2018, decreases of \$11 million (5%) and \$15 million (3.5%), respectively, compared to the same periods in 2017. The decreases were due to lower earnings from the railcar leasing business, attributable to the decline in lease revenues and higher repair costs, partly offset by increased earnings of our over-the-road trailer and crane services businesses. Significant components of the operating costs of our leasing businesses, such as depreciation expense, financing and certain operating costs, do not vary proportionately to revenue changes. Thus, changes in revenues can produce a disproportionate effect on earnings.

Other

Other earnings from our finance activities include CORT furniture leasing and other investment income. Other earnings also include interest income on loans to finance Clayton Homes' loan portfolio and transportation equipment held for lease (charged as interest expense in the results of those businesses) and interest expense on related borrowings of Berkshire Hathaway Finance Corporation ("BHFC"). The net interest (income, net of expense) related to such loans increased \$50 million in the first six months of 2018 compared to 2017, which reflected increased interest income and lower interest expense of BHFC. In the first six months of 2018, other earnings also reflected increased other investment income.

Investment and Derivative Gains/Losses

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

	Second Quarter					First Six	Mon	ths
		2018		2017		2018		2017
Investment gains/losses	\$	5,990	\$	290	\$	(1,819)	\$	605
Derivative gains/losses		372		(65)		166		395
Gains/losses before income taxes and noncontrolling interests		6,362		225		(1,653)		1,000
Income taxes and noncontrolling interests		1,244		82		(345)		353
Net gains/losses	\$	5,118	\$	143	\$	(1,308)	\$	647
Effective income tax rate		19.9%		36.6%		18.3%		35.4%

Investment and Derivative Gains/Losses (Continued)

Investment gains/losses

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

In 2018, pre-tax investment gains/losses reflected in earnings included changes during the periods in unrealized gains and losses on investments in equity securities still held at June 30, 2018. Securities still held at June 30, 2018 produced pre-tax gains in earnings of approximately \$5.6 billion in the second quarter and pre-tax losses of approximately \$2.1 billion for the first six months. Prior to the adoption of ASU 2016-01, such unrealized gains and losses were included in other comprehensive income. ASU 2016-01 did not permit the restatement of prior years' statements of earnings.

We believe that investment gains/losses, whether realized from sales or unrealized from changes in market prices, are often meaningless in terms of understanding our reported results or evaluating our periodic economic performance. We continue to believe the amount of investment gains/losses included in earnings in any given period typically has little analytical or predictive value. The effects of changes in market prices for equity securities that are now reported in earnings are unpredictable, particularly over quarterly and annual periods.

Derivative gains/losses

Derivative contract gains/losses currently represent the changes in fair value of our equity index put option contract liabilities. These liabilities relate to contracts entered into before March 2008 and expiring between April 2019 and January 2026. 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.

As of June 30, 2018, equity index put option intrinsic values were approximately \$930 million and our recorded liabilities at fair value were approximately \$2.0 billion. Our ultimate payment obligations, if any, under our equity index put option contracts will be determined as of the contract expiration dates and will be based on the intrinsic value as defined under the contracts. Derivative contracts produced pre-tax gains in the second quarter and first six months of 2018 of \$372 million and \$166 million, respectively. The second quarter gains were primarily due to higher equity index values, foreign currency exchange rate changes and the effects of shorter average contract durations. Derivative contracts produced pre-tax gains of \$395 million in the first six months of 2017, which were primarily attributable to increased index values and shorter contract durations, partly offset by unfavorable foreign currency exchange rate changes.

Other

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

	Second Quarter					First Siz	x Mon	ths
	1	2018		2017	2018			2017
Equity method earnings	\$	285	\$	304	\$	625	\$	559
Acquisition accounting expenses		(220)		(180)		(438)		(322)
Corporate interest expense, before foreign currency exchange rate effects		(82)		(65)		(159)		(132)
Corporate interest expense, Euro note foreign currency exchange rate effects		323		(342)		160		(399)
Other		42		7		103		7
Net earnings (losses) attributable to Berkshire Hathaway shareholders	\$	348	\$	(276)	\$	291	\$	(287)

After-tax equity method earnings includes Berkshire's share of earnings attributable to Kraft Heinz, Pilot Flying J, Berkadia and Electric Transmission of Texas. After-tax other earnings (losses) also include charges arising from the application of the acquisition method in connection with Berkshire's past business acquisitions. Such charges were primarily from the amortization of intangible assets recorded in connection with those business acquisitions. Berkshire issued Euro-denominated debt in 2015, 2016 and 2017 and at June 30, 2018, the aggregate par amount outstanding was $\epsilon 6.85$ 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.

Financial Condition

Our consolidated balance sheet continues to reflect significant liquidity and a strong capital base. Our consolidated shareholders' equity at June 30, 2018 was \$358.1 billion, an increase of \$9.8 billion since December 31, 2017. Net earnings attributable to Berkshire shareholders in the first six months of 2018 were \$10.9 billion, which included after-tax losses on our investments in equity securities of approximately \$1.7 billion.

At June 30, 2018, our insurance and other businesses held cash, cash equivalents and U.S. Treasury Bills of approximately \$103.2 billion, of which \$84.7 billion was held in U.S. Treasury Bills. Investments in securities (excluding our investment in Kraft Heinz) were \$192.6 billion. Berkshire parent company debt outstanding at June 30, 2018 was approximately \$17.8 billion, a decrease of \$1.0 billion from December 31, 2017, reflecting a maturity of \$800 million in term debt and a \$219 million year-to-date decrease attributable to foreign currency exchange rate changes applicable to the ϵ 6.85 billion par amount of Euro-denominated senior notes. Berkshire term debt of \$750 million will mature in August 2018.

Our railroad, utilities and energy businesses (conducted by BNSF and BHE) maintain very large investments in capital assets (property, plant and equipment) and will regularly make significant capital expenditures in the normal course of business. We forecast capital expenditures of these two operations will approximate \$10 billion for the year ending December 31, 2018, of which approximately \$4.1 billion was made in the first six months.

BNSF's outstanding debt approximated \$22.5 billion as of June 30, 2018, relatively unchanged since December 31, 2017. In August 2018, BNSF issued \$750 million of 4.15% senior unsecured debentures due in 2048. Outstanding borrowings of BHE and its subsidiaries were approximately \$40.1 billion at June 30, 2018, an increase of \$451 million since December 31, 2017. In July 2018, BHE issued \$1.0 billion of 4.45% senior unsecured debt that matures in 2049. BHE subsidiaries also issued debt in July 2018, aggregating \$1.05 billion and due in 2049. The proceeds from these financings were used to repay borrowings and for other general corporate purposes. Over the remainder of 2018, approximately \$1.7 billion of BHE and subsidiaries and is not committed to provide capital to support BNSF, BHE or any of their subsidiaries.

Finance and financial products assets were approximately \$38.2 billion as of June 30, 2018, a decrease of \$3.7 billion since December 31, 2017. Finance assets consist primarily of loans and finance receivables, various types of property held for lease, cash, cash equivalents and U.S. Treasury Bills. Finance and financial products liabilities declined \$4.1 billion in the first six months of 2018 to approximately \$12.6 billion at June 30, 2018, attributable to \$4.1 billion of debt maturities of a wholly-owned financing subsidiary, Berkshire Hathaway Finance Corporation ("BHFC"). An additional \$500 million of BHFC senior notes will mature over the remainder 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 has a common stock repurchase program, which as amended on July 17, 2018, permits Berkshire to repurchase its Class A and Class B shares at prices below Berkshire's intrinsic value, as conservatively determined by Warren Buffett, Berkshire's Chairman of the Board and Chief Executive Officer, and Charlie Munger, a Vice-Chairman of the Board. The program allows share repurchases in the open market or through privately negotiated transactions and does not specify a maximum number of shares to be repurchased. The program is expected to continue indefinitely. We will not repurchase our stock if it reduces the total amount of Berkshire's consolidated cash, cash equivalents and U.S. Treasury Bills holdings below \$20 billion. Financial strength and redundant liquidity will always be of paramount importance at Berkshire. There were no share repurchases in 2018.

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.

Except as otherwise disclosed in this Quarterly Report, our contractual obligations as of June 30, 2018 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, 2017.

Critical Accounting Policies

Certain accounting policies require us to make estimates and judgments that affect the amounts reflected in the Consolidated Financial Statements. Such estimates and judgments necessarily involve varying, and possibly significant, degrees of uncertainty. Accordingly, certain amounts currently recorded in the financial statements will likely be adjusted in the future based on new available information and changes in other facts and circumstances. Reference is made to "Critical Accounting Policies" discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Berkshire's Annual Report on Form 10-K for the year ended December 31, 2017.

Our Consolidated Balance Sheet as of June 30, 2018 includes estimated liabilities for unpaid losses and loss adjustment expenses from property and casualty insurance and reinsurance contracts of approximately \$105 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, 2018 includes goodwill of acquired businesses of approximately \$81 billion. We evaluate goodwill for impairment at least annually and we conducted our most recent annual review during the fourth quarter of 2017. Although we believe that the goodwill reflected in the 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 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, 2018, there were no material changes in the market risks described in Berkshire's Annual Report on Form 10-K for the year ended December 31, 2017.

Item 4. Controls and Procedures

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

Part II Other Information

Item 1. Legal Proceedings

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

Item 1A. Risk Factors

Our significant business risks are described in Item 1A to Form 10-K for the year ended December 31, 2017 to which reference is made herein.

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

For several years, Berkshire had a common stock repurchase program, which permitted Berkshire to repurchase its Class A and Class B shares at prices no higher than a 20% premium over the book value of the shares. On July 17, 2018, Berkshire's Board of Directors authorized an amendment to the program, permitting Berkshire to repurchase shares any time that Warren Buffett, Berkshire's Chairman of the Board and Chief Executive Officer, and Charles Munger, a Vice-Chairman of the Board, believe that the repurchase price is below Berkshire's intrinsic value, conservatively determined. The program continues to allow share repurchases in the open market or through privately negotiated transactions and does not specify a maximum number of shares to be repurchased. The repurchase program does not obligate Berkshire to repurchase any specific dollar amount or number of Class A or Class B shares and there is no expiration date to the program. There were no share repurchases in 2018.

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

Date: August 4, 2018

	a. Exhibits
3(i)	Restated Certificate of Incorporation Incorporated by reference to Exhibit 3(i) to Form 10-K filed on March 2, 2015.
3(ii)	By-Laws Incorporated by reference to Exhibit 3(ii) to Form 8-K filed on May 4, 2016.
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

The following financial information from Berkshire Hathaway Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, formatted in XBRL (Extensible Business Reporting Language) includes: (i) the Consolidated Balance Sheets as of June 30, 2018 and December 31, 2017, (ii) the Consolidated Statements of Earnings for each of the three-month and six-month periods ended June 30, 2018 and 2017, (iii) the Consolidated Statements of Comprehensive Income for each of the three-month and six-month periods ended June 30, 2018 and 2017, (iv) the Consolidated Statements of Changes in Shareholders' Equity for the six-month periods ended June 30, 2018 and 2017, (v) the Consolidated Statements of Cash Flows for each of the six-month periods ended June 30, 2018 and 2017, (v) the Consolidated 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)

/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 Mont	hs Ending	g Year Ended December 31,											
	June 3	June 30, 2018		2017		2016		2015	2014			2013		
Net earnings attributable to Berkshire Hathaway shareholders ⁽¹⁾	\$	10,873	\$	44,940	\$	24,074	\$	24,083	\$	19,872	\$	19,476		
Income tax expense (benefit) ⁽¹⁾		2,569		(21,515)		9,240		10,532		7,935		8,951		
Earnings attributable to noncontrolling interests		133		413		353		331		298		369		
Equity method net (earnings) losses		(728)		(2,938)		(923)		122		26		262		
Dividends from equity method investments		529		797		952		366						
Fixed charges		2,239		4,529		4,439		4,065		3,882		3,386		
Earnings available for fixed charges	\$	15,615	\$	26,226	\$	38,135	\$	39,499	\$	32,013	\$	32,444		
Fixed charges														
Interest expense, including amortization ⁽²⁾	\$	1,932	\$	3,927	\$	3,741	\$	3,446	\$	3,253	\$	2,801		
Rentals representing interest and capitalized interest		307		602		698		619		629		585		
	\$	2,239	\$	4,529	\$	4,439	\$	4,065	\$	3,882	\$	3,386		
Ratio of earnings to fixed charges		6.97x		5.79x		8.59x		9.72x		8.25x		9.58x		

(1) Effective January 1, 2018, all changes in the fair values of investments in equity securities are included in earnings, including unrealized gains and losses on securities still held. During the first six months of 2018, Berkshire's earnings included net pre-tax losses on investments in equity securities of approximately \$2.1 billion (\$1.7 billion after-tax), which was predominantly related to market value changes during the first six months of 2018.

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

Quarter ended June 30, 2018

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

CERTIFICATIONS

I, Warren E. Buffett, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Berkshire Hathaway Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 4, 2018

/S/ WARREN E. BUFFETT

Chairman—Principal Executive Officer

Quarter ended June 30, 2018

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

CERTIFICATIONS

I, Marc D. Hamburg, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Berkshire Hathaway Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 4, 2018

/S/ MARC D. HAMBURG

Senior Vice President—Principal Financial Officer

Section 1350 Certifications

Quarter ended June 30, 2018

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

- (1) the Quarterly Report on Form 10-Q of the Company for the period ended June 30, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 4, 2018

/S/ WARREN E. BUFFETT

Warren E. Buffett Chairman and Chief Executive Officer

Section 1350 Certifications

Quarter ended June 30, 2018

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

- (1) the Quarterly Report on Form 10-Q of the Company for the period ended June 30, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 4, 2018

/S/ MARC D. HAMBURG

Marc D. Hamburg Senior Vice President and Chief Financial Officer

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

PacifiCorp and its subsidiaries operate coal mines and coal processing facilities and Acme Brick and its affiliates operate clay, shale and limestone excavation facilities (collectively, the "mining facilities") that are regulated by the Federal Mine Safety and Health Administration ("MSHA") under the Federal Mine Safety and Health Act of 1977 (the "Mine Safety Act"). MSHA inspects mining facilities on a regular basis. The total number of reportable Mine Safety Act citations, orders, assessments and legal actions for the three-month period ended June 30, 2018 are summarized in the table below and are subject to contest and appeal. The severity and assessment of penalties may be reduced or, in some cases, dismissed through the contest and appeal process. Amounts are reported regardless of whether PacifiCorp or Acme has challenged or appealed the matter. 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, 2018. PacifiCorp and Acme have not received any notice of a pattern, or notice of the potential to have a pattern, of violations of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of coal or other mine health or safety hazards under Section 104(e) of the Mine Safety Act during the three-month period ended June 30, 2018.

	_	1	Mine Safety A	ct		Total		Legal Actions				
Mining Facilities	Section 104 Significant and Substantial Citations ⁽¹⁾	Section 104(b) <u>Orders⁽²⁾</u>	Section 104(d) Citations/ Orders ⁽³⁾	Section 110(b)(2) <u>Violations⁽⁴⁾</u>	Section 107(a) Imminent Danger <u>Orders⁽⁵⁾</u>	Value of Proposed MSHA Assessments <u>(in thousands)</u>	Total Number of Mining Related Fatalities	Pending as of Last Day of Period ⁽⁶⁾	Instituted During Period	Resolved During Period		
Coal:												
Bridger (surface)				_		\$ —	—	_		_		
Bridger (underground)	3	_	1	_	_	20	_	2	2	2		
Wyodak Coal Crushing Facility	_		_	_	_		_		_	_		
Clay, shale and limestone:												
Malvern		—		—						_		
Wheeler		—		—			—					
Fort Smith		_	_	_	—		_	_	_	_		
Oklahoma City	—	—	—	—	—	—	—	—	—			
Tulsa	_	—	_	_	—	_	_	_	_	_		
Denver	—	—	—	—	_	—	_	—	—			
Bennett	—	—	—	—	_	—		—	—	_		
Denton	—	—	—	—	—	—	—	—	—			
Elgin	—	—	—	—	_	—		—	—	_		
Sealy	—	—	—	—	_	—	_	—	—			
Texas Clay	_	_	_	_	_	_	_	_	_	_		
Leeds		—	—	—	—	—	—	—	—			
Montgomery	—	—	—	—	_	—		—	—	_		
Lueders	—	—	—	—	_	—	—	_	—	—		
Cordova	—	—	—	—	—		—	—	—	—		

(1) Citations for alleged violations of mandatory health and safety standards that could significantly or substantially contribute to the cause and effect of a safety or health hazard under Section 104 of the Mine Safety Act. One of the Section 104(a) Significant and Substantial citations was modified to a Section 104(d)-1 citation which upon review by MSHA was reverted back to a Section 104(a) Significant and Substantial citation.

(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. The Section 104(d)-1 citation included in this table was subsequently modified by MSHA to a Section 104(a) Non-Significant and Substantial citation.

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