

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

(Mark One)

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

For the quarterly period ended June 30, 2020

OR

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

For the transition period from _____ to _____

Commission file number 001-14905

BERKSHIRE HATHAWAY INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

47-0813844

(I.R.S. Employer Identification Number)

3555 Farnam Street, Omaha, Nebraska 68131

(Address of principal executive office) (Zip Code)

(402) 346-1400

(Registrant's telephone number, including area code)

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

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

Title of each class	Trading Symbols	Name of each exchange on which registered
Class A Common Stock	BRK.A	New York Stock Exchange
Class B Common Stock	BRK.B	New York Stock Exchange
0.750% Senior Notes due 2023	BRK23	New York Stock Exchange
1.125% Senior Notes due 2027	BRK27	New York Stock Exchange
1.625% Senior Notes due 2035	BRK35	New York Stock Exchange
1.300% Senior Notes due 2024	BRK24	New York Stock Exchange
2.150% Senior Notes due 2028	BRK28	New York Stock Exchange
0.250% Senior Notes due 2021	BRK21	New York Stock Exchange
0.625% Senior Notes due 2023	BRK23A	New York Stock Exchange
0.000% Senior Notes due 2025	BRK25	New York Stock Exchange
2.375% Senior Notes due 2039	BRK39	New York Stock Exchange
2.625% Senior Notes due 2059	BRK59	New York Stock Exchange

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Smaller reporting company ☐

Emerging growth company ☐

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

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

Number of shares of common stock outstanding as of July 30, 2020:

Class A —

657,906

Class B —

1,401,356,454

Part I— Financial Information

Item 1. Financial Statements

<u>Consolidated Balance Sheets—June 30, 2020 and December 31, 2019</u>	2-3
<u>Consolidated Statements of Earnings—Second Quarter and First Six Months 2020 and 2019</u>	4
<u>Consolidated Statements of Comprehensive Income—Second Quarter and First Six Months 2020 and 2019</u>	5
<u>Consolidated Statements of Changes in Shareholders' Equity—Second Quarter and First Six Months 2020 and 2019</u>	5
<u>Consolidated Statements of Cash Flows—First Six Months 2020 and 2019</u>	6
<u>Notes to Consolidated Financial Statements</u>	7-25

Item 2. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	26-46
-----------------------------------------------------------------------------------------------------------------------------	-------

Item 3. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	46
--------------------------------------------------------------------------------------------------	----

Item 4. <u>Controls and Procedures</u>	46
---------------------------------------------------------------	----

Part II— Other Information 46

Item 1. <u>Legal Proceedings</u>	46
---------------------------------------------------------	----

Item 1A. <u>Risk Factors</u>	47
-----------------------------------------------------	----

Item 2. <u>Unregistered Sales of Equity Securities and Use of Proceeds and Issuer Repurchases of Equity Securities</u>	47
-----------------------------------------------------------------------------------------------------------------------------------------------	----

Item 3. <u>Defaults Upon Senior Securities</u>	48
-----------------------------------------------------------------------	----

Item 4. <u>Mine Safety Disclosures</u>	48
---------------------------------------------------------------	----

Item 5. <u>Other Information</u>	48
---------------------------------------------------------	----

Item 6. <u>Exhibits</u>	48
------------------------------------------------	----

<u>Signature</u>	48
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Part I Financial Information
Item 1. Financial Statements
BERKSHIRE HATHAWAY INC.
and Subsidiaries
CONSOLIDATED BALANCE SHEETS
(dollars in millions)

	<u>June 30,</u> <u>2020</u>	<u>December 31,</u> <u>2019</u>
	<u>(Unaudited)</u>	
ASSETS		
<i>Insurance and Other:</i>		
Cash and cash equivalents*	\$ 32,318	\$ 61,151
Short-term investments in U.S. Treasury Bills	110,518	63,822
Investments in fixed maturity securities	19,210	18,685
Investments in equity securities	207,454	248,027
Equity method investments	17,132	17,505
Loans and finance receivables	18,175	17,527
Other receivables	33,546	32,418
Inventories	19,277	19,852
Property, plant and equipment	21,122	21,438
Equipment held for lease	14,887	15,065
Goodwill	47,034	57,052
Other intangible assets	29,847	31,051
Deferred charges under retroactive reinsurance contracts	13,193	13,747
Other	14,021	13,232
	<u>597,734</u>	<u>630,572</u>
<i>Railroad, Utilities and Energy:</i>		
Cash and cash equivalents*	3,756	3,024
Receivables	3,220	3,417
Property, plant and equipment	138,780	137,838
Goodwill	24,719	24,830
Regulatory assets	2,989	2,881
Other	16,935	15,167
	<u>190,399</u>	<u>187,157</u>
	<u>\$ 788,133</u>	<u>\$ 817,729</u>

* Cash and cash equivalents includes U.S. Treasury Bills with maturities of three months or less when purchased of \$10.9 billion at June 30, 2020 and \$37.1 billion at December 31, 2019.

See accompanying Notes to Consolidated Financial Statements

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

	<u>June 30,</u> <u>2020</u>	<u>December 31,</u> <u>2019</u>
	<u>(Unaudited)</u>	
LIABILITIES AND SHAREHOLDERS' EQUITY		
<i>Insurance and Other:</i>		
Unpaid losses and loss adjustment expenses	\$ 75,669	\$ 73,019
Unpaid losses and loss adjustment expenses under retroactive reinsurance contracts	41,837	42,441
Unearned premiums	20,992	19,782
Life, annuity and health insurance benefits	20,642	20,155
Other policyholder liabilities	7,826	7,723
Accounts payable, accruals and other liabilities	26,197	27,611
Payable for purchase of U.S. Treasury Bills	1,114	—
Derivative contract liabilities	1,565	968
Aircraft repurchase liabilities and unearned lease revenues	5,389	5,281
Notes payable and other borrowings	38,243	37,590
	<u>239,474</u>	<u>234,570</u>
<i>Railroad, Utilities and Energy:</i>		
Accounts payable, accruals and other liabilities	14,468	14,708
Regulatory liabilities	7,222	7,311
Notes payable and other borrowings	68,446	65,778
	<u>90,136</u>	<u>87,797</u>
Income taxes, principally deferred	61,270	66,799
Total liabilities	<u>390,880</u>	<u>389,166</u>
<i>Shareholders' equity:</i>		
Common stock	8	8
Capital in excess of par value	35,615	35,658
Accumulated other comprehensive income	(5,967)	(5,243)
Retained earnings	378,654	402,493
Treasury stock, at cost	(14,815)	(8,125)
Berkshire Hathaway shareholders' equity	<u>393,495</u>	<u>424,791</u>
Noncontrolling interests	3,758	3,772
Total shareholders' equity	<u>397,253</u>	<u>428,563</u>
	<u>\$ 788,133</u>	<u>\$ 817,729</u>

See accompanying Notes to Consolidated Financial Statements

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

	Second Quarter		First Six Months	
	2020	2019	2020	2019
	(Unaudited)		(Unaudited)	
Revenues:				
Insurance and Other:				
Insurance premiums earned	\$ 15,595	\$ 14,863	\$ 31,343	\$ 29,182
Sales and service revenues	28,703	34,128	60,629	66,537
Leasing revenues	1,161	1,491	2,589	2,927
Interest, dividend and other investment income	2,150	2,295	4,426	4,412
	47,609	52,777	98,987	103,058
Railroad, Utilities and Energy:				
Freight rail transportation revenues	4,573	5,851	9,953	11,576
Energy operating revenues	3,419	3,566	7,053	7,391
Service revenues and other income	1,239	1,404	2,112	2,251
	9,231	10,821	19,118	21,218
Total revenues	56,840	63,598	118,105	124,276
Investment and derivative contract gains (losses)	40,085	10,048	(30,190)	30,370
Costs and expenses:				
Insurance and Other:				
Insurance losses and loss adjustment expenses	10,066	10,669	21,045	20,843
Life, annuity and health insurance benefits	1,407	1,165	2,790	2,069
Insurance underwriting expenses	3,067	2,569	5,991	5,325
Cost of sales and services	23,216	27,047	48,608	52,814
Cost of leasing	749	1,000	1,751	2,020
Selling, general and administrative expenses	4,652	4,829	9,123	9,261
Goodwill and intangible asset impairments	10,634	—	10,634	—
Interest expense	258	267	554	529
	54,049	47,546	100,496	92,861
Railroad, Utilities and Energy:				
Freight rail transportation expenses	2,871	3,885	6,464	7,867
Utilities and energy cost of sales and other expenses	2,503	2,680	5,225	5,522
Other expenses	1,092	1,175	1,941	1,828
Interest expense	744	725	1,472	1,454
	7,210	8,465	15,102	16,671
Total costs and expenses	61,259	56,011	115,598	109,532
Earnings (loss) before income taxes and equity method earnings	35,666	17,635	(27,683)	45,114
Equity method earnings (loss)	(257)	124	43	292
Earnings (loss) before income taxes	35,409	17,759	(27,640)	45,406
Income tax expense (benefit)	9,002	3,586	(4,350)	9,501
Net earnings (loss)	26,407	14,173	(23,290)	35,905
Earnings attributable to noncontrolling interests	112	100	161	171
Net earnings (loss) attributable to Berkshire Hathaway shareholders	\$ 26,295	\$ 14,073	\$ (23,451)	\$ 35,734
Net earnings (loss) per average equivalent Class A share	\$ 16,314	\$ 8,608	\$ (14,500)	\$ 21,824
Net earnings (loss) per average equivalent Class B share*	\$ 10.88	\$ 5.74	\$ (9.67)	\$ 14.55
Average equivalent Class A shares outstanding	1,611,760	1,634,962	1,617,325	1,637,378
Average equivalent Class B shares outstanding	2,417,640,311	2,452,442,401	2,425,986,839	2,456,067,007

* Class B shares are economically equivalent to one-fifteen-hundredth of a Class A share. Accordingly, net earnings per average equivalent Class B share outstanding is equal to one-fifteen-hundredth of the equivalent Class A amount. See Note 18.

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	
	2020	2019	2020	2019
	(Unaudited)		(Unaudited)	
Net earnings (loss)	\$ 26,407	\$ 14,173	\$ (23,290)	\$ 35,905
Other comprehensive income:				
Unrealized appreciation of investments	203	96	23	218
Applicable income taxes	(50)	(22)	(9)	(50)
Foreign currency translation	586	(17)	(868)	166
Applicable income taxes	(10)	—	37	(3)
Defined benefit pension plans	15	26	110	92
Applicable income taxes	(1)	(6)	(22)	(23)
Other, net	24	(32)	(35)	(45)
Other comprehensive income, net	767	45	(764)	355
Comprehensive income	27,174	14,218	(24,054)	36,260
Comprehensive income attributable to noncontrolling interests	125	96	121	189
Comprehensive income attributable to Berkshire Hathaway shareholders	\$ 27,049	\$ 14,122	\$ (24,175)	\$ 36,071

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

	Berkshire Hathaway shareholders' equity					Total
	Common stock and capital in excess of par value	Accumulated other comprehensive income	Retained earnings	Treasury stock	Non-controlling interests	
Balance at December 31, 2018	\$ 35,715	\$ (5,015)	\$ 321,112	\$ (3,109)	\$ 3,797	\$ 352,500
Net earnings	—	—	21,661	—	71	21,732
Other comprehensive income, net	—	288	—	—	22	310
Issuance (acquisition) of common stock	13	—	—	(1,690)	—	(1,677)
Transactions with noncontrolling interests	(98)	—	—	—	(176)	(274)
Balance at March 31, 2019	35,630	(4,727)	342,773	(4,799)	3,714	372,591
Net earnings	—	—	14,073	—	100	14,173
Other comprehensive income, net	—	49	—	—	(4)	45
Issuance (acquisition) of common stock	8	—	—	(443)	—	(435)
Transactions with noncontrolling interests	(20)	—	—	—	37	17
Balance at June 30, 2019	\$ 35,618	\$ (4,678)	\$ 356,846	\$ (5,242)	\$ 3,847	\$ 386,391
Balance at December 31, 2019	\$ 35,666	\$ (5,243)	\$ 402,493	\$ (8,125)	\$ 3,772	\$ 428,563
Net earnings (loss)	—	—	(49,746)	—	49	(49,697)
Adoption of new accounting pronouncement	—	—	(388)	—	—	(388)
Other comprehensive income, net	—	(1,478)	—	—	(53)	(1,531)
Issuance (acquisition) of common stock	—	—	—	(1,575)	—	(1,575)
Transactions with noncontrolling interests	(39)	—	—	—	(98)	(137)
Balance at March 31, 2020	35,627	(6,721)	352,359	(9,700)	3,670	375,235
Net earnings (loss)	—	—	26,295	—	112	26,407
Other comprehensive income, net	—	754	—	—	13	767
Issuance (acquisition) of common stock	—	—	—	(5,115)	—	(5,115)
Transactions with noncontrolling interests	(4)	—	—	—	(37)	(41)
Balance at June 30, 2020	\$ 35,623	\$ (5,967)	\$ 378,654	\$ (14,815)	\$ 3,758	\$ 397,253

See accompanying Notes to Consolidated Financial Statements

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

	First Six Months	
	2020	2019
	(Unaudited)	
Cash flows from operating activities:		
Net earnings (loss)	\$ (23,290)	\$ 35,905
Adjustments to reconcile net earnings (loss) to operating cash flows:		
Investment (gains) losses	29,593	(29,387)
Depreciation and amortization	5,109	4,873
Other, including asset impairment charges	10,520	(737)
Changes in operating assets and liabilities:		
Losses and loss adjustment expenses	2,140	2,032
Deferred charges reinsurance assumed	554	470
Unearned premiums	1,268	2,005
Receivables and originated loans	(1,885)	(3,094)
Other assets	(760)	(2,102)
Other liabilities	(298)	(1,359)
Income taxes	(5,485)	8,156
Net cash flows from operating activities	17,466	16,762
Cash flows from investing activities:		
Purchases of equity securities	(4,800)	(2,834)
Sales of equity securities	15,743	4,460
Purchases of U.S. Treasury Bills and fixed maturity securities	(113,169)	(66,754)
Sales of U.S. Treasury Bills and fixed maturity securities	12,689	6,733
Redemptions and maturities of U.S. Treasury Bills and fixed maturity securities	54,422	62,807
Purchases of loans and finance receivables	(608)	(191)
Collections of loans and finance receivables	156	175
Acquisitions of businesses, net of cash acquired	(82)	(580)
Purchases of property, plant and equipment and equipment held for lease	(6,187)	(6,747)
Other	(715)	23
Net cash flows from investing activities	(42,551)	(2,908)
Cash flows from financing activities:		
Proceeds from borrowings of insurance and other businesses	3,428	4,176
Repayments of borrowings of insurance and other businesses	(2,092)	(2,907)
Proceeds from borrowings of railroad, utilities and energy businesses	6,254	3,339
Repayments of borrowings of railroad, utilities and energy businesses	(2,291)	(1,690)
Changes in short term borrowings, net	(1,166)	(95)
Acquisition of treasury stock	(6,739)	(2,133)
Other	(214)	(279)
Net cash flows from financing activities	(2,820)	411
Effects of foreign currency exchange rate changes	(140)	26
Increase (decrease) in cash and cash equivalents and restricted cash	(28,045)	14,291
Cash and cash equivalents and restricted cash at beginning of year	64,632	30,811
Cash and cash equivalents and restricted cash at end of second quarter *	\$ 36,587	\$ 45,102
<i>* Cash and cash equivalents and restricted cash are comprised of the following:</i>		
<i>Beginning of year—</i>		
<i>Insurance and Other</i>	<i>\$ 61,151</i>	<i>\$ 27,749</i>
<i>Railroad, Utilities and Energy</i>	<i>3,024</i>	<i>2,612</i>
<i>Restricted cash, included in other assets</i>	<i>457</i>	<i>450</i>
	<u><i>\$ 64,632</i></u>	<u><i>\$ 30,811</i></u>
<i>End of second quarter—</i>		
<i>Insurance and Other</i>	<i>\$ 32,318</i>	<i>\$ 41,375</i>
<i>Railroad, Utilities and Energy</i>	<i>3,756</i>	<i>3,259</i>
<i>Restricted cash, included in other assets</i>	<i>513</i>	<i>468</i>
	<u><i>\$ 36,587</i></u>	<u><i>\$ 45,102</i></u>

See accompanying Notes to Consolidated Financial Statements

**BERKSHIRE HATHAWAY INC.
and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2020**

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 are described in Note 2.

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

The novel coronavirus ("COVID-19") spread rapidly across the world in the first quarter of 2020 and was declared a pandemic by the World Health Organization. The government and private sector responses to contain its spread began to significantly affect our operating businesses in March and adversely affected nearly all of our operations in the second quarter, although such effects vary significantly. The duration and extent of the effects over longer terms cannot be reasonably estimated at this time. The risks and uncertainties resulting from the pandemic that may affect our future earnings, cash flows and financial condition include the nature and duration of the curtailment or closure of our various facilities and the long-term effect on the demand for our products and services. Accordingly, significant estimates used in the preparation of our financial statements including those associated with evaluations of certain long-lived assets, goodwill and other intangible assets for impairment, expected credit losses on amounts owed to us and the estimations of certain losses assumed under insurance and reinsurance contracts may be subject to significant adjustments in future periods. Additionally, GEICO's underwriting results will likely be negatively affected over the remainder of the year and in the first quarter of 2021 as the full impact of the GEICO Giveback program (a program whereby auto insurance policies renewed and newly issued during the period between April 8, 2020 and October 7, 2020 receive a 15% premium rate reduction) will be reflected in earned premiums during these periods.

Note 2. New accounting pronouncements

We adopted Accounting Standards Codification ("ASC") 326 "Financial Instruments-Credit Losses" on January 1, 2020. ASC 326 provides for the measurement of expected credit losses on financial assets that are carried at amortized cost based on the net amounts expected to be collected. Measurements of expected credit losses therefore include provisions for non-collection, whether the risk is probable or remote. Prior to the adoption of ASC 326, credit losses were measured when non-collection was considered probable based on the prevailing facts and circumstances. We elected to not measure an allowance for expected credit losses on accrued interest and instead reverse uncollectible accrued interest through interest income on a timely basis.

Upon adoption of ASC 326, we recorded a charge to retained earnings of \$388 million representing the cumulative after-tax increase in our allowances for credit losses, which was primarily related to our manufactured housing loans. Expected credit losses for such financial assets are based on the net present value of future principal payments less estimated expenses related to the charge-off and foreclosure of expected uncollectible loans and include provisions for loans that are not in foreclosure. Our principal credit quality indicator is whether the loans are performing. Expected credit loss estimates consider historical default rates, collateral recovery rates, historical runoff rates, interest rates, reductions of future cash flows for modified loans, the historical time elapsed from last payment until foreclosure, among other matters. In addition, our estimates consider current conditions and reasonable and supportable forecasts.

Notes to Consolidated Financial Statements (Continued)

Note 2. New accounting pronouncements (Continued)

Trade receivables, insurance premium receivables and other receivables are primarily short-term in nature with stated collection terms of less than one year from the date of origination. In establishing credit loss allowances for such receivables, we primarily utilize credit loss history. However, credit loss allowances may be adjusted as a result of current conditions and when we expect reasonable and supportable forecasts to deviate from historical experience. In evaluating expected credit losses of reinsurance recoverables on unpaid losses, we review the credit quality of the counterparty and consider credit ratings, right-of-offset provisions within reinsurance contracts and other forms of credit enhancement including, collateral, funds held arrangements, guarantees and other publicly available information.

We adopted ASU 2017-04 “Simplifying the Test for Goodwill Impairment” as of January 1, 2020. Under ASU 2017-04, the measurement of a goodwill impairment is represented by the excess of the carrying value over the fair value of the reporting unit and is limited to the carrying value of goodwill. ASU 2017-04 is effective for goodwill impairment tests in fiscal years beginning after its adoption date.

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

Note 3. Investments in fixed maturity securities

Investments in fixed maturity securities as of June 30, 2020 and December 31, 2019 are summarized by type below (in millions).

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
<i>June 30, 2020</i>				
U.S. Treasury, U.S. government corporations and agencies	\$ 3,441	\$ 76	\$ —	\$ 3,517
Foreign governments	9,137	81	(12)	9,206
Corporate bonds	5,499	440	(21)	5,918
Other	497	74	(2)	569
	<u>\$ 18,574</u>	<u>\$ 671</u>	<u>\$ (35)</u>	<u>\$ 19,210</u>
<i>December 31, 2019</i>				
U.S. Treasury, U.S. government corporations and agencies	\$ 3,054	\$ 37	\$ (1)	\$ 3,090
Foreign governments	8,584	63	(9)	8,638
Corporate bonds	5,896	459	(3)	6,352
Other	539	67	(1)	605
	<u>\$ 18,073</u>	<u>\$ 626</u>	<u>\$ (14)</u>	<u>\$ 18,685</u>

Investments in foreign governments include securities issued by national and provincial government entities as well as instruments that are unconditionally guaranteed by such entities. As of June 30, 2020, approximately 88% of our foreign government holdings were rated AA or higher by at least one of the major rating agencies.

The amortized cost and estimated fair value of fixed maturity securities as of June 30, 2020 are summarized below by contractual maturity dates (in millions). Actual maturities may differ from contractual maturities due to early call or prepayment rights held by issuers.

	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years	Mortgage- backed securities	Total
Amortized cost	\$ 8,632	\$ 8,894	\$ 283	\$ 401	\$ 364	\$ 18,574
Fair value	8,645	9,067	325	743	430	19,210

Notes to Consolidated Financial Statements (Continued)

Note 4. Investments in equity securities

Investments in equity securities as of June 30, 2020 and December 31, 2019 are summarized based on the primary industry of the investee in the tables below (in millions).

	Cost Basis	Net Unrealized Gains	Fair Value
<i>June 30, 2020*</i>			
Banks, insurance and finance	\$ 31,164	\$ 28,081	\$ 59,245
Consumer products	38,706	73,990	112,696
Commercial, industrial and other	26,193	9,320	35,513
	<u>\$ 96,063</u>	<u>\$ 111,391</u>	<u>\$ 207,454</u>

* Approximately 71% of the aggregate fair value was concentrated in four companies (American Express Company – \$14.4 billion; Apple Inc. – \$91.5 billion; Bank of America Corporation – \$22.6 billion and The Coca-Cola Company – \$17.9 billion).

	Cost Basis	Net Unrealized Gains	Fair Value
<i>December 31, 2019*</i>			
Banks, insurance and finance	\$ 40,419	\$ 61,976	\$ 102,395
Consumer products	38,887	60,747	99,634
Commercial, industrial and other	31,034	14,964	45,998
	<u>\$ 110,340</u>	<u>\$ 137,687</u>	<u>\$ 248,027</u>

* Approximately 60% of the aggregate fair value was concentrated in four companies (American Express Company – \$18.9 billion; Apple Inc. – \$73.7 billion; Bank of America Corporation – \$33.4 billion and The Coca-Cola Company – \$22.1 billion).

On August 8, 2019, Berkshire invested a total of \$10 billion in Occidental Corporation (“Occidental”) newly issued Occidental Cumulative Perpetual Preferred Stock with an aggregate liquidation value of \$10 billion, and warrants to purchase up to 80 million shares of Occidental common stock at an exercise price of \$62.50 per share. In accordance with the terms of the warrants, on August 3, 2020, the number of shares of common stock that can be purchased was increased to 83.86 million shares and the exercise price was reduced to \$59.62 per share. The preferred stock accrues dividends at 8% per annum and is redeemable at the option of Occidental commencing on the tenth anniversary of issuance at a redemption price equal to 105% of the liquidation preference plus any accumulated and unpaid dividends, or mandatorily under certain specified capital return events. Dividends on the preferred stock may be paid in cash or, at Occidental’s option, in shares of Occidental common stock. The warrants are exercisable in whole or in part until one year after the redemption of the preferred stock. Our investments in Occidental are included in the commercial, industrial and other category in the preceding tables.

Note 5. Equity method investments

Berkshire and its subsidiaries hold investments in certain businesses that are accounted for pursuant to the equity method. Currently, the most significant of these is our investment in the common stock of The Kraft Heinz Company (“Kraft Heinz”). Kraft Heinz is one of the world’s largest manufacturers and marketers of food and beverage products, including condiments and sauces, cheese and dairy, meals, meats, refreshment beverages, coffee and other grocery products. Berkshire currently owns 325,442,152 shares of Kraft Heinz common stock representing 26.6% of the outstanding shares.

Shares of Kraft Heinz common stock are publicly-traded and the fair value of our investment was approximately \$10.4 billion at June 30, 2020 and \$10.5 billion at December 31, 2019. The carrying value of our investment was approximately \$13.1 billion at June 30, 2020 and \$13.8 billion at December 31, 2019.

As disclosed in Berkshire’s Form 10-Qs for the first three quarters of 2019, Kraft Heinz’s financial statements for the first and second quarters of 2019 were not available until August 13, 2019 when Kraft Heinz filed financial statements for those periods with the Securities and Exchange Commission. Thus, Berkshire did not record equity method earnings attributable to Kraft Heinz for each of those periods until the third quarter of 2019. Our equity method losses for the second quarter and first six months of 2020 were \$440 million and \$339 million, respectively, which included approximately \$750 million representing our proportionate share of the goodwill and identifiable intangible asset impairment charges recorded by Kraft Heinz in the second quarter. We received dividends on the common stock of \$260 million in each of the first six months of 2020 and 2019, which were recorded as reductions to the carrying value of our investment.

Notes to Consolidated Financial Statements (Continued)

Note 5. Equity method investments (Continued)

As of June 30, 2020, the carrying value of our investment in Kraft Heinz exceeded the fair value based on the quoted market price by \$2.7 billion (20.6%). In light of that fact, we evaluated our investment in Kraft Heinz for impairment. We utilize no bright-line tests in such evaluations. Based on the available facts and information regarding the operating results of Kraft Heinz, our ability and intent to hold the investment until recovery, the relative amount of the decline, and the length of time that fair value was less than carrying value, we concluded that recognition of an impairment loss in earnings was not required. However, we will continue to monitor this investment and it is possible that an impairment loss will be recorded in earnings in future periods based on changes in facts and circumstances or intentions.

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

	June 27, 2020	December 28, 2019
Assets	\$ 98,306	\$ 101,450
Liabilities	49,141	49,701

	Second Quarter		First Six Months	
	2020	2019	2020	2019
Sales	\$ 6,648	\$ 6,406	\$ 12,805	\$ 12,365
Net earnings (loss) attributable to Kraft Heinz common shareholders*	(1,651)	449	(1,273)	854

* Includes goodwill and identifiable intangible asset impairment charges of approximately \$2.6 billion and \$500 million during the second quarters of 2020 and 2019, respectively, and \$2.8 billion and \$1.1 billion during the first six months of 2020 and 2019, respectively.

Other investments accounted for pursuant to the equity method include our investments in Berkadia Commercial Mortgage LLC (“Berkadia”), Pilot Travel Centers LLC (“Pilot”) and Electric Transmission Texas, LLC (“ETT”). The carrying value of our investments in these entities was approximately \$4.0 billion as of June 30, 2020 and \$3.7 billion as of December 31, 2019. Our equity method earnings from these entities in the first six months were \$382 million in 2020 and \$314 million in 2019. Additional information concerning these investments follows.

We own a 50% interest in Berkadia, with Jefferies Financial Group Inc. (“Jefferies”) owning the other 50% interest. Berkadia is a servicer of commercial real estate loans in the U.S., performing primary, master and special servicing functions for U.S. government agency programs, commercial mortgage-backed securities transactions, banks, insurance companies and other financial institutions. A source of funding for Berkadia’s operations is through its issuance of commercial paper, which is currently limited to \$1.5 billion. On June 30, 2020, Berkadia’s commercial paper outstanding was \$1.47 billion. The commercial paper is supported by a surety policy issued by a Berkshire insurance subsidiary. Jefferies is obligated to indemnify us for one-half of any losses incurred under the policy. In addition, a Berkshire Hathaway Energy Company subsidiary owns a 50% interest in ETT, an owner and operator of electric transmission assets in the Electric Reliability Council of Texas footprint. American Electric Power owns the other 50% interest.

In 2017, we acquired a 38.6% interest in Pilot, headquartered in Knoxville, Tennessee. Pilot is the largest operator of travel centers in North America, supplying more than 11 billion gallons of fuel per year via more than 950 retail locations across 44 U.S. states and six Canadian provinces and through wholesale distribution. The Haslam family currently owns a 50.1% interest in Pilot 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 with the Haslam family retaining a 20% interest. As a result, Berkshire will become the majority owner of Pilot in 2023.

Notes to Consolidated Financial Statements (Continued)

Note 6. Investment gains/losses

Investment gains/losses in the second quarter and first six months of 2020 and 2019 are summarized as follows (in millions).

	Second Quarter		First Six Months	
	2020	2019	2020	2019
Equity securities:				
Unrealized investment gains (losses) on securities held at the end of the period	\$ 39,369	\$ 9,827	\$ (18,377)	\$ 29,192
Investment gains (losses) on securities sold during the period	(87)	5	(11,233)	194
	<u>39,282</u>	<u>9,832</u>	<u>(29,610)</u>	<u>29,386</u>
Fixed maturity securities:				
Gross realized gains	25	7	41	12
Gross realized losses	(14)	(6)	(20)	(16)
Other	(4)	2	(4)	5
	<u>\$ 39,289</u>	<u>\$ 9,835</u>	<u>\$ (29,593)</u>	<u>\$ 29,387</u>

Equity securities gains and losses include unrealized gains and losses from changes in fair values during the period on equity securities we still own.

In the first six months of 2020 and 2019, as reflected in the Consolidated Statements of Cash Flows, we received proceeds of approximately \$15.7 billion and \$4.5 billion, respectively, from sales of equity securities. In the preceding table, investment gains/losses on equity securities sold reflect the difference between proceeds from sales and the fair value of the equity securities sold at the beginning of the applicable quarterly or annual period or the purchase date, if later. The losses on securities sold in the first six months of 2020 (\$11.2 billion) include losses of \$10.7 billion from market value changes in the first quarter on securities that were sold in the second quarter. Our taxable gains/losses on equity securities sold are generally the difference between the proceeds from sales and original cost. Taxable losses were \$4.5 billion and \$3.3 billion in the second quarter and first six months of 2020, respectively, and taxable gains were \$832 million and \$1.35 billion in the second quarter and first six months of 2019, respectively.

Note 7. Loans and finance receivables

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

	June 30, 2020	December 31, 2019
Loans and finance receivables before allowances and discounts	\$ 19,410	\$ 18,199
Allowances for credit losses	(732)	(167)
Unamortized acquisition discounts and points	(503)	(505)
	<u>\$ 18,175</u>	<u>\$ 17,527</u>

Loans and finance receivables are principally installment loans originated or acquired by our manufactured housing business. The changes in the allowance for credit losses for each of the first six months of 2020 and 2019 follow (in millions).

	2020	2019
Balance - beginning of year:	\$ 167	\$ 177
Adoption of ASC 326	486	—
Provision for credit losses	130	66
Charge-offs, net of recoveries	(51)	(66)
Balance - June 30:	<u>\$ 732</u>	<u>\$ 177</u>

Notes to Consolidated Financial Statements (Continued)

Note 7. Loans and finance receivables (Continued)

As of June 30, 2020, approximately 99% of the manufactured housing loan balances were evaluated collectively for impairment. As of June 30, 2020, we considered approximately 98% of the loan balances to be current as to payment status. Manufactured housing loan balances before discounts and allowances designated as performing or non-performing are presented below by year of loan origination as of June 30, 2020 (in millions).

Loans and Financing Receivables by Origination Year							
	2020	2019	2018	2017	2016	Prior	Total
Performing	\$ 2,386	\$ 2,663	\$ 2,032	\$ 1,510	\$ 1,349	\$ 7,192	\$ 17,132
Non-performing	3	4	8	10	11	66	102
Total	<u>\$ 2,389</u>	<u>\$ 2,667</u>	<u>\$ 2,040</u>	<u>\$ 1,520</u>	<u>\$ 1,360</u>	<u>\$ 7,258</u>	<u>\$ 17,234</u>

We are party to an agreement with Seritage Growth Properties to provide a \$2.0 billion term loan facility, which expires on July 31, 2023. The outstanding loan under the facility was approximately \$1.6 billion as of both June 30, 2020 and December 31, 2019, and is secured by mortgages on real estate properties. In the first quarter of 2020, we provided a loan of \$576 million to Lee Enterprises, Inc. in connection with its acquisition of our newspaper operations and the repayment of its then outstanding credit facilities. We are the sole lender to each of these entities and each of these loans is current as to payment status.

Note 8. Other receivables

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

	June 30, 2020	December 31, 2019
Insurance premiums receivable	\$ 15,371	\$ 13,379
Reinsurance recoverable on unpaid losses	2,909	2,855
Trade receivables	11,385	12,275
Other	4,625	4,327
Allowances for credit losses	(744)	(418)
	<u>\$ 33,546</u>	<u>\$ 32,418</u>

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

	June 30, 2020	December 31, 2019
Trade receivables	\$ 2,954	\$ 3,120
Other	370	388
Allowances for credit losses	(104)	(91)
	<u>\$ 3,220</u>	<u>\$ 3,417</u>

Provisions for credit losses on receivables summarized in the preceding tables were \$424 million in the first six months of 2020.

Note 9. Inventories

Inventories are comprised of the following (in millions).

	June 30, 2020	December 31, 2019
Raw materials	\$ 4,786	\$ 4,492
Work in process and other	2,644	2,700
Finished manufactured goods	4,906	4,821
Goods acquired for resale	6,941	7,839
	<u>\$ 19,277</u>	<u>\$ 19,852</u>

Notes to Consolidated Financial Statements (Continued)

Note 10. Property, plant and equipment

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

	June 30, 2020	December 31, 2019
Land, buildings and improvements	\$ 13,428	\$ 13,259
Machinery and equipment	24,422	24,285
Furniture, fixtures and other	4,621	4,666
	42,471	42,210
Accumulated depreciation	(21,349)	(20,772)
	<u>\$ 21,122</u>	<u>\$ 21,438</u>

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

	June 30, 2020	December 31, 2019
Railroad:		
Land, track structure and other roadway	\$ 62,764	\$ 62,404
Locomotives, freight cars and other equipment	13,516	13,482
Construction in progress	1,076	748
	77,356	76,634
Accumulated depreciation	(12,401)	(12,101)
	64,955	64,533
Utilities and energy:		
Utility generation, transmission and distribution systems	81,518	81,127
Interstate natural gas pipeline assets	8,215	8,165
Independent power plants and other assets	8,850	8,817
Construction in progress	4,499	3,732
	103,082	101,841
Accumulated depreciation	(29,257)	(28,536)
	73,825	73,305
	<u>\$ 138,780</u>	<u>\$ 137,838</u>

Depreciation expense for the first six months of 2020 and 2019 is summarized below (in millions).

	First Six Months	
	2020	2019
Insurance and other	\$ 1,147	\$ 1,092
Railroad, utilities and energy	2,716	2,544
	<u>\$ 3,863</u>	<u>\$ 3,636</u>

Notes to Consolidated Financial Statements (Continued)

Note 11. Equipment held for lease

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

	June 30, 2020	December 31, 2019
Railcars	\$ 9,370	\$ 9,260
Aircraft	8,059	8,093
Other equipment held for lease	4,907	4,862
	22,336	22,215
Accumulated depreciation	(7,449)	(7,150)
	\$ 14,887	\$ 15,065

Depreciation expense for equipment held for lease in the first six months was \$599 million in 2020 and \$579 million in 2019. Operating lease revenues by type for the second quarter and first six months of 2020 and 2019 were as follows (in millions).

	Fixed lease revenue	Variable lease revenue	Total
Second quarter 2020	\$ 1,062	\$ 99	\$ 1,161
Second quarter 2019	1,118	373	1,491
First six months 2020	2,158	431	2,589
First six months 2019	2,192	735	2,927

Note 12. Goodwill and other intangible assets

Reconciliations of the changes in the carrying value of goodwill for the first six months of 2020 and for the year ended December 31, 2019 follow (in millions).

	June 30, 2020	December 31, 2019
Balance at beginning of year	\$ 81,882	\$ 81,025
Acquisitions of businesses	18	890
Impairment charges	(9,996)	—
Other, including foreign currency translation	(151)	(33)
Balance at end of period	\$ 71,753	\$ 81,882

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

	June 30, 2020		December 31, 2019	
	Gross carrying amount	Accumulated amortization	Gross carrying amount	Accumulated amortization
Insurance and other:				
Trademarks and trade names	\$ 5,180	\$ 769	\$ 5,286	\$ 759
Patents and technology	4,658	3,167	4,560	3,032
Customer relationships	27,311	5,346	27,943	5,025
Other	3,300	1,320	3,364	1,286
	\$ 40,449	\$ 10,602	\$ 41,153	\$ 10,102
Railroad, utilities and energy:				
Trademarks and trade names	\$ 212	\$ 28	\$ 212	\$ 26
Customer relationships	678	343	678	324
Other	113	60	113	58
	\$ 1,003	\$ 431	\$ 1,003	\$ 408

Notes to Consolidated Financial Statements (Continued)

Note 12. Goodwill and other intangible assets (Continued)

Intangible asset amortization expense in the first six months was \$647 million in 2020 and \$658 million in 2019. Intangible assets with indefinite lives were \$18.3 billion as of June 30, 2020 and \$19.0 billion as of December 31, 2019 and primarily related to certain customer relationships and trademarks and trade names.

During the second quarter of 2020, we concluded it was necessary to reevaluate goodwill and indefinite-lived intangible assets of certain of our reporting units for impairment due to the disruptions arising from the COVID-19 pandemic. We believe the most significant of these disruptions relate to the air travel and commercial aerospace and supporting industries.

We recorded pre-tax goodwill impairment charges of approximately \$10 billion and pre-tax indefinite-lived intangible asset impairment charges of \$638 million in the second quarter of 2020. Approximately \$10 billion of these charges related to Precision Castparts Corp. ("PCC"), the largest business within Berkshire's manufacturing segment. The carrying value of PCC-related goodwill and indefinite-lived intangible assets prior to the impairment charges was approximately \$31 billion.

The amounts of the impairment charges were determined based on discounted cash flow methods and reflect our current assessments of the risks and uncertainties associated with the aerospace industry. Significant judgment is required in estimating the fair value of a reporting unit and in performing impairment tests. Due to the inherent uncertainty in forecasting cash flows and earnings, actual results in the future may vary significantly from the forecasts.

The COVID-19 pandemic events will continue to evolve and the effects on our businesses may differ from what we currently estimate. If the effects prove to be worse than is reflected in our current estimates, additional goodwill or indefinite-lived intangible asset impairment charges could be required.

Note 13. Derivative contracts

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

	Liabilities	Notional Value
June 30, 2020	\$ 1,565	\$ 14,348
December 31, 2019	968	14,385

The equity index put option contracts are European style options written prior to March 2008 on four major equity indexes. Notional value in the preceding table represents the aggregate undiscounted amounts payable assuming the value of each index is zero at each contract's expiration date. Certain contracts are denominated in foreign currencies and the related notional amounts are based on the foreign currency exchange rates as of the balance sheet date. These contracts generated pre-tax gains of \$796 million in the second quarter and pre-tax losses of \$597 million in the first six months of 2020. Equity index put option contracts produced pre-tax gains of \$213 million and \$983 million in the second quarter and first six months of 2019, respectively. The losses in the first six months of 2020 reflected declines in index values between December 31, 2019 and June 30, 2020.

Substantially all open contracts as of June 30, 2020 will expire by February 2023. The weighted average life of unexpired contracts at June 30, 2020 was approximately 1.3 years. 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 \$2.5 billion on the contract inception dates with respect to unexpired contracts as of June 30, 2020 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 \$1.2 billion at June 30, 2020 and \$397 million at December 31, 2019. These contracts may not be unilaterally terminated or fully settled before the expiration dates and the ultimate amount of cash basis gains or losses will not be determined until the contract expiration dates.

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.

Notes to Consolidated Financial Statements (Continued)

Note 14. Unpaid losses and loss adjustment expenses

Our liabilities for unpaid losses and loss adjustment expenses (also referred to as “claim liabilities”) under 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. A reconciliation of the changes in claim liabilities, excluding liabilities under retroactive reinsurance contracts (see Note 15), for each of the six months ending June 30, 2020 and 2019 follows (in millions).

	2020	2019
Balances – beginning of year:		
Gross liabilities	\$ 73,019	\$ 68,458
Reinsurance recoverable on unpaid losses	(2,855)	(3,060)
Net liabilities	70,164	65,398
Incurred losses and loss adjustment expenses:		
Current accident year events	20,278	20,127
Prior accident years’ events	189	71
Total incurred losses and loss adjustment expenses	20,467	20,198
Paid losses and loss adjustment expenses:		
Current accident year events	(6,638)	(7,724)
Prior accident years’ events	(11,155)	(10,243)
Total payments	(17,793)	(17,967)
Foreign currency translation adjustment	(78)	3
Balances – June 30:		
Net liabilities	72,760	67,632
Reinsurance recoverable on unpaid losses	2,909	3,149
Gross liabilities	\$ 75,669	\$ 70,781

Incurred losses and loss adjustment expenses in the preceding table were recorded in earnings in each period and related to insured events occurring in the current year (“current accident year”) and events occurring in all prior years (“prior accident years”). In the first six months, we recorded net increases in estimated ultimate liabilities for prior accident years of \$189 million in 2020 compared to \$71 million in 2019, which produced corresponding increases in incurred losses and loss adjustment expenses. These increases, as percentages of the net liabilities at the beginning of each year, were 0.3% in 2020 and 0.1% in 2019.

In the first six months of 2020 and 2019, we reduced estimated ultimate liabilities for prior years’ loss events for primary insurance by \$250 million and \$198 million, respectively. The decreases were primarily attributable to lower than anticipated private passenger automobile, medical professional liability and workers’ compensation claims. The decrease in 2019 was partially offset by increased liabilities for legacy casualty exposures and other commercial insurance business. We increased estimated ultimate liabilities for prior years’ loss events related to reinsurance assumed by \$439 million and \$269 million in the first six months of 2020 and 2019, respectively. The increase in 2020 included increased liabilities for legacy casualty exposures.

Notes to Consolidated Financial Statements (Continued)

Note 15. 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 inception date or, when 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 each of the six months ending June 30, 2020 and 2019 follow (in millions).

	2020		2019	
	Unpaid losses and loss adjustment expenses	Deferred charges reinsurance assumed	Unpaid losses and loss adjustment expenses	Deferred charges reinsurance assumed
Balances – beginning of year	\$ 42,441	\$ (13,747)	\$ 41,834	\$ (14,104)
Incurred losses and loss adjustment expenses:				
Current year contracts	—	—	175	(82)
Prior years' contracts	24	554	—	552
Total	24	554	175	470
Paid losses and loss adjustment expenses	(628)	—	(460)	—
Balances – June 30	\$ 41,837	\$ (13,193)	\$ 41,549	\$ (13,634)
Incurred losses and loss adjustment expenses, net of deferred charges	\$ 578		\$ 645	

In the preceding table, classifications of incurred losses and loss adjustment expenses are based on the inception dates of the contracts. Incurred losses and loss adjustment expenses in the first six months related to contracts written in prior years were \$578 million in 2020 and \$552 million in 2019. Such losses reflected the recurring amortization of deferred charges and the effects of changes in the timing and amount of projected future loss payments.

Berkshire's subsidiary, National Indemnity Company ("NICO"), is party to a contract with various subsidiaries of American International Group, Inc. (collectively, "AIG"), in which NICO's ultimate liability is contractually limited to \$20 billion. Our estimated ultimate claim liabilities with respect to the AIG contract at both June 30, 2020 and December 31, 2019 were \$18.2 billion. Deferred charge assets related to the AIG contract were approximately \$6.0 billion at June 30, 2020 and \$6.3 billion at December 31, 2019.

Note 16. Notes payable and other borrowings

Notes payable and other borrowings are summarized below (dollars in millions). The weighted average interest rates and maturity date ranges shown in the following tables are based on borrowings as of June 30, 2020.

	Weighted Average Interest Rate	June 30, 2020	December 31, 2019
<i>Insurance and other:</i>			
Berkshire Hathaway Inc. ("Berkshire"):			
U.S. Dollar denominated due 2020-2047	3.2%	\$ 8,318	\$ 8,324
Euro denominated due 2021-2035	1.0%	7,653	7,641
Japanese Yen denominated due 2023-2060	0.6%	5,767	3,938
Berkshire Hathaway Finance Corporation ("BHFC"):			
U.S. Dollar denominated due 2020-2049	4.1%	8,828	8,679
Great Britain Pound denominated due 2039-2059	2.5%	2,128	2,274
Other subsidiary borrowings due 2020-2045	4.2%	4,680	5,262
Subsidiary short-term borrowings	2.9%	869	1,472
		<u>\$ 38,243</u>	<u>\$ 37,590</u>

Notes to Consolidated Financial Statements (Continued)

Note 16. Notes payable and other borrowings (Continued)

In March 2020, Berkshire repaid €1.0 billion of maturing senior notes and issued €1.0 billion of 0.0% senior notes due in 2025. In the first quarter of 2021, \$1.6 billion of senior notes will mature. In April 2020, Berkshire issued ¥195.5 billion (approximately \$1.8 billion) of senior notes with maturity dates ranging from 2023 to 2060 and a weighted average interest rate of 1.07%.

Borrowings of BHFC, a wholly owned finance subsidiary of Berkshire, consist of senior unsecured notes used to fund manufactured housing loans originated or acquired and equipment held for lease of certain subsidiaries. BHFC borrowings are fully and unconditionally guaranteed by Berkshire. In January 2020, BHFC repaid \$350 million of maturing senior notes and in March 2020 issued \$500 million of 1.85% senior notes due in 2030.

The carrying values of Berkshire and BHFC non-U.S. Dollar denominated senior notes (€6.85 billion, £1.75 billion and ¥625.5 billion par) reflect the applicable foreign currency exchange rates as of the balance sheet dates. The effects of changes in foreign currency exchange rates during the period are recorded in earnings as a component of selling, general and administrative expenses. Changes in the exchange rates resulted in pre-tax gains of \$102 million in the first six months of 2020 and \$64 million in the first six months of 2019.

In addition to BHFC borrowings, Berkshire guaranteed approximately \$1.2 billion of other subsidiary borrowings at June 30, 2020. Generally, Berkshire's guarantee of a subsidiary's debt obligation is an absolute, unconditional and irrevocable guarantee for the full and prompt payment when due of all payment obligations.

	Weighted Average Interest Rate	June 30, 2020	December 31, 2019
<i>Railroad, utilities and energy:</i>			
Berkshire Hathaway Energy Company ("BHE") and subsidiaries:			
BHE senior unsecured debt due 2021-2050	4.5%	\$ 11,461	\$ 8,581
Subsidiary and other debt due 2020-2064	4.3%	31,444	30,772
Short-term borrowings	1.6%	2,289	3,214
Burlington Northern Santa Fe and subsidiaries due 2020-2097	4.6%	23,252	23,211
		<u>\$ 68,446</u>	<u>\$ 65,778</u>

BHE subsidiary debt represents amounts issued pursuant to separate financing agreements. Substantially all of the assets of certain BHE subsidiaries are, or may be, pledged or encumbered to support or otherwise secure debt. These borrowing arrangements generally contain various covenants, which pertain to leverage ratios, interest coverage ratios and/or debt service coverage ratios. During the first six months of 2020, BHE and its subsidiaries issued new term debt of approximately \$5.3 billion with maturity dates ranging from 2025 to 2062 and a weighted average interest rate of 3.5%. In the first six months of 2020, BHE and its subsidiaries repaid \$1.8 billion of debt and reduced short-term borrowings by \$920 million.

BNSF's borrowings are primarily senior unsecured debentures. In April 2020, BNSF issued \$575 million of 3.05% senior unsecured debentures due in 2051. During the first six months of 2020, BNSF repaid \$531 million of debt. As of June 30, 2020, BNSF, BHE and their subsidiaries were in compliance with all applicable debt covenants. Berkshire does not guarantee any debt, borrowings or lines of credit of BNSF, BHE or their subsidiaries.

As of June 30, 2020, our subsidiaries had unused lines of credit and commercial paper capacity aggregating approximately \$9.3 billion to support short-term borrowing programs and provide additional liquidity. Such unused lines of credit included approximately \$7.4 billion related to BHE and its subsidiaries.

Notes to Consolidated Financial Statements (Continued)

Note 17. Fair value measurements

Our financial assets and liabilities are summarized below as of June 30, 2020 and December 31, 2019, with fair values shown according to the fair value hierarchy (in millions). The carrying values of cash and cash equivalents, U.S. Treasury Bills, other 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, 2020					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 3,517	\$ 3,517	\$ 3,470	\$ 47	\$ —
Foreign governments	9,206	9,206	5,982	3,224	—
Corporate bonds	5,918	5,918	—	5,916	2
Other	569	569	—	569	—
Investments in equity securities	207,454	207,454	199,168	45	8,241
Investment in Kraft Heinz common stock	13,054	10,378	10,378	—	—
Loans and finance receivables	18,175	19,237	—	2,505	16,732
Derivative contract assets (1)	213	213	1	28	184
Derivative contract liabilities:					
Railroad, utilities and energy (1)	171	171	7	102	62
Equity index put options	1,565	1,565	—	—	1,565
Notes payable and other borrowings:					
Insurance and other	38,243	42,641	—	42,628	13
Railroad, utilities and energy	68,446	83,946	—	83,946	—
December 31, 2019					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 3,090	\$ 3,090	\$ 3,046	\$ 44	\$ —
Foreign governments	8,638	8,638	5,437	3,201	—
Corporate bonds	6,352	6,352	—	6,350	2
Other	605	605	—	605	—
Investments in equity securities	248,027	248,027	237,271	46	10,710
Investment in Kraft Heinz common stock	13,757	10,456	10,456	—	—
Loans and finance receivables	17,527	17,861	—	1,809	16,052
Derivative contract assets (1)	145	145	—	23	122
Derivative contract liabilities:					
Railroad, utilities and energy (1)	76	76	6	59	11
Equity index put options	968	968	—	—	968
Notes payable and other borrowings:					
Insurance and other	37,590	40,589	—	40,569	20
Railroad, utilities and energy	65,778	76,237	—	76,237	—

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

Notes to Consolidated Financial Statements (Continued)

Note 17. Fair value measurements (Continued)

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

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

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

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

Reconciliations of 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 ended June 30, 2020 and 2019 follow (in millions).

		Gains (losses) included in:				
	Balance – beginning of year	Earnings	Other comprehensive income	Regulatory assets and liabilities	Acquisitions, dispositions and settlements	Balance – June 30
Investments in fixed maturity and equity securities:						
2020	\$ 10,407	\$ (2,469)	\$ —	\$ —	\$ —	\$ 7,938
2019	7	—	—	—	(2)	5
Net derivative contract liabilities:						
2020	(857)	(265)	—	(56)	(265)	(1,443)
2019	(2,343)	1,134	(1)	(23)	(128)	(1,361)

Quantitative information as of June 30, 2020 with respect to significant assets and liabilities measured and carried at fair value on a recurring basis with the use of significant unobservable inputs (Level 3) follows (dollars in millions).

	Fair Value	Principal Valuation Techniques	Unobservable Inputs	Weighted Average
Investments in equity securities:				
Preferred stock	\$ 7,878	Discounted cash flow	Expected duration	9 years
			Discount for transferability restrictions and subordination	375 basis points
Common stock warrants	57	Warrant pricing model	Expected duration	9 years
			Volatility	28%
Derivative contract liabilities	1,565	Option pricing model	Volatility	21%

As described in Note 4, our investments in Occidental Cumulative Perpetual Preferred Stock (“Occidental Preferred”) and Occidental common stock warrants were acquired at an aggregate cost of \$10 billion. Investments in equity securities in the preceding table include our investments in Occidental Preferred and Occidental common stock warrants. These investments are subject to contractual restrictions on transferability and may contain provisions that prevent us from economically hedging our investments. In applying discounted cash flow techniques in valuing the Occidental Preferred, we made assumptions regarding the expected duration of the investment and the effects of subordination in liquidation. The Occidental Preferred is redeemable at Occidental’s option beginning in 2029. In valuing the Occidental common stock warrants, we used a warrant valuation model. While most of the inputs to the model are observable, we made assumptions regarding the expected duration and volatility of the warrants. The Occidental common stock warrants expire on the one-year anniversary on which no Occidental Preferred remains outstanding.

Notes to Consolidated Financial Statements (Continued)

Note 17. Fair value measurements (Continued)

Our equity index put option derivative contracts are illiquid and contain contract terms that are not standard in derivatives markets. For example, we are not required to post collateral under most of our contracts. We determine the fair value of the equity index put option contract liabilities based on the Black-Scholes option valuation model.

As described in Note 12, we recorded goodwill and indefinite-lived intangible asset impairment charges in the second quarter of 2020. These charges reflected our estimates of fair values of the related reporting units for goodwill and of the indefinite-lived intangible assets, and the related measurements are considered level three measurements.

In estimating fair values of reporting units and indefinite-lived intangible assets, we consider the available facts and circumstances concerning the reporting unit and the industries in which it operates. The key assumptions and inputs we generally use in such determinations include forecasting revenues and expenses, cash flows and capital expenditures, as well as the selection of a discount rate and other inputs. These inputs also include our qualitative assessment of risks and uncertainties. We utilized discounted cash flow/earnings methods to develop our estimates of the fair values and we also considered other publicly available information.

Estimates of the fair value of reporting units can be significantly affected by expectations of the severity, duration or long-term effects of the COVID-19 pandemic on the reporting unit's business, which we cannot reliably predict at this time. Consequently, fair value estimates in such instances may be subject to wide variations. We concluded it was appropriate to reflect the increased risks and uncertainties precipitated by the pandemic through a combination of increases in discount rates and reductions to operating and long-term growth assumptions. We also incorporated forecasted operating results that were reduced from what was used in estimating fair value in connection with the 2019 annual impairment test conducted during the fourth quarter.

Note 18. Common stock

Changes in Berkshire's issued, treasury and outstanding common stock during the first six months of 2020 are shown in the table below. In addition to our common stock, 1,000,000 shares of preferred stock are authorized, but none are issued.

	Class A, \$5 Par Value (1,650,000 shares authorized)			Class B, \$0.0033 Par Value (3,225,000,000 shares authorized)		
	Issued	Treasury	Outstanding	Issued	Treasury	Outstanding
Balance December 31, 2019	719,307	(17,337)	701,970	1,408,183,852	(23,702,319)	1,384,481,533
Conversions of Class A common stock to Class B common stock	(27,607)	—	(27,607)	41,410,500	—	41,410,500
Treasury stock acquired	—	(3,164)	(3,164)	—	(31,731,259)	(31,731,259)
Balance at June 30, 2020	<u>691,700</u>	<u>(20,501)</u>	<u>671,199</u>	<u>1,449,594,352</u>	<u>(55,433,578)</u>	<u>1,394,160,774</u>

Each Class A common share is entitled to one vote per share. Class B common stock possesses dividend and distribution rights equal to one-fifteen-hundredth (1/1,500) of such rights of Class A common stock. Each Class B common share possesses voting rights equivalent to one-ten-thousandth (1/10,000) of the voting rights of a Class A share. Unless otherwise required under Delaware General Corporation Law, Class A and Class B common shares vote as a single class. Each share of Class A common stock is convertible, at the option of the holder, into 1,500 shares of Class B common stock. Class B common stock is not convertible into Class A common stock. On an equivalent Class A common stock basis, there were 1,600,640 shares outstanding as of June 30, 2020 and 1,624,958 shares outstanding as of December 31, 2019.

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

Berkshire's common stock repurchase program permits Berkshire to repurchase its Class A and Class B shares any time that Warren Buffett, Berkshire's Chairman of the Board and Chief Executive Officer, and Charlie Munger, Vice Chairman of the Board, believe that the repurchase price is below Berkshire's intrinsic value, conservatively determined. The program continues to allow share repurchases in the open market or through privately negotiated transactions and does not specify a maximum number of shares to be repurchased. However, repurchases will not be made if they would reduce the total value of Berkshire's consolidated cash, cash equivalents and U.S. Treasury Bills holdings below \$20 billion. The repurchase program does not obligate Berkshire to repurchase any specific dollar amount or number of Class A or Class B shares and there is no expiration date to the program.

Notes to Consolidated Financial Statements (Continued)

Note 19. Income taxes

Our consolidated effective income tax rates for the second quarter and first six months of 2020 were 25.4% and 15.7%, respectively, and 20.2% and 20.9% in the second quarter and first six months of 2019, respectively. Our effective income tax rate normally reflects recurring benefits from dividends-received deductions applicable to investments in equity securities and production tax credits related to wind-powered electricity generation placed in service in the U.S. Our periodic effective income tax rate will also vary due to the changes in mix of pre-tax earnings, the magnitude of gains or losses included in earnings with respect to our investments in equity securities and of non-deductible expenses, and the underlying income tax rates applicable in the various taxing jurisdictions.

Note 20. Accumulated other comprehensive income

A summary of the net changes in after-tax accumulated other comprehensive income attributable to Berkshire Hathaway shareholders for the six months ending June 30, 2020 and 2019 follows (in millions).

	Unrealized appreciation of investments, net	Foreign currency translation	Defined benefit pension plans	Other	Accumulated other comprehensive income
First six months of 2020:					
Balance at December 31, 2019	\$ 481	\$ (4,346)	\$ (1,369)	\$ (9)	\$ (5,243)
Other comprehensive income, net	14	(794)	83	(27)	(724)
Balance at June 30, 2020	<u>\$ 495</u>	<u>\$ (5,140)</u>	<u>\$ (1,286)</u>	<u>\$ (36)</u>	<u>\$ (5,967)</u>
First six months of 2019:					
Balance at December 31, 2018	\$ 370	\$ (4,603)	\$ (816)	\$ 34	\$ (5,015)
Other comprehensive income, net	166	145	67	(41)	337
Balance at June 30, 2019	<u>\$ 536</u>	<u>\$ (4,458)</u>	<u>\$ (749)</u>	<u>\$ (7)</u>	<u>\$ (4,678)</u>

Note 21. Supplemental cash flow information

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

	First Six Months	
	2020	2019
Cash paid during the period for:		
Income taxes	\$ 980	\$ 1,199
Interest:		
Insurance and other	591	540
Railroad, utilities and energy	1,438	1,370
Non-cash investing and financing activities:		
Non-cash acquisition of equity securities	231	—

Note 22. 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 July 2020, Berkshire Hathaway Energy (“BHE”) reached a definitive agreement with Dominion Energy, Inc. (“Dominion”) to acquire substantially all of Dominion’s natural gas transmission and storage business, which includes more than 7,700 miles of natural gas transmission pipelines, about 900 billion cubic feet of operated natural gas storage capacity and partial ownership of a liquefied natural gas export, import and storage facility. The acquisition price will be approximately \$4.0 billion. BHE will also assume approximately \$5.7 billion of existing asset-related long-term debt. The acquisition is subject to customary closing conditions and is expected to close during the fourth quarter of 2020.

Notes to Consolidated Financial Statements (Continued)

Note 23. Revenues from contracts with customers

We recognize revenue when a good or service is transferred to a customer. A good or service is transferred when or as the customer obtains control of that good or service. Revenues are based on the consideration we expect to receive in connection with our promises to deliver goods and services to our customers.

The following tables summarize customer contract revenues disaggregated by reportable segment and the source of the revenue for the second quarter and first six months of 2020 and 2019 (in millions). Other revenues included in consolidated revenues were primarily insurance premiums earned, interest, dividend and other investment income and leasing revenues, which are not considered to be revenues from contracts with customers under GAAP.

	Manufacturing	McLane Company	Service and Retail	BNSF	Berkshire Hathaway Energy	Insurance, Corporate and other	Total
Three months ending June 30, 2020							
Manufactured products:							
Industrial and commercial products	\$ 4,631	\$ —	\$ 45	\$ —	\$ —	\$ —	\$ 4,676
Building products	3,665	—	—	—	—	—	3,665
Consumer products	3,009	—	—	—	—	—	3,009
Grocery and convenience store distribution	—	7,287	—	—	—	—	7,287
Food and beverage distribution	—	3,787	—	—	—	—	3,787
Auto sales	—	—	1,895	—	—	—	1,895
Other retail and wholesale distribution	487	—	2,620	—	—	—	3,107
Service	348	122	634	4,558	971	—	6,633
Electricity and natural gas	—	—	—	—	3,319	—	3,319
Total	12,140	11,196	5,194	4,558	4,290	—	37,378
Other revenues	877	22	827	14	369	17,353	19,462
	<u>\$ 13,017</u>	<u>\$ 11,218</u>	<u>\$ 6,021</u>	<u>\$ 4,572</u>	<u>\$ 4,659</u>	<u>\$ 17,353</u>	<u>\$ 56,840</u>
Six months ending June 30, 2020							
Manufactured products:							
Industrial and commercial products	\$ 10,750	\$ —	\$ 89	\$ —	\$ —	\$ —	\$ 10,839
Building products	7,360	—	—	—	—	—	7,360
Consumer products	6,337	—	—	—	—	—	6,337
Grocery and convenience store distribution	—	15,146	—	—	—	—	15,146
Food and beverage distribution	—	7,593	—	—	—	—	7,593
Auto sales	—	—	3,804	—	—	—	3,804
Other retail and wholesale distribution	1,092	—	5,553	—	—	—	6,645
Service	735	254	1,595	9,924	1,764	—	14,272
Electricity and natural gas	—	—	—	—	6,834	—	6,834
Total	26,274	22,993	11,041	9,924	8,598	—	78,830
Other revenues	1,757	46	1,918	28	568	34,958	39,275
	<u>\$ 28,031</u>	<u>\$ 23,039</u>	<u>\$ 12,959</u>	<u>\$ 9,952</u>	<u>\$ 9,166</u>	<u>\$ 34,958</u>	<u>\$ 118,105</u>

Notes to Consolidated Financial Statements (Continued)

Note 23. Revenues from contracts with customers (Continued)

	Manufacturing	McLane Company	Service and Retail	BNSF	Berkshire Hathaway Energy	Insurance, Corporate and other	Total
Three months ending June 30, 2019							
Manufactured products:							
Industrial and commercial products	\$ 6,503	\$ —	\$ 46	\$ —	\$ —	\$ —	\$ 6,549
Building products	4,143	—	—	—	—	—	4,143
Consumer products	3,669	—	—	—	—	—	3,669
Grocery and convenience store distribution	—	8,042	—	—	—	—	8,042
Food and beverage distribution	—	4,321	—	—	—	—	4,321
Auto sales	—	—	2,125	—	—	—	2,125
Other retail and wholesale distribution	534	—	3,092	—	—	—	3,626
Service	429	23	1,044	5,837	1,223	—	8,556
Electricity and natural gas	—	—	—	—	3,429	—	3,429
Total	15,278	12,386	6,307	5,837	4,652	—	44,460
Other revenues	913	25	1,133	14	318	16,735	19,138
	<u>\$ 16,191</u>	<u>\$ 12,411</u>	<u>\$ 7,440</u>	<u>\$ 5,851</u>	<u>\$ 4,970</u>	<u>\$ 16,735</u>	<u>\$ 63,598</u>

Six months ending June 30, 2019

Manufactured products:							
Industrial and commercial products	\$ 12,962	\$ —	\$ 92	\$ —	\$ —	\$ —	\$ 13,054
Building products	7,695	—	—	—	—	—	7,695
Consumer products	6,959	—	—	—	—	—	6,959
Grocery and convenience store distribution	—	16,077	—	—	—	—	16,077
Food and beverage distribution	—	8,446	—	—	—	—	8,446
Auto sales	—	—	4,062	—	—	—	4,062
Other retail and wholesale distribution	1,078	—	6,013	—	—	—	7,091
Service	777	43	2,034	11,550	1,948	—	16,352
Electricity and natural gas	—	—	—	—	7,116	—	7,116
Total	29,471	24,566	12,201	11,550	9,064	—	86,852
Other revenues	1,779	44	2,242	26	578	32,755	37,424
	<u>\$ 31,250</u>	<u>\$ 24,610</u>	<u>\$ 14,443</u>	<u>\$ 11,576</u>	<u>\$ 9,642</u>	<u>\$ 32,755</u>	<u>\$ 124,276</u>

A summary of the transaction price allocated to the significant unsatisfied remaining performance obligations relating to contracts with expected durations in excess of one year as of June 30, 2020 follows (in millions).

	Performance obligations expected to be satisfied:		Total
	Less than 12 months	Greater than 12 months	
Electricity and natural gas	\$ 884	\$ 4,888	\$ 5,772
Other sales and service contracts	1,155	2,663	3,818

Notes to Consolidated Financial Statements (Continued)

Note 24. Business segment data

Our operating businesses include a large and diverse group of insurance, manufacturing, service and retailing businesses. We organize our reportable business segments in a manner that reflects how management views those business activities. Certain businesses are grouped together for segment reporting based upon similar products or product lines, marketing, selling and distribution characteristics, even though those business units are operated under separate local management. Revenues and earnings before income taxes by segment for the second quarter and first six months of 2020 and 2019 were as follows (in millions).

	Second Quarter		First Six Months	
	2020	2019	2020	2019
Revenues of Operating Businesses:				
Insurance:				
Underwriting:				
GEICO	\$ 9,040	\$ 8,869	\$ 18,149	\$ 17,491
Berkshire Hathaway Primary Group	2,244	2,287	4,613	4,438
Berkshire Hathaway Reinsurance Group	4,311	3,707	8,581	7,253
Investment income	1,615	1,654	3,263	3,141
Total insurance	17,210	16,517	34,606	32,323
BNSF	4,602	5,893	10,019	11,655
Berkshire Hathaway Energy	4,659	4,970	9,166	9,642
Manufacturing	13,033	16,206	28,068	31,276
McLane Company	11,218	12,411	23,039	24,610
Service and retailing	6,037	7,462	12,993	14,487
	56,759	63,459	117,891	123,993
Reconciliation of segments to consolidated amount:				
Corporate, eliminations and other	81	139	214	283
	<u>\$ 56,840</u>	<u>\$ 63,598</u>	<u>\$ 118,105</u>	<u>\$ 124,276</u>
	Second Quarter		First Six Months	
	2020	2019	2020	2019
Earnings Before Income Taxes of Operating Businesses:				
Insurance:				
Underwriting:				
GEICO	\$ 2,060	\$ 393	\$ 3,044	\$ 1,163
Berkshire Hathaway Primary Group	96	167	63	137
Berkshire Hathaway Reinsurance Group	(1,103)	(104)	(1,592)	(357)
Investment income	1,613	1,649	3,260	3,134
Total insurance	2,666	2,105	4,775	4,077
BNSF	1,494	1,773	3,078	3,438
Berkshire Hathaway Energy	533	593	952	1,133
Manufacturing	1,399	2,527	3,510	4,721
McLane Company	44	59	109	170
Service and retailing	408	745	966	1,366
	6,544	7,802	13,390	14,905
Reconciliation of segments to consolidated amount:				
Investment and derivative gains (losses)	40,085	10,048	(30,190)	30,370
Interest expense, not allocated to segments	(111)	(107)	(247)	(216)
Equity method investments	(257)	124	43	292
Goodwill and intangible asset impairments	(10,634)	—	(10,634)	—
Corporate, eliminations and other	(218)	(108)	(2)	55
	<u>\$ 35,409</u>	<u>\$ 17,759</u>	<u>\$ (27,640)</u>	<u>\$ 45,406</u>

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

Results of Operations

Net earnings/loss 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	
	2020	2019	2020	2019
Insurance – underwriting	\$ 806	\$ 353	\$ 1,169	\$ 742
Insurance – investment income	1,368	1,366	2,754	2,603
Railroad	1,131	1,338	2,321	2,591
Utilities and energy	633	607	1,194	1,212
Manufacturing, service and retailing	1,449	2,487	3,487	4,687
Investment and derivative gains (losses)	31,645	7,934	(23,972)	24,040
Other	(10,737) *	(12)	(10,404) *	(141)
Net earnings (loss) attributable to Berkshire Hathaway shareholders	\$ 26,295	\$ 14,073	\$ (23,451)	\$ 35,734

* Includes goodwill and indefinite-lived asset impairment charges of \$10.9 billion.

Through our subsidiaries, we engage in a number of diverse business activities. We manage our operating businesses on an unusually decentralized basis. There are essentially no centralized or integrated business functions and there is minimal involvement by our corporate headquarters in the day-to-day business activities of the operating businesses. Our senior corporate management team participates in and is ultimately responsible for significant capital allocation decisions, investment activities and the selection of the Chief Executive to head each of the operating businesses. The business segment data (Note 24 to the accompanying Consolidated Financial Statements) should be read in conjunction with this discussion.

Prior to the middle of March, many of our operating businesses were experiencing comparative revenue and earnings increases over 2019. As efforts to contain the spread of the COVID-19 pandemic accelerated in the second half of March and continued through the second quarter, most of our businesses were negatively affected, with the effects to date ranging from relatively minor to severe. Several of our businesses deemed essential have continued to operate, including our railroad, utilities and energy, insurance and certain of our manufacturing, distribution and service businesses. Revenues and earnings of most of our manufacturing, service and retailing businesses declined considerably, and in certain instances severely, in the second quarter due to closures of facilities where crowds can gather, such as retail stores, restaurants and entertainment venues and closures of certain of our businesses.

In response to the effects of the pandemic, we have implemented various business continuity plans to protect our employees and customers. Such plans include a variety of actions, such as temporarily closing certain retail stores, manufacturing facilities and service centers of businesses that were not subject to government mandated closure. Our businesses have implemented practices to protect employees while at work. Such practices have included work-from-home, staggered or reduced work schedules, increased cleaning and sanitation of work spaces, providing employee health screenings, eliminating non-essential travel and face-to-face meetings and providing general health reminders intended to lower the risk of spreading COVID-19.

We have also taken actions in response to the economic losses from reductions in consumer demand for products and services we offer and our inability to produce goods and provide services at certain of our businesses. These actions have included employee furloughs, wage and salary reductions, capital spending reductions and other actions intended to help mitigate the economic losses and preserve capital and liquidity. While we believe that certain of these necessary actions are temporary, certain of our businesses are undertaking and will likely continue to undertake restructuring activities that will resize the operations to better fit expected customer demand. We cannot reliably predict when business activities at our numerous and diverse operations will normalize. Nor can we predict how these events will alter the future consumption patterns of consumers and businesses we serve.

Our insurance businesses generated after-tax earnings from underwriting of \$806 million in the second quarter and \$1.2 billion in the first six months of 2020, which was largely attributable to unusually high earnings from GEICO due to lower claims frequencies. These results are likely to be temporary, as the full effects of the reductions in premiums from the GEICO Giveback program in underwriting earnings will occur over the remainder of 2020 and the first quarter of 2021 when the reduced levels of premiums written under the program are earned and included in our reported revenues. To the extent claims frequencies over this period revert to historical levels, GEICO may incur underwriting losses. Insurance underwriting results in 2020 also included earnings from other primary insurance and losses from reinsurance. After-tax earnings from insurance investment income were relatively unchanged in the second quarter and increased 5.8% in the first six months of 2020 as compared to 2019, reflecting higher dividend income and lower interest income due to significant declines in interest rates and interest earned on our substantial short-term investment balances.

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

Results of Operations (Continued)

After-tax earnings of our railroad business decreased 15.5% in the second quarter and 10.4% in the first six months of 2020 as compared to 2019. Earnings in 2020 reflected the effects on revenues from lower shipping volumes, including the negative effects of COVID-19, partly offset by productivity improvements which lowered operating costs. After-tax earnings of our utilities and energy business increased 4.3% in the second quarter and decreased 1.5% in the first six months of 2020 compared to 2019. Earnings from our manufacturing, service and retailing businesses declined 41.7% in the second quarter and 25.6% in the first six months of 2020 versus 2019. Earnings of these businesses were generally lower in 2020 attributable to the effects of COVID-19, although such effects varied among our businesses.

Investment and derivative gains/losses in 2020 and 2019 included significant gains and losses, including significant unrealized gains and losses from market price changes on our holdings of equity securities. 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.

Other earnings in the second quarter and first six months of 2020 included after-tax goodwill and indefinite-lived intangible asset impairment charges of \$10.9 billion, including our equity method share of impairment charges recorded by Kraft Heinz.

Insurance—Underwriting

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

The timing and amount of catastrophe losses can produce significant volatility in our periodic underwriting results, particularly with respect to our reinsurance businesses. Generally, we consider pre-tax 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 \$118 billion as of June 30, 2020. 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.

Additionally, underwriting results in 2020 of our commercial insurance and reinsurance businesses were negatively affected by estimated losses and costs associated with the COVID-19 pandemic, including estimated provisions for claims and uncollectible premiums and incremental operating costs to maintain customer service levels at certain underwriting units. The potential effects of the pandemic may be further affected by future judicial rulings and regulatory and legislative actions pertaining to insurance coverage and claims that we cannot reasonably estimate at this time. We also anticipate our underwriting results for the remainder of 2020 and the first quarter of 2021 will be adversely affected from lower premiums for certain business attributable to premium credits granted to policyholders and when premiums are a function of the insured's payroll.

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

	Second Quarter		First Six Months	
	2020	2019	2020	2019
Pre-tax underwriting earnings (loss):				
GEICO	\$ 2,060	\$ 393	\$ 3,044	\$ 1,163
Berkshire Hathaway Primary Group	96	167	63	137
Berkshire Hathaway Reinsurance Group	(1,103)	(104)	(1,592)	(357)
Pre-tax underwriting earnings	1,053	456	1,515	943
Income taxes and noncontrolling interests	247	103	346	201
Net underwriting earnings	\$ 806	\$ 353	\$ 1,169	\$ 742
Effective income tax rate	23.4%	22.1%	22.8%	22.3%

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

Insurance—Underwriting (Continued)

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 Quarter				First Six Months			
	2020		2019		2020		2019	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 8,090		\$ 8,703		\$ 17,771		\$ 17,966	
Premiums earned	\$ 9,040	100.0	\$ 8,869	100.0	\$ 18,149	100.0	\$ 17,491	100.0
Losses and loss adjustment expenses	5,614	62.1	7,276	82.0	12,380	68.2	13,832	79.1
Underwriting expenses	1,366	15.1	1,200	13.6	2,725	15.0	2,496	14.3
Total losses and expenses	6,980	77.2	8,476	95.6	15,105	83.2	16,328	93.4
Pre-tax underwriting earnings	\$ 2,060		\$ 393		\$ 3,044		\$ 1,163	

GEICO generated pre-tax underwriting earnings of \$2.1 billion in the second quarter and \$3.0 billion in the first six months, reflecting significant declines in losses and loss adjustment expenses attributable to lower claims frequencies from the effects of less driving by policyholders in 2020 during the COVID-19 pandemic. As policyholder driving increases, claims frequencies are expected to increase and as the effects of the GEICO Giveback program (see following paragraph) on earned premiums increase, GEICO could experience pre-tax underwriting losses over the second half of 2020, which would offset a portion of the pre-tax underwriting earnings generated in the first half.

Premiums written decreased 7.0% in the second quarter and 1.1% in the first six months of 2020 compared to 2019. The GEICO Giveback program was implemented on April 8, 2020, providing a 15% premium credit to all voluntary auto and motorcycle policies renewing between April 8, 2020 and October 7, 2020, as well as to any new policies purchased during the same period. The GEICO Giveback program reduced premiums written in the second quarter of 2020 by approximately \$1.3 billion. Because premiums are earned over the policy terms, the effect of the GEICO Giveback program on underwriting results is delayed. Premiums earned increased 1.9% in the second quarter and 3.8% in the first six months of 2020 compared to the same periods in 2019, which included a reduction of \$293 million attributable to the GEICO Giveback program. It is estimated that during the period between April 8, 2020 and April 7, 2021, earned premiums will be reduced by approximately \$2.5 billion as a result of the GEICO Giveback program. *Premiums earned will very likely decline in the third and fourth quarters even if policies-in-force and exposures increase.*

Over the past twelve months, voluntary auto policies-in-force grew 8.3% and premiums per auto policy decreased approximately 2.3%. The increase in voluntary auto policies-in-force resulted from a 24.2% decrease in lost policies partially offset by a 1.7% decrease in new business sales. Voluntary auto policies-in-force increased approximately 930,000 during the first six months of 2020. In response to the COVID-19 pandemic, GEICO paused cancellations of insurance policies for non-payment, which contributed to the increase in policies-in-force in the first half of 2020. Consequently, as policy cancellations for non-payment resume, policies-in-force growth is expected to slow considerably over the second half of 2020.

Losses and loss adjustment expenses in the second quarter of 2020 were approximately \$5.6 billion, a decrease of \$1.7 billion (22.8%) and in the first six months of 2020 were approximately \$12.4 billion, a decrease of \$1.5 billion (10.5%) compared to 2019. GEICO's ratio of losses and loss adjustment expenses to premiums earned (the "loss ratio") in the second quarter and first six months of 2020 was 62.1% and 68.2%, respectively, decreases of 19.9 and 10.9 percentage points compared to the second quarter and first six months of 2019, respectively. The decreases in the loss ratio reflect significant declines in claims frequencies and increases in claims severities.

Claims frequencies in the first six months of 2020 were lower for property damage, bodily injury and personal injury protection coverages (twenty-seven to thirty percent range) and collision coverage (twenty-four to twenty-six percent range) compared to 2019. Average claims severities in the first six months of 2020 were higher for property damage coverage (nine to eleven percent range), collision coverage (seven to nine percent range) and bodily injury coverage (ten to twelve percent range). The low point in claims frequencies was reached in April. Frequencies in May and June increased significantly from April, although they were well below historical levels. GEICO's loss and loss adjustment expenses in the first six months of 2020 also included reductions in the ultimate claims loss estimates for prior years' loss events of \$166 million in 2020 and \$54 million in 2019.

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

Insurance—Underwriting (Continued)

GEICO (Continued)

Underwriting expenses in the first six months of 2020 were approximately \$2.7 billion, an increase of \$229 million (9.2%) over 2019. GEICO's expense ratio (underwriting expenses to premiums earned) in the first six months of 2020 was 15.0%, an increase of 0.7 percentage points compared to 2019. The underwriting expense increase was primarily attributable to higher employee-related costs, technology costs and increased allowances for uncollectible premiums, partially offset by lower premium and state taxes.

Berkshire Hathaway Primary Group

The Berkshire Hathaway Primary Group ("BH Primary") provides a variety of commercial insurance solutions, including healthcare malpractice, workers' compensation, automobile, general liability, property and various specialty coverages for small, medium and large clients. The largest of these insurers are Berkshire Hathaway Specialty Insurance ("BH Specialty"), Berkshire Hathaway Homestate Companies ("BHHC"), MedPro Group, Berkshire Hathaway GUARD Insurance Companies ("GUARD"), and National Indemnity Company ("NICO Primary"). Other BH Primary insurers include U.S. Liability Insurance Company, Central States Indemnity Company and MLMIC Insurance Company. A summary of BH Primary underwriting results follows (dollars in millions).

	Second Quarter				First Six Months			
	2020		2019		2020		2019	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 2,149		\$ 2,370		\$ 4,604		\$ 4,711	
Premiums earned	\$ 2,244	100.0	\$ 2,287	100.0	\$ 4,613	100.0	\$ 4,438	100.0
Losses and loss adjustment expenses	1,582	70.5	1,568	68.6	3,393	73.6	3,138	70.7
Underwriting expenses	566	25.2	552	24.1	1,157	25.0	1,163	26.2
Total losses and expenses	2,148	95.7	2,120	92.7	4,550	98.6	4,301	96.9
Pre-tax underwriting earnings	\$ 96		\$ 167		\$ 63		\$ 137	

Premiums written in the second quarter and first six months of 2020 decreased \$221 million (9.3%) and \$107 million (2.3%), respectively, compared to the same periods in 2019. The decreases were primarily attributable to lower workers' compensation and commercial auto business, partly offset by increases from BH Specialty in property and casualty business. The declines in workers' compensation and commercial auto premiums written reflected the effects of reduced exposures and premium refunds related to COVID-19, increased price competition in the market and the effect of the Applied Underwriters divestiture in 2019. Premiums earned in the second quarter and first six months of 2020 decreased \$43 million (1.9%) and increased \$175 million (3.9%), respectively, compared to the same periods in 2019.

BH Primary insurers generated pre-tax underwriting earnings of \$96 million in the second quarter and \$63 million in the first six months of 2020 compared to \$167 million in the second quarter and \$137 million in the first six months of 2019. Underwriting results in the first six months of 2020 included estimated claim losses and allowances for credit losses attributable to the pandemic, partly offset by lower other underwriting expenses. Loss ratios for the first six months were 73.6% in 2020 and 70.7% in 2019. Losses and loss adjustment expenses incurred included reductions for prior years' loss events of \$84 million in the first six months of 2020 and \$144 million in 2019.

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

Berkshire Hathaway Reinsurance Group

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

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

Insurance—Underwriting (Continued)

Berkshire Hathaway Reinsurance Group (Continued)

Generally, we strive to generate underwriting profits. However, time-value-of-money concepts are important elements in establishing prices for retroactive reinsurance and periodic payment annuity businesses due to the expected long durations of the liabilities. We expect to incur pre-tax underwriting losses from such businesses, primarily through deferred charge amortization and discount accretion charges. We receive premiums at the inception of these contracts, which are then available for investment. A summary of Berkshire Hathaway Reinsurance Group's premiums and pre-tax underwriting results follows (in millions).

	Second Quarter				First Six Months			
	Premiums earned		Pre-tax underwriting earnings (loss)		Premiums earned		Pre-tax underwriting earnings (loss)	
	2020	2019	2020	2019	2020	2019	2020	2019
Property/casualty	\$ 2,708	\$ 2,301	\$ (643)	\$ 198	\$ 5,431	\$ 4,623	\$ (805)	\$ 158
Life/health	1,418	1,082	41	(1)	2,769	2,106	46	190
Retroactive reinsurance	—	91	(460)	(238)	34	94	(502)	(561)
Periodic payment annuity	182	229	(146)	(75)	341	423	(202)	(245)
Variable annuity	3	4	105	12	6	7	(129)	101
	<u>\$ 4,311</u>	<u>\$ 3,707</u>	<u>\$ (1,103)</u>	<u>\$ (104)</u>	<u>\$ 8,581</u>	<u>\$ 7,253</u>	<u>\$ (1,592)</u>	<u>\$ (357)</u>

Property/casualty

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

	Second Quarter				First Six Months			
	2020		2019		2020		2019	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 2,995		\$ 2,327		\$ 7,051		\$ 5,869	
Premiums earned	\$ 2,708	100.0	\$ 2,301	100.0	\$ 5,431	100.0	\$ 4,623	100.0
Losses and loss adjustment expenses	2,577	95.2	1,455	63.2	4,697	86.5	3,229	69.8
Underwriting expenses	774	28.5	648	28.2	1,539	28.3	1,236	26.8
Total losses and expenses	<u>3,351</u>	<u>123.7</u>	<u>2,103</u>	<u>91.4</u>	<u>6,236</u>	<u>114.8</u>	<u>4,465</u>	<u>96.6</u>
Pre-tax underwriting earnings (loss)	<u>\$ (643)</u>		<u>\$ 198</u>		<u>\$ (805)</u>		<u>\$ 158</u>	

Property/casualty premiums written increased \$668 million (28.7%) in the second quarter and \$1.2 billion (20.1%) in the first six months of 2020 as compared to the same periods in 2019. The increases in premiums written were primarily attributable to new property contracts, partially offset by the unfavorable foreign currency effects of a stronger U.S. Dollar.

Losses and loss adjustment expenses in the second quarter and first six months of 2020 increased \$1.1 billion (77.1%) and \$1.5 billion (45.5%) over the same periods in 2019. Losses and loss adjustment expenses reflected estimated COVID-19 related claims of approximately \$350 million in the second quarter and \$575 million in the first six months of 2020. Losses and loss adjustment expenses in the first six months included a net increase in estimated ultimate liabilities for prior years' loss events of \$439 million in 2020 and \$269 million in 2019. The increase in 2020 is primarily attributable to legacy environmental, asbestos and other latent injury claims. We incurred no significant losses from property catastrophe events in the first six months of 2020 and 2019. Underwriting results in the first six months included approximately \$39 million related to allowances for credit losses attributable to the pandemic in 2020.

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

Insurance—Underwriting (Continued)

Life/health

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

	Second Quarter				First Six Months			
	2020		2019		2020		2019	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 1,418		\$ 1,088		\$ 2,770		\$ 2,112	
Premiums earned	\$ 1,418	100.0	\$ 1,082	100.0	\$ 2,769	100.0	\$ 2,106	100.0
Life and health insurance benefits	1,132	79.8	875	80.9	2,186	78.9	1,509	71.7
Underwriting expenses	245	17.3	208	19.2	537	19.4	407	19.3
Total benefits and expenses	1,377	97.1	1,083	100.1	2,723	98.3	1,916	91.0
Pre-tax underwriting earnings (loss)	\$ 41		\$ (1)		\$ 46		\$ 190	

Life/health premiums written increased \$330 million (30.3%) in the second quarter and \$658 million (31.2%) in the first six months of 2020 compared to the corresponding 2019 periods. The increases included \$198 million in the second quarter and \$366 million in the first six months from a single reinsurance contract that inceptioned in the fourth quarter of 2019 covering health insurance risks. The increases in premiums written also reflected volume growth in Asia and Europe, partially offset by the unfavorable effects of foreign currency translation attributable to a stronger U.S. Dollar.

The life/health business produced pre-tax underwriting earnings of \$41 million in the second quarter and \$46 million in the first six months of 2020 compared to pre-tax losses of \$1 million in the second quarter and pre-tax earnings of \$190 million in the first six months of 2019. Life/health underwriting results in the first quarter of 2019 included a one-time pre-tax gain of \$163 million attributable to a yearly-renewable-term life reinsurance contract amendment, which effectively eliminated our future exposures under the contract. In the second quarter of 2019, underwriting results also reflected an increase in disability benefit liabilities in Australia, attributable to higher claims experience and changes to various underlying assumptions.

Retroactive reinsurance

There were no significant retroactive reinsurance contracts written in the first six months of 2020 and 2019. Pre-tax underwriting losses in 2020 and 2019 derived from deferred charge amortization and changes in the estimated timing and amount of future claim payments, as well as from foreign currency gains/losses arising from the periodic remeasurement of non-U.S. Dollar denominated liabilities related to contracts written by our U.S. subsidiaries.

Pre-tax underwriting results included foreign currency remeasurement losses of \$115 million in the second quarter and gains of \$90 million in the first six months of 2020 compared to gains of \$41 million in the second quarter and losses of \$11 million in the first six months of 2019. Retroactive reinsurance contracts produced pre-tax underwriting losses before foreign currency gains/losses of \$345 million in the second quarter and \$592 million in the first six months of 2020 compared to \$279 million in the second quarter and \$550 million in the first six months of 2019.

Gross unpaid losses assumed under retroactive reinsurance contracts as of June 30, 2020 and December 31, 2019 were \$41.8 billion and \$42.4 billion, respectively. Unamortized deferred charge assets related to such reinsurance contracts as of June 30, 2020 and December 31, 2019 were \$13.2 billion and \$13.7 billion, respectively. Deferred charge assets will be charged to earnings over the expected remaining claims settlement periods through periodic amortization.

Periodic payment annuity

Periodic payment annuity premiums earned in the second quarter and first six months of 2020 were \$182 million and \$341 million, respectively, compared to \$229 million and \$423 million, respectively, in 2019. The periodic payment annuity market is price sensitive. The volumes written can change rapidly due to changes in prices, which are affected by prevailing interest rates, the perceived risks and durations associated with the expected annuity payments and the level of competition.

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

Insurance—Underwriting (Continued)

Periodic payment annuity (Continued)

Periodic payment annuity contracts normally produce pre-tax underwriting losses deriving from the recurring discount accretion of annuity liabilities. Underwriting results also include the effects of mortality and interest rate changes and remeasurement gains and losses related to foreign currency denominated liabilities of certain contracts written by our U.S. subsidiaries. During the second quarter and first six months of 2020, pre-tax underwriting results included remeasurement gains of \$6 million and \$111 million, respectively. Remeasurement gains were \$37 million in the second quarter and \$9 million in the first six months of 2019.

Excluding foreign currency remeasurement gains/losses, pre-tax underwriting losses were \$152 million in the second quarter and \$313 million in the first six months of 2020 compared to \$112 million in the second quarter and \$254 million in the first six months of 2019. Discounted periodic payment annuity liabilities as of June 30, 2020 and December 31, 2019 were \$13.9 billion and \$13.5 billion, respectively. The weighted average discount rate of these liabilities was 4.0% as of June 30, 2020.

Variable annuity

Variable annuity guarantee reinsurance contracts produced pre-tax earnings of \$105 million in the second quarter and pre-tax losses of \$129 million in the first six months of 2020 compared to pre-tax earnings of \$12 million in the second quarter and \$101 million in the first six months of 2019. Periodic underwriting results from this business reflect changes in remaining liabilities for underlying guaranteed benefits reinsured, which are affected by changes in securities markets and interest rates and from the periodic amortization of expected profit margins. Underwriting results from these contracts can be volatile, reflecting the volatility of securities markets, interest rates and foreign currency exchange rates.

Insurance—Investment Income

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

	Second Quarter		First Six Months	
	2020	2019	2020	2019
Interest and other investment income	\$ 270	\$ 577	\$ 674	\$ 1,090
Dividend income	1,343	1,072	2,586	2,044
Investment income before income taxes and noncontrolling interests	1,613	1,649	3,260	3,134
Income taxes and noncontrolling interests	245	283	506	531
Net investment income	\$ 1,368	\$ 1,366	\$ 2,754	\$ 2,603
Effective income tax rate	15.1%	17.0%	15.5%	16.8%

Interest and other investment income declined \$307 million (53.2%) in the second quarter and \$416 million (38.2%) in the first six months of 2020 compared to 2019. The declines were primarily due to lower income from short-term investments. Dividend income increased \$271 million (25.3%) in the second quarter and \$542 million (26.5%) in the first six months of 2020 compared to 2019. The increases were primarily attributable to the investment in \$10 billion liquidation value of 8% cumulative preferred stock of Occidental on August 8, 2019 and higher dividend rates on certain common stock investments. We reduced our overall investments in equity securities in the second quarter of 2020, and dividend income over the second half of 2020 may decline from the first half.

We continue to hold substantial balances of cash, cash equivalents and short-term U.S. Treasury Bills. Short-term interest rates declined over the second half of 2019 and continued to decline through the first half of 2020. We expect such rates, which are historically low, to remain low and that our earnings from such investments over the remainder of 2020 will be substantially lower than in 2019. Nevertheless, we believe that maintaining ample liquidity is paramount and we insist on safety over yield with respect to short-term investments.

Invested assets of our insurance businesses derive from shareholder capital, including reinvested earnings, and from net liabilities under insurance and reinsurance contracts or "float." The major components of float are unpaid losses and loss adjustment expenses, including liabilities under retroactive reinsurance contracts, life, annuity and health insurance benefit liabilities, unearned premiums and other liabilities due to policyholders, less insurance premiums and reinsurance receivables, deferred charges assumed under retroactive reinsurance contracts and deferred policy acquisition costs. Float was approximately \$131 billion on June 30, 2020 and \$129 billion on December 31, 2019. Our average cost of float was negative for the first six months of 2020 as our underwriting operations generated pre-tax earnings of \$1.5 billion.

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

Insurance—Investment Income (Continued)

A summary of cash and investments held in our insurance businesses as of June 30, 2020 and December 31, 2019 follows (in millions).

	June 30, 2020	December 31, 2019
Cash, cash equivalents and U.S. Treasury Bills	\$ 84,146	\$ 64,908
Equity securities	200,958	240,126
Fixed maturity securities	19,094	18,537
Other	2,467	2,481
	<u>\$ 306,665</u>	<u>\$ 326,052</u>

Fixed maturity securities as of June 30, 2020 were as follows (in millions).

	Amortized cost	Unrealized gains	Carrying value
U.S. Treasury, U.S. government corporations and agencies	\$ 3,433	\$ 75	\$ 3,508
Foreign governments	9,136	69	9,205
Corporate bonds	5,431	420	5,851
Other	457	73	530
	<u>\$ 18,457</u>	<u>\$ 637</u>	<u>\$ 19,094</u>

U.S. government obligations are rated AA+ or Aaa by the major rating agencies. Approximately 88% of all foreign government obligations were rated AA or higher. Foreign government securities include obligations issued or unconditionally guaranteed by national or provincial government entities. Approximately 98% of corporate bond investments were considered investment-grade by the major rating agencies.

Railroad ("Burlington Northern Santa Fe")

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

	Second Quarter		First Six Months	
	2020	2019	2020	2019
Revenues	\$ 4,602	\$ 5,893	\$ 10,019	\$ 11,655
Operating expenses:				
Compensation and benefits	993	1,334	2,237	2,734
Fuel	327	775	941	1,486
Purchased services	560	687	1,226	1,400
Depreciation and amortization	612	595	1,227	1,186
Equipment rents, materials and other	356	462	788	876
Total operating expenses	2,848	3,853	6,419	7,682
Interest expense	260	267	522	535
	3,108	4,120	6,941	8,217
Pre-tax earnings	1,494	1,773	3,078	3,438
Income taxes	363	435	757	847
Net earnings	<u>\$ 1,131</u>	<u>\$ 1,338</u>	<u>\$ 2,321</u>	<u>\$ 2,591</u>
Effective income tax rate	<u>24.3%</u>	<u>24.5%</u>	<u>24.6%</u>	<u>24.6%</u>

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

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

BNSF's revenues in the second quarter and first six months of 2020 were \$4.6 billion and \$10.0 billion, respectively, representing decreases of approximately \$1.3 billion (21.9%) and \$1.6 billion (14.0%) versus the corresponding periods in 2019. BNSF's revenues in 2020 reflected lower volumes of 17.9% in the second quarter and 11.7% in the first six months, as well as a 2.7% year-to-date decrease in average revenue per car/unit. Volume in the first six months of 2020 was 4.44 million cars/units compared to 5.03 million cars/units in 2019.

Pre-tax earnings were \$1.5 billion and \$3.1 billion in the second quarter and first six months of 2020, respectively, decreases of 15.7% and 10.5%, respectively, compared to 2019. The decreases principally resulted from the negative impacts on volumes of the COVID-19 pandemic, as well as the effects on earnings in 2019 of a revenue increase related to the favorable outcome of an arbitration hearing and a reduction to expense from a retirement plan curtailment gain arising from a plan amendment. These effects were partially offset by significant improvements in 2020 in service, velocity and cost performance compared to the first six months of 2019 when severe winter weather and flooding on parts of the network negatively affected expenses and service levels.

Revenues from consumer products were \$1.6 billion in the second quarter and \$3.3 billion in the first six months of 2020, decreases of 17.4% and 14.6%, respectively, from 2019. The decreases reflected lower average revenue per car/unit for both periods and volume decreases of 12.1% in the second quarter and 9.7% in the first six months of 2020. The volume decreases were due to lower intermodal and automotive shipments attributable to the COVID-19 pandemic.

Revenues from industrial products were \$1.2 billion in the second quarter and \$2.6 billion in the first six months of 2020, decreases of 26.4% and 13.9%, respectively, from 2019. The decreases were attributable to lower volumes of 25.9% in the second quarter and 14.4% in the first six months of 2020. Average revenue per car/unit was lower in the second quarter and higher in the first six months. The volume decreases were primarily driven by a decline in U.S. industrial production due to the COVID-19 pandemic and reduced demand in the energy sector, which drove lower sand and petroleum products volume.

Revenues from agricultural products were \$1.1 billion in the second quarter and \$2.2 billion in the first six months of 2020, decreases of 12.2% and 5.1%, respectively, from 2019. The decreases reflected lower revenue per car/unit for both periods and volume decreases of 7.0% in the second quarter and 2.1% in the first six months of 2020 as compared to 2019. The volume decreases were due to the impacts of the COVID-19 pandemic, primarily impacting ethanol and related commodities, as well as lower net exports.

Revenues from coal were \$541 million in the second quarter and \$1.3 billion in the first six months of 2020, decreases of 38.7% and 25.4%, respectively, compared to 2019. The decreases reflected lower average revenue per car/unit and lower volume of 33.6% in the second quarter and 21.0% in the first six months. Volumes were primarily impacted by lower electricity demand driven by impacts of the COVID-19 pandemic and mild winter weather, low natural gas prices and plant retirements.

Operating expenses in the second quarter and first six months of 2020 were \$2.8 billion and \$6.4 billion, respectively, decreases of \$1.0 billion (26.1%) and \$1.3 billion (16.4%), respectively, compared to the same periods in 2019. The ratio of operating expenses to revenues decreased 3.5 percentage points to 61.9% in the second quarter and 1.8 percentage points to 64.1% in the first six months of 2020 versus the 2019 periods. BNSF's expenses in 2020 reflected lower volume-related costs, productivity improvements, the effects of cost control initiatives and improved weather conditions compared to the first six months of 2019.

Compensation and benefits expenses decreased \$341 million (25.6%) in the second quarter and \$497 million (18.2%) in the first six months of 2020 compared to 2019. The decreases were primarily due to lower employee counts associated with lower volume and due to improved productivity. Fuel expenses decreased \$448 million (57.8%) in the second quarter and \$545 million (36.7%) in the first six months of 2020 compared to 2019. The decreases were primarily due to lower average fuel prices, lower volumes and improved efficiency. Purchased service expenses decreased \$127 million (18.5%) in the second quarter and \$174 million (12.4%) in the first six months of 2020 compared to 2019, primarily due to lower volume, improved productivity and insurance recoveries in 2020 related to flooding in 2019. Equipment rents, materials and other expenses decreased \$106 million (22.9%) in the second quarter and \$88 million (10.0%) in the first six months of 2020 compared to 2019, as a result of lower volume-related costs, the effects of cost controls and lower personal injury expense in 2020, partially offset by a pension plan curtailment gain in the first quarter of 2019.

BNSF is an important part of the national and global supply chain and, as an essential business, has continued to operate throughout the duration of the COVID-19 pandemic. However, the COVID-19 pandemic has caused a significant economic slowdown that has adversely affected the demand for transportation services. The COVID-19 pandemic continues to evolve, and the full extent to which it may impact BNSF's business, operating results, financial condition, or liquidity will depend on future developments which are highly uncertain and cannot be predicted with confidence. We believe BNSF's fundamental business remains strong and it has ample liquidity to continue business operations during this volatile period.

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

Utilities and Energy ("Berkshire Hathaway Energy Company")

We currently own 91.1% of the outstanding common stock of Berkshire Hathaway Energy Company ("BHE"), which operates a global energy business. BHE's domestic regulated utility interests are comprised of PacifiCorp, MidAmerican Energy Company ("MEC") and NV Energy. In Great Britain, BHE subsidiaries operate two regulated electricity distribution businesses referred to as Northern Powergrid. BHE also owns two domestic regulated interstate natural gas pipeline companies. Other energy businesses include a regulated electricity transmission-only business in Alberta, Canada ("AltaLink, L.P.") and a diversified portfolio of mostly renewable independent power projects. BHE also operates the largest residential real estate brokerage firm and one of the largest residential real estate brokerage franchise networks in the United States.

The rates our regulated businesses charge customers for energy and services are largely based on the costs of business operations, including income taxes and a return on capital, and are subject to regulatory approval. To the extent such costs are not allowed in the approved rates, operating results will be adversely affected. A summary of BHE's net earnings follows (dollars in millions).

	Second Quarter		First Six Months	
	2020	2019	2020	2019
Revenues:				
Energy operating revenue	\$ 3,419	\$ 3,567	\$ 7,053	\$ 7,392
Real estate operating revenue	1,193	1,327	2,086	2,112
Other income (loss)	47	76	27	138
Total revenue	4,659	4,970	9,166	9,642
Costs and expense:				
Energy cost of sales	888	1,027	1,926	2,241
Energy operating expense	1,638	1,681	3,349	3,332
Real estate operating costs and expense	1,116	1,210	1,989	2,016
Interest expense	484	459	950	920
Total costs and expense	4,126	4,377	8,214	8,509
Pre-tax earnings	533	593	952	1,133
Income tax expense (benefit)*	(165)	(80)	(366)	(210)
Net earnings after income taxes	698	673	1,318	1,343
Noncontrolling interests	4	4	7	7
Net earnings attributable to Berkshire Hathaway Energy	694	669	1,311	1,336
Noncontrolling interests	61	62	117	124
Net earnings attributable to Berkshire Hathaway shareholders	\$ 633	\$ 607	\$ 1,194	\$ 1,212
Effective income tax rate	(31.0)%	(13.5)%	(38.4)%	(18.5)%

* Includes significant production tax credits from wind-powered electricity generation.

The discussion of BHE's operating results that follows is based on after-tax earnings, reflecting how the energy businesses are managed and evaluated. A summary of net earnings attributable to BHE follows (in millions).

	Second Quarter		First Six Months	
	2020	2019	2020	2019
PacifiCorp	\$ 167	\$ 168	\$ 343	\$ 348
MidAmerican Energy Company	208	153	358	343
NV Energy	98	81	118	110
Northern Powergrid	59	64	146	144
Natural gas pipelines	64	48	243	229
Other energy businesses	184	158	320	249
Real estate brokerage	59	90	69	68
Corporate interest and other	(145)	(93)	(286)	(155)
	\$ 694	\$ 669	\$ 1,311	\$ 1,336

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

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. After-tax earnings were \$167 million and \$343 million in the second quarter and first six months of 2020, respectively, decreases of \$1 million (0.6%) and \$5 million (1.4%), respectively, compared to 2019. The declines reflected lower utility margin (operating revenue less cost of sales) and higher interest expense, partially offset by lower operating expenses, increased allowances for equity and borrowed funds used during construction and increased income tax benefits from production tax credits from repowering certain wind-powered generating facilities. Utility margin was \$761 million in the second quarter and \$1.6 billion in the first six months of 2020, decreases of \$22 million and \$27 million, respectively, compared to 2019, primarily attributable to lower operating revenue from a 2.9% year-to-date decline in retail customer volumes, partially offset by price impacts from changes in sales mix. The decrease in retail customer volumes was primarily due to impacts of COVID-19, partly offset by the favorable impacts of weather and an increase in the average number of customers.

MidAmerican Energy Company

MEC operates a regulated electric and natural gas utility primarily in Iowa and Illinois. After-tax earnings were \$208 million in the second quarter of 2020, an increase of \$55 million (35.9%) as compared to 2019. After-tax earnings were \$358 million in the first six months of 2020, an increase of \$15 million (4.4%) compared to 2019. The increases were primarily due to increased income tax benefits from production tax credits driven by repowering existing facilities and new wind projects placed in-service and lower operating expenses, partially offset by lower allowances for equity and borrowed funds used during construction and higher interest expense. Electric utility margin, excluding energy efficiency program revenue, in the second quarter of 2020 was \$439 million, an increase of \$14 million compared to 2019. The increase reflected a 1.8% net increase in electric retail customer volumes due largely to weather and increased usage from certain industrial customers, partially offset by impacts of COVID-19 on retail volumes and lower generation and purchased power costs. The electric utility margin increase was partially offset by the effects of lower wholesale revenue. Electric utility margin was \$838 million in the first six months of 2020, a decrease of \$37 million compared to 2019. The decline was primarily due to lower wholesale revenue and retail price impacts from changes in sales mix, partially offset by lower generation and purchased power costs and a 0.5% increase in retail customer volumes. Natural gas utility margin decreased 15% year-to-date, reflecting a 12.9% reduction in retail customer volumes, primarily due to weather.

NV Energy

NV Energy operates regulated electric and natural gas utilities in Nevada. After-tax earnings were \$98 million in the second quarter and \$118 million in the first six months of 2020, increases of \$17 million (21.0%) and \$8 million (7.3%), respectively, compared to 2019, primarily due to higher electric utility margin, higher other income (second quarter only) and lower income tax expense from the favorable impacts of ratemaking. The year-to-date increase was partially offset by higher depreciation expense. Electric utility margin was \$406 million in the second quarter and \$728 million in the first six months of 2020, increases of \$11 million and \$12 million, respectively, compared to 2019, primarily due to price impacts from changes in sales mix, partially offset by a 0.9% year-to-date decrease in retail customer volumes, including distribution-only service customers, primarily due to impacts of COVID-19.

Northern Powergrid

After-tax earnings in the second quarter of 2020 decreased \$5 million (7.8%) compared to 2019. The decrease reflected lower distribution revenues of \$11 million as a result of 12.8% lower units distributed, largely due to impacts of COVID-19, partly offset by higher tariff rates. After-tax earnings increased 1.4% in the first six months of 2020 compared to 2019, primarily due to lower interest expense, partially offset by lower distribution revenues of \$3 million as a result of 7.0% lower units distributed, largely due to impacts of COVID-19, offset by increased tariff rates.

Natural gas pipelines

After-tax earnings in the second quarter and first six months of 2020 increased \$16 million (33.3%) and \$14 million (6.1%), respectively, compared to 2019, primarily due to higher transportation revenue and the favorable impact of a rate case settlement at Northern Natural Gas. The year-to-date increase was partially offset by increased depreciation, higher interest expense and lower storage revenue.

Other energy businesses

After-tax earnings in the second quarter and first six months of 2020 were \$184 million and \$320 million, respectively, increases of \$26 million (16.5%) and \$71 million (28.5%), respectively, compared to 2019. The increases were primarily due to income tax benefits from renewable wind tax equity investments, largely from projects reaching commercial operation.

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

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

Real estate brokerage

After-tax earnings in the second quarter of 2020 decreased \$31 million compared to 2019. The decrease was primarily due to an unfavorable contingent earn-out remeasurement and lower after-tax earnings from brokerage services due to a 21% decrease in closed units, in large part from impacts of COVID-19, partially offset by higher earnings from mortgage services, primarily due to higher refinance activity from the favorable interest rate environment. After-tax earnings increased 1.5% in the first six months of 2020 compared to 2019. The increase was primarily due to higher after-tax earnings from mortgage services, primarily due to higher refinance activity from the favorable interest rate environment and partially offset by an unfavorable contingent earn-out remeasurement and lower after-tax earnings from brokerage services due to an 11% decrease in closed units, offset by lower operating expenses.

Corporate interest and other

After-tax earnings decreased \$52 million and \$131 million in the second quarter and first six months of 2020, respectively, compared to 2019, primarily due to lower federal income tax credits recognized, state income tax benefits recognized in 2019 and higher interest expense, partially offset by higher after-tax earnings from non-regulated energy services.

Manufacturing, Service and Retailing

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

	Second Quarter				First Six Months			
	Revenues		Earnings *		Revenues		Earnings *	
	2020	2019	2020	2019	2020	2019	2020	2019
Manufacturing	\$ 13,033	\$ 16,206	\$ 1,399	\$ 2,527	\$ 28,068	\$ 31,276	\$ 3,510	\$ 4,721
Service and retailing	17,255	19,873	452	804	36,032	39,097	1,075	1,536
	<u>\$ 30,288</u>	<u>\$ 36,079</u>			<u>\$ 64,100</u>	<u>\$ 70,373</u>		
Pre-tax earnings			1,851	3,331			4,585	6,257
Income taxes and noncontrolling interests			402	844			1,098	1,570
			<u>\$ 1,449</u>	<u>\$ 2,487</u>			<u>\$ 3,487</u>	<u>\$ 4,687</u>
Effective income tax rate			<u>21.5%</u>	<u>24.7%</u>			<u>23.6%</u>	<u>24.6%</u>

* Excludes certain acquisition accounting expenses, which were primarily from the amortization of identifiable intangible assets recorded in connection with our business acquisitions. The after-tax acquisition accounting expenses excluded from earnings in the preceding table were \$196 million in the second quarter and \$398 million in the first six months of 2020, compared to \$188 million in the second quarter and \$380 million in the first six months of 2019. In the second quarter and first six months of 2020, such expenses also exclude goodwill and indefinite-lived intangible asset after-tax impairment charges of \$10.35 billion. These expenses are included in "Other" in the summary of earnings on page 26 and in the "Other" earnings section on page 43.

Manufacturing

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

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

Manufacturing, Service and Retailing (Continued)

Manufacturing (Continued)

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

	Second Quarter				First Six Months			
	Revenues		Pre-tax earnings		Revenues		Pre-tax earnings	
	2020	2019	2020	2019	2020	2019	2020	2019
Industrial products	\$ 5,789	\$ 7,887	\$ 535	\$ 1,552	\$ 13,147	\$ 15,564	\$ 1,841	\$ 2,983
Building products	4,968	5,369	696	726	9,825	9,931	1,263	1,208
Consumer products	2,276	2,950	168	249	5,096	5,781	406	530
	<u>\$ 13,033</u>	<u>\$ 16,206</u>	<u>\$ 1,399</u>	<u>\$ 2,527</u>	<u>\$ 28,068</u>	<u>\$ 31,276</u>	<u>\$ 3,510</u>	<u>\$ 4,721</u>

Industrial products

Revenues of the industrial products group were \$5.8 billion in the second quarter and \$13.1 billion in the first six months of 2020, decreases of 26.6% and 15.5%, respectively, from comparable 2019 periods. Pre-tax earnings of the group were \$535 million in the second quarter and \$1.8 billion in the first six months of 2020, declines of 65.5% and 38.3% compared to the second quarter and first six months of 2019, respectively. Pre-tax earnings as a percentage of revenues for the group were 14.0% in the first six months of 2020 compared to 19.2% in 2019.

PCC's revenues were \$1.8 billion in the second quarter and \$4.2 billion in the first six months of 2020, decreases of 32.5% from the second quarter and 19.5% from the first six months of 2019. In the second quarter and first six months of 2020, PCC experienced significant declines in aerospace markets. The COVID-19 pandemic produced material declines in commercial air travel during the second quarter. Airlines responded by reducing and/or cancelling aircraft orders, which is resulting in significant reductions in build rates by aircraft manufacturers and significant inventory reduction initiatives being implemented by PCC's customers. Further, Boeing's ongoing 737 MAX aircraft production issues have contributed to the declines in aerospace product sales in the second quarter and first six months of 2020.

PCC incurred a pre-tax loss of \$78 million in the second quarter of 2020 compared to pre-tax earnings of \$481 million in the second quarter of 2019. The earnings decrease reflected the decline in aerospace products sales, which contributed to reduced manufacturing efficiencies and lower gross sales margin rates. In addition, PCC management is undertaking aggressive restructuring actions to resize operations in response to reduced expected volumes in aerospace markets. During the first six months of 2020, PCC reduced its workforce by approximately 10,000 employees representing about 30% of its total workforce at year end 2019. Restructuring costs and inventory and fixed asset write-downs in the second quarter of 2020 were approximately \$250 million. Earnings as a percentage of revenues are expected to continue to be negatively impacted through 2020 due to inefficiencies associated with aligning operations to reduced aircraft build rates. We believe the duration and severity of the pandemic and the long-term effects on commercial air travel and aerospace industries remains unclear.

Lubrizol's revenues were \$1.3 billion in the second quarter and \$2.9 billion in the first six months of 2020, decreases of 24.1% from the second quarter and 14.3% from the first six months of 2019. The declines reflected lower volumes, attributable to the worldwide economic impacts of COVID-19 and the impact of a fire at an additives manufacturing, blending and storage facility in Rouen, France at the end of the third quarter of 2019. While the Rouen operations were partially restarted in December 2019, volumes at the facility continued to be below historical levels through the first half of 2020. Lubrizol's consolidated volume declined 26% in the second quarter and 15% in the first six months of 2020 compared to 2019, reflecting declines in the Additives and Engineered Materials product lines, partly offset by higher volumes in Life Science products.

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

Manufacturing, Service and Retailing (Continued)

Industrial products (Continued)

Lubrizol's pre-tax earnings decreased 41.3% in the second quarter and 25.6% in the first six months of 2020 compared to the same periods in 2019, primarily attributable to lower sales volumes, the impact of the Rouen fire, lower average selling prices and unfavorable effects from foreign currency translation. These negative impacts were partially offset by lower average raw material costs and lower operating expenses.

Mammon's revenues were \$1.7 billion in the second quarter and \$3.7 billion in the first six months of 2020, decreases of 21.1% from the second quarter and 11.0% from the first six months of 2019. In the second quarter of 2020, excluding acquisitions, revenues decreased in almost all of Mammon's sectors due to lower volumes, primarily attributable to the COVID-19 pandemic, with the largest effects experienced in the Transportation Products, Retail Solutions, Food Service Technologies and Metal Services sectors. Additionally, revenues in 2020 decreased due to lower metal prices in the Electrical, Plumbing & Refrigeration and Metal Services sectors, the effect of 2019 divestitures and unfavorable foreign currency translation. The drastic declines in oil prices in 2020 also adversely affected volumes and revenues in the Crane, Electrical, Water, Industrial and Rail & Leasing sectors.

Mammon's pre-tax earnings decreased 33.4% in the second quarter and 17.4% in the first six months of 2020 compared to the same periods in 2019. The decreases reflected the declines in revenues, increased restructuring charges and lower interest income. We expect additional restructuring initiatives will take place over the remainder of 2020 in response to the reduced product demand, particularly in the sectors most affected by the pandemic.

IMC's revenues were \$637 million in the second quarter and \$1.5 billion in the first six months of 2020, decreases of 26.5% from the second quarter and 15.6% from the first six months of 2019. The revenue declines were attributable to the negative effects of COVID-19 and unfavorable foreign currency translation effects, partly offset by the effects of business acquisitions over the past year. IMC's pre-tax earnings declined 53.4% in the second quarter and 37.4% in the first six months of 2020 compared to the same periods in 2019, as a result of the sales declines and changes in sales mix.

Building products

Revenues of the building products group were \$5.0 billion in the second quarter and \$9.8 billion in the first six months of 2020, decreases of \$401 million (7.5%) and \$106 million (1.1%), respectively, compared to the second quarter and first six months of 2019. Pre-tax earnings of the group were \$696 million in the second quarter and \$1.3 billion in the first six months of 2020, a decrease of 4.1% from the second quarter and an increase of 4.6% from the first six months of 2019. Pre-tax earnings as percentages of revenues were 12.9% and 12.2% in the first six months of 2020 and 2019, respectively.

Clayton Homes' revenues were \$2.0 billion in the second quarter and \$3.8 billion in the first six months of 2020, increases of 8.2% and 10.5% over the second quarter and first six months of 2019, respectively. The comparative increases were primarily due to increases in home sales of 6.7% in the second quarter and 10.5% in the first six months, reflecting a net increase in units sold and changes in sales mix. Unit sales of site-built homes increased 22% in the first six months of 2020, while manufactured home unit sales were relatively unchanged. Interest income from lending activities in the second quarter and first six months of 2020 increased 5.8% and 6.1%, respectively, as compared to 2019. Loan balances, net of allowances for credit losses, were \$16.0 billion as of June 30, 2020 compared to \$15.9 billion as of December 31, 2019.

Pre-tax earnings of Clayton Homes were \$319 million in the second quarter and \$520 million in the first six months of 2020, increases of 13.2% and 4.6%, respectively, compared to the same periods in 2019. The earnings increases reflected higher earnings from home building activities and increased interest income, net of interest expense, partly offset by increased provisions for credit losses. The increases in credit loss provisions were driven by expected losses attributable to the impact on the economy and unemployment rates resulting from the COVID-19 pandemic.

Aggregate revenues of our other building products businesses were \$2.9 billion in the second quarter and \$6.0 billion in the first six months of 2020, decreases of 16.0% and 7.2%, respectively, compared to the same periods in 2019. The decreases were primarily attributable to lower volumes associated with the pandemic, partly offset by increased paint and coatings volumes from a new agreement with Ace Hardware Stores.

Pre-tax earnings of the other building products businesses were \$377 million in the second quarter and \$743 million in the first six months of 2020, a decrease of 15.4% from the second quarter and an increase of 4.5% from the first six months of 2019. Earnings in the second quarter of 2020 reflected the reductions in sales volumes, partially offset by the effects of lower average material costs and expense containment efforts. Results for the first six months of 2020 also benefitted from lower facilities closure costs and higher sales volumes in the first quarter.

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

Manufacturing, Service and Retailing (Continued)

Consumer products

Consumer products revenues were \$2.3 billion in the second quarter and \$5.1 billion in the first six months of 2020, decreases of 22.8% and 11.8%, respectively, compared to the same periods in 2019. Apparel and footwear sales declined 28.9% in the second quarter of 2020, reflecting lower sales volumes from the effects of COVID-19 related retail store closures and reduced or cancelled orders, partly offset by an increase at Brooks Sports. The increase at Brooks Sports was partly attributable to the effect of a significant reduction in sales in the second quarter of 2019 caused by product shipping delays at a new distribution facility. In the second quarter of 2020, Forest River sales declined 26.1%, attributable to lower volumes, while Duracell revenues increased 16.4%.

Consumer products pre-tax earnings were \$168 million in the second quarter and \$406 million in the first six months of 2020, decreases of 32.5% and 23.4%, respectively, compared to 2019. Pre-tax earnings as a percentage of revenues for the first six months were 8.0% in 2020 and 9.2% in 2019. The decreases in pre-tax earnings reflected comparative declines in earnings from apparel and footwear of 76.8% in the second quarter and 48.7% in the first six months of 2020, which included various incremental costs and charges related to COVID-19. In addition, pre-tax earnings of Forest River declined 37.8% in the second quarter and 27.1% in the first six months of 2020 as compared to 2019. The sales and earnings declines in the second quarter at these businesses lessened significantly in the month of June, as the local economies reopened from the shutdowns.

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			
	Revenues		Pre-tax earnings		Revenues		Pre-tax earnings	
	2020	2019	2020	2019	2020	2019	2020	2019
Service	\$ 2,667	\$ 3,436	\$ 260	\$ 502	\$ 6,025	\$ 6,854	\$ 685	\$ 974
Retailing	3,370	4,026	148	243	6,968	7,633	281	392
McLane Company	11,218	12,411	44	59	23,039	24,610	109	170
	<u>\$ 17,255</u>	<u>\$ 19,873</u>	<u>\$ 452</u>	<u>\$ 804</u>	<u>\$ 36,032</u>	<u>\$ 39,097</u>	<u>\$ 1,075</u>	<u>\$ 1,536</u>

Service

Our service business group offers fractional ownership programs for general aviation aircraft (NetJets) and high technology training to operators of aircraft (FlightSafety). We also distribute electronic components (TTI), franchise and service a network of quick service restaurants (Dairy Queen) and offer third party logistics services that primarily serve the petroleum and chemical industries (Charter Brokerage). Other service businesses include transportation equipment leasing (XTRA) and furniture leasing (CORT), electronic news distribution, multimedia and regulatory filings (Business Wire), operation of a television station in Miami, Florida (WPLG) and until the time of their sale on March 16, 2020, the publishing of newspapers.

Service group revenues were \$2.7 billion in the second quarter and \$6.0 billion in the first six months of 2020, decreases of 22.4% and 12.1%, respectively, compared to 2019. The comparative revenue declines included declines of 31.2% in the second quarter and 16.1% for the first six months from NetJets and FlightSafety, which were primarily attributable to lower demand for aviation services as a consequence of the pandemic. In addition, the declines reflected year-to-date revenue declines of 3.0% at TTI and 24.3% at CORT, as well as the effects of the disposition of the newspaper operations.

Pre-tax earnings of the service group were \$260 million in the second quarter and \$685 million in the first six months of 2020, decreases of \$242 million (48.2%) and \$289 million (29.7%), respectively, compared to 2019. Pre-tax earnings of the group as a percentage of revenues were 11.4% in the first six months of 2020 compared to 14.2% in 2019. The comparative earnings declines were primarily attributable to lower earnings from FlightSafety, NetJets and TTI, and to a lesser extent, XTRA and CORT. TTI's earnings decline reflected lower gross margin rates. The declines at NetJets and FlightSafety were due to lower demand for services and increased asset impairment and restructuring charges.

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

Manufacturing, Service and Retailing (Continued)

Retailing

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

Retailing group revenues were \$3.4 billion in the second quarter and \$7.0 billion in the first six months of 2020, decreases of 16.3% and 8.7%, respectively, compared to 2019. BHA's revenues, which represented about 2/3 of our combined retailing revenues in 2020, decreased 11.1% in the second quarter and 6.2% in the first six months compared to the same periods in 2019. BHA's comparative revenue decreases reflected decreases in new and pre-owned vehicle sales of 11% in the second quarter and 6% in the first six months and lower vehicle service and repair revenues in the second quarter, which were attributable to the COVID-19 pandemic. Home furnishings group revenues, which represented about 20% of the aggregate retailing group revenues for the first six months of 2020, decreased 24.7% in the second quarter and 12.1% in the first six months of 2020 as compared to 2019.

Pre-tax earnings of the retail group were \$148 million in the second quarter and \$281 million in the first six months of 2020, decreases of 39.1% and 28.3%, respectively, from 2019. BHA's pre-tax earnings increased 35.6% in the second quarter and 19.9% in the first six months of 2020, primarily due to lower selling, general and administrative expenses and lower floorplan interest expense. Aggregate pre-tax earnings for the remainder of our retailing group declined \$129 million in the second quarter and \$148 million in the first six months as compared to 2019. The spread of COVID-19 throughout the U.S. resulted in the temporary closures or restricted operations at our retail store operations during 2020 and significantly lower sales. Sales volumes increased and operating results improved over the latter part of the second quarter as these operations were slowly reopened. Also, we incurred additional charges in the second quarter attributable to asset impairment charges and credit losses.

McLane Company

McLane operates a wholesale distribution business that provides grocery and non-food consumer products to retailers and convenience stores ("grocery") and to restaurants ("foodservice"). McLane also operates businesses that are wholesale distributors of distilled spirits, wine and beer ("beverage"). The grocery and foodservice businesses generate high sales and very low profit margins. These businesses have several significant customers, including Walmart, 7-Eleven, Yum! Brands and others. Grocery sales comprised about 2/3 of McLane's consolidated sales in the first six months of 2020 with food service comprising most of the remainder. A curtailment of purchasing by any of its significant customers could have an adverse impact on periodic revenues and earnings.

Revenues were \$11.2 billion in the second quarter and \$23.0 billion in the first six months of 2020, decreases of 9.6% and 6.4%, respectively, compared to 2019. Revenues in the second quarter of 2020 decreased 9.4% in the grocery business (5.8% year-to-date) and 11.6% in the foodservice business (8.9% year-to-date) as compared to 2019. The declines were attributable to COVID-19 related restaurant closures (particularly for casual dining restaurant customers) and lower sales in certain product categories within the grocery business. Pre-tax earnings decreased \$15 million (25.4%) in the second quarter and \$61 million (35.9%) in the first six months of 2020 as compared to 2019. The earnings decrease in the first six months of 2020 included charges of \$23 million for credit losses and inventory losses in the foodservice operations and the impact of lower sales. McLane continues to operate in an intensely competitive business environment, which is negatively affecting its current operating results.

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

Investment and Derivative Gains/Losses

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

	Second Quarter		First Six Months	
	2020	2019	2020	2019
Investment gains (losses)	\$ 39,289	\$ 9,835	\$ (29,593)	\$ 29,387
Derivative gains (losses)	796	213	(597)	983
Gains (losses) before income taxes and noncontrolling interests	40,085	10,048	(30,190)	30,370
Income taxes and noncontrolling interests	8,440	2,114	(6,218)	6,330
Net gains (losses)	\$ 31,645	\$ 7,934	\$ (23,972)	\$ 24,040
Effective income tax rate	21.0%	21.0%	20.7%	20.8%

Investment gains/losses

As a result of a change to GAAP effective in 2018, we are required to include the unrealized gains and losses arising from changes in market prices of investments in equity securities in our reported earnings. While this accounting standard does not change the effect on our consolidated shareholders' equity or total comprehensive income, it has significantly increased the volatility of our periodic net earnings due to the magnitude of our equity securities portfolio and the inherent volatility of equity securities prices.

Pre-tax investment gains/losses in 2020 included net unrealized gains of \$39.4 billion in the second quarter and net unrealized losses of \$18.4 billion in the first six months and in 2019 included net unrealized gains of \$9.8 billion in the second quarter and \$29.2 billion in the first six months attributable to equity securities we still held at June 30, 2020 and 2019, respectively. Investment losses on equity securities sold in the first six months of 2020 were \$11.2 billion, which included losses of \$10.7 billion from market value changes in the first quarter on securities that were sold in the second quarter. Taxable investment losses on equity securities sold, which is the difference between sales proceeds and the original cost basis of the securities sold, were \$4.5 billion in the second quarter and \$3.3 billion in the first six months of 2020. Taxable investment gains on equity securities sold were \$0.8 billion in the second quarter and \$1.4 billion in the first six months of 2019.

Investment gains/losses from periodic changes in securities prices will continue to cause significant volatility in our consolidated earnings. We believe that investment gains/losses, whether realized from sales or unrealized from changes in market prices, are often meaningless in terms of understanding our reported consolidated earnings or evaluating our periodic economic performance. We continue to believe that the amount of investment gains/losses included in earnings in any given period has little analytical or predictive value.

Derivative gains/losses

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

As of June 30, 2020, the intrinsic value of our equity index put option contracts was approximately \$1.2 billion and our recorded liability at fair value was \$1.6 billion. Our ultimate payment obligations, if any, under our contracts will be determined as of the contract expiration dates based on the intrinsic value as defined under the contracts. Equity index put option contracts produced pre-tax gains of \$796 million in the second quarter and pre-tax losses of \$597 million in the first six months of 2020, primarily due to changes in equity index values. Equity index put option contracts generated pre-tax gains of \$213 million in the second quarter and \$983 million in the first six months of 2019.

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

Other

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

	Second Quarter		First Six Months	
	2020	2019	2020	2019
Equity method earnings (loss)	\$ (154)	\$ 131	\$ 102	\$ 297
Acquisition accounting expenses	(196)	(188)	(398)	(380)
Goodwill and intangible asset impairments	(10,350)	—	(10,350)	—
Corporate interest expense, before foreign currency effects	(76)	(72)	(172)	(146)
Foreign currency exchange rate gains (losses) on Berkshire and BHFC non-U.S. Dollar senior notes	(92)	(87)	83	47
Income tax expense adjustment	—	—	—	(377)
Other, principally corporate investment income	131	204	331	418
Net earnings (loss) attributable to Berkshire Hathaway shareholders	<u>\$ (10,737)</u>	<u>\$ (12)</u>	<u>\$ (10,404)</u>	<u>\$ (141)</u>

After-tax equity method earnings (loss) includes Berkshire's share of earnings attributable to Kraft Heinz, Pilot, Berkadia and Electric Transmission of Texas. Our Kraft Heinz investment produced after-tax losses of \$297 million for the second quarter and \$198 million for the first six months of 2020 and included \$513 million in the second quarter and \$552 million in the first six months associated with goodwill and intangible asset impairment charges recorded by Kraft Heinz. As discussed in Note 5 to the accompanying unaudited Consolidated Financial Statements, financial results of Kraft Heinz for the first and second quarters of 2019 were not made available to us until the third quarter of 2019. Accordingly, our consolidated statements of earnings for the second quarter and first six months of 2019 do not include our share of Kraft Heinz's earnings for those periods.

After-tax acquisition accounting expenses include charges arising from the application of the acquisition method in connection with certain of Berkshire's past business acquisitions. Such charges arise primarily from the amortization of intangible assets recorded in connection with those business acquisitions. Goodwill and intangible asset impairments include \$9.8 billion attributable to impairments of goodwill and certain identifiable intangible assets recorded in connection with our acquisition of PCC in 2016. See Critical Accounting Policies on page 45 for additional details.

Foreign currency exchange rate gains and losses pertain to non-U.S. Dollar denominated debt issued by Berkshire and BHFC. As of June 30, 2020, outstanding borrowings included senior notes of €6.85 billion par, ¥625.5 billion par and £1.75 billion par. Changes in foreign currency exchange rates produce non-cash unrealized gains and losses from the periodic revaluation of these liabilities into U.S. Dollars. The gains and losses recorded in any given period can be significant due the magnitude of the borrowings and the inherent volatility in foreign currency exchange rates.

The income tax expense adjustment in the first six months of 2019 relates to investments that we made between 2015 and 2018 in certain tax equity investment funds, which aggregated approximately \$340 million. In December 2018 and during the first quarter of 2019, we learned of allegations by federal authorities of fraudulent income conduct by the sponsor of these funds and in January 2020, the principals involved in creating the investment funds plead guilty to criminal charges related to the sale of the investments. In the first quarter of 2019, we concluded it was more likely than not that the income tax benefits that we recognized prior to 2019 were not valid.

Financial Condition

Our consolidated balance sheet continues to reflect very significant liquidity and a very strong capital base. Consolidated shareholders' equity at June 30, 2020 was \$393.5 billion, a decrease of \$31.3 billion since December 31, 2019. Net loss attributable to Berkshire shareholders in the first six months of 2020 was approximately \$23.5 billion. Earnings in 2020 included after-tax losses on our investments of approximately \$23.5 billion, which were primarily due to declines in the market prices of our investments in equity securities since December 31, 2019. Our results in 2020 also included after-tax goodwill and other intangible asset impairment charges of \$10.9 billion.

Our operating business groups are preparing for reduced cash flows from reduced revenues and economic activity as a result of COVID-19. We are taking measures to reduce costs as appropriate through the measures previously described in this Report. We currently believe our liquidity and capital strength, which is extremely strong, to be more than adequate.

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

Financial Condition *(Continued)*

At June 30, 2020, our insurance and other businesses held cash, cash equivalents and U.S. Treasury Bills of \$142.8 billion, which included \$120.8 billion in U.S. Treasury Bills. Investments in equity and fixed maturity securities (excluding our investment in Kraft Heinz) were \$226.7 billion. During the second quarter we received approximately \$12.8 billion from the sales of equity securities, net of the costs of equity securities purchased. The proceeds from these activities have been primarily reinvested in U.S. Treasury Bills.

Berkshire parent company debt outstanding at June 30, 2020 was \$21.7 billion, an increase of \$1.8 billion since December 31, 2019. In March 2020, Berkshire repaid maturing senior notes of €1.0 billion and issued €1.0 billion of 0.0% senior notes due in 2025. In April 2020, Berkshire issued ¥195.5 billion of senior notes (approximately \$1.8 billion), which has a weighted average interest rate of 1.07% and maturity dates ranging from 2023 to 2060. In the first quarter of 2021, senior notes of \$1.6 billion will mature.

Berkshire's insurance and other subsidiary outstanding borrowings were \$16.5 billion at June 30, 2020, which included senior note borrowings of BHFC, a wholly-owned financing subsidiary, of approximately \$11.0 billion. BHFC's borrowings are used to fund a portion of loans originated and acquired by Clayton Homes and equipment held for lease by our UTLX railcar leasing business. In January 2020, BHFC repaid \$350 million of maturing senior notes and in March 2020, issued \$500 million of 1.85% senior notes due in 2030. Berkshire guarantees the full and timely payment of principal and interest with respect to BHFC's senior notes. Over the next twelve months, approximately \$1.3 billion of BHFC senior notes will mature.

Our railroad, utilities and energy businesses (conducted by BNSF and BHE) maintain very large investments in capital assets (property, plant and equipment) and will regularly make significant capital expenditures in the normal course of business. Capital expenditures of these two operations in the first six months of 2020 were \$4.5 billion and we currently forecast additional capital expenditures of approximately \$5.7 billion over the remainder of 2020.

BNSF's outstanding debt was \$23.3 billion as of June 30, 2020, relatively unchanged from December 31, 2019. In April 2020, BNSF issued \$575 million of 3.05% senior unsecured debentures due in 2051. Outstanding borrowings of BHE and its subsidiaries were \$45.2 billion at June 30, 2020, an increase of approximately \$2.6 billion since December 31, 2019. In the first six months of 2020, BHE and its subsidiaries issued new term debt aggregating \$5.3 billion with maturity dates ranging from 2025 to 2062, repaid approximately \$1.8 billion of debt and reduced short-term borrowings by approximately \$920 million. Over the remainder of 2020, BHE and its subsidiaries will repay debt of approximately \$800 million. Berkshire does not guarantee the repayment of debt issued by BNSF, BHE or any of their subsidiaries and is not committed to provide capital to support BNSF, BHE or any of their subsidiaries.

In July 2020, BHE reached a definitive agreement with Dominion Energy, Inc. ("Dominion") to acquire substantially all of Dominion's natural gas transmission and storage business, which includes more than 7,700 miles of natural gas transmission pipelines, about 900 billion cubic feet of operated natural gas storage capacity and partial ownership of a liquefied natural gas export, import and storage facility. The acquisition price will be approximately \$4.0 billion, which will be funded with cash provided by the Berkshire parent company. BHE will also assume approximately \$5.7 billion of existing asset-related long-term debt. The acquisition is subject to customary closing conditions and is expected to close during the fourth quarter of 2020.

Berkshire's common stock repurchase program was amended on July 17, 2018, permitting Berkshire to repurchase its Class A and Class B shares at prices below Berkshire's intrinsic value, as conservatively determined by Warren Buffett, Berkshire's Chairman of the Board and Chief Executive Officer, and Charlie Munger, Vice Chairman of the Board. The program allows share repurchases in the open market or through privately negotiated transactions and does not specify a maximum number of shares to be repurchased. The program is expected to continue indefinitely. We will not repurchase our stock if it reduces the total amount of Berkshire's consolidated cash, cash equivalents and U.S. Treasury Bill holdings below \$20 billion. Financial strength and redundant liquidity will always be of paramount importance at Berkshire. In the first six months of 2020, Berkshire paid \$6.7 billion to repurchase shares of Class A and B common stock.

Contractual Obligations

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

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

Contractual Obligations *(Continued)*

In the first six months of 2020, Berkshire and its subsidiaries issued new term debt. Principal and interest payments associated with these new term borrowings are expected as follows: in 2020 – \$136 million; in 2021 and 2022 – \$466 million; in 2023 and 2024 – \$982 million; and thereafter – \$11.9 billion.

Except as otherwise disclosed in this Quarterly Report, our contractual obligations as of June 30, 2020 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, 2019.

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 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, 2019.

Our Consolidated Balance Sheet as of June 30, 2020 includes estimated liabilities for unpaid losses and loss adjustment expenses from property and casualty insurance and reinsurance contracts of \$117.5 billion. Due to the inherent uncertainties in the processes of establishing these liabilities, 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, 2020 included goodwill of acquired businesses of approximately \$71.8 billion and indefinite-lived intangible assets of \$18.3 billion. We evaluate these assets for impairment at least annually and we conducted our most recent annual review during the fourth quarter of 2019.

Goodwill and indefinite-lived intangible asset impairment reviews include determining the estimated fair values of our reporting units and assets. The key assumptions and inputs used in such determinations may include forecasting revenues and expenses, cash flows and capital expenditures, as well as an appropriate discount rate and other inputs. Significant judgment by management is required in estimating the fair value of a reporting unit and in performing impairment tests. Due to the inherent subjectivity and uncertainty in forecasting future cash flows and earnings over long periods of time, actual results may vary materially from the forecasts.

In response to the adverse effects of the COVID-19 pandemic, we considered whether goodwill needed to be reevaluated for impairment as of June 30, 2020. While we estimated the fair values of certain reporting units had likely declined since the fourth quarter of 2019, we concluded it is more likely than not that goodwill for these units was not impaired as of June 30, 2020. However, we also determined it was necessary to quantitatively reevaluate goodwill for impairment as of June 30 for other reporting units, and most significantly for PCC. As a result of our reviews, we recorded pre-tax goodwill impairment charges of \$10.0 billion and indefinite-lived intangible asset impairment charges of \$638 million, of which approximately \$10 billion related to PCC.

Prior to carrying out the reevaluation, the carrying value of our goodwill in PCC was approximately \$17 billion. Additionally, the carrying value of indefinite-lived intangible assets in PCC was approximately \$14 billion. Substantially all of these amounts were recorded in connection with Berkshire's acquisition of PCC in 2016. We believe the effects of the pandemic on commercial airlines and aircraft manufacturers continues to be particularly severe. We considered a number of factors in our evaluation, including but not limited to: the announcements by airlines concerning potential future demand, employment levels and aircraft orders; announcements by manufacturers on reduced aircraft production and the actions we are taking or may take to restructure our operations to fit lower expected demand. Further, in our judgment, the timing and extent of the recovery in the commercial airline and aerospace industries may be dependent on the development and wide-scale distribution of medicines or vaccines that effectively treat the virus. Consequently, we deemed it prudent under the prevailing circumstances to increase the discount rates and reduce our prior long-term forecasts of future cash flows for purposes of reviewing for impairments. The amounts of these adjustments were based on qualitative assessments by Berkshire.

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

Critical Accounting Policies *(Continued)*

Making estimates of the fair value of reporting units at this time are significantly affected by assumptions on the severity, duration or long-term effects of the pandemic on the reporting unit's business, which we cannot reliably predict at this time. Consequently, any fair value estimates in such instances can be subject to wide variations. The effects of the COVID-19 pandemic could prove to be worse than we currently estimate for these and our other reporting units and could lead us to record goodwill or indefinite-lived asset impairment charges over the second half of 2020.

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

Forward-Looking Statements

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

Actual events and results may differ materially from those expressed or forecasted in forward-looking statements due to a number of factors. The principal risk factors that could cause our actual performance and future events and actions to differ materially from such forward-looking statements include, but are not limited to, changes in market prices of our investments in fixed maturity and equity securities, losses realized from derivative contracts, the occurrence of one or more catastrophic events, such as an earthquake, hurricane, act of terrorism or cyber attack that causes losses insured by our insurance subsidiaries and/or losses to our business operations, the frequency and severity of epidemics, pandemics or other outbreaks, including COVID-19, that negatively affect our operating results and restrict our access to borrowed funds through the capital markets at reasonable rates, 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, 2020, 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, 2019.

Item 4. Controls and Procedures

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

Part II Other Information

Item 1. Legal Proceedings

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

Part II Other Information

Item 1A. Risk Factors

Our significant business risks are described in Item 1A to Form 10-K for the year ended December 31, 2019 to which reference is made herein. These risk factors are supplemented for the items described below. The risks and uncertainties we describe are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business or operations. Any adverse effect on our business, financial condition or operating results could result in a decline in the value of our securities and the loss of all or part of your investment.

Epidemics, pandemics or other outbreaks, including COVID-19, could hurt our operating businesses.

The outbreak of COVID-19 has adversely affected, and in the future it or other epidemics, pandemics or outbreaks may adversely affect, our operations, including our equity securities portfolio. This is or may be due to closures or restrictions requested or mandated by governmental authorities, disruption to supply chains and workforce, reduction of demand for our products and services, credit losses when customers and other counterparties fail to satisfy their obligations to us, and volatility in global equity securities markets, among other factors. We share most of these risks with all businesses.

Unfavorable general economic conditions may significantly reduce our operating earnings and impair our ability to access capital markets at a reasonable cost.

Our operating businesses are subject to economic conditions affecting the general economy or the specific industries in which they operate. To the extent that economic conditions in the U.S. and worldwide are depressed by the effects of COVID-19 or otherwise, one or more of our significant operations could be materially harmed. In addition, our utilities and energy businesses and our railroad business regularly utilize debt as a component of their capital structures, and depend on having access to borrowed funds through the capital markets at reasonable rates. To the extent that access to the capital markets is restricted or the cost of funding increases, these operations could be adversely affected.

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

Berkshire's common stock repurchase program permits Berkshire to repurchase its Class A and Class B shares any time that Warren Buffett, Berkshire's Chairman of the Board and Chief Executive Officer, and Charles Munger, Vice Chairman of the Board, believe that the repurchase price is below Berkshire's intrinsic value, conservatively determined. Repurchases may be in the open market or through privately negotiated transactions. Information with respect to Berkshire's Class A and Class B common stock repurchased during the second quarter of 2020 follows.

Period	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced program	Maximum number or value of shares that yet may be repurchased under the program
May:				
Class A common stock	540	\$ 262,967.67	540	*
Class B common stock	18,828,006	\$ 174.58	18,828,006	*
June:				
Class A common stock	1,282	\$ 268,815.58	1,282	*
Class B common stock	7,514,590	\$ 178.59	7,514,590	*

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

Part II Other Information

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures

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

Item 5. Other Information

None

Item 6. Exhibits

- a. Exhibits
- 3(i) Restated Certificate of Incorporation
[Incorporated by reference to Exhibit 3\(i\) to Form 10-K filed on March 2, 2015.](#)
- 3(ii) By-Laws
[Incorporated by reference to Exhibit 3\(ii\) to Form 8-K filed on August 4, 2016.](#)
- 31.1 [Rule 13a-14\(a\)/15d-14\(a\) Certifications](#)
- 31.2 [Rule 13a-14\(a\)/15d-14\(a\) Certifications](#)
- 32.1 [Section 1350 Certifications](#)
- 32.2 [Section 1350 Certifications](#)
- 95 [Mine Safety Disclosures](#)
- 101 The following financial information from Berkshire Hathaway Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, formatted in iXBRL (Inline Extensible Business Reporting Language) includes: (i) the Cover Page (ii) the Consolidated Balance Sheets, (iii) the Consolidated Statements of Earnings, (iv) the Consolidated Statements of Comprehensive Income, (v) the Consolidated Statements of Changes in Shareholders' Equity, (vi) the Consolidated Statements of Cash Flows, and (vii) the Notes to Consolidated Financial Statements, tagged in summary and detail.
- 104 Cover Page Interactive Data File (formatted as iXBRL and contained in Exhibit 101)

SIGNATURE

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

BERKSHIRE HATHAWAY INC.
(Registrant)

Date: August 8, 2020

/S/ MARC D. HAMBURG

(Signature)

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