

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

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended September 30, 2022
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
0.625% Senior Notes due 2023	BRK23A	New York Stock Exchange
1.300% Senior Notes due 2024	BRK24	New York Stock Exchange
0.000% Senior Notes due 2025	BRK25	New York Stock Exchange
1.125% Senior Notes due 2027	BRK27	New York Stock Exchange
2.150% Senior Notes due 2028	BRK28	New York Stock Exchange
1.500% Senior Notes due 2030	BRK30	New York Stock Exchange
2.000% Senior Notes due 2034	BRK34	New York Stock Exchange
1.625% Senior Notes due 2035	BRK35	New York Stock Exchange
2.375% Senior Notes due 2039	BRK39	New York Stock Exchange
0.500% Senior Notes due 2041	BRK41	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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

Number of shares of common stock outstanding as of October 26, 2022:

Class A —	596,826
Class B —	1,301,981,370

BERKSHIRE HATHAWAY INC.

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

	September 30, 2022 (Unaudited)	December 31, 2021
ASSETS		
<i>Insurance and Other:</i>		
Cash and cash equivalents*	\$ 28,869	\$ 85,319
Short-term investments in U.S. Treasury Bills	76,332	58,535
Investments in fixed maturity securities	18,602	16,434
Investments in equity securities	306,167	350,719
Equity method investments	28,714	17,375
Loans and finance receivables	22,094	20,751
Other receivables	40,383	35,388
Inventories	25,102	20,954
Property, plant and equipment	20,378	20,834
Equipment held for lease	15,139	14,918
Goodwill	46,822	47,117
Other intangible assets	27,738	28,486
Deferred charges - retroactive reinsurance	9,990	10,639
Other	16,753	15,854
	683,083	743,323
<i>Railroad, Utilities and Energy:</i>		
Cash and cash equivalents*	3,757	2,865
Receivables	4,985	4,177
Property, plant and equipment	157,472	155,530
Goodwill	26,513	26,758
Regulatory assets	4,750	3,963
Other	21,736	22,168
	219,213	215,461
	<u>\$ 902,296</u>	<u>\$ 958,784</u>

* Includes U.S. Treasury Bills with maturities of three months or less when purchased of \$1.9 billion at September 30, 2022 and \$61.7 billion at December 31, 2021.

See accompanying Notes to Consolidated Financial Statements

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

	September 30, 2022 (Unaudited)	December 31, 2021
LIABILITIES AND SHAREHOLDERS' EQUITY		
Insurance and Other:		
Unpaid losses and loss adjustment expenses	\$ 91,642	\$ 86,664
Unpaid losses and loss adjustment expenses under retroactive reinsurance contracts	36,666	38,256
Unearned premiums	26,878	23,512
Life, annuity and health insurance benefits	22,305	22,452
Other policyholder liabilities	9,051	9,330
Accounts payable, accruals and other liabilities	31,100	30,376
Aircraft repurchase liabilities and unearned lease revenues	6,165	5,849
Notes payable and other borrowings	41,535	39,272
	265,342	255,711
Railroad, Utilities and Energy:		
Accounts payable, accruals and other liabilities	16,871	15,696
Regulatory liabilities	7,220	7,214
Notes payable and other borrowings	74,961	74,990
	99,052	97,900
Income taxes, principally deferred	74,155	90,243
Total liabilities	438,549	443,854
Shareholders' equity:		
Common stock	8	8
Capital in excess of par value	35,190	35,592
Accumulated other comprehensive income	(8,234)	(4,027)
Retained earnings	493,438	534,421
Treasury stock, at cost	(64,972)	(59,795)
Berkshire Hathaway shareholders' equity	455,430	506,199
Noncontrolling interests	8,317	8,731
Total shareholders' equity	463,747	514,930
	<u>\$ 902,296</u>	<u>\$ 958,784</u>

See accompanying Notes to Consolidated Financial Statements

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

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Revenues:				
<i>Insurance and Other:</i>				
Insurance premiums earned	\$ 18,810	\$ 17,727	\$ 54,389	\$ 51,314
Sales and service revenues	39,597	36,722	117,679	107,163
Leasing revenues	1,959	1,565	5,518	4,336
Interest, dividend and other investment income	2,378	1,795	7,101	5,544
	62,744	57,809	184,687	168,357
<i>Railroad, Utilities and Energy:</i>				
Freight rail transportation revenues	6,663	5,761	19,219	16,917
Energy operating revenues	6,090	5,225	15,843	14,375
Service revenues and other income	1,437	1,788	4,175	4,647
	14,190	12,774	39,237	35,939
Total revenues	76,934	70,583	223,924	204,296
Investment and derivative contract gains (losses)	(13,465)	4,921	(82,362)	38,015
Costs and expenses:				
<i>Insurance and Other:</i>				
Insurance losses and loss adjustment expenses	16,005	13,939	42,957	37,078
Life, annuity and health insurance benefits	1,450	1,568	4,055	4,507
Insurance underwriting expenses	2,506	3,239	7,734	9,318
Cost of sales and services	31,292	28,984	92,710	84,275
Cost of leasing	1,418	1,116	4,148	2,980
Selling, general and administrative expenses	4,068	4,889	12,081	13,844
Interest expense	297	286	863	860
	57,036	54,021	164,548	152,862
<i>Railroad, Utilities and Energy:</i>				
Freight rail transportation expenses	4,581	3,527	12,766	10,625
Utilities and energy cost of sales and other expenses	4,295	3,497	11,730	10,306
Other expenses	1,320	1,582	4,003	4,238
Interest expense	795	770	2,350	2,322
	10,991	9,376	30,849	27,491
Total costs and expenses	68,027	63,397	195,397	180,353
Earnings (loss) before income taxes and equity method earnings	(4,558)	12,107	(53,835)	61,958
Equity method earnings	441	377	1,048	775
Earnings (loss) before income taxes	(4,117)¹	12,484	(52,787)¹	62,733
Income tax expense (benefit)	(1,529)	1,840	(12,408)	11,824
Net earnings (loss)	(2,588)	10,644	(40,379)	50,909
Earnings attributable to noncontrolling interests	100	300	604	760
Net earnings (loss) attributable to Berkshire Hathaway shareholders	\$ (2,688)	\$ 10,344	\$ (40,983)	\$ 50,149
Net earnings (loss) per average equivalent Class A share	\$ (1,832)	\$ 6,882	\$ (27,866)	\$ 33,025
Net earnings (loss) per average equivalent Class B share*	\$ (1.22)	\$ 4.59	\$ (18.58)	\$ 22.02
Average equivalent Class A shares outstanding	1,466,946	1,503,013	1,470,714	1,518,513
Average equivalent Class B shares outstanding	2,200,419,462	2,254,518,838	2,206,070,294	2,277,769,582

* Class B shares are economically equivalent to one-fifteen-hundredth of a Class A share. Accordingly, net earnings (loss) per average equivalent Class B share outstanding is equal to one-fifteen-hundredth of the equivalent Class A amount. See Note 17.

See accompanying Notes to Consolidated Financial Statements

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

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Net earnings (loss)	\$ (2,588)	\$ 10,644	\$ (40,379)	\$ 50,909
Other comprehensive income:				
Unrealized appreciation of investments	(527)	(89)	(974)	(164)
Applicable income taxes	113	20	208	38
Foreign currency translation	(1,727)	(643)	(3,794)	(616)
Applicable income taxes	(38)	6	14	(8)
Defined benefit pension plans	29	54	70	158
Applicable income taxes	(7)	(13)	(16)	(42)
Other, net	44	38	199	45
Other comprehensive income, net	(2,113)	(627)	(4,293)	(589)
Comprehensive income	(4,701)	10,017	(44,672)	50,320
Comprehensive income attributable to noncontrolling interests	46	288	518	762
Comprehensive income attributable to Berkshire Hathaway shareholders	<u>\$ (4,747)</u>	<u>\$ 9,729</u>	<u>\$ (45,190)</u>	<u>\$ 49,558</u>

See accompanying Notes to Consolidated Financial Statements

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

	Berkshire Hathaway shareholders' equity						
	Common stock and capital in excess of par value	Accumulated other comprehensive income	Retained earnings	Treasury stock	Non- controlling interests	Total	
<u>For the third quarter and first nine months of 2022</u>							
Balance at December 31, 2021	\$ 35,600	\$ (4,027)	\$ 534,421	\$ (59,795)	\$ 8,731	\$ 514,930	
Net earnings	—	—	5,460	—	125	5,585	
Other comprehensive income, net	—	(401)	—	—	(3)	(404)	
Acquisition of common stock	—	—	—	(3,111)	—	(3,111)	
Transactions with noncontrolling interests	(6)	—	—	—	(129)	(135)	
Balance at March 31, 2022	\$ 35,594	\$ (4,428)	\$ 539,881	\$ (62,906)	\$ 8,724	\$ 516,865	
Net earnings (loss)	—	—	(43,755)	—	379	(43,376)	
Other comprehensive income, net	—	(1,747)	—	—	(29)	(1,776)	
Acquisition of common stock	—	—	—	(1,028)	—	(1,028)	
Transactions with noncontrolling interests	(382)	—	—	—	(650)	(1,032)	
Balance at June 30, 2022	\$ 35,212	\$ (6,175)	\$ 496,126	\$ (63,934)	\$ 8,424	\$ 469,653	
Net earnings (loss)	—	—	(2,688)	—	100	(2,588)	
Other comprehensive income, net	—	(2,059)	—	—	(54)	(2,113)	
Acquisition of common stock	—	—	—	(1,038)	(153)	(1,191)	
Transactions with noncontrolling interests	(14)	—	—	—	—	(14)	
Balance at September 30, 2022	<u>\$ 35,198</u>	<u>\$ (8,234)</u>	<u>\$ 493,438</u>	<u>\$ (64,972)</u>	<u>\$ 8,317</u>	<u>\$ 463,747</u>	
<u>For the third quarter and first nine months of 2021</u>							
Balance at December 31, 2020	\$ 35,634	\$ (4,243)	\$ 444,626	\$ (32,853)	\$ 8,172	\$ 451,336	
Net earnings	—	—	11,711	—	129	11,840	
Other comprehensive income, net	—	(327)	—	—	7	(320)	
Acquisition of common stock	—	—	—	(6,565)	—	(6,565)	
Transactions with noncontrolling interests	4	—	—	—	(119)	(115)	
Balance at March 31, 2021	\$ 35,638	\$ (4,570)	\$ 456,337	\$ (39,418)	\$ 8,189	\$ 456,176	
Net earnings	—	—	28,094	—	331	28,425	
Other comprehensive income, net	—	351	—	—	7	358	
Acquisition of common stock	—	—	—	(6,028)	—	(6,028)	
Transactions with noncontrolling interests	5	—	—	—	(136)	(131)	
Balance at June 30, 2021	\$ 35,643	\$ (4,219)	\$ 484,431	\$ (45,446)	\$ 8,391	\$ 478,800	
Net earnings	—	—	10,344	—	300	10,644	
Other comprehensive income, net	—	(615)	—	—	(12)	(627)	
Acquisition of common stock	—	—	—	(7,626)	—	(7,626)	
Transactions with noncontrolling interests	(32)	—	—	—	(84)	(116)	
Balance at September 30, 2021	<u>\$ 35,611</u>	<u>\$ (4,834)</u>	<u>\$ 494,775</u>	<u>\$ (53,072)</u>	<u>\$ 8,595</u>	<u>\$ 481,075</u>	

See accompanying Notes to Consolidated Financial Statements

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

	2022	First Nine Months	2021
Cash flows from operating activities:			
Net earnings (loss)	\$	(40,379)	\$ 50,909
Adjustments to reconcile net earnings (loss) to operating cash flows:			
Investment (gains) losses		82,089	(37,235)
Depreciation and amortization		8,141	8,013
Other		(4,935)	(717)
Changes in operating assets and liabilities:			
Unpaid losses and loss adjustment expenses		4,551	4,809
Deferred charges - retroactive reinsurance		649	709
Unearned premiums		3,632	3,958
Receivables and originated loans		(7,527)	(6,810)
Other assets		(5,599)	(1,558)
Other liabilities		2,515	1,928
Income taxes		(16,114)	7,620
Net cash flows from operating activities		27,023	31,626
Cash flows from investing activities:			
Purchases of equity securities		(66,246)	(5,004)
Sales of equity securities		17,343	11,975
Purchases of U.S. Treasury Bills and fixed maturity securities		(139,359)	(106,399)
Sales of U.S. Treasury Bills and fixed maturity securities		69,998	15,945
Redemptions and maturities of U.S. Treasury Bills and fixed maturity securities		47,512	103,294
Purchases of loans and finance receivables		(31)	(70)
Collections of loans and finance receivables		332	283
Acquisitions of businesses, net of cash acquired		(183)	(204)
Purchases of property, plant and equipment and equipment held for lease		(10,907)	(9,244)
Other		32	1,505
Net cash flows from investing activities		(81,509)	12,081
Cash flows from financing activities:			
Proceeds from borrowings of insurance and other businesses		6,981	2,952
Repayments of borrowings of insurance and other businesses		(1,468)	(3,010)
Proceeds from borrowings of railroad, utilities and energy businesses		3,185	2,939
Repayments of borrowings of railroad, utilities and energy businesses		(1,791)	(2,609)
Changes in short term borrowings, net		(531)	(689)
Acquisition of treasury stock		(5,246)	(20,192)
Other		(1,441)	(755)
Net cash flows from financing activities		(311)	(21,364)
Effects of foreign currency exchange rate changes		(553)	(98)
Increase (decrease) in cash and cash equivalents and restricted cash		(55,350)	22,245
Cash and cash equivalents and restricted cash at beginning of year*		88,706	48,396
Cash and cash equivalents and restricted cash at end of third quarter*	\$	33,356	\$ 70,641
<i>*Cash and cash equivalents and restricted cash are comprised of:</i>			
<i>Beginning of year—</i>			
Insurance and Other	\$	85,319	\$ 44,714
Railroad, Utilities and Energy		2,865	3,276
Restricted cash included in other assets		522	406
	\$	88,706	\$ 48,396
<i>End of third quarter—</i>			
Insurance and Other	\$	28,869	\$ 65,156
Railroad, Utilities and Energy		3,757	4,833
Restricted cash included in other assets		730	652
	\$	33,356	\$ 70,641

See accompanying Notes to Consolidated Financial Statements

**BERKSHIRE HATHAWAY INC.
and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
September 30, 2022**

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.

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 and losses on equity securities will produce significant volatility in our interim and annual earnings. In addition, the magnitude of gains and losses from the periodic revaluation of certain assets and liabilities denominated in foreign currencies and asset impairment charges may cause significant variations in periodic net earnings.

To varying degrees, the COVID-19 pandemic continues to affect our operating businesses. Significant government and private sector actions have been taken since 2020 to control the spread and mitigate the economic effects of the virus and its variants. Such actions in 2022 included temporary business closures or restrictions of business activities in various parts of the world. In addition, significant disruptions of supply chains and higher costs emerged in 2021 and have persisted in 2022. The development of geopolitical conflicts in 2022 have contributed to disruptions of supply chains, resulting in cost increases for commodities, goods and services in many parts of the world. In the U.S. and elsewhere, governments are implementing actions intended to slow price inflation. The economic effects from these events over longer terms cannot be reasonably estimated at this time. 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.

Note 2. New accounting pronouncements

In August 2018, the Financial Accounting Standards Board issued Accounting Standards Update 2018-12 “Targeted Improvements to the Accounting for Long-Duration Contracts” (“ASU 2018-12”). ASU 2018-12 requires reassessment of cash flow assumptions at least annually and revision of discount rate assumptions each reporting period in valuing policyholder liabilities of long-duration contracts. Under ASU 2018-12, the effects from changes in cash flow assumptions are reflected in earnings and the effects from changes in discount rate assumptions are reflected in other comprehensive income. Currently, the cash flow and discount rate assumptions are set at the contract inception date and not subsequently changed, except under limited circumstances. ASU 2018-12 is to be applied retrospectively to the earliest period presented in the financial statements, will require new disclosures and is effective for fiscal years beginning after December 15, 2022, with early adoption permitted.

We will adopt ASU 2018-12 as of January 1, 2023 using the modified retrospective method, whereby revised cash flow and discount rate assumptions as of January 1, 2021 (the transition date) are applied to contracts then in-force, with liabilities then remeasured, with the cumulative effect from discount rate changes (based on changes in prevailing interest rates) recorded in accumulated other comprehensive income and the cumulative effect from cash flow assumption changes in retained earnings. While we have not finalized our assessment and continue to evaluate the impact of the adoption beginning as of the transition date, we believe that the changes in discount rate assumptions will initially have a greater effect on our recorded liabilities than changes in cash flow assumptions. We preliminarily estimate the cumulative effect of adopting ASU 2018-12 will reduce our consolidated shareholders’ equity from the amount previously reported by approximately \$6.5 billion as of January 1, 2021, with that reduction declining to approximately \$4.7 billion as of December 31, 2021. While we have not determined the effect of adopting ASU 2018-12 as of September 30, 2022, we currently expect the cumulative reduction to our consolidated shareholders’ equity has declined significantly since December 31, 2021, based on the interest rate increases in 2022.

Notes to Consolidated Financial Statements (Continued)

Note 3. Investments in fixed maturity securities

Investments in fixed maturity securities as of September 30, 2022 and December 31, 2021 are summarized by type below (in millions).

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
September 30, 2022				
U.S. Treasury, U.S. government corporations and agencies	\$ 9,039	\$ 4	\$ (268)	\$ 8,775
Foreign governments	8,701	9	(205)	8,505
Corporate bonds	830	205	(6)	1,029
Other	275	22	(4)	293
	<u>\$ 18,845</u>	<u>\$ 240</u>	<u>\$ (483)</u>	<u>\$ 18,602</u>
December 31, 2021				
U.S. Treasury, U.S. government corporations and agencies	\$ 3,286	\$ 22	\$ (5)	\$ 3,303
Foreign governments	10,998	29	(33)	10,994
Corporate bonds	1,363	412	(1)	1,774
Other	317	47	(1)	363
	<u>\$ 15,964</u>	<u>\$ 510</u>	<u>\$ (40)</u>	<u>\$ 16,434</u>

Investments in foreign governments include securities issued by national and provincial government entities as well as instruments that are unconditionally guaranteed by such entities. As of September 30, 2022, approximately 93% of our foreign government holdings were rated AA or higher by at least one of the major rating agencies. The amortized cost and estimated fair value of fixed maturity securities at September 30, 2022 are summarized below by contractual maturity dates. Amounts are in millions. Actual maturities may differ from contractual maturities due to prepayment rights held by issuers.

	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years	Mortgage-backed securities	Total
Amortized cost	\$ 7,904	\$ 10,201	\$ 460	\$ 82	\$ 198	\$ 18,845
Fair value	7,753	9,895	654	85	215	18,602

Note 4. Investments in equity securities

Investments in equity securities as of September 30, 2022 and December 31, 2021 are summarized as follows (in millions).

	Cost Basis	Net Unrealized Gains	Fair Value
September 30, 2022*			
Banks, insurance and finance	\$ 32,148	\$ 36,817	\$ 68,965
Consumer products	41,106	116,615	157,721
Commercial, industrial and other	69,056	10,425	79,481
	<u>\$ 142,310</u>	<u>\$ 163,857</u>	<u>\$ 306,167</u>

* Approximately 73% of the aggregate fair value was concentrated in five companies (American Express Company – \$20.5 billion; Apple Inc. – \$126.5 billion; Bank of America Corporation – \$31.2 billion; The Coca-Cola Company – \$22.4 billion and Chevron Corporation – \$24.4 billion).

	Cost Basis	Net Unrealized Gains	Fair Value
December 31, 2021*			
Banks, insurance and finance	\$ 26,822	\$ 62,236	\$ 89,058
Consumer products	36,076	154,945	191,021
Commercial, industrial and other	41,707	28,933	70,640
	<u>\$ 104,605</u>	<u>\$ 246,114</u>	<u>\$ 350,719</u>

* Approximately 73% of the aggregate fair value was concentrated in four companies (American Express Company – \$24.8 billion; Apple Inc. – \$161.2 billion; Bank of America Corporation – \$46.0 billion and The Coca-Cola Company – \$23.7 billion).

Notes to Consolidated Financial Statements (Continued)

Note 4. Investments in equity securities (Continued)

As of September 30, 2022, we owned 151.6 million shares of American Express Company (“American Express”) common stock representing 20.3% of the American Express outstanding common stock. Since 1995, we have been party to an agreement with American Express whereby we agreed to vote a significant portion of our shares in accordance with the recommendations of the American Express Board of Directors and we have agreed to passivity commitments as requested by the Board of Governors of the Federal Reserve System, which collectively, in our judgment, restrict our ability to exercise significant influence over the operating and financial policies of American Express. Accordingly, we have not applied the equity method of accounting to our investment in American Express and continue to record our investment at fair value.

During the first six months of 2022, we acquired approximately 17% of the outstanding common stock of Occidental Petroleum Corporation (“Occidental”) and in the third quarter of 2022, we acquired additional shares such that our aggregate voting interest exceeded 20% on August 4, 2022. We adopted the equity method with respect to our investment in Occidental common stock as of that date and included this investment in equity method investments at September 30, 2022. See Note 5. We continue to report our investments in Occidental Cumulative Perpetual Preferred Stock and Occidental common stock warrants at fair value as equity securities, as such interests are not in-substance common stock under GAAP and are not eligible for the equity method.

Our investment in Occidental preferred stock has an aggregate liquidation value of \$10 billion and our investment in Occidental warrants allows us to purchase up to 83.86 million shares of Occidental common stock at an exercise price of \$59.62 per share. The preferred stock accrues dividends at 8% per annum and is redeemable at the option of Occidental commencing in 2029 at a redemption price equal to 105% of the liquidation preference, plus any accumulated and unpaid dividends and is mandatorily redeemable under specified events. The warrants are exercisable in whole or in part until one year after the redemption of the preferred stock.

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 are our investments in the common stock of The Kraft Heinz Company (“Kraft Heinz”) and, as of August 4, 2022, Occidental. We own 26.5% of Kraft Heinz common stock and we own 20.9% of Occidental common stock, which excludes the potential effect of the exercise of Occidental common stock warrants. See Note 4.

Kraft Heinz manufactures and markets food and beverage products, including condiments and sauces, cheese and dairy, meals, meats, refreshment beverages, coffee and other grocery products. Occidental is an international energy company, including oil and natural gas exploration, development and production, and chemicals manufacturing businesses. Occidental’s midstream businesses purchase, market, gather, process, transport and store various oil, natural gas, carbon dioxide and other products. We anticipate Occidental’s financial information will not be available in time for concurrent reporting in our consolidated financial statements. Therefore, we will report the equity method effects for Occidental on a one-quarter lag. Our earnings in the fourth quarter of 2022 will include our equity method share of Occidental’s third quarter earnings.

The common stock of Kraft Heinz and Occidental are publicly traded. The fair values and carrying values of these two investments in addition to the carrying values of our other significant equity method investments are summarized as follows (in millions). We evaluated our investment in Kraft Heinz for impairment as of September 30, 2022. Based on the prevailing facts and circumstances, we concluded recognition of an impairment loss in earnings was not required.

	Carrying Value		Fair Value	
	September 30, 2022	December 31, 2021	September 30, 2022	December 31, 2021
Kraft Heinz	\$ 12,769	\$ 13,112	\$ 10,853	\$ 11,683
Occidental	11,180	—	11,943	—
Other	4,765	4,263		
	<u>\$ 28,714</u>	<u>\$ 17,375</u>		

Notes to Consolidated Financial Statements (Continued)

Note 5. Equity method investments (Continued)

Our earnings and distributions received from equity method investments are summarized in the table below (in millions).

	Equity in Earnings				Distributions Received			
	Third Quarter		First Nine Months		Third Quarter		First Nine Months	
	2022	2021	2022	2021	2022	2021	2022	2021
Kraft Heinz	\$ 114	\$ 194	\$ 391	\$ 337	\$ 131	\$ 131	\$ 391	\$ 391
Occidental	—	—	—	—	—	—	—	—
Other	327	183	657	438	94	55	231	1,037
	<u>\$ 441</u>	<u>\$ 377</u>	<u>\$ 1,048</u>	<u>\$ 775</u>	<u>\$ 225</u>	<u>\$ 186</u>	<u>\$ 622</u>	<u>\$ 1,428</u>

As previously indicated, we will report the equity method effects for Occidental on a one-quarter lag. Our equity method share of Occidental's earnings will be reported in our earnings beginning in the fourth quarter of 2022. Distributions from other investees in the first nine months of 2021 included a special distribution of \$849 million from Pilot Travel Centers ("Pilot").

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

	September 24, 2022	December 25, 2021
Assets	\$ 89,992	\$ 93,394
Liabilities	41,649	43,942

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Sales	\$ 6,505	\$ 6,324	\$ 19,104	\$ 19,333
Net earnings attributable to Kraft Heinz common shareholders	432	733	1,473	1,269

Summarized consolidated financial information of Occidental follows (in millions).

	June 30, 2022	December 31, 2021
Assets	\$ 74,221	\$ 75,036
Liabilities	46,391	54,709

	Second Quarter		First Six Months	
	2022	2021	2022	2021
Total revenues and other income	\$ 10,735	\$ 6,010	\$ 19,268	\$ 11,489
Net earnings (loss) attributable to Occidental common shareholders	3,555	(97)	8,231	(443)

Other investments that we account for pursuant to the equity method include Berkadia Commercial Mortgage LLC ("Berkadia"), Pilot, Electric Transmission Texas, LLC ("ETT") and Iroquois Gas Transmission System L.P. ("Iroquois"). 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 provides capital solutions, investment sales advisory and mortgage servicing for multifamily and commercial real estate. Berkadia's commercial paper borrowing capacity (currently limited to \$1.5 billion) 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. Berkshire Hathaway Energy ("BHE") subsidiaries own 50% noncontrolling interests in ETT, an owner and operator of electric transmission assets in Texas, and Iroquois, an owner and operator of natural gas pipeline assets in New York and Connecticut.

We own a 38.6% interest in Pilot, headquartered in Knoxville, Tennessee. Pilot operates travel centers in North America through more than 800 retail locations across 44 U.S. states and six Canadian provinces and is a leading supplier of fuel to third parties. We have an agreement to acquire an additional 41.4% interest in Pilot in the first quarter of 2023 for a value to be determined, based upon Pilot's adjusted earnings in 2022 and its net debt at December 31, 2022. As a result, Berkshire will become the majority owner of Pilot at that time.

Notes to Consolidated Financial Statements (Continued)

Note 6. Investment and derivative contract gains/losses

Investment and derivative contract gains/losses in the third quarter and first nine months of 2022 and 2021 are summarized as follows (in millions).

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Investment gains (losses):				
Equity securities:				
Change in unrealized investment gains (losses) during the period on securities held at the end of the period	\$ (12,902)	\$ 4,759	\$ (80,496)	\$ 36,163
Investment gains (losses) on securities sold during the period	(165)	75	(1,085)	889
	(13,067)	4,834	(81,581)	37,052
Fixed maturity securities:				
Gross realized gains	6	24	18	59
Gross realized losses	(433)	(7)	(509)	(20)
Other	(6)	—	(17)	144
Investment gains (losses)	(13,500)	4,851	(82,089)	37,235
Derivative contract gains (losses)	35	70	(273)	780
	<u>\$ (13,465)</u>	<u>\$ 4,921</u>	<u>\$ (82,362)</u>	<u>\$ 38,015</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, as well as gains and losses on securities we sold during the period. As reflected in the Consolidated Statements of Cash Flows, we received proceeds from sales of equity securities of approximately \$17.3 billion in the first nine months of 2022 and \$12.0 billion in the first nine months of 2021. In the preceding table, investment gains and losses on equity securities sold during the period represent the difference between the sales proceeds and the fair value of the equity securities sold at the beginning of the applicable period or, if later, the purchase date. Taxable gains/losses on equity securities sold are generally the difference between the proceeds from sales and original cost. Equity securities sold produced taxable gains of \$3 million in the third quarter and taxable losses of \$660 million in the first nine months of 2022 compared to taxable gains of \$941 million in the third quarter and \$2.9 billion in the first nine months of 2021.

Our derivative contract gains and losses derive from equity index put option contracts. As of September 30, 2022, we had four open contracts, which had an aggregate fair value liability of less than \$1 million and an aggregate notional value of \$1.6 billion.

Notes to Consolidated Financial Statements (Continued)

Note 7. Loans and finance receivables

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

	September 30, 2022	December 31, 2021
Loans and finance receivables before allowances and discounts	\$ 23,442	\$ 22,065
Allowances for credit losses	(785)	(765)
Unamortized acquisition discounts and points	(563)	(549)
	<u>\$ 22,094</u>	<u>\$ 20,751</u>

Loans and finance receivables are principally manufactured home loans, and to a lesser extent, site-built home loans and commercial loans. Reconciliations of the allowance for credit losses on loans and finance receivables for the first nine months of 2022 and 2021 follow (in millions).

	2022	First Nine Months 2021
Balance at beginning of year	\$ 765	\$ 712
Provision for credit losses	45	65
Charge-offs, net of recoveries	(25)	(33)
Balance at September 30	<u>\$ 785</u>	<u>\$ 744</u>

As of September 30, 2022, substantially all manufactured and site-built home loans were evaluated collectively for impairment. As of September 30, 2022, we considered approximately 97% of these loans to be current as to payment status. A summary of performing and non-performing home loans before discounts and allowances by year of loan origination as of September 30, 2022 follows (in millions).

	2022	2021	2020	2019	2018	Prior	Total
Performing	\$ 4,268	\$ 3,696	\$ 2,883	\$ 2,037	\$ 1,544	\$ 7,205	\$ 21,633
Non-performing	4	7	9	8	7	42	77
	<u>\$ 4,272</u>	<u>\$ 3,703</u>	<u>\$ 2,892</u>	<u>\$ 2,045</u>	<u>\$ 1,551</u>	<u>\$ 7,247</u>	<u>\$ 21,710</u>

We are also party to two commercial loan agreements with an aggregate carrying value of \$1.7 billion at September 30, 2022 and \$1.9 billion at December 31, 2021. The larger of these loans is with Seritage Growth Properties ("Seritage"), which had a carrying value of \$1.27 billion as of September 30, 2022 and \$1.44 billion as of December 31, 2021. The Seritage loan is pursuant to a \$2.0 billion term loan facility and the outstanding loan is secured by mortgages on its real estate properties. The Seritage loan agreement allows optional loan prepayments without penalty and further provides the option to extend the maturity of the loan to July 31, 2025, if the outstanding principal has been reduced to \$800 million by the original expiration date of July 31, 2023. Each of these loans is current as to payment status.

Note 8. Other receivables

Other receivables are comprised of the following (in millions).

	September 30, 2022	December 31, 2021
Insurance and other:		
Insurance premiums receivable	\$ 17,815	\$ 15,050
Reinsurance recoverables	4,793	4,900
Trade receivables	14,448	12,971
Other	4,051	3,146
Allowances for credit losses	(724)	(679)
	<u>\$ 40,383</u>	<u>\$ 35,388</u>
Railroad, utilities and energy:		
Trade receivables	\$ 4,362	\$ 3,678
Other	765	650
Allowances for credit losses	(142)	(151)
	<u>\$ 4,985</u>	<u>\$ 4,177</u>

Notes to Consolidated Financial Statements (Continued)

Note 8. Other receivables (Continued)

Provisions for credit losses in the first nine months with respect to receivables summarized above were \$328 million in 2022 and \$335 million in 2021. Charge-offs, net of recoveries, in the first nine months were \$284 million in 2022 and \$279 million in 2021.

Note 9. Inventories

Inventories are comprised of the following (in millions).

	September 30, 2022	December 31, 2021
Raw materials	\$ 6,473	\$ 5,743
Work in process and other	3,750	3,192
Finished manufactured goods	5,776	4,530
Goods acquired for resale	9,103	7,489
	<u>\$ 25,102</u>	<u>\$ 20,954</u>

Note 10. Property, plant and equipment

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

	September 30, 2022	December 31, 2021
Land, buildings and improvements	\$ 14,089	\$ 14,070
Machinery and equipment	26,072	26,063
Furniture, fixtures and other	4,968	4,640
	45,129	44,773
Accumulated depreciation	(24,751)	(23,939)
	<u>\$ 20,378</u>	<u>\$ 20,834</u>

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

	September 30, 2022	December 31, 2021
Railroad:		
Land, track structure and other roadway	\$ 66,744	\$ 65,843
Locomotives, freight cars and other equipment	15,989	13,822
Construction in progress	1,366	1,027
	84,099	80,692
Accumulated depreciation	(17,530)	(14,978)
	<u>66,569</u>	<u>65,714</u>
Utilities and energy:		
Utility generation, transmission and distribution systems	90,756	90,223
Interstate natural gas pipeline assets	17,882	17,423
Independent power plants and other assets	14,352	13,695
Construction in progress	5,198	4,196
	128,188	125,537
Accumulated depreciation	(37,285)	(35,721)
	<u>90,903</u>	<u>89,816</u>
	<u>\$ 157,472</u>	<u>\$ 155,530</u>

Depreciation expense for the first nine months of 2022 and 2021 is summarized below (in millions).

	2022	First Nine Months 2021
Insurance and other	\$ 1,690	\$ 1,725
Railroad, utilities and energy	4,646	4,485
	<u>\$ 6,336</u>	<u>\$ 6,210</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).

	September 30, 2022	December 31, 2021
Railcars	\$ 9,556	\$ 9,448
Aircraft	10,089	9,234
Other	5,120	5,053
	24,765	23,735
Accumulated depreciation	(9,626)	(8,817)
	<u>\$ 15,139</u>	<u>\$ 14,918</u>

Depreciation expense for equipment held for lease in the first nine months was \$900 million in 2022 and \$861 million in 2021. Fixed and variable operating lease revenues for the third quarter and first nine months of 2022 and 2021 are summarized below (in millions).

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Fixed lease revenue	\$ 1,344	\$ 1,151	\$ 3,796	\$ 3,318
Variable lease revenue	615	414	1,722	1,018
	<u>\$ 1,959</u>	<u>\$ 1,565</u>	<u>\$ 5,518</u>	<u>\$ 4,336</u>

Note 12. Goodwill and other intangible assets

Reconciliations of the changes in the carrying value of goodwill for the first nine months of 2022 and for the year ended December 31, 2021 follow (in millions).

	September 30, 2022	December 31, 2021
Balance at beginning of year	\$ 73,875	\$ 73,734
Business acquisitions	78	353
Other, including foreign currency translation	(618)	(212)
Balance at end of period*	<u>\$ 73,335</u>	<u>\$ 73,875</u>

* Net of accumulated goodwill impairments of \$11.0 billion as of September 30, 2022 and December 31, 2021.

The gross carrying amounts and accumulated amortization of other intangible assets are summarized below (in millions).

	September 30, 2022			December 31, 2021		
	Gross carrying amount	Accumulated amortization	Net carrying value	Gross carrying amount	Accumulated amortization	Net carrying value
Insurance and other:						
Customer relationships	\$ 27,337	\$ 6,957	\$ 20,380	\$ 27,335	\$ 6,450	\$ 20,885
Trademarks and trade names	5,158	816	4,342	5,176	802	4,374
Patents and technology	4,957	3,741	1,216	4,763	3,484	1,279
Other	3,280	1,480	1,800	3,390	1,442	1,948
	<u>\$ 40,732</u>	<u>\$ 12,994</u>	<u>\$ 27,738</u>	<u>\$ 40,664</u>	<u>\$ 12,178</u>	<u>\$ 28,486</u>
Railroad, utilities and energy:						
Customer relationships	\$ 678	\$ 421	\$ 257	\$ 678	\$ 396	\$ 282
Trademarks, trade names and other	1,015	182	833	1,015	146	869
	<u>\$ 1,693</u>	<u>\$ 603</u>	<u>\$ 1,090</u>	<u>\$ 1,693</u>	<u>\$ 542</u>	<u>\$ 1,151</u>

Notes to Consolidated Financial Statements (Continued)

Note 12. Goodwill and other intangible assets (Continued)

Intangible asset amortization expense in the first nine months was \$905 million in 2022 and \$942 million in 2021. Intangible assets with indefinite lives were \$18.4 billion as of September 30, 2022 and \$18.5 billion as of December 31, 2021 and primarily related to certain customer relationships and trademarks and trade names.

Note 13. 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 14), for each of the nine-month periods ending September 30, 2022 and 2021 follows (in millions).

	2022	2021
Balances at beginning of year:		
Gross liabilities	\$ 86,664	\$ 79,854
Reinsurance recoverable on unpaid losses	(2,960)	(2,912)
Net liabilities	83,704	76,942
Incurred losses and loss adjustment expenses:		
Current accident year	44,472	38,447
Prior accident years	(2,141)	(2,151)
Total	42,331	36,296
Paid losses and loss adjustment expenses:		
Current accident year	(17,543)	(15,277)
Prior accident years	(18,564)	(15,076)
Total	(36,107)	(30,353)
Foreign currency effect	(1,044)	(119)
Balances at September 30:		
Net liabilities	88,884	82,766
Reinsurance recoverable on unpaid losses	2,758	2,988
Gross liabilities	<u>\$ 91,642</u>	<u>\$ 85,754</u>

Incurred losses and loss adjustment expenses shown in the preceding table were recorded in earnings and related to insured events occurring in the current year (“current accident year”) and events occurring in all prior years (“prior accident years”). Incurred and paid losses and loss adjustment expenses are net of reinsurance recoveries. Current accident year incurred losses in the first nine months of 2022 and 2021 included approximately \$4.0 billion and \$2.7 billion, respectively, from significant catastrophe events (losses in excess of \$100 million per event). Significant catastrophe events in the first nine months included Hurricane Ian (\$3.4 billion) and floods in Australia and South Africa in 2022 and Winter Storm Uri, Hurricane Ida (\$1.5 billion) and floods in Europe in 2021.

In the first nine months, we recorded net reductions of estimated ultimate liabilities for prior accident years of \$2.1 billion in 2022 and \$2.2 billion in 2021, which produced corresponding reductions in incurred losses and loss adjustment expenses in those periods. These reductions, as percentages of the net liabilities at the beginning of each year, were 2.6% in 2022 and 2.8% in 2021.

Estimated ultimate liabilities for prior accident years from primary insurance in the first nine months were reduced by \$734 million in 2022 and \$1.6 billion in 2021. The reductions in each period derived primarily from private passenger automobile, medical professional liability and workers’ compensation claims. Estimated ultimate liabilities for prior years attributable to property and casualty reinsurance in the first nine months decreased \$1.4 billion in 2022 and \$564 million in 2021.

Notes to Consolidated Financial Statements (Continued)

Note 14. Retroactive reinsurance contracts

Retroactive reinsurance policies provide indemnification of losses and loss adjustment expenses of short-duration insurance contracts with respect to underlying loss events that occurred prior to the contract inception date. Claims payments may commence immediately after the contract date or, when applicable, after 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 charges for each of the nine-month periods ending September 30, 2022 and 2021 follow (in millions).

	2022		2021	
	Unpaid losses and loss adjustment expenses	Deferred charges - retroactive reinsurance	Unpaid losses and loss adjustment expenses	Deferred charges - retroactive reinsurance
Balances at beginning of year	\$ 38,256	\$ (10,639)	\$ 40,966	\$ (12,441)
Incurred losses and loss adjustment expenses:				
Current year contracts	—	—	82	—
Prior years' contracts	(23)	649	(9)	709
Total	(23)	649	73	709
Paid losses and loss adjustment expenses	(1,567)	—	(1,318)	—
Balances at September 30	\$ 36,666	\$ (9,990)	\$ 39,721	\$ (11,732)
Incurred losses and loss adjustment expenses, net of deferred charges	\$ 626		\$ 782	

In the preceding table, classifications of incurred losses and loss adjustment expenses are based on the inception dates of the contracts, which reflect when our exposure to losses began. Incurred losses and loss adjustment expenses in the first nine months for prior years' contracts were \$626 million in 2022 and \$700 million in 2021 and included recurring amortization of deferred charges and the effect of changes in the timing and amount of expected future loss payments. Currently, our largest retroactive reinsurance contract is between our subsidiary, National Indemnity Company, and certain subsidiaries of American International Group, Inc. (collectively, "AIG"). Our estimated claim liabilities with regard to the AIG contract were approximately \$14.8 billion at September 30, 2022 and \$15.8 billion at December 31, 2021. Deferred charges related to the AIG contract were \$4.14 billion at September 30, 2022 and \$4.45 billion at December 31, 2021.

Note 15. Notes payable and other borrowings

Notes payable and other borrowings are summarized below (in millions). The weighted average interest rates and maturity date ranges shown in the following tables are based on borrowings as of September 30, 2022.

	Weighted Average Interest Rate	September 30, 2022	December 31, 2021
Insurance and other:			
Berkshire Hathaway Inc. ("Berkshire"):			
U.S. Dollar denominated due 2023-2047	3.3%	\$ 6,227	\$ 6,820
Euro denominated due 2023-2041	1.0%	6,722	7,792
Japanese Yen denominated due 2023-2060	0.6%	6,289	6,797
Berkshire Hathaway Finance Corporation ("BHFC"):			
U.S. Dollar denominated due 2027-2052	3.6%	14,456	10,758
Great Britain Pound denominated due 2039-2059	2.5%	1,920	2,325
Euro denominated due 2030-2034	1.8%	1,219	—
Other subsidiary borrowings due 2022-2045	4.1%	4,328	4,438
Subsidiary short-term borrowings	4.7%	374	342
		<u>\$ 41,535</u>	<u>\$ 39,272</u>

Notes to Consolidated Financial Statements (Continued)

Note 15. Notes payable and other borrowings (Continued)

In January 2022, Berkshire repaid \$600 million of maturing senior notes and issued ¥128.5 billion (approximately \$1.1 billion) of senior notes with maturity dates ranging from 2027 to 2052 and a weighted average interest rate of 0.5%. 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 March 2022, BHFC issued \$4.5 billion of senior notes with maturity dates ranging from 2027 to 2052 with a weighted average interest rate of 3.4% and €1.25 billion (approximately \$1.4 billion) of senior notes maturing in 2030 and 2034 with a weighted average interest rate of 1.8%. In May 2022, BHFC repaid \$775 million of maturing senior notes.

The carrying values of Berkshire and BHFC non-U.S. Dollar denominated senior notes (€8.15 billion, £1.75 billion and ¥914 billion par at September 30, 2022) reflect the applicable exchange rates as of each balance sheet date. 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 \$1.2 billion in the third quarter and \$3.3 billion in the first nine months of 2022 as compared to \$264 million in the third quarter and \$939 million in the first nine months of 2021.

Berkshire also guarantees debt of other subsidiaries, aggregating approximately \$3.7 billion at September 30, 2022. Generally, Berkshire's guarantee of a subsidiary's debt obligation is an absolute, unconditional and irrevocable guarantee for the full and prompt payment when due of all payment obligations.

	Weighted Average Interest Rate	September 30, 2022	December 31, 2021
Railroad, utilities and energy:			
Berkshire Hathaway Energy Company ("BHE") and subsidiaries:			
BHE senior unsecured debt due 2023-2053	4.3 %	\$ 13,992	\$ 13,003
Subsidiary and other debt due 2022-2064	4.2 %	36,226	36,759
Short-term borrowings	4.2 %	1,441	2,009
Burlington Northern Santa Fe ("BNSF") and subsidiaries due 2022-2097	4.5 %	23,302	23,219
		<u>\$ 74,961</u>	<u>\$ 74,990</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 such debt. These borrowing arrangements generally contain various covenants, which pertain to leverage ratios, interest coverage ratios and/or debt service coverage ratios. In April 2022, BHE issued \$1.0 billion of 4.6% senior notes due in 2053. During the first nine months of 2022, BHE subsidiaries issued approximately \$1.3 billion of variable and fixed rate term debt with a weighted average interest rate of 3.9% as of September 30 and maturity dates ranging from 2024 to 2052.

BNSF's borrowings are primarily senior unsecured debentures. In June 2022, BNSF issued \$1.0 billion of 4.45% debentures due in 2053. During the first nine months of 2022, BNSF repaid \$900 million of term debt. As of September 30, 2022, 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.

Our subsidiaries have unused lines of credit and commercial paper capacity to support short-term borrowing programs and provide additional liquidity. Unused lines of credit were approximately \$10.7 billion at September 30, 2022, which included approximately \$9.2 billion related to BHE and its subsidiaries.

Notes to Consolidated Financial Statements (Continued)

Note 16. Fair value measurements

Our financial assets and liabilities are summarized below as of September 30, 2022 and December 31, 2021, 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)
September 30, 2022					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 8,775	\$ 8,775	\$ 8,740	\$ 35	\$ —
Foreign governments	8,505	8,505	8,207	298	—
Corporate bonds	1,029	1,029	—	1,029	—
Other	293	293	—	293	—
Investments in equity securities	306,167	306,167	294,094	7	12,066
Investment in Kraft Heinz & Occidental common stock	23,949	22,796	22,796	—	—
Loans and finance receivables	22,094	22,659	—	1,744	20,915
Derivative contract assets ⁽¹⁾	731	731	68	593	70
Derivative contract liabilities ⁽¹⁾	261	261	2	133	126
Notes payable and other borrowings:					
Insurance and other	41,535	36,362	—	36,314	48
Railroad, utilities and energy	74,961	66,991	—	66,991	—
December 31, 2021					
Investments in fixed maturity securities:					
U.S. Treasury, U.S. government corporations and agencies	\$ 3,303	\$ 3,303	\$ 3,261	\$ 42	\$ —
Foreign governments	10,994	10,994	10,286	708	—
Corporate bonds	1,774	1,774	—	1,774	—
Other	363	363	—	363	—
Investments in equity securities	350,719	350,719	339,225	8	11,486
Investment in Kraft Heinz common stock	13,112	11,683	11,683	—	—
Loans and finance receivables	20,751	22,174	—	2,178	19,996
Derivative contract assets ⁽¹⁾	329	329	6	230	93
Derivative contract liabilities ⁽¹⁾	376	376	2	150	224
Notes payable and other borrowings:					
Insurance and other	39,272	42,339	—	42,292	47
Railroad, utilities and energy	74,990	87,065	—	87,065	—

⁽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 16. Fair value measurements (Continued)

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

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

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

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

Reconciliations of significant assets and liabilities measured and carried at fair value on a recurring basis with the use of significant unobservable inputs (Level 3) for the nine months ended September 30, 2022 and 2021 follow (in millions).

	Balance at beginning of year	Gains included in earnings	Acquisitions, dispositions and settlements	Transfers out of Level 3	Balance at September 30
Investments in equity securities:					
2022	\$ 11,480	\$ 581	\$ —	\$ —	\$ 12,061
2021	8,978	1,713	1,100	—	11,791
Equity indexput option contract liabilities:					
2021	(1,065)	780	(1)	—	(286)

Quantitative information as of September 30, 2022 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	\$ 9,956	Discounted cash flow	Expected duration	7 years
			Discount for transferability restrictions and subordination	372 bps
Common stock warrants	2,105	Warrant pricing model	Expected duration	7 years
			Volatility	39%

Investments in equity securities in the preceding table include our investments in certain preferred stocks and common stock warrants that do not have readily determinable market values as defined under GAAP. These investments are subject to contractual restrictions on transferability and may contain provisions that prevent us from economically hedging our investments. We applied discounted cash flow techniques in valuing the preferred stock and we made assumptions regarding the expected duration of the investment and the effects of subordination in liquidation. In valuing the common stock warrants, we used a warrant valuation model. While most of the inputs to the model are observable, we made assumptions regarding the expected duration and volatility of the warrants.

Notes to Consolidated Financial Statements (Continued)

Note 17. Common stock

Changes in Berkshire's issued, treasury and outstanding common stock during the first nine months of 2022 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
Balances at December 31, 2021	665,901	(48,788)	617,113	1,488,292,852	(197,818,349)	1,290,474,503
Conversions of Class A to Class B common stock	(12,093)	—	(12,093)	18,139,500	—	18,139,500
Treasury stock acquired	—	(6,818)	(6,818)	—	(6,850,133)	(6,850,133)
Balances at September 30, 2022	<u>653,808</u>	<u>(55,606)</u>	<u>598,202</u>	<u>1,506,432,352</u>	<u>(204,668,482)</u>	<u>1,301,763,870</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 equal 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 1,466,045 shares outstanding as of September 30, 2022 and 1,477,429 shares outstanding as of December 31, 2021.

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 the 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 \$30 billion. The repurchase program does not obligate Berkshire to repurchase any specific dollar amount or number of Class A or Class B shares and there is no expiration date to the program.

Note 18. Income taxes

Our consolidated effective income tax rates were 37.1% in the third quarter and 23.5% in the first nine months of 2022 compared to 14.7% in the third quarter and 18.8% in the first nine months of 2021. Our effective income tax rate normally reflects recurring benefits from dividends-received deductions applicable to investments in certain 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, including investment gains or losses with respect to our investments in equity securities, the amount of non-deductible goodwill impairment charges and other expenses and the underlying income tax rates applicable in the various taxing jurisdictions.

Notes to Consolidated Financial Statements (Continued)

Note 19. Accumulated other comprehensive income

A summary of the net changes in after-tax accumulated other comprehensive income attributable to Berkshire Hathaway shareholders for the nine months ending September 30, 2022 and 2021 follows (in millions).

	Unrealized appreciation of fixed maturity securities, net	Foreign currency translation	Defined benefit pension plans	Other	Accumulated other comprehensive income
First nine months of 2022					
Balance at beginning of year	\$ 369	\$ (4,092)	\$ (347)	\$ 43	\$ (4,027)
Other comprehensive income, net	(767)	(3,676)	47	189	(4,207)
Balance at end of period	<u>\$ (398)</u>	<u>\$ (7,768)</u>	<u>\$ (300)</u>	<u>\$ 232</u>	<u>\$ (8,234)</u>
First nine months of 2021					
Balance at beginning of year	\$ 536	\$ (3,082)	\$ (1,645)	\$ (52)	\$ (4,243)
Other comprehensive income, net	(126)	(619)	112	42	(591)
Balance at end of period	<u>\$ 410</u>	<u>\$ (3,701)</u>	<u>\$ (1,533)</u>	<u>\$ (10)</u>	<u>\$ (4,834)</u>

Note 20. Supplemental cash flow information

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

	2022	First Nine Months 2021
Cash paid during the period for:		
Income taxes	\$ 3,474	\$ 4,002
Interest:		
Insurance and other	917	1,040
Railroad, utilities and energy	2,323	2,335

Note 21. Contingencies and commitments

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

On March 20, 2022, Berkshire entered into a definitive agreement and plan of merger with Alleghany Corporation (“Alleghany”) to acquire all of Alleghany’s outstanding common stock for cash consideration of approximately \$11.6 billion. Following the receipt of Alleghany shareholder approval on June 9, 2022 and all required regulatory approvals, the acquisition was completed on October 19, 2022. The consideration paid was funded by existing cash balances. Alleghany operates a group of property and casualty reinsurance and insurance businesses. It also owns a portfolio of non-financial businesses.

Given the proximity of the Alleghany acquisition date to the date these interim Consolidated Financial Statements were issued, it was impracticable to provide an initial estimate of the fair values of identifiable assets acquired, liabilities assumed and residual goodwill or proforma information. We expect to provide disclosures of preliminary values of identifiable assets acquired and liabilities assumed as of the acquisition date as well as proforma information, if material, in our Consolidated Financial Statements for the year ending December 31, 2022. Alleghany’s most recently available historical consolidated financial statements are as of September 30, 2022. As of that date, Alleghany’s total assets and liabilities were \$31.2 billion and \$23.4 billion, respectively.

In June 2022, BHE acquired the BHE common stock held by Greg Abel, Berkshire’s Vice Chairman - non-insurance operations, for \$870 million. The purchase was pursuant to the terms of a shareholders agreement between Berkshire, BHE and BHE’s non-controlling shareholders. Berkshire recorded a charge of \$362 million to capital in excess of par value for the excess of the consideration paid over the carrying value of the acquired noncontrolling interest.

Notes to Consolidated Financial Statements (Continued)

Note 22. 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 third quarter and first nine months of 2022 and 2021 (in millions). Other revenues, which are not considered to be revenues from contracts with customers under GAAP, are primarily insurance premiums earned, interest, dividend and other investment income and leasing revenues.

	Manufacturing	McLane	Service and Retailing	BNSF	Berkshire Hathaway Energy	Insurance, Corporate and other	Total
<u>Three months ending September 30, 2022</u>							
Manufactured products:							
Industrial and commercial products	\$ 6,145	\$ —	\$ 51	\$ —	\$ —	\$ —	\$ 6,196
Building products	5,928	—	—	—	—	—	5,928
Consumer products	4,753	—	—	—	—	—	4,753
Grocery and convenience store distribution	—	8,315	—	—	—	—	8,315
Food and beverage distribution	—	4,946	—	—	—	—	4,946
Auto sales	—	—	2,686	—	—	—	2,686
Other retail and wholesale distribution	803	—	4,189	—	—	—	4,992
Service	328	277	1,006	6,646	1,328	—	9,585
Electricity and natural gas	—	—	—	—	5,905	—	5,905
Total	17,957	13,538	7,932	6,646	7,233	—	53,306
Other revenues	1,012	32	1,609	17	294	20,664	23,628
	<u>\$ 18,969</u>	<u>\$ 13,570</u>	<u>\$ 9,541</u>	<u>\$ 6,663</u>	<u>\$ 7,527</u>	<u>\$ 20,664</u>	<u>\$ 76,934</u>
<u>Nine months ending September 30, 2022</u>							
Manufactured products:							
Industrial and commercial products	\$ 18,219	\$ —	\$ 148	\$ —	\$ —	\$ —	\$ 18,367
Building products	17,317	—	—	—	—	—	17,317
Consumer products	15,355	—	—	—	—	—	15,355
Grocery and convenience store distribution	—	24,000	—	—	—	—	24,000
Food and beverage distribution	—	14,510	—	—	—	—	14,510
Auto sales	—	—	7,888	—	—	—	7,888
Other retail and wholesale distribution	2,343	—	12,629	—	—	—	14,972
Service	894	739	3,090	19,173	4,001	—	27,897
Electricity and natural gas	—	—	—	—	15,359	—	15,359
Total	54,128	39,249	23,755	19,173	19,360	—	155,665
Other revenues	2,962	97	4,470	46	658	60,026	68,259
	<u>\$ 57,090</u>	<u>\$ 39,346</u>	<u>\$ 28,225</u>	<u>\$ 19,219</u>	<u>\$ 20,018</u>	<u>\$ 60,026</u>	<u>\$ 223,924</u>

Notes to Consolidated Financial Statements (Continued)

Note 22. Revenues from contracts with customers (Continued)

	Manufacturing	McLane	Service and Retailing	BNSF	Berkshire Hathaway Energy	Insurance, Corporate and other	Total
Three months ending September 30, 2021							
Manufactured products:							
Industrial and commercial products	\$ 5,600	\$ —	\$ 43	\$ —	\$ —	\$ —	\$ 5,643
Building products	5,005	—	—	—	—	—	5,005
Consumer products	4,758	—	—	—	—	—	4,758
Grocery and convenience store distribution	—	7,933	—	—	—	—	7,933
Food and beverage distribution	—	4,478	—	—	—	—	4,478
Auto sales	—	—	2,423	—	—	—	2,423
Other retail and wholesale distribution	742	—	3,913	—	—	—	4,655
Service	400	175	1,073	5,747	1,586	—	8,981
Electricity and natural gas	—	—	—	—	5,138	—	5,138
Total	16,505	12,586	7,452	5,747	6,724	—	49,014
Other revenues	951	26	1,202	14	289	19,087	21,569
	<u>\$ 17,456</u>	<u>\$ 12,612</u>	<u>\$ 8,654</u>	<u>\$ 5,761</u>	<u>\$ 7,013</u>	<u>\$ 19,087</u>	<u>\$ 70,583</u>
Nine months ending September 30, 2021							
Manufactured products:							
Industrial and commercial products	\$ 16,549	\$ —	\$ 142	\$ —	\$ —	\$ —	\$ 16,691
Building products	14,518	—	—	—	—	—	14,518
Consumer products	13,525	—	—	—	—	—	13,525
Grocery and convenience store distribution	—	23,104	—	—	—	—	23,104
Food and beverage distribution	—	12,838	—	—	—	—	12,838
Auto sales	—	—	7,485	—	—	—	7,485
Other retail and wholesale distribution	2,199	—	11,577	—	—	—	13,776
Service	1,099	509	3,060	16,875	4,219	—	25,762
Electricity and natural gas	—	—	—	—	14,048	—	14,048
Total	47,890	36,451	22,264	16,875	18,267	—	141,747
Other revenues	2,821	78	3,287	42	755	55,566	62,549
	<u>\$ 50,711</u>	<u>\$ 36,529</u>	<u>\$ 25,551</u>	<u>\$ 16,917</u>	<u>\$ 19,022</u>	<u>\$ 55,566</u>	<u>\$ 204,296</u>

A summary of the transaction price allocated to the significant unsatisfied remaining performance obligations relating to contracts with expected durations in excess of one year as of September 30, 2022 and the timing of when the performance obligations are expected to be satisfied follows (in millions).

	Less than 12 months	Greater than 12 months	Total
Electricity and natural gas	\$ 3,619	\$ 21,586	\$ 25,205
Other sales and service contracts	1,588	3,039	4,627

Notes to Consolidated Financial Statements (Continued)

Note 23. 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 and 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 third quarter and first nine months of 2022 and 2021 were as follows (in millions).

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Revenues of Operating Businesses				
Insurance:				
Underwriting:				
GEICO	\$ 9,808	\$ 9,604	\$ 29,169	\$ 28,073
Berkshire Hathaway Primary Group	3,485	2,964	9,916	8,373
Berkshire Hathaway Reinsurance Group	5,517	5,159	15,304	14,868
Investment income	1,683	1,339	5,331	4,212
Total insurance	20,493	19,066	59,720	55,526
BNSF	6,693	5,790	19,301	17,000
BHE	7,531	7,013	20,032	19,022
Manufacturing	19,000	17,496	57,193	50,821
McLane	13,569	12,612	39,346	36,529
Service and retailing	9,567	8,679	28,299	25,614
	76,853	70,656	223,891	204,512
Reconciliation of segments to consolidated amount				
Corporate, eliminations and other	81	(73)	33	(216)
	<u>\$ 76,934</u>	<u>\$ 70,583</u>	<u>\$ 223,924</u>	<u>\$ 204,296</u>

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Earnings (Loss) Before Income Taxes of Operating Businesses				
Insurance:				
Underwriting:				
GEICO	\$ (759)	\$ (289)	\$ (1,424)	\$ 1,360
Berkshire Hathaway Primary Group	(281)	(23)	53	349
Berkshire Hathaway Reinsurance Group	(110)	(708)	1,013	(1,298)
Investment income	1,678	1,337	5,322	4,205
Total insurance	528	317	4,964	4,616
BNSF	1,884	2,029	5,844	5,667
BHE	1,321	1,375	2,561	2,797
Manufacturing	2,883	2,445	8,735	7,595
McLane	112	(8)	270	179
Service and retailing	1,202	1,110	3,536	3,234
	7,930	7,268	25,910	24,088
Reconciliation of segments to consolidated amount				
Investment and derivative gains (losses)	(13,465)	4,921	(82,362)	38,015
Interest expense, not allocated to segments	(99)	(128)	(303)	(386)
Equity method investments	441	377	1,048	775
Corporate, eliminations and other	1,076	46	2,920	241
	<u>\$ (4,117)</u>	<u>\$ 12,484</u>	<u>\$ (52,787)</u>	<u>\$ 62,733</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).

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Insurance – underwriting	\$ (962)	\$ (784)	\$ (334)	\$ 356
Insurance – investment income	1,408	1,161	4,484	3,588
Railroad	1,442	1,538	4,477	4,305
	1,585	1,496	3,101	2,939
Utilities and energy				
Manufacturing, service and retailing	3,247	2,706	9,521	8,329
Investment and derivative contract gains (losses)	(10,449)	3,878	(65,067)	29,979
Other	1,041	349	2,835	653
Net earnings (loss) attributable to Berkshire Hathaway shareholders	<u>\$ (2,688)</u>	<u>\$ 10,344</u>	<u>\$ (40,983)</u>	<u>\$ 50,149</u>

Through our subsidiaries, we engage in numerous diverse business activities. We manage our operating businesses on an unusually decentralized basis. There are few centralized or integrated business functions. 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 23 to the accompanying Consolidated Financial Statements) should be read in conjunction with this discussion.

In varying degrees, the COVID-19 pandemic has affected our operating businesses. In addition, significant disruptions of supply chains and higher costs emerged in 2021 and have persisted in 2022. Further, geopolitical conflicts, including the Russia-Ukraine conflict, have developed in 2022. We cannot reliably predict future economic effects of these events on our businesses or when our operations will normalize. Nor can we reliably predict how these events will alter the future consumption patterns of consumers and businesses we serve.

Insurance underwriting after-tax earnings decreased \$178 million in the third quarter and \$690 million in the first nine months of 2022 versus 2021. After-tax incurred losses attributable to significant catastrophe occurrences in the third quarter were approximately \$2.7 billion from Hurricane Ian in 2022 and \$1.7 billion from Hurricane Ida and floods in Europe in 2021. Underwriting results in 2022 were also negatively impacted by increases in private passenger automobile claims frequencies and severities, and favorably impacted by higher foreign currency exchange rate gains arising from the remeasurement of non-U.S. Dollar denominated liabilities of our U.S. insurance subsidiaries and improved life and health reinsurance results. After-tax earnings from insurance investment income increased \$247 million in the third quarter and \$896 million in the first nine months of 2022 compared to 2021, attributable to increased dividend income and higher interest rates.

After-tax earnings of our railroad, BNSF, declined 6.2% in the third quarter and increased 4.0% in the first nine months of 2022 compared to 2021. The comparative changes in earnings in 2022 reflected higher revenue per car/unit, lower overall freight volumes and higher fuel and other operating costs. After-tax earnings of our utilities and energy business increased 5.9% in the third quarter and 5.5% in the first nine months of 2022 compared to 2021. The increases reflected higher earnings from tax equity investments and from the natural gas pipeline and Northern Powergrid businesses, partly offset by lower earnings from the U.S. regulated utilities and real estate brokerage businesses. After-tax earnings from our manufacturing, service and retailing businesses increased 20.0% in the third quarter and 14.3% in the first nine months of 2022 versus 2021. Results were mixed among our various businesses. While customer demand for products and services was relatively good in 2022, demand began to weaken in the third quarter at certain of our businesses. We continue to experience the negative effects of higher materials, freight, labor and other input costs.

Investment and derivative contract gains and losses in 2022 and 2021 predominantly derived from our investments in equity securities and includes unrealized gains and losses from market price changes during the period. 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 quarterly or annual results or in 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 included after-tax foreign currency exchange gains related to non-U.S. Dollar denominated debt of \$858 million in the third quarter and \$2.4 billion in the first nine months of 2022, compared to \$196 million and \$676 million in the third quarter and first nine months of 2021, respectively.

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

Insurance—Underwriting

Our management views our insurance businesses as possessing two distinct activities – underwriting and investing. Underwriting decisions are the responsibility of the unit managers, while investing decisions are the responsibility of Berkshire's Chairman and CEO, Warren E. Buffett, and Berkshire's corporate investment managers. Accordingly, we evaluate performance of underwriting operations without any allocation of investment income or investment gains and losses. We consider investment income as an integral component of our aggregate insurance operating results. However, we consider investment gains and losses, whether realized or unrealized, as non-operating. We believe that such gains and losses are not meaningful in understanding the quarterly or annual operating results of our insurance businesses.

The timing and magnitude of catastrophe losses can produce significant volatility in our periodic underwriting results, particularly with respect to our reinsurance businesses. Generally, we consider incurred losses exceeding \$100 million from a current year catastrophic event to be significant. Significant catastrophe events in 2022 included Hurricane Ian in the third quarter and floods in Australia and South Africa during the first six months, while significant events in 2021 included Hurricane Ida and floods in Europe in the third quarter and Winter Storm Uri in the first quarter. We recorded estimated pre-tax losses of \$3.4 billion from Hurricane Ian in the third quarter of 2022 and \$2.2 billion from Hurricane Ida and European floods in the third quarter of 2021.

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 \$128 billion as of September 30, 2022. 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 liabilities of our U.S. based insurance subsidiaries from foreign currency exchange rate changes.

Underwriting results of certain of our commercial insurance and reinsurance businesses have been affected by estimated losses and costs associated with the COVID-19 pandemic. While pandemic-related losses in the first nine months of 2022 were insignificant, results in future periods may be affected by legal and regulatory actions pertaining to insurance coverage, which we cannot reasonably estimate at this time.

We provide primary insurance and reinsurance products covering property and casualty risks, as well as life and health risks. On October 19, 2022, Berkshire acquired Alleghany Corporation ("Alleghany"), which operates property and casualty insurance and reinsurance businesses. These businesses will be incorporated into our reinsurance and primary insurance results beginning as of the acquisition date. Our insurance and reinsurance businesses are GEICO, Berkshire Hathaway Primary Group and Berkshire Hathaway Reinsurance Group. Underwriting results of our insurance businesses are summarized below (dollars in millions).

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Pre-tax underwriting earnings (loss):				
GEICO	\$ (759)	\$ (289)	\$ (1,424)	\$ 1,360
Berkshire Hathaway Primary Group	(281)	(23)	53	349
Berkshire Hathaway Reinsurance Group	(110)	(708)	1,013	(1,298)
Pre-tax underwriting earnings	(1,150)	(1,020)	(358)	411
Income taxes and noncontrolling interests	(188)	(236)	(24)	55
Net underwriting earnings (loss)	<u>\$ (962)</u>	<u>\$ (784)</u>	<u>\$ (334)</u>	<u>\$ 356</u>
Effective income tax rate	<u>16.3%</u>	<u>23.0%</u>	<u>6.6%</u>	<u>13.6%</u>

GEICO

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

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
	Amount	%	Amount	%
Premiums written	<u>\$ 10,137</u>		<u>\$ 29,818</u>	
Premiums earned	\$ 9,808	100.0	\$ 29,169	100.0
Losses and loss adjustment expenses	9,515	97.0	27,164	93.1
Underwriting expenses	1,052	10.7	3,429	11.8
Total losses and expenses	<u>10,567</u>	<u>107.7</u>	<u>30,593</u>	<u>104.9</u>
Pre-tax underwriting earnings (loss)	<u>\$ (759)</u>		<u>\$ (1,424)</u>	

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

Insurance—Underwriting (Continued)

GEICO (Continued)

GEICO's pre-tax underwriting losses in 2022 reflected increased claims severities, primarily due to significant cost inflation in property and physical damage claims, which began to accelerate in the second half of 2021 and have continued through 2022. Increases in used car prices are producing increased claims severities on total losses and shortages of car parts are contributing to elevated claims severities on partial losses. In addition, injury claims severities continue to trend higher.

Premiums written were relatively unchanged in the third quarter and the first nine months of 2022 compared to 2021, reflecting increases in average premiums per auto policy due to rate increases, which were substantially offset by a decrease in policies-in-force. Voluntary auto policies-in-force declined 4.6% over the first nine months of 2022 while average premiums per voluntary auto policy increased by approximately 5.4%. Premiums earned increased \$204 million (2.1%) in the third quarter and \$1.1 billion (3.9%) in the first nine months of 2022 compared to 2021. Premiums earned in the first nine months of 2021 included a reduction of approximately \$475 million attributable to the remaining impact of the GEICO Giveback program that provided a 15% premium credit to new and renewing voluntary auto and motorcycle policies written between April 8, 2020 and October 7, 2020.

Losses and loss adjustment expenses increased \$1.0 billion (12.1%) in the third quarter and \$4.6 billion (20.4%) in the first nine months of 2022 compared to 2021. GEICO's ratio of losses and loss adjustment expenses to premiums earned was 97.0% in the third quarter and 93.1% in the first nine months of 2022, increases of 8.6 percentage points and 12.7 percentage points, respectively, compared to the same periods in 2021. The increases were primarily attributable to higher claims frequencies and severities, as well as lower reductions of loss estimates for prior years' loss events and an increase in significant catastrophe losses.

Claims frequencies in the first nine months of 2022 were higher for all coverages, including property damage (one to two percent range), bodily injury and personal injury (four to five percent range) and collision (six to seven percent range). Average claims severities in the first nine months of 2022 were higher for property damage and collision coverages (seventeen to nineteen percent range) and bodily injury coverage (nine to eleven percent range). Losses and loss adjustment expenses reflected reductions in the ultimate loss estimates for prior years' loss events of \$386 million in the first nine months of 2022 compared to \$1.2 billion in 2021. The reductions in 2022 reflected decreases in all major coverages except collision and property damage coverages, while the reductions in 2021 were across all major coverages. Losses and loss adjustment expenses in the third quarter were approximately \$600 million from Hurricane Ian in 2022 and \$400 million from Hurricane Ida in 2021.

Underwriting expenses decreased \$355 million (25.2%) in the third quarter and \$718 million (17.3%) in the first nine months of 2022 compared to 2021, primarily due to significant reductions in advertising costs in both periods and lower employee-related costs in the first nine months. GEICO's expense ratio (underwriting expense to premiums earned) was 10.7% in the third quarter and 11.8% in the first nine months of 2022, decreases of 3.9 percentage points and 3.0 percentage points, respectively, compared to the same periods in 2021, attributable to both the decreases in expenses as well as the increases in earned premiums.

Berkshire Hathaway Primary Group

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

	Third Quarter				First Nine Months			
	2022		2021		2022		2021	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 3,895		\$ 3,506		\$ 10,791		\$ 9,357	
Premiums earned	\$ 3,485	100.0	\$ 2,964	100.0	\$ 9,916	100.0	\$ 8,373	100.0
Losses and loss adjustment expenses	2,825	81.1	2,240	75.6	7,342	74.0	6,044	72.2
Underwriting expenses	941	27.0	747	25.2	2,521	25.5	1,980	23.6
Total losses and expenses	3,766	108.1	2,987	100.8	9,863	99.5	8,024	95.8
Pre-tax underwriting earnings (loss)	\$ (281)		\$ (23)		\$ 53		\$ 349	

Premiums written increased \$389 million (11.1%) in the third quarter and \$1.4 billion (15.3%) in the first nine months of 2022 compared to 2021, reflecting year-to-date increases at BH Specialty (20%), USLI (17%) and BHHC (15%). The increases were across a variety of property and casualty coverages and across several markets.

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

Insurance—Underwriting (Continued)

Berkshire Hathaway Primary Group (Continued)

BH Primary's loss ratio was 81.1% in the third quarter and 74.0% in the first nine months of 2022, an increase of 5.5 percentage points in the third quarter and 1.8 percentage points in the first nine months compared to 2021. Losses from catastrophe events in 2022 were approximately \$660 million in the third quarter (Hurricane Ian) and \$740 million in the first nine months. Losses from catastrophe events in 2021 were approximately \$260 million in the third quarter (largely Hurricane Ida) and \$420 million in the first nine months. Losses and loss adjustment expenses also included net reductions in estimated ultimate liabilities for prior years' loss events in the first nine months of \$348 million in 2022 and \$420 million in 2021. BH Primary insurers write significant levels of workers' compensation, commercial and professional liability insurance and the related claim costs may be subject to high severity and long claim-tails. Claims liabilities could be greater than anticipated due to a variety of factors.

Underwriting expenses increased \$194 million (26.0%) in the third quarter and \$541 million (27.3%) in the first nine months of 2022 compared to the same periods in 2021. The expense ratio increased 1.8 percentage points in the third quarter and 1.9 percentage points in the first nine months of 2022 compared to 2021. These increases reflected costs associated with new business development programs and changes in business mix.

Berkshire Hathaway Reinsurance Group

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

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 business due to the expected long durations of the claim liabilities. We expect to incur pre-tax underwriting losses from such business, 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 BHRG's premiums and pre-tax underwriting results follows (in millions).

	Third Quarter				First Nine Months			
	Premiums earned		Pre-tax underwriting earnings (loss)		Premiums earned		Pre-tax underwriting earnings (loss)	
	2022	2021	2022	2021	2022	2021	2022	2021
Property/casualty	\$ 4,013	\$ 3,637	\$ 23	\$ (247)	\$ 10,943	\$ 10,385	\$ 1,404	\$ 121
Life/health	1,309	1,328	67	(181)	3,822	3,932	130	(522)
Retroactive reinsurance	—	—	(83)	(158)	—	82	(325)	(620)
Periodic payment annuity	192	191	(149)	(94)	529	458	(279)	(374)
Variable annuity	3	3	32	(28)	10	11	83	97
	<u>\$ 5,517</u>	<u>\$ 5,159</u>	<u>\$ (110)</u>	<u>\$ (708)</u>	<u>\$ 15,304</u>	<u>\$ 14,868</u>	<u>\$ 1,013</u>	<u>\$ (1,298)</u>

Property/casualty

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

	Third Quarter				First Nine Months			
	2022		2021		2022		2021	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 4,574		\$ 4,115		\$ 13,119		\$ 11,924	
Premiums earned	\$ 4,013	100.0	\$ 3,637	100.0	\$ 10,943	100.0	\$ 10,385	100.0
Losses and loss adjustment expenses	3,451	86.0	2,986	82.1	7,825	71.5	7,689	74.0
Underwriting expenses	539	13.4	898	24.7	1,714	15.7	2,575	24.8
Total losses and expenses	3,990	99.4	3,884	106.8	9,539	87.2	10,264	98.8
Pre-tax underwriting earnings (loss)	<u>\$ 23</u>		<u>\$ (247)</u>		<u>\$ 1,404</u>		<u>\$ 121</u>	

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

Insurance—Underwriting (Continued)

Berkshire Hathaway Reinsurance Group (Continued)

Property/casualty (Continued)

Premiums written increased \$459 million (11.2%) in the third quarter and \$1.2 billion (10.0%) in the first nine months of 2022 compared to the same periods in 2021, primarily due to net increases in new property business and higher rates, partially offset by unfavorable foreign currency translation effects. Losses and loss adjustment expenses increased \$465 million (15.6%) in the third quarter and \$136 million (1.8%) in the first nine months of 2022 compared to 2021. Losses incurred from catastrophe events were \$1.9 billion in the third quarter (primarily Hurricane Ian) and \$2.6 billion in the first nine months of 2022 and were \$1.5 billion in the third quarter and \$1.9 billion in the first nine months of 2021. Reductions in estimated ultimate liabilities for losses occurring in prior years were \$833 million in the third quarter and \$1.4 billion in the first nine months of 2022 and were \$599 million in the third quarter and \$564 million in the first nine months of 2021.

Underwriting expenses as percentages of premiums earned decreased 11.3 percentage points in the third quarter and 9.1 percentage points in the first nine months of 2022 compared to 2021, primarily attributable to foreign currency exchange rate effects and changes in business mix. Underwriting expenses included foreign currency exchange gains of \$315 million in the third quarter and \$704 million in the first nine months of 2022, primarily related to a third quarter 2021 intercompany reinsurance agreement in which a non-U.S. based Berkshire subsidiary ceded non-U.S. Dollar denominated liabilities to a U.S. based Berkshire subsidiary. The foreign currency exchange gains in the third quarter of 2021 were not significant. Under U.S. GAAP, the effects of exchange rate changes from the remeasurement of liabilities assumed by the U.S. subsidiary are reflected in earnings as its functional currency is the U.S. Dollar. The net foreign currency exchange rate effects from translating the financial statements of the non-U.S. subsidiary to the U.S. Dollar are included in other comprehensive income.

Life/health

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

	Third Quarter				First Nine Months			
	2022		2021		2022		2021	
	Amount	%	Amount	%	Amount	%	Amount	%
Premiums written	\$ 1,251		\$ 1,332		\$ 3,743		\$ 3,929	
Premiums earned	\$ 1,309	100.0	\$ 1,328	100.0	\$ 3,822	100.0	\$ 3,932	100.0
Life and health insurance benefits	1,013	77.4	1,247	93.9	3,028	79.2	3,733	94.9
Underwriting expenses	229	17.5	262	19.7	664	17.4	721	18.4
Total benefits and expenses	1,242	94.9	1,509	113.6	3,692	96.6	4,454	113.3
Pre-tax underwriting earnings (loss)	\$ 67		\$ (181)		\$ 130		\$ (522)	

Life/health premiums written decreased \$81 million (6.1%) in the third quarter and \$186 million (4.7%) in the first nine months of 2022 compared to the same periods in 2021, primarily due to unfavorable foreign currency translation effects. Life and health benefits declined \$234 million (18.8%) in the third quarter and \$705 million (18.9%) in the first nine months of 2022 compared to 2021, primarily due to relatively high pandemic-related mortality claims in the U.S., South Africa, India and Latin America in 2021.

Retroactive reinsurance

Pre-tax underwriting losses in each period derived from the amortization of deferred charges and changes in the estimated timing and amounts of future claim payments. Underwriting results also include foreign currency exchange gains and losses from the effects of changes in foreign currency exchange rates on non-U.S. Dollar denominated liabilities of our U.S. subsidiaries. Foreign currency exchange gains were \$130 million in the third quarter and \$287 million in the first nine months of 2022 compared to \$70 million in the first nine months of 2021, substantially all of which was in the third quarter. Pre-tax underwriting losses before foreign currency exchange effects were \$213 million in the third quarter and \$612 million in the first nine months of 2022 compared to \$227 million in the third quarter and \$690 million in the first nine months of 2021.

Unpaid losses assumed under retroactive reinsurance contracts declined \$1.6 billion in the first nine months of 2022 to \$36.7 billion at September 30, 2022, primarily due to loss payments. Unamortized deferred charges related to retroactive reinsurance contracts declined \$649 million in the first nine months of 2022 to \$10.0 billion at September 30, 2022, primarily attributable to periodic amortization. Deferred charge amortization will be included in underwriting earnings over the expected remaining claims settlement periods.

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

Insurance—Underwriting (Continued)

Berkshire Hathaway Reinsurance Group (Continued)

Periodic payment annuity

Periodic payment annuity premiums earned were relatively unchanged in the third quarter and increased 15.5% in the first nine months of 2022 compared to the same periods in 2021. Periodic payment annuity business is both price and demand sensitive and the supply of available business is affected by the timing of underlying legal claim settlements. Our volumes written may 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, as well as the level of competition.

Our periodic payment annuity contracts normally produce pre-tax underwriting losses, deriving from the recurring accretion of time-value discounted annuity liabilities, which includes discount accrual on liabilities of contracts without life contingencies. Underwriting results also include gains or losses from foreign currency exchange rate changes on non-U.S. Dollar denominated liabilities of our U.S. subsidiaries. Pre-tax underwriting results included foreign currency gains of \$119 million in the third quarter and \$279 million in the first nine months of 2022 compared to \$45 million in the third quarter and \$25 million in the first nine months of 2021.

Pre-tax underwriting losses before foreign currency exchange effects were \$268 million in the third quarter and \$558 million in the first nine months of 2022 and \$139 million in the third quarter and \$399 million in the first nine months of 2021. Pre-tax losses in the third quarter of 2022 included approximately \$130 million attributable to an agreement to terminate an existing reinsurance contract, in which the settlement payable exceeded the carrying value of the liabilities. Discounted annuity liabilities were \$15.2 billion at September 30, 2022, which included \$3.9 billion for contracts without life contingencies, and had a weighted average discount rate of approximately 3.9%. Upon the adoption of ASU 2018-12 in 2023, the discount rates will be adjusted quarterly based upon prevailing interest rates which could have a significant effect on our recorded annuity liabilities. The periodic effect from discount rate changes will be largely reflected in other comprehensive income.

Variable annuity

Variable annuity guarantee reinsurance contracts produced pre-tax gains of \$32 million in the third quarter and \$83 million in the first nine months of 2022 compared to pre-tax losses of \$28 million in the third quarter and gains of \$97 million in the first nine months of 2021. The results from these contracts are affected by changes in securities markets, interest rates and foreign currency exchange rates, which can be volatile, and from the periodic amortization of expected profit margins. Underwriting earnings in the first nine months of 2022 and 2021 were primarily attributable to the net effects of interest rate increases and changes in securities markets which were unfavorable in 2022 and favorable in 2021. Underwriting results in the third quarter of 2021 included losses from lower underlying lapse rate assumptions.

Insurance—Investment Income

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

	Third Quarter		First Nine Months		Percentage Change	
	2022	2021	2022	2021	Third Quarter	First Nine Months
Dividend income	\$ 1,281	\$ 1,196	\$ 4,533	\$ 3,747	7.1%	21.0%
Interest and other investment income	397	141	789	458	181.6	72.3
Pre-tax net investment income	1,678	1,337	5,322	4,205	25.5	26.6
Income taxes and noncontrolling interests	270	176	838	617		
Net investment income	\$ 1,408	\$ 1,161	\$ 4,484	\$ 3,588		
Effective income tax rate	16.1%	13.1%	15.7%	14.7%		

Dividend income increased 7.1% in the third quarter and 21.0% in the first nine months of 2022 compared to 2021. The increases in 2022 reflected an overall increase in equity security investments during 2022. Dividend income also varies from period to period due to changes in the investment portfolio and the frequency and timing of dividends from certain investees. Dividend income included \$8 million in the third quarter and \$37 million in the first nine months of 2022 and \$26 million in the third quarter and \$101 million in the first nine months of 2021 from investments in preferred stock of Berkshire Hathaway Energy. Such amounts are deducted from earnings of the utilities and energy segment.

Interest and other investment income increased \$256 million (181.6%) in the third quarter and \$331 million (72.3%) in the first nine months of 2022 compared to the same periods in 2021. The increases were primarily due to increases in short-term interest rates. We continue to hold substantial balances of cash, cash equivalents and short-term U.S. Treasury Bills. While exceptionally low interest rates prevailed in recent years, interest rates increased significantly over the first nine months of 2022. We continue to believe that maintaining ample liquidity is paramount and we insist on safety over yield with respect to short-term investments.

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

Insurance—Investment Income (Continued)

Invested assets of our insurance businesses derive from shareholder capital and from net liabilities under insurance and reinsurance contracts or “float.” The major components of float are unpaid losses and loss adjustment expenses, including liabilities under retroactive reinsurance contracts, life, annuity and health benefit liabilities, unearned premiums and other liabilities due to policyholders, which are reduced by insurance premiums receivable, reinsurance receivables, deferred charges assumed under retroactive reinsurance contracts and deferred policy acquisition costs. Float approximated \$150 billion at September 30, 2022 and \$147 billion at December 31, 2021. Our combined insurance operations generated pre-tax underwriting losses of \$358 million in the first nine months of 2022 and, consequently, the average cost of float for that period was 0.24%. In October 2022, Berkshire acquired Alleghany, which operates insurance and reinsurance businesses. Estimated float of Alleghany's businesses approximated \$13.5 billion based on its historical balance sheet at September 30, 2022. A summary of cash and investments held in our insurance businesses as of September 30, 2022 and December 31, 2021 follows (in millions).

	September 30, 2022	December 31, 2021
Cash, cash equivalents and U.S. Treasury Bills	\$ 59,699	\$ 90,688
Equity securities	295,387	334,907
Fixed maturity securities	18,476	16,386
Other	3,252	4,296
	<u>\$ 376,814</u>	<u>\$ 446,277</u>

Fixed maturity securities as of September 30, 2022 were as follows (in millions).

	Amortized Cost	Unrealized Gains (Losses)	Carrying Value
U.S. Treasury, U.S. government corporations and agencies	\$ 9,023	\$ (264)	\$ 8,759
Foreign governments	8,630	(196)	8,434
Corporate bonds	821	200	1,021
Other	244	18	262
	<u>\$ 18,718</u>	<u>\$ (242)</u>	<u>\$ 18,476</u>

U.S. government obligations are rated AA+ or Aaa by the major rating agencies. Approximately 93% of all foreign government obligations were rated AA or higher by at least one of the major rating agencies as of September 30, 2022. Foreign government securities include obligations issued or unconditionally guaranteed by national or provincial government entities.

Railroad

Burlington Northern Santa Fe, LLC (“BNSF”) operates one of the largest railroad systems in North America, with over 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 including consumer products, industrial products, agricultural products and coal. A summary of BNSF's earnings follows (dollars in millions).

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Railroad operating revenues	\$ 6,530	\$ 5,591	\$ 18,761	\$ 16,421
Railroad operating expenses:				
Compensation and benefits	1,479	1,168	3,916	3,477
Fuel	1,272	705	3,409	1,948
Purchased services	530	510	1,538	1,525
Depreciation and amortization	633	608	1,875	1,832
Equipment rents, materials and other	508	338	1,494	1,262
Total	4,422	3,329	12,232	10,044
Railroad operating earnings	2,108	2,262	6,529	6,377
Other revenues (expenses):				
Other revenues	163	199	540	579
Other expenses, net	(129)	(176)	(458)	(514)
Interest expense	(258)	(256)	(767)	(775)
Pre-tax earnings	1,884	2,029	5,844	5,667
Income taxes	442	491	1,367	1,362
Net earnings	<u>\$ 1,442</u>	<u>\$ 1,538</u>	<u>\$ 4,477</u>	<u>\$ 4,305</u>
Effective income tax rate	<u>23.5%</u>	<u>24.2%</u>	<u>23.4%</u>	<u>24.0%</u>

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

Railroad (Continued)

The following table summarizes BNSF's railroad freight volumes by business group (cars/units in thousands).

	Cars/Units				Percentage Change	
	Third Quarter		First Nine Months		Third Quarter	First Nine Months
	2022	2021	2022	2021		
Consumer products	1,323	1,425	3,977	4,307	(7.2)%	(7.7)%
Industrial products	413	443	1,237	1,280	(6.8)	(3.4)
Agricultural products)
	276	265	884	896	4.2	(1.3)
Coal	399	404	1,158	1,127	(1.2)	2.8
	2,411	2,537	7,256	7,610	(5.0)	(4.7)

Railroad operating revenues increased 16.8% in the third quarter and 14.3% in the first nine months of 2022 compared to 2021, attributable to increases in average revenue per car/unit resulting from higher fuel surcharge revenue driven by higher fuel prices, along with increased rates per car/unit, partially offset by lower volumes. BNSF's pre-tax earnings decreased 7.1% in the third quarter and increased 3.1% in the first nine months of 2022 compared to 2021. Results for the third quarter were impacted by lower freight volumes and higher fuel and other operating costs, partially offset by higher revenue per car.

Operating revenues from consumer products were \$2.4 billion in the third quarter and \$7.0 billion in the first nine months of 2022, increases of 15.3% and 14.5%, respectively, from 2021. The increases reflected higher average revenue per car/unit, partially offset by volume decreases of 7.2% in the third quarter and 7.7% in the first nine months of 2022 compared to 2021. The volume decreases were primarily due to lower international intermodal shipments resulting from supply chain disruptions. Operating revenues from industrial products were \$1.5 billion in the third quarter and \$4.2 billion in the first nine months of 2022, increases of 7.1% and 6.9%, respectively, from 2021. The increases reflected higher average revenue per car/unit, partially offset by volume decreases of 6.8% in the third quarter and 3.4% in the first nine months of 2022 compared to 2021. The volume decreases in both the third quarter and first nine months were primarily due to lower petroleum and building products shipments.

Operating revenues from agricultural products were \$1.3 billion in the third quarter and \$4.1 billion in the first nine months of 2022, increases of 25.7% and 12.0%, respectively, compared to 2021. The increases were primarily attributable to higher average revenue per car/unit. Volumes increased 4.2% in the third quarter due to higher domestic grain shipments and increased renewable diesel and oil feedstock shipments, while volumes decreased 1.3% in the first nine months of 2022, primarily due to lower grain exports, partially offset by higher volumes of domestic grains, renewable diesel and oil feedstocks. Operating revenues from coal were \$1.1 billion in the third quarter and \$3.0 billion in the first nine months of 2022, increases of 27.0% and 28.8%, respectively, from 2021. The increases were primarily attributable to higher average revenue per car/unit. Volumes decreased 1.2% in the third quarter primarily due to network challenges, while volumes increased 2.8% in the first nine months of 2022 due to increased electricity generation, higher natural gas prices and improved export demand.

Railroad operating expenses were \$4.4 billion in the third quarter and \$12.2 billion in the first nine months of 2022, increases of \$1.1 billion (32.8%) and \$2.2 billion (21.8%), respectively, compared to 2021. The increases were primarily due to significant increases in the cost of fuel, as well as higher compensation and benefits expenses. Our ratio of railroad operating expenses to railroad operating revenues increased 8.2 percentage points to 67.7% in the third quarter and 4.0 percentage points to 65.2% in the first nine months of 2022 versus the comparable 2021 periods. Compensation and benefits expenses increased \$311 million (26.6%) in the third quarter and \$439 million (12.6%) in the first nine months of 2022 compared to 2021, primarily due to wage inflation, including the impact from tentative or ratified union labor agreements, higher health and welfare costs and lower productivity. Fuel expenses increased \$567 million (80.4%) in the third quarter and \$1.5 billion (75.0%) in the first nine months of 2022 compared to 2021, primarily due to higher fuel prices, partially offset by lower volumes. Equipment rents, materials and other expenses increased \$170 million (50.3%) in the third quarter and \$232 million (18.4%) in the first nine months of 2022 compared to 2021, primarily due to general inflation, lower gains from land and easement sales and higher casualty costs.

Approximately 30,500 of BNSF's employees are members of a labor union. The U.S. Class I railroads and rail labor unions were engaged in negotiations from January 2020 through June 2022. Federal mediation was included in that timeframe, followed by a release from the National Mediation Board for a Presidential Emergency Board (PEB). In accordance with the Railway Labor Act (RLA), the PEB issued its report and recommendations to settle the bargaining disputes on August 16, 2022. Tentative agreements based on these recommendations were reached with all labor unions in September 2022. To date, six unions have ratified those agreements. Two labor unions did not ratify their tentative agreement, and the parties have agreed to maintain the status quo as discussions continue. Ratification results for the remaining unions are scheduled to be announced through November 2022. Where settlements have not been successful following the RLA process, Congress may act by extending the status quo period or passing a law imposing a resolution on the parties.

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

Utilities and Energy

We currently own 92% of Berkshire Hathaway Energy Company ("BHE"), which operates a global energy business. BHE's domestic regulated utility interests include PacifiCorp, MidAmerican Energy Company ("MEC") and NV Energy. BHE subsidiaries also operate two regulated electricity distribution businesses referred to as Northern Powergrid in Great Britain. BHE's natural gas pipelines consist of five domestic regulated interstate natural gas pipeline systems and a 25% interest in a liquefied natural gas export, import and storage facility ("LNG interest"), which BHE operates and consolidates for financial reporting purposes. 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 and investments. BHE also operates a residential real estate brokerage business and a large network of residential real estate brokerage franchises 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).

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Revenues:				
Energy operating revenue	\$ 6,095	\$ 5,225	\$ 15,858	\$ 14,375
Real estate operating revenue	1,405	1,743	4,284	4,738
Other income (loss)	31	45	(110)	(91)
Total revenue	7,531	7,013	20,032	19,022
Costs and expense:				
Energy cost of sales	1,959	1,385	4,944	4,064
Energy operating expense	2,362	2,132	6,858	6,302
Real estate operating costs and expense	1,352	1,608	4,086	4,312
Interest expense	537	513	1,583	1,547
Total costs and expense	6,210	5,638	17,471	16,225
Pre-tax earnings	1,321	1,375	2,561	2,797
Income tax expense (benefit)*	(570)	(398)	(1,274)	(842)
Net earnings after income taxes	1,891	1,773	3,835	3,639
Noncontrolling interests of BHE subsidiaries	147	103	376	311
Net earnings attributable to BHE	1,744	1,670	3,459	3,328
Noncontrolling interests and preferred stock dividends	159	174	358	389
Net earnings attributable to Berkshire Hathaway shareholders	\$ 1,585	\$ 1,496	\$ 3,101	\$ 2,939
Effective income tax rate	(43.1)%	(28.9)%	(49.7)%	(30.1)%

* 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 (dollars in millions).

	Third Quarter		First Nine Months		Percentage Change	
	2022	2021	2022	2021	Third Quarter	First Nine Months
PacifiCorp	\$ 409	\$ 333	\$ 622	\$ 728	22.8%	(14.6)%
MidAmerican Energy Company	300	373	745	728	(19.6)	2.3
NV Energy	270	282	392	416	(4.3)	(5.8)
Northern Powergrid	100	83	282	162	20.5	74.1
Natural gas pipelines	232	144	729	627	61.1	16.3
Other energy businesses	243	230	726	521	5.7	39.3
Real estate brokerage	29	102	134	321	(71.6)	(58.3)
Corporate interest and other	161	123	(171)	(175)	30.9	(2.3)
	\$ 1,744	\$ 1,670	\$ 3,459	\$ 3,328	4.4	3.9

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

Utilities and Energy (Continued)

PacifiCorp operates a regulated electric utility in portions of several Western states, including Utah, Oregon and Wyoming. After-tax earnings increased \$76 million in the third quarter and decreased \$106 million in the first nine months of 2022 compared to 2021. The changes reflected increases in utility margin (operating revenue less cost of sales) and higher production tax credits recognized in the third quarter and higher operating expenses. The increases in operating expenses reflected higher accruals in the first nine months of 2022 associated with wildfires in 2020, higher general and plant maintenance costs and incremental costs from additional assets placed in-service.

PacifiCorp's utility margin was \$1.1 billion in the third quarter and \$2.7 billion in the first nine months of 2022, increases of \$68 million and \$88 million, respectively, from the comparable periods in 2021. The increases reflected higher operating revenue from favorable retail and wholesale pricing and increases in retail customer volumes, partially offset by higher purchased power and thermal generation costs. Retail customer volumes increased 3.5% in the third quarter and 0.8% in the first nine months of 2022 compared to 2021, primarily due to an increase in the average number of customers and the favorable impact of weather, partially offset by lower customer usage.

MEC operates a regulated electric and natural gas utility primarily in Iowa and Illinois. After-tax earnings decreased \$73 million in the third quarter and increased \$17 million in the first nine months of 2022 compared to 2021. The changes reflected increases in electric utility margin offset by higher operating expenses and lower other income. Additionally, comparative income tax benefits were lower in the third quarter and higher in the first nine months of 2022, as higher production tax credits recognized on new wind-powered and solar-powered generating facilities placed in-service (\$14 million in the third quarter and \$106 million in the first nine months) were offset by the impacts of ratemaking. The increase in operating expenses included higher costs associated with certain regulatory mechanisms.

MEC's electric utility margin was \$774 million in the third quarter and \$1.8 billion in the first nine months of 2022, increases of 12% and 15%, respectively, versus 2021. The increases were attributable to higher operating revenue from increased retail and wholesale customer volumes and favorable wholesale pricing, partially offset by higher purchased power costs. Electric retail customer volumes increased 3.1% in the third quarter and 4.0% in the first nine months of 2022 compared to 2021, primarily due to higher customer usage.

NV Energy operates regulated electric and natural gas utilities in Nevada. After-tax earnings decreased \$12 million in the third quarter and \$24 million in the first nine months of 2022 compared to 2021. The decreases reflected higher operating expenses from increased plant operations and maintenance expenses, higher accruals for earnings sharing and incremental costs from additional assets placed in-service, partially offset by higher interest income from carrying charges on regulatory balances.

NV Energy's electric utility margin was \$622 million in the third quarter and \$1.3 billion in the first nine months of 2022, relatively unchanged compared to 2021. Electric retail customer volumes increased 0.3% in the third quarter and 1.3% in the first nine months of 2022 compared to 2021, primarily due to an increase in the average number of customers, partially offset by the unfavorable impact of weather.

Northern Powergrid's after-tax earnings increased \$17 million in the third quarter and \$120 million in the first nine months of 2022 compared to 2021. Earnings in the first nine months of 2021 included deferred income tax expense of \$109 million related to the enactment in June 2021 of an increase in the United Kingdom income tax rate from 19% to 25%, effective April 1, 2023. In addition, earnings increased at CE Gas from new projects placed in-service in March and July 2022 and improved distribution business results largely from higher tariff rates, which were partially offset by unfavorable foreign currency translation effects in 2022.

Natural gas pipelines' after-tax earnings increased \$88 million in the third quarter and \$102 million in the first nine months of 2022 compared to 2021. The increases were primarily due to higher earnings at BHE GT&S, largely from the impacts of a general rate case, favorable income tax adjustments and lower operating expenses. The year-to-date increase was partially offset by reduced margins in 2022 due to higher natural gas sales and higher transportation revenue in 2021, attributable to an increase in demand as a result of the February 2021 winter storms.

Other energy businesses' after-tax earnings increased \$13 million in the third quarter and \$205 million in the first nine months of 2022 compared to 2021. The increases in earnings were primarily due to increased wind tax equity investment earnings of \$24 million in the third quarter and \$182 million in the first nine months of 2022 as well as from higher operating revenue from owned renewable energy projects, partly offset by lower earnings from natural gas generating facilities. The increases in wind tax equity investment earnings reflected increased income tax benefits from projects reaching commercial operation over the past twelve months. The comparative increase in year-to-date earnings also reflected the impact of losses in 2021 on pre-existing tax equity investments due to the February 2021 winter storms.

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

Utilities and Energy (Continued)

Real estate brokerage after-tax earnings decreased \$73 million in the third quarter and \$187 million in the first nine months of 2022 compared to 2021. The decreases in earnings were primarily attributable to lower earnings from mortgage services due to a decrease in funded volume primarily from a decline in refinancing activity and lower earnings from brokerage and settlement services from a decrease in closed units, partially offset by lower operating expenses.

Corporate interest and other after-tax earnings increased \$38 million in the third quarter and was relatively unchanged for the first nine months of 2022 compared to 2021, reflecting higher federal income tax credits recognized, partially offset by higher interest expense and lower earnings from non-regulated energy services in the first nine months.

Manufacturing, Service and Retailing

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

	Third Quarter		First Nine Months		Percentage Change	
	2022	2021	2022	2021	Third Quarter	First Nine Months
Revenues						
Manufacturing	\$ 19,000	\$ 17,496	\$ 57,193	\$ 50,821	8.6%	12.5%
Service and retailing	23,136	21,291	67,645	62,143	8.7	8.9
	<u>\$ 42,136</u>	<u>\$ 38,787</u>	<u>\$ 124,838</u>	<u>\$ 112,964</u>		
Pre-tax earnings						
Manufacturing	\$ 2,883	\$ 2,445	\$ 8,735	\$ 7,595	17.9%	15.0%
Service and retailing	1,314	1,102	3,806	3,413	19.2	11.5
	<u>4,197</u>	<u>3,547</u>	<u>12,541</u>	<u>11,008</u>		
Income taxes and noncontrolling interests	950	841	3,020	2,679		
Net earnings*	<u>\$ 3,247</u>	<u>\$ 2,706</u>	<u>\$ 9,521</u>	<u>\$ 8,329</u>		
Effective income tax rate	<u>22.1%</u>	<u>22.9%</u>	<u>23.6%</u>	<u>23.7%</u>		
Pre-tax earnings as a percentage of revenues	<u>10.0%</u>	<u>9.1%</u>	<u>10.0%</u>	<u>9.7%</u>		

* Excludes certain acquisition accounting expenses, primarily related to the amortization of identifiable intangible assets recorded in connection with our business acquisitions. The after-tax acquisition accounting expenses excluded from earnings were \$161 million in the third quarter and \$484 million in the first nine months of 2022 and \$169 million in the third quarter and \$532 million in the first nine months of 2021. These expenses are included in "Other" in the summary of earnings on page 26 and in the "Other" earnings section on page 42.

Manufacturing

Our manufacturing group includes a variety of industrial, building and consumer products businesses. A summary of revenues and pre-tax earnings of these operations follows (dollars in millions).

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Revenues				
Industrial products	\$ 7,723	\$ 7,192	\$ 22,912	\$ 21,050
Building products	7,589	6,374	22,011	18,404
Consumer products	3,688	3,930	12,270	11,367
	<u>\$ 19,000</u>	<u>\$ 17,496</u>	<u>\$ 57,193</u>	<u>\$ 50,821</u>
Pre-tax earnings				
Industrial products	\$ 1,375	\$ 1,124	\$ 3,861	\$ 3,508
Building products	1,236	833	3,687	2,576
Consumer products	272	488	1,187	1,511
	<u>\$ 2,883</u>	<u>\$ 2,445</u>	<u>\$ 8,735</u>	<u>\$ 7,595</u>
Pre-tax earnings as a percentage of revenues				
Industrial products	17.8%	15.6%	16.9%	16.7%
Building products	16.3%	13.1%	16.8%	14.0%
Consumer products	7.4%	12.4%	9.7%	13.3%

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

Manufacturing, Service and Retailing (Continued)

Industrial products

The industrial products group includes metal products for aerospace, power and general industrial markets (Precision Castparts Corp. ("PCC")), specialty chemicals (The Lubrizol Corporation ("Lubrizol")), metal cutting tools/systems (IMC International Metalworking Companies ("IMC")) and Marmon, which consists of more than 100 autonomous manufacturing and service businesses, internally aggregated into eleven groups, and includes leasing for the rail, intermodal tank container and mobile crane industries. The industrial products group also includes equipment and systems for the livestock and agricultural industries (CTB International) and a variety of industrial products for diverse markets (Scott Fetzer and LiquidPower Specialty Products).

Revenues of the industrial products group increased \$531 million (7.4%) in the third quarter and \$1.9 billion (8.8%) in the first nine months of 2022 compared to 2021. Pre-tax earnings increased \$251 million (22.3%) in the third quarter and \$353 million (10.1%) in the first nine months of 2022 compared to 2021. Pre-tax earnings as a percentage of revenues for the group were 16.9% for the first nine months of 2022, an increase of 0.2 percentage points compared to 2021. Operating results in 2022 were negatively affected by a combination of higher materials and energy costs, manufacturing inefficiencies attributable to supply chain disruptions and labor shortages and asset impairment charges, which largely offset the impacts of increased average selling prices and increased demand for certain product categories. Operating results of this group's international businesses were also negatively impacted in 2022 by the stronger U.S. Dollar.

PCC's revenues were \$1.9 billion in the third quarter and \$5.5 billion in the first nine months of 2022, increases of 17.5% in the third quarter and 14.5% in the first nine months compared to 2021. PCC derives significant revenues and earnings from sales of aerospace products. The revenue increases in 2022 were primarily attributable to higher demand for aerospace products.

While commercial air travel increased in both the U.S. and international markets, traffic remains below pre-COVID-19 pandemic levels, especially for international routes. Further recovery likely will be uneven, attributable in part to travel restrictions imposed from time-to-time to control the spread of variants of COVID-19, as well as from the changes in supply chain conditions, including the availability of workers. Commercial aircraft delivery rates by original equipment manufacturers ("OEMs") of narrow-body aircraft have rebounded since the onset of the pandemic. However, deliveries of wide-body aircraft remain relatively low, in part attributable to the pause in the Boeing 787 program, which resumed deliveries in the third quarter of 2022. Long-term industry forecasts continue to show growth and strong demand for air travel and aerospace products.

PCC's pre-tax earnings declined \$37 million in the third quarter and \$13 million in the first nine months of 2022 compared to 2021, reflecting the impacts of a year-to-date reduction in pension plan income of \$43 million, as well as increased costs related to labor, materials and utilities and supply chain disruptions. PCC management continues to take actions to improve operations, maintain safety and prepare for increased demand for PCC's products. Growth in PCC's revenues and earnings will be predicated on the ability to successfully increase production levels to match the expected growth in aerospace demand, including managing through the current supply chain and employment environments.

Lubrizol's revenues were approximately \$1.7 billion in the third quarter and \$5.1 billion in the first nine months of 2022, increases of 6.5% in the third quarter and 2.4% in the first nine months compared to 2021. The revenue increases reflected higher average selling prices, partially offset by lower volumes and adverse foreign currency translation effects from the stronger U.S. Dollar. Sales volumes through the first nine months of 2022 were restricted by unplanned temporary maintenance shutdowns and raw material supply constraints, which limited Lubrizol's production capabilities. The increase in average selling prices was driven by escalating prices for raw materials, including oil feedstocks, as well as for utilities, packaging, shipping and freight costs.

Lubrizol's pre-tax earnings increased \$251 million in the third quarter and \$249 million in the first nine months of 2022 compared to 2021. The increase in earnings was driven by fire-related insurance recoveries in 2022, while earnings in 2021 were negatively impacted by significant losses related to a fire in June 2021 at a facility located in Rockton, Illinois and impairment charges in the third quarter of 2021 related to an underperforming business in the Advanced Materials product lines. Insurance recoveries related to a fire in 2019 at the Rouen, France facility and the Rockton, Illinois facility fire were \$142 million in the third quarter and \$242 million in the first nine months of 2022 compared to \$10 million of insurance recoveries in the third quarter and \$55 million in the first nine months of 2021. The fire losses related to the Rockton, Illinois fire and impairment charges in 2021 aggregated \$73 million in the third quarter and \$229 million in the first nine months of 2021. Earnings in 2022 were also negatively impacted by rising raw material costs, lower sales volumes, higher expenses from the unplanned temporary maintenance shutdowns and unfavorable foreign currency translation effects, partially offset by higher selling prices. Earnings in 2021 were also negatively impacted by the weather-related temporary shut-down of Additives facilities in the U.S. in the first quarter, which resulted in lost sales and various incremental and non-recurring manufacturing and other operating costs.

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

Manufacturing, Service and Retailing (Continued)

Industrial products (Continued)

Marmon's revenues were \$2.7 billion in the third quarter and \$8.1 billion in the first nine months of 2022, increases of 4.3% in the third quarter and 12.8% in the first nine months compared to 2021. Nearly all of Marmon's business groups generated higher revenues in the first nine months of 2022, led by significant increases in the Transportation, Metal Services, Industrial and Electrical products groups, which contributed approximately 76% of the increase. These increases generally reflected favorable volume and sales mix and higher metals prices, partially offset by unfavorable foreign currency translation effects. Metals prices in the third quarter of 2022 began to moderate and in certain instances declined. Revenues of the Rail & Leasing group in the third quarter and first nine months of 2022 declined versus 2021, due primarily to low product sales volumes and declining lease rates.

Marmon's pre-tax earnings increased 13.3% in the third quarter and 14.1% in the first nine months of 2022 compared to 2021. Earnings in the first nine months of 2022 included losses of approximately \$90 million in the Rail & Leasing group related to the shutdown in the second quarter of its business in Russia. In the first nine months of 2022, the Transportation, Metal Services, Plumbing, Electrical, Retail and Industrial Products groups contributed meaningful increases in earnings, due to a combination of higher sales volumes and margins. These increases were partially offset by lower earnings from the Rail & Leasing group.

IMC's revenues were \$905 million in the third quarter and \$2.8 billion in the first nine months of 2022, increases of 5.0% compared to the same periods in 2021. Revenues in 2022 reflected increased sales in several geographic regions, partially offset by lower revenues in Asia and effects from foreign currency translation and the Russia-Ukraine conflict. IMC's pre-tax earnings decreased 1.3% in the first nine months of 2022 compared to 2021, as the revenue increases were more than offset by higher raw material costs, changes in sales mix and unfavorable effects of foreign currency translation and the Russia-Ukraine conflict.

Building products

The building products group includes manufactured and site-built home construction and related lending and financial services (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).

Revenues of the building products group increased \$1.2 billion (19.1%) in the third quarter and \$3.6 billion (19.6%) in the first nine months of 2022 and pre-tax earnings increased \$403 million (48.4%) in the third quarter and \$1.1 billion (43.1%) in the first nine months of 2022 compared to 2021. Our building products businesses have benefited in recent years from the low interest rate environment. However, interest rates in the U.S. increased significantly over the first nine months of 2022. As a result, the significant increase in home mortgage interest rates has slowed demand for new home construction. As such, comparative revenues and earnings in the near term will likely decline from current levels.

Clayton Homes' revenues increased 24.8% to \$3.3 billion in the third quarter and 24.9% to \$9.5 billion in the first nine months of 2022 compared to 2021. Revenues from home sales increased \$1.8 billion (30.2%) in the first nine months of 2022, primarily due to higher average selling prices and increased volume. New home unit sales increased 9.5% in the first nine months of 2022, reflecting a 10.5% increase in factory-built manufactured home unit sales and a 5.4% increase in site-built home unit sales. We expect unit sales will likely decline in the near term, as a consequence of higher interest rates. Financial services revenues, which include mortgage origination and services, insurance and interest income from lending activities, increased 4.1% in the first nine months of 2022 compared to 2021. Loan balances, net of allowances for credit losses, were approximately \$20.4 billion as of September 30, 2022, an increase of approximately \$1.6 billion from December 31, 2021.

Pre-tax earnings of Clayton Homes increased \$249 million (63.8%) in the third quarter and \$512 million (41.3%) in the first nine months of 2022 compared to 2021. Earnings in 2022 reflected higher home sales, gross margin rates and net interest income, as well as relatively low credit losses.

Aggregate revenues of our other building products businesses were approximately \$4.3 billion in the third quarter and \$12.5 billion in the first nine months of 2022, increases of \$565 million (15.1%) in the third quarter and \$1.7 billion (15.9%) in the first nine months versus 2021. The increases were primarily due to higher average selling prices, and to a lesser extent, from higher unit volumes in certain product lines and product mix changes.

Pre-tax earnings of our other building products businesses increased \$154 million (34.9%) in the third quarter and \$600 million (44.9%) in the first nine months of 2022 compared to 2021. Earnings as a percentage of revenues in the first nine months of 2022 increased 3.1 percentage points versus 2021. Earnings in 2022 benefitted from higher selling prices and strong demand in certain product categories, as well as a comparative increase in pre-tax gains from business divestitures and asset sales of \$58 million in the third quarter and \$169 million in the first nine months. The increase in earnings in 2022 also reflected the negative impact of severe winter storms in the first quarter of 2021, which reduced sales and increased production and other operating costs.

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

Manufacturing, Service and Retailing (Continued)

Consumer products

The consumer products group includes recreational vehicles (Forest River), several apparel and footwear operations (including Fruit of the Loom, Garan, Fechheimer, H.H. Brown Shoe Group and Brooks Sports) and high-performance batteries (Duracell). This group also includes custom picture framing products (Larson-Juhl) and jewelry products (Richline).

Consumer products group revenues decreased \$242 million (6.2%) in the third quarter and increased \$903 million (7.9%) in the first nine months of 2022 compared to 2021. Forest River's revenues declined 7.2% in the third quarter and increased 22.1% in the first nine months of 2022 compared to 2021. Forest River's unit sales declined 27.9% in the third quarter and 5.3% in the first nine months of 2022 versus 2021. The comparative decline in unit volume in the third quarter was attributable to reduced consumer demand. Over the first nine months of 2022, Forest River's revenues reflected higher average selling prices, resulting from higher material prices and supply chain costs.

Revenues of our apparel and footwear businesses declined \$27 million (2.0%) in the third quarter and \$165 million (4.2%) in the first nine months of 2022 compared to 2021, reflecting lower revenues from apparel (5.6% in the third quarter and 8.5% in the first nine months), partly offset by higher revenues from footwear. The declines in apparel revenues were driven by lower volumes, as retailers reduced orders in response to rising inventories. Duracell's revenues in first nine months of 2022 declined 6.9% versus 2021, primarily due to lower volumes and unfavorable foreign currency translation effects of the stronger U.S. Dollar.

Pre-tax earnings of our consumer products group declined \$216 million (44.3%) in the third quarter and \$324 million (21.4%) in the first nine months of 2022 versus 2021. Pre-tax earnings as a percentage of revenues decreased 3.6 percentage points in the first nine months of 2022 compared to 2021. The declines in earnings in 2022 reflected lower aggregate earnings from the apparel and footwear businesses and from Duracell. The comparative decline in earnings in the first nine months was partially offset by higher earnings from Forest River.

Apparel and footwear earnings declined about 75% in the third quarter and 58% in the first nine months of 2022 compared to 2021. Our apparel businesses continue to be negatively affected by lower sales volumes, reduced manufacturing efficiencies and higher input costs, including raw materials, freight, labor and other operating costs. We expect that the comparative operating earnings will likely be lower in the fourth quarter, due to low customer demand and high costs. Duracell's earnings in 2022 declined, primarily due to lower sales, cost inflation and foreign currency translation effects.

Earnings from Forest River were essentially unchanged in the third quarter and higher in the first nine months of 2022, primarily due to the increase in unit sales in the first half of the year and higher average selling prices, partly offset by higher materials costs. We currently expect demand for recreational vehicles will continue to slow and Forest River's comparative revenues and earnings to decline over the remainder of 2022 and into 2023.

Service and retailing

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

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Revenues				
Service	\$ 4,771	\$ 4,131	\$ 14,031	\$ 11,718
Retailing	4,796	4,548	14,268	13,896
McLane	13,569	12,612	39,346	36,529
	<u>\$ 23,136</u>	<u>\$ 21,291</u>	<u>\$ 67,645</u>	<u>\$ 62,143</u>
Pre-tax earnings				
Service	\$ 806	\$ 696	\$ 2,286	\$ 2,013
Retailing	396	414	1,250	1,221
McLane	112	(8)	270	179
	<u>\$ 1,314</u>	<u>\$ 1,102</u>	<u>\$ 3,806</u>	<u>\$ 3,413</u>
Pre-tax earnings as a percentage of revenues				
Service	16.9%	16.8%	16.3%	17.2%
Retailing	8.3%	9.1%	8.8%	8.8%
McLane	0.8%	(0.1)%	0.7%	0.5%

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

Manufacturing, Service and Retailing (Continued)

Service

Our service group consists of several businesses. The largest of these businesses are NetJets and FlightSafety (aviation services), which offer shared ownership programs for general aviation aircraft and high technology training products and services to operators of aircraft, and TTI, a distributor of electronics components. Our other service businesses franchise and service a network of quick service restaurants (Dairy Queen), lease transportation equipment (XTRA) and furniture (CORT), provide third party logistics services that primarily serve the petroleum and chemical industries (Charter Brokerage), distribute electronic news, multimedia and regulatory filings (Business Wire) and operate a television station in Miami, Florida (WPLG).

Service group revenues increased \$640 million (15.5%) in the third quarter and \$2.3 billion (19.7%) in the first nine months of 2022 compared to 2021. Revenues from TTI increased 16.6% in the third quarter and 20.3% in the first nine months of 2022 versus 2021, reflecting strong demand in nearly all significant markets. However, during the third quarter of 2022, new orders slowed in certain regions and markets, in part attributable to inventory levels within the supply chain. Revenues from aviation services (NetJets and FlightSafety) increased 14.2% in the third quarter and 19.9% in the first nine months of 2022 compared to 2021. The revenue increases reflected year-to-date increases in training hours (17%), customer flight hours (14%), most of which occurred in the first half of the year, and fuel surcharges to customers due to the increase in customer flight hours and significant increases in fuel prices. These increases were partially offset by the effects from changes in sales mix.

Pre-tax earnings of the service group increased \$110 million (15.8%) in the third quarter and \$273 million (13.6%) in the first nine months of 2022 compared to 2021. Pre-tax earnings as a percentage of revenues decreased 0.9 percentage points in the first nine months of 2022 compared to 2021. The earnings increase in the third quarter of 2022 was primarily attributable to aviation services, reflecting a significant comparative decline in subcontract aircraft utilization, and to a lesser extent, increased earnings from several of our other businesses. The comparative increase in earnings in the first nine months reflected higher earnings from TTI, primarily attributable to the increases in sales and improved operating cost leverage, partially offset by unfavorable foreign currency effects in 2022 and a favorable legal settlement in 2021. Earnings from aviation services for the first nine months of 2022 decreased compared to 2021, attributable to a significant increase in subcontracted aircraft utilization due to the increase in customer flight hours in the first half of the year, and from higher equipment maintenance and other operating costs, which more than offset the increase in revenues.

Retailing

Our largest retailing business is Berkshire Hathaway Automotive, Inc. ("BHA"), representing 66% of our combined retailing revenue in the first nine months of 2022. BHA consists of over 80 auto dealerships that sell new and pre-owned automobiles and offer repair services and related products. BHA also offers vehicle service contracts and operates two insurance businesses. Our retailing businesses also include four home furnishings retailing businesses (Nebraska Furniture Mart, R.C. Willey, Star Furniture and Jordan's), which sell furniture, appliances, flooring and electronics. The home furnishings group represented 20% of the combined retailing revenues in the first nine months of 2022.

Other retailing businesses include three jewelry retailing businesses (Borsheims, Helzberg and Ben Bridge), See's Candies (confectionary products), Pampered Chef (high quality kitchen tools), Oriental Trading Company (party supplies, school supplies and toys and novelties) and Detlev Louis Motorrad ("Louis"), a retailer of motorcycle accessories based in Germany.

Retailing group revenues increased \$248 million (5.5%) in the third quarter and \$372 million (2.7%) in the first nine months of 2022 compared to 2021 reflecting increases at BHA, partially offset by combined lower revenues from our other retailers. BHA's revenues in the third quarter and first nine months of 2022 increased 11.3% and 6.3%, respectively, compared to the same periods in 2021. Revenues from new and used vehicle sales increased 10.9% in the third quarter and 5.4% in the first nine months of 2022 compared to 2021. Revenues from vehicle sales reflected higher average vehicle transaction prices, partly offset by lower unit sales on a year-to-date comparative basis. Unit sales continue to be constrained by low new vehicle production by OEMs, attributable to the ongoing global computer chip shortages and other supply chain disruptions. Revenues from service and repair and finance and service contract revenues each increased versus 2021.

Retailing group pre-tax earnings decreased \$18 million (4.3%) in the third quarter and increased \$29 million (2.4%) in the first nine months of 2022 compared to 2021. BHA's pre-tax earnings increased 24.7% in the third quarter and 22.7% in the first nine months of 2022 compared to 2021, primarily due to increases in vehicle gross profit margins and finance and service contract earnings per vehicle sold and from operating cost control efforts. BHA's comparative new vehicle gross profit margin rates began to accelerate during the second half of 2021, as a consequence of low available inventory attributable to supply chain constraints impacting the OEMs. Aggregate pre-tax earnings for the remainder of our retailing group decreased \$68 million (32.2%) in the third quarter and \$103 million (15.9%) in the first nine months of 2022 compared to 2021, primarily due to declining earnings from the furniture retailers and Pampered Chef.

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Manufacturing, Service and Retailing (Continued)

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 61% of McLane's consolidated sales in the first nine months of 2022, with foodservice representing most of the remainder. A curtailment of purchasing by any of its significant customers could have an adverse impact on McLane's periodic revenues and earnings.

Revenues increased \$957 million (7.6%) in the third quarter and \$2.8 billion (7.7%) in the first nine months of 2022 compared to 2021, reflecting year-to-date increases of 3.9% from the grocery business and 15.2% from the foodservice business. Pre-tax earnings increased \$120 million in the third quarter and \$91 million (50.8%) in the first nine months of 2022 compared to 2021. The increases in earnings reflected slightly higher gross margin rates in the grocery and foodservice businesses, partly offset by higher personnel costs, fuel expense and insurance costs. McLane's grocery and food service operating results continue to be adversely affected by supply chain constraints, including the effects of labor and truck driver shortages and higher inventory costs. We expect the current difficult operating environment to continue for the remainder of 2022.

Investment and Derivative Contract Gains/Losses

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

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Investment gains (losses)	\$ (13,500)	\$ 4,851	\$ (82,089)	\$ 37,235
Derivative contract gains (losses)	35	70	(273)	780
Gains (losses) before income taxes and noncontrolling interests	(13,465)	4,921	(82,362)	38,015
Income taxes and noncontrolling interests	(3,016)	1,043	(17,295)	8,036
Net earnings (loss)	<u>\$ (10,449)</u>	<u>\$ 3,878</u>	<u>\$ (65,067)</u>	<u>\$ 29,979</u>
Effective income tax rate	<u>20.9%</u>	<u>20.7%</u>	<u>20.8%</u>	<u>20.9%</u>

Investment gains/losses

Unrealized gains and losses arising from changes in market prices of investments in equity securities are included in our reported earnings, which significantly increases the volatility of our periodic net earnings due to the magnitude of our equity securities portfolio and the inherent volatility of equity securities prices. Unrealized gains and losses also include the effects of changes in foreign currency exchange rates on investments in non-U.S. issuers that are held by our U.S. based subsidiaries. Pre-tax investment gains/losses included net unrealized losses of \$12.9 billion in the third quarter and \$80.5 billion in the first nine months of 2022 compared to net unrealized gains of \$4.8 billion in the third quarter and \$36.2 billion in the first nine months of 2021 on securities we held at the end of the applicable period. Taxable investment gains/losses on equity securities sold is generally the difference between sales proceeds and the original cost of the securities sold. Sales of equity securities produced taxable gains of \$3 million in the third quarter and taxable losses of \$660 million in the first nine months of 2022 compared to taxable gains of \$0.9 billion in the third quarter and \$2.9 billion in the first nine months of 2021.

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 the investment gains/losses recorded in earnings in any given period has little analytical or predictive value.

Derivative contract gains/losses

Derivative contract gains/losses include the changes in fair value of our few remaining equity index put option contract liabilities. The gains and losses from the changes in the fair values of these liabilities are recorded in earnings. As of September 30, 2022, our recorded liability at fair value was less than \$1 million. Our ultimate payment obligations, if any, under these contracts will be determined as of the contract expiration dates based on the intrinsic value as defined in the contracts.

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

Other

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

	Third Quarter		First Nine Months	
	2022	2021	2022	2021
Equity method earnings	\$ 362	\$ 310	\$ 874	\$ 665
Acquisition accounting expenses	(161)	(169)	(484)	(532)
Corporate interest expense, before foreign currency effects	(66)	(75)	(203)	(232)
Foreign currency exchange rate gains on Berkshire and BHFC non-U.S. Dollar senior notes	858	196	2,441	676
Other	48	87	207	76
	<u>\$ 1,041</u>	<u>\$ 349</u>	<u>\$ 2,835</u>	<u>\$ 653</u>

After-tax equity method earnings include our proportionate share of earnings attributable to our investments in Kraft Heinz, Pilot, Berkadia, Electric Transmission of Texas and Iroquois Gas Transmission Systems. Equity method earnings increased \$209 million in the first nine months of 2022 versus 2021, primarily due to higher earnings from Kraft Heinz and Pilot. Beginning in the fourth quarter of 2022, equity method earnings will also include Occidental Petroleum. See Note 5 to the Consolidated Financial Statements.

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.

Foreign currency exchange rate gains and losses pertain to Berkshire's Euro and Japanese Yen denominated debt and BHFC's Euro and Great Britain Pound denominated debt. Changes in foreign currency exchange rates produce unrealized gains and losses from the periodic revaluation of these liabilities into U.S. Dollars. In 2022, we recorded significant foreign currency exchange rate gains on these debt issues, due to strengthening of the U.S. Dollar, which reduced the U.S. Dollar carrying value of the debt. These gains were largely offset by losses included in investment gains/losses, pertaining to non-U.S. Dollar denominated investments held by our U.S. based subsidiaries. The gains and losses recorded in any given period can be significant due to the magnitude of the borrowings and the inherent volatility in foreign currency exchange rates. Other earnings/losses consist primarily of Berkshire parent company investment income and corporate expenses, other intercompany interest income where the interest expense is included in earnings of the operating businesses and unallocated income taxes.

Financial Condition

Our Consolidated Balance Sheet continues to reflect very significant liquidity and a very strong capital base. Consolidated shareholders' equity attributable to Berkshire shareholders at September 30, 2022 was \$455.4 billion, a decrease of \$50.8 billion since December 31, 2021. Net loss attributable to Berkshire shareholders was \$41.0 billion in the first nine months of 2022, which included after-tax losses on our investments of \$64.9 billion. Investment gains and losses from changes in the market prices of our investments in equity securities will produce significant volatility in our earnings.

Berkshire's common stock repurchase program, as amended, permits Berkshire to repurchase its Class A and Class B shares at prices below Berkshire's intrinsic value, as conservatively determined by Warren Buffett, Berkshire's Chairman of the Board and Chief Executive Officer, and Charlie Munger, Vice Chairman of the Board. The program does not specify a maximum number of shares to be repurchased and does not require any specified repurchase amount. The program is expected to continue indefinitely. We will not repurchase our stock if it reduces the total amount of Berkshire's consolidated cash, cash equivalents and U.S. Treasury Bills holdings below \$30 billion. Financial strength and redundant liquidity will always be of paramount importance at Berkshire. Berkshire paid \$5.2 billion in the first nine months of 2022 to repurchase shares of its Class A and B common stock.

At September 30, 2022, our insurance and other businesses held cash, cash equivalents and U.S. Treasury Bills of \$105.2 billion, which included \$77.9 billion in U.S. Treasury Bills. Investments in equity and fixed maturity securities (excluding our investments in Kraft Heinz and Occidental common stock) were \$324.8 billion. During the first nine months of 2022, we paid cash of \$66.2 billion to acquire equities securities and we received proceeds of \$17.3 billion from sales of equity securities. On October 19, 2022, we acquired Alleghany Corporation for cash consideration of \$11.6 billion, which was funded by existing cash balances.

Our consolidated borrowings at September 30, 2022 were \$116.5 billion, of which over 95% were by the Berkshire parent company, BHFC, BNSF and BHE and its subsidiaries. In the first nine months of 2022, Berkshire and certain of its subsidiaries issued term debt of approximately \$10.2 billion in the aggregate and paid approximately \$3.3 billion on maturing term debt.

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

Financial Condition (Continued)

Berkshire parent company outstanding debt at September 30, 2022 was \$19.2 billion, a decrease of \$2.2 billion since December 31, 2021. In January 2022, Berkshire repaid \$600 million of maturing senior notes and issued ¥128.5 billion (approximately \$1.1 billion) of senior notes with maturity dates ranging from 2027 to 2052 and a weighted average interest rate of 0.5%. Berkshire's borrowings decreased \$2.7 billion in the first nine months of 2022 from changes in foreign currency exchange rates on its non-U.S. Dollar denominated debt. Berkshire parent company debt maturities over the next twelve months approximate \$4.2 billion, all of which is in the first six months of 2023.

Berkshire's insurance and other subsidiary outstanding borrowings were \$22.3 billion at September 30, 2022, which included senior note borrowings of BHFC, a wholly-owned financing subsidiary, of approximately \$17.6 billion. BHFC's borrowings are used to fund a portion of loans originated by Clayton Homes and equipment held for lease by our railcar leasing business. In March 2022, BHFC issued \$4.5 billion of senior notes with maturity dates ranging from 2027 to 2052 and a weighted average interest rate of 3.4% and issued €1.25 billion of senior notes maturing in 2030 and 2034 with a weighted average interest rate of 1.8%. Aggregate maturities of BHFC debt in the first nine months of 2022 were \$775 million. Berkshire guarantees BHFC's senior notes for the full and timely payment of principal and interest.

BNSF's outstanding debt was \$23.3 billion as of September 30, 2022, an increase of \$83 million from December 31, 2021. In June 2022, BNSF issued \$1.0 billion of 4.45% debentures due in 2053. During the first nine months of 2022, BNSF repaid approximately \$900 million of term debt. Outstanding borrowings of BHE and its subsidiaries were \$51.7 billion at September 30, 2022, a decrease of \$112 million from December 31, 2021. In April 2022, BHE issued \$1.0 billion of 4.6% senior notes due in 2053, and during the first nine months of 2022, subsidiaries issued approximately \$1.3 billion of fixed and variable rate term debt with a weighted average interest rate of 3.9% as of September 30, 2022 and maturity dates ranging from 2024 to 2052. Aggregate debt maturities for BHE and BNSF over the next twelve months approximate \$3.6 billion. Berkshire does not guarantee the repayment of debt issued by BNSF, BHE or any of their subsidiaries.

In the first nine months of 2022, our diverse group of businesses generated net operating cash flows of approximately \$27.0 billion. Our consolidated capital expenditures for property, plant and equipment and equipment held for lease were \$10.9 billion in the first nine months of 2022, which included capital expenditures by our railroad, utilities and energy businesses (BNSF and BHE) of \$7.9 billion. 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. Forecasted capital expenditures for BHE and BNSF over the remainder of 2022 approximate \$3.7 billion.

On August 16, 2022, the Inflation Reduction Act of 2022 ("the 2022 act") was signed into law. The 2022 act contains numerous provisions, including a 15% corporate alternative minimum income tax on "adjusted financial statement income", expanded tax credits for clean energy incentives and a 1% excise tax on corporate stock repurchases. The provisions of the 2022 act become effective for tax years beginning after December 31, 2022. We currently do not expect a material impact on our consolidated financial statements. However, we expect future guidance from the Treasury Department and will continue to evaluate the impact of the Act as more guidance becomes available.

Contractual Obligations

We are party to other contracts associated with ongoing business activities, which will result in cash payments to counterparties in future periods. Certain obligations are included in our Consolidated Balance Sheets, such as operating lease liabilities and shared aircraft repurchase liabilities of NetJets.

We are also obligated to pay claims arising from property and casualty insurance companies. Such liabilities, including amounts from retroactive reinsurance, were \$128.3 billion at September 30, 2022. However, the timing and amount of the payments under insurance and reinsurance contracts are contingent upon the outcome of future events. Actual payments will likely vary, perhaps materially, from any forecasted payments, as well as from the liabilities currently recorded in our Consolidated Balance Sheet. We anticipate that these payments will be funded by operating cash flows.

Other obligations pertaining to the acquisition of goods or services in the future, such as certain purchase obligations, are not currently reflected in the Consolidated Financial Statements and will be recognized in future periods as the goods are delivered or services are provided. As of September 30, 2022, the largest categories of our long-term contractual obligations primarily related to fuel, capacity, transmission and maintenance contracts and capital expenditure commitments of BHE and BNSF and aircraft purchase commitments of NetJets.

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

Contractual Obligations *(Continued)*

On March 20, 2022, we agreed to acquire all of the outstanding shares of Alleghany common stock for cash consideration of approximately \$11.6 billion. On October 19, 2022, the acquisition of Alleghany closed. We also have an agreement to acquire an additional 41.4% of Pilot in 2023 and agreements to acquire certain non-controlling interests of consolidated subsidiaries as described in Note 26 to the Consolidated Financial Statements included in Item 8 of Berkshire's Annual Report on Form 10-K for the year ended December 31, 2021.

Except as otherwise disclosed in this Quarterly Report, our contractual obligations as of September 30, 2022 were, in the aggregate, not materially different from those disclosed in "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, 2021.

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, 2021.

Our Consolidated Balance Sheet as of September 30, 2022 includes estimated liabilities of \$128.3 billion for unpaid losses and loss adjustment expenses from property and casualty insurance and reinsurance contracts. 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 can result in a material effect on periodic earnings. The effects from changes in these estimates are recorded as a component of insurance losses and loss adjustment expenses in the period of the change.

Our Consolidated Balance Sheet as of September 30, 2022 included goodwill of acquired businesses of \$73.3 billion and indefinite-lived intangible assets of \$18.4 billion. We evaluate these assets for impairment at least annually and we conducted our most recent annual review during the fourth quarter of 2021. In connection with that annual goodwill impairment review, the estimated fair values of five reporting units did not exceed our carrying values by at least 20%. The most significant of these reporting units was Precision Castparts Corp. ("PCC"). The estimated fair value of PCC was approximately \$34.5 billion, exceeding our carrying value of approximately \$31.1 billion by 10.7%. Our carrying value of PCC included goodwill of approximately \$7.5 billion. For the four other reporting units, our aggregate estimated fair value was approximately \$2.5 billion, which exceeded our aggregate carrying value of approximately \$2.3 billion by 9.2%. Our carrying value of these units included goodwill of approximately \$1.2 billion.

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.

As of September 30, 2022, we concluded it is more likely than not that goodwill recorded in our Consolidated Balance Sheet was not impaired. The long-term adverse consequences of the COVID-19 pandemic, geopolitical conflicts and changes in business conditions on certain of our reporting units may prove to be worse than we currently anticipate, and we may need to record goodwill or indefinite-lived intangible asset impairment charges in future periods. Making estimates of the fair value of reporting units and judgments on goodwill impairments at this time are and will likely continue to be significantly affected by assumptions on the severity, duration or long-term effects of adverse events on a reporting unit's business, which we cannot reliably predict. Consequently, any fair value estimates in such instances can be subject to wide variations.

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

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

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, or 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; the adverse impacts from geopolitical events; changes in laws or regulations affecting our insurance, railroad, utilities and energy and finance subsidiaries; changes in federal income tax laws; and changes in general economic and market factors that affect the prices of securities or the industries in which we do business.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Reference is made to Berkshire's most recently issued Annual Report and in particular the "Market Risk Disclosures" included in "Management's Discussion and Analysis of Financial Condition and Results of Operations." As of September 30, 2022, 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, 2021.

Item 4. Controls and Procedures

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

Part II Other Information

Item 1. Legal Proceedings

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

Item 1A. Risk Factors

Our significant business risks are described in Item 1A to Form 10-K for the year ended December 31, 2021, to which reference is made herein. 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.

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 Charlie Munger, Vice Chairman of the Board, believe that the repurchase price is below Berkshire's intrinsic value, conservatively determined. Repurchases may be in the open market or through privately negotiated transactions. Information with respect to Berkshire's Class A and Class B common stock repurchased during the third quarter of 2022 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
July				
Class A common stock	1,302	\$ 424,974.96	1,302	*
Class B common stock	—	\$ —	—	*
August				
Class A common stock	595	\$ 444,401.28	595	*
Class B common stock	—	\$ —	—	*
September				
Class A common stock	519	\$ 424,972.62	519	*
Class B common stock	—	\$ —	—	*

* 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 \$30 billion.

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures

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

Item 5. Other Information

None

Item 6. Exhibits

- a. Exhibits
- 3(i) Restated Certificate of Incorporation
[Incorporated by reference to Exhibit 3\(i\) to Form 10-K filed on March 2, 2015.](#)
- 3(ii) By-Laws
[Incorporated by reference to Exhibit 3\(ii\) to Form 8-K filed on May 4, 2022.](#)
- 31.1 [Rule 13a-14\(a\)/15d-14\(a\) Certifications](#)
- 31.2 [Rule 13a-14\(a\)/15d-14\(a\) Certifications](#)
- 32.1 [Section 1350 Certifications](#)
- 32.2 [Section 1350 Certifications](#)
- 95 [Mine Safety Disclosures](#)
- 101 The following financial information from Berkshire Hathaway Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2022, formatted in iXBRL (Inline Extensible Business Reporting Language) includes: (i) the Cover Page (ii) the Consolidated Balance Sheets, (iii) the Consolidated Statements of Earnings, (iv) the Consolidated Statements of Comprehensive Income, (v) the Consolidated Statements of Changes in Shareholders' Equity, (vi) the Consolidated Statements of Cash Flows, and (vii) the Notes to Consolidated Financial Statements, tagged in summary and detail.
- 104 Cover Page Interactive Data File (formatted as iXBRL and contained in Exhibit 101)

SIGNATURE

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

BERKSHIRE HATHAWAY INC.
(Registrant)

Date: November 5, 2022

/S/ MARC D. HAMBURG
(Signature)
Marc D. Hamburg,
Senior Vice President and
Principal Financial Officer

