

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the Quarterly Period Ended March 31, 2023

or

Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Commission File Number 001-06714

GRAHAM HOLDINGS COMPANY

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

1300 North 17th Street, Arlington, Virginia

(Address of principal executive offices)

53-0182885

(I.R.S. Employer
Identification No.)

22209

(Zip Code)

(703) 345-6300

(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class B Common Stock, par value \$1.00 per share	GHC	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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

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

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

Shares outstanding at April 28, 2023:

Class A Common Stock – 964,001 Shares
Class B Common Stock – 3,778,767 Shares

GRAHAM HOLDINGS COMPANY

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements.

**GRAHAM HOLDINGS COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)**

	Three Months Ended March 31	
	2023	2022
(in thousands, except per share amounts)		
Operating Revenues		
Sales of services	\$ 586,863	\$ 557,569
Sales of goods	444,683	357,152
	1,031,546	914,721
Operating Costs and Expenses		
Cost of services sold (exclusive of items shown below)	356,942	324,981
Cost of goods sold (exclusive of items shown below)	370,272	290,520
Selling, general and administrative	241,962	224,862
Depreciation of property, plant and equipment	20,025	19,475
Amortization of intangible assets	13,944	14,912
Impairment of long-lived assets	745	—
	1,003,890	874,750
Income from Operations	27,656	39,971
Equity in earnings of affiliates, net	4,661	2,604
Interest income	1,204	715
Interest expense	(14,294)	(11,417)
Non-operating pension and postretirement benefit income, net	31,845	50,505
Gain on marketable equity securities, net	18,022	46,912
Other income, net	3,083	2,876
Income Before Income Taxes	72,177	132,166
Provision for Income Taxes	19,200	35,600
Net Income	52,977	96,566
Net Income Attributable to Noncontrolling Interests	(705)	(942)
Net Income Attributable to Graham Holdings Company Common Stockholders	\$ 52,272	\$ 95,624
Per Share Information Attributable to Graham Holdings Company Common Stockholders		
Basic net income per common share	\$ 10.91	\$ 19.50
Basic average number of common shares outstanding	4,759	4,871
Diluted net income per common share	\$ 10.88	\$ 19.45
Diluted average number of common shares outstanding	4,776	4,885

See accompanying Notes to Condensed Consolidated Financial Statements.

GRAHAM HOLDINGS COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

(in thousands)	Three Months Ended March 31	
	2023	2022
Net Income	\$ 52,977	\$ 96,566
Other Comprehensive Loss, Before Tax		
Foreign currency translation adjustments:		
Translation adjustments arising during the period	8,994	(1,738)
Pension and other postretirement plans:		
Amortization of net prior service cost included in net income	409	716
Amortization of net actuarial gain included in net income	(10,766)	(17,774)
	(10,357)	(17,058)
Cash flow hedges (loss) gain	(930)	1,642
Other Comprehensive Loss, Before Tax	(2,293)	(17,154)
Income tax benefit related to items of other comprehensive income (loss)	2,878	4,019
Other Comprehensive Income (Loss), Net of Tax	585	(13,135)
Comprehensive Income	53,562	83,431
Comprehensive income attributable to noncontrolling interests	(705)	(942)
Total Comprehensive Income Attributable to Graham Holdings Company	\$ 52,857	\$ 82,489

See accompanying Notes to Condensed Consolidated Financial Statements.

GRAHAM HOLDINGS COMPANY
CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands)	As of	
	March 31, 2023	December 31, 2022
	(Unaudited)	
Assets		
Current Assets		
Cash and cash equivalents	\$ 123,469	\$ 169,319
Restricted cash	30,777	20,467
Investments in marketable equity securities and other investments	616,379	622,408
Accounts receivable, net	507,514	560,779
Inventories and contracts in progress	246,220	226,811
Prepaid expenses	112,982	97,450
Income taxes receivable	3,335	9,313
Other current assets	1,914	1,547
Total Current Assets	1,642,590	1,708,094
Property, Plant and Equipment, Net	506,995	503,000
Lease Right-of-Use Assets	424,938	429,403
Investments in Affiliates	194,960	186,419
Goodwill, Net	1,567,594	1,560,953
Indefinite-Lived Intangible Assets	180,038	178,934
Amortized Intangible Assets, Net	147,553	161,422
Prepaid Pension Cost	1,671,477	1,658,046
Deferred Income Taxes	6,870	6,812
Deferred Charges and Other Assets (includes \$476 and \$646 of restricted cash)	199,184	189,132
Total Assets	\$ 6,542,199	\$ 6,582,215
Liabilities and Equity		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 536,959	\$ 563,005
Deferred revenue	373,173	381,416
Income taxes payable	15,026	3,766
Current portion of lease liabilities	72,210	70,007
Current portion of long-term debt	123,018	155,813
Dividends declared	7,902	—
Total Current Liabilities	1,128,288	1,174,007
Accrued Compensation and Related Benefits	134,541	134,921
Other Liabilities	37,373	37,506
Deferred Income Taxes	462,109	466,275
Mandatorily Redeemable Noncontrolling Interest	32,309	30,845
Lease Liabilities	387,866	393,626
Long-Term Debt	568,101	570,547
Total Liabilities	2,750,587	2,807,727
Commitments and Contingencies (Note 14)		
Redeemable Noncontrolling Interests	21,882	21,827
Preferred Stock	—	—
Common Stockholders' Equity		
Common stock	20,000	20,000
Capital in excess of par value	388,173	390,438
Retained earnings	7,199,588	7,163,128
Accumulated other comprehensive income, net of taxes		
Cumulative foreign currency translation adjustment	(45,644)	(54,638)
Unrealized gain on pensions and other postretirement plans	380,898	388,591
Cash flow hedges	1,482	2,198
Cost of Class B common stock held in treasury	(4,197,279)	(4,178,334)
Total Common Stockholders' Equity	3,747,218	3,731,383
Noncontrolling Interests	22,512	21,278
Total Equity	3,769,730	3,752,661
Total Liabilities and Equity	\$ 6,542,199	\$ 6,582,215

See accompanying Notes to Condensed Consolidated Financial Statements.

GRAHAM HOLDINGS COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

(in thousands)	Three Months Ended March 31	
	2023	2022
Cash Flows from Operating Activities		
Net Income	\$ 52,977	\$ 96,566
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, amortization and long-lived asset impairments	34,714	34,387
Amortization of lease right-of-use asset	16,492	17,569
Net pension benefit and special separation benefit expense	(23,162)	(44,782)
Gain on marketable equity securities and cost method investments, net	(19,853)	(46,912)
Gain on disposition of property, plant and equipment and investments, net	(1,053)	(1,593)
Credit loss expense and provision for other receivables	15	1,503
Stock-based compensation expense	1,802	1,677
Foreign exchange loss	1,504	1,047
Equity in earnings of affiliates, net of distributions	(4,655)	2,020
(Benefit from) provision for deferred income taxes	(1,781)	16,182
Contingent consideration accretion expense	315	76
Change in operating assets and liabilities:		
Accounts receivable	54,245	89,228
Inventories	(19,318)	(15,298)
Accounts payable and accrued liabilities	(48,264)	(78,819)
Deferred revenue	(2,387)	(9,037)
Income taxes receivable/payable	17,274	18,392
Lease liabilities	(16,182)	(20,247)
Other assets and other liabilities, net	(18,800)	(18,549)
Other	(1,072)	1,482
Net Cash Provided by Operating Activities	22,811	44,892
Cash Flows from Investing Activities		
Proceeds from sales of marketable equity securities	29,028	55,731
Purchases of property, plant and equipment	(22,554)	(14,207)
Purchases of marketable equity securities	(6,162)	—
Investments in equity affiliates, cost method and other investments	(4,735)	(23,698)
Net proceeds from disposition of property, plant and equipment, and investments	2,706	1,334
Other	(237)	363
Net Cash (Used in) Provided by Investing Activities	(1,954)	19,523
Cash Flows from Financing Activities		
Net payments under revolving credit facilities	(33,000)	(37,000)
Common shares repurchased	(23,439)	(9,527)
Dividends paid	(7,910)	(7,749)
Net proceeds from (repayments of) vehicle floor plan payable	7,196	(3,889)
Repayments of borrowings	(3,999)	(977)
Proceeds from (repayments of) bank overdrafts	3,153	(2,868)
Deferred payments of acquisitions	(161)	(3,294)
Other	358	942
Net Cash Used in Financing Activities	(57,802)	(64,362)
Effect of Currency Exchange Rate Change	1,235	(208)
Net Decrease in Cash and Cash Equivalents and Restricted Cash	(35,710)	(155)
Beginning Cash and Cash Equivalents and Restricted Cash	190,432	158,843
Ending Cash and Cash Equivalents and Restricted Cash	\$ 154,722	\$ 158,688

See accompanying Notes to Condensed Consolidated Financial Statements.

GRAHAM HOLDINGS COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN COMMON STOCKHOLDERS' EQUITY (UNAUDITED)

(in thousands)	Common Stock	Capital in Excess of Par Value	Retained Earnings	Accumulated Other Comprehensive Income	Treasury Stock	Noncontrolling Interest	Total Equity	Redeemable Noncontrolling Interest
As of December 31, 2022	\$ 20,000	\$ 390,438	\$ 7,163,128	\$ 336,151	\$ (4,178,334)	\$ 21,278	\$ 3,752,661	\$ 21,827
Net income for the period			52,977				52,977	
Net income attributable to noncontrolling interests			(650)			650	—	
Net income attributable to redeemable noncontrolling interests			(55)				(55)	55
Change in redemption value of redeemable noncontrolling interests						64	64	70
Noncontrolling interest capital contribution						520	520	
Distribution to redeemable noncontrolling interest							—	(70)
Dividends on common stock			(15,812)				(15,812)	
Repurchase of Class B common stock					(23,439)		(23,439)	
Issuance of Class B common stock		(4,067)			4,494		427	
Amortization of unearned stock compensation and stock option expense		1,802					1,802	
Other comprehensive income, net of income taxes				585			585	
As of March 31, 2023	\$ 20,000	\$ 388,173	\$ 7,199,588	\$ 336,736	\$ (4,197,279)	\$ 22,512	\$ 3,769,730	\$ 21,882

(in thousands)	Common Stock	Capital in Excess of Par Value	Retained Earnings	Accumulated Other Comprehensive Income	Treasury Stock	Noncontrolling Interest	Total Equity	Redeemable Noncontrolling Interest
As of December 31, 2021	\$ 20,000	\$ 389,456	\$ 7,126,761	\$ 971,388	\$ (4,108,022)	\$ 12,086	\$ 4,411,669	\$ 14,311
Net income for the period			96,566				96,566	
Net income attributable to noncontrolling interests			(986)			986	—	
Net loss attributable to redeemable noncontrolling interests			44				44	(44)
Change in redemption value of redeemable noncontrolling interests						64	64	64
Distribution to noncontrolling interest						(357)	(357)	
Dividends on common stock			(15,497)				(15,497)	
Repurchase of Class B common stock					(9,527)		(9,527)	
Issuance of Class B common stock					1,437		1,437	
Amortization of unearned stock compensation and stock option expense		1,677					1,677	
Other comprehensive loss, net of income taxes				(13,135)			(13,135)	
As of March 31, 2022	\$ 20,000	\$ 391,133	\$ 7,206,888	\$ 958,253	\$ (4,116,112)	\$ 12,779	\$ 4,472,941	\$ 14,331

See accompanying Notes to Condensed Consolidated Financial Statements.

GRAHAM HOLDINGS COMPANY

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. ORGANIZATION, BASIS OF PRESENTATION AND RECENT ACCOUNTING PRONOUNCEMENTS

Graham Holdings Company (the Company) is a diversified holding company whose operations include: education; television broadcasting—online, podcast, print and local TV news; manufacturing; home health and hospice care; automotive dealerships; and other businesses. The Company's Kaplan subsidiary provides a wide variety of educational services, both domestically and outside the United States (U.S.). The Company's television broadcast segment owns and operates seven television broadcasting stations. The Company's manufacturing companies comprise the ownership of a supplier of pressure treated wood, a manufacturer of electrical solutions, a manufacturer of lifting solutions, and a supplier of parts used in electric utilities and industrial systems. The Company's healthcare segment provides home health, hospice and palliative services, in-home specialty pharmacy infusion therapies, applied behavior analysis (ABA) therapy, physician services for allergy, asthma and immunology patients, in-home aesthetics, and healthcare software-as-a-service technology. The Company's automotive business comprises six dealerships and valet repair services. The Company's other businesses include a consumer internet company; restaurants; a custom framing company; a marketing solutions provider; a customer data and analytics software company; website and print magazines; an ad-free audio streaming service for children; and a daily local news podcast and newsletter company.

Basis of Presentation – The accompanying condensed consolidated financial statements have been prepared in accordance with: (i) generally accepted accounting principles in the United States of America (GAAP) for interim financial information; (ii) the instructions to Form 10-Q; and (iii) the guidance of Rule 10-01 of Regulation S-X under the Securities and Exchange Act of 1934, as amended, for financial statements required to be filed with the Securities and Exchange Commission (SEC). They include the assets, liabilities, results of operations and cash flows of the Company, including its domestic and foreign subsidiaries that are more than 50% owned or otherwise controlled by the Company. As permitted under such rules, certain notes and other financial information normally required by GAAP have been condensed or omitted. Management believes the accompanying condensed consolidated financial statements reflect all normal and recurring adjustments necessary for a fair statement of the Company's financial position, results of operations, and cash flows as of and for the periods presented herein. The Company's results of operations for the three months ended March 31, 2023 and 2022 may not be indicative of the Company's future results. These condensed consolidated financial statements are unaudited and should be read in conjunction with the Company's audited consolidated financial statements and the notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

The year-end condensed consolidated balance sheet data was derived from audited financial statements, but does not include all disclosures required by GAAP.

Use of Estimates in the Preparation of the Condensed Consolidated Financial Statements – The preparation of the condensed consolidated financial statements in conformity with GAAP requires management to make estimates and judgments that affect the amounts reported herein. Management bases its estimates and assumptions on historical experience and on various other factors that are believed to be reasonable under the circumstances. Due to the inherent uncertainty involved in making estimates, actual results reported in future periods may be affected by changes in those estimates.

Recently Adopted and Issued Accounting Pronouncements – In September 2022, the Financial Accounting Standards Board issued new guidance that requires a buyer in a supplier finance program to disclose certain qualitative and quantitative information about the program's nature, activity during the period, changes from period to period, and potential magnitude. The standard was adopted by the Company in the first quarter of 2023 and did not have a significant impact on its Condensed Consolidated Financial Statements.

2. ACQUISITIONS AND DISPOSITIONS OF BUSINESSES

Acquisitions. In January 2023, Graham Healthcare Group (GHG) acquired two small businesses which are included in healthcare.

During 2022, the Company acquired seven businesses: five in healthcare and two in automotive, for \$143.2 million in cash and contingent consideration and the assumption of floor plan payables. The assets and liabilities of the companies acquired were recorded at their estimated fair values at the date of acquisition.

In May 2022, GHG acquired two small businesses which are included in healthcare.

On July 5, 2022, the Company's automotive subsidiary acquired two automotive dealerships, including the real property for the dealership operations. In addition to a cash payment and the assumption of \$10.9 million in floor

plan payables, the automotive subsidiary borrowed \$77.4 million to finance the acquisition. The dealerships are operated and managed by an entity affiliated with Christopher J. Ourisman, a member of the Ourisman Automotive Group family of dealerships. These acquisitions expand the Company's automotive business operations and are included in automotive.

In July 2022, GHG acquired a 100% interest in a multi-state provider of ABA clinics. The acquisition is expected to expand the product offerings of the healthcare division and is included in healthcare.

In August 2022, GHG acquired two small businesses which are included in healthcare.

Acquisition-related costs for acquisitions were expensed as incurred. The aggregate purchase price of the 2022 acquisitions was allocated as follows, based on acquisition date fair values to the following assets and liabilities:

(in thousands)	Purchase Price Allocation	
	Year Ended	
	December 31, 2022	
Accounts receivable	\$	3,172
Inventory		21,278
Property, plant and equipment		36,255
Lease right-of-use assets		4,773
Goodwill		56,163
Indefinite-lived intangible assets		41,800
Amortized intangible assets		1,200
Other assets		481
Deferred income taxes		241
Floor plan payables		(10,908)
Other liabilities		(3,798)
Current and noncurrent lease liabilities		(5,865)
Redeemable noncontrolling interest		(2,164)
Noncontrolling interest		(512)
Aggregate purchase price, net of cash acquired	\$	142,116

The 2022 fair values recorded were based upon valuations and the estimates and assumptions used in such valuations are subject to change within the measurement period (up to one year from the acquisition date). The recording of deferred tax assets or liabilities and the final amount of residual goodwill is not yet finalized. Goodwill is calculated as the excess of the consideration transferred over the net assets recognized and represents the estimated future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. The goodwill recorded due to these acquisitions is attributable to the assembled workforces of the acquired companies and expected synergies. The Company expects to deduct \$38.5 million of goodwill for income tax purposes for the acquisitions completed in 2022.

The acquired companies were consolidated into the Company's financial statements starting on their respective acquisition dates. The following unaudited pro forma information includes the 2022 acquisitions as if they occurred at the beginning of 2021:

(in thousands)	Three Months Ended	
	March 31	
	2022	
Operating revenues	\$	998,193
Net income		100,676

These pro forma results were based on estimates and assumptions, which the Company believes are reasonable, and include the historical results of operations of the acquired companies and adjustments for depreciation and amortization of identified assets and the effect of pre-acquisition transaction related expenses incurred by the Company and the acquired entities. The pro forma information does not include efficiencies, cost reductions and synergies expected to result from the acquisitions. They are not the results that would have been realized had these entities been part of the Company during the periods presented and are not necessarily indicative of the Company's consolidated results of operations in future periods.

Disposition of Businesses. In October 2022, the Company entered into an agreement to merge the CyberVista business with CyberWire, Inc. in return for a noncontrolling financial interest in the merged entity, N2K Networks, Inc. (the CyberVista transaction). The Company deconsolidated the CyberVista subsidiary, which was included in

other businesses, and accounts for its continuing interest in N2K Networks under the equity method of accounting (see Note 3).

Other Transactions. In November 2022, a CSI Pharmacy Holdings Company, LLC (CSI) minority shareholder put some shares to the Company, which had a redemption value of \$1.2 million. Following the redemption, the Company owns 76.5% of CSI.

3. INVESTMENTS

Money Market Investments. As of March 31, 2023 and December 31, 2022, the Company had money market investments of \$2.2 million and \$7.7 million, respectively, that are classified as cash and cash equivalents in the Company's Condensed Consolidated Balance Sheets.

Investments in Marketable Equity Securities. Investments in marketable equity securities consist of the following:

(in thousands)	As of	
	March 31, 2023	December 31, 2022
Total cost	\$ 234,157	\$ 270,764
Gross unrealized gains	373,842	363,147
Gross unrealized losses	(4,456)	(23,990)
Total Fair Value	\$ 603,543	\$ 609,921

At March 31, 2023 and December 31, 2022, the Company owned 55,430 shares in Markel Corporation (Markel) valued at \$70.8 million and \$73.0 million, respectively. The Chief Executive Officer of Markel, Mr. Thomas S. Gayner, is a member of the Company's Board of Directors. As of March 31, 2023, the Company owned 422 Class A and 482,945 Class B shares in Berkshire Hathaway valued at \$345.6 million, which exceeded 5% of the Company's total assets.

The Company purchased \$4.6 million of marketable equity securities during the first three months of 2023. There were no purchases of marketable equity securities during the first three months of 2022.

During the first three months of 2023, the gross cumulative realized net losses from the sales of marketable equity securities were \$12.2 million. The total proceeds from such sales were \$29.0 million. During the first three months of 2022, the gross cumulative realized gains from the sales of marketable equity securities were \$41.6 million. The total proceeds from such sales were \$55.7 million.

The net gain on marketable equity securities comprised the following:

(in thousands)	Three Months Ended March 31	
	2023	2022
Gain on marketable equity securities, net	\$ 18,022	\$ 46,912
Less: Net losses in earnings from marketable equity securities sold	3,657	5,767
Net unrealized gains in earnings from marketable equity securities still held at the end of the period	\$ 21,679	\$ 52,679

Investments in Affiliates. As of March 31, 2023, the Company held a 49.9% interest in N2K Networks on a fully diluted basis, and accounts for its investment under the equity method. The Company holds two of the five seats of N2K Networks' governing board with the other shareholders retaining substantive participation rights to control the financial and operating decisions of N2K Networks through representation on the board.

As of March 31, 2023, the Company held an approximate 18% interest in Intersection Holdings, LLC (Intersection), and accounts for its investment under the equity method. The Company holds two of the ten seats of Intersection's governing board, which allows the Company to exercise significant influence over Intersection.

As of March 31, 2023, the Company also held investments in several other affiliates; GHG held a 40% interest in Residential Home Health Illinois, a 40% interest in Residential Hospice Illinois, a 40% interest in the joint venture formed between GHG and a Michigan hospital, and a 40% interest in the joint venture formed between GHG and Allegheny Health Network (AHN). During the first quarter of 2022, GHG invested an additional \$18.5 million in the Residential Home Health Illinois and Residential Hospice Illinois affiliates to fund their acquisition of certain home health and hospice assets of the NorthShore University HealthSystem. The transaction diluted GHG's interest in Residential Hospice Illinois resulting in a \$0.6 million gain on the sale of investment in affiliate (see Note 12). For the

three months ended March 31, 2023 and 2022, the Company recorded \$3.5 million and \$3.3 million, respectively, in revenue for services provided to the affiliates of GHG.

The Company had \$50.1 million and \$49.1 million in its investment account that represents cumulative undistributed income in its investments in affiliates as of March 31, 2023 and December 31, 2022, respectively.

Additionally, Kaplan International Holdings Limited (KIHL) held a 45% interest in a joint venture formed with University of York. KIHL loaned the joint venture £22 million, which loan is repayable over 25 years at an interest rate of 7% and guaranteed by the University of York. The outstanding balance on this loan was £20.4 million as of March 31, 2023. The loan is repayable by December 2041.

Cost Method Investments. The Company held investments without readily determinable fair values in a number of equity securities that are accounted for as cost method investments, which are recorded at cost, less impairment, and adjusted for observable price changes for identical or similar investments of the same issuer. The carrying value of these investments was \$69.4 million and \$66.7 million as of March 31, 2023 and December 31, 2022, respectively. During the three months ended March 31, 2023, the Company recorded gains of \$1.8 million to those equity securities based on observable transactions.

4. ACCOUNTS RECEIVABLE, ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Accounts receivable consist of the following:

(in thousands)	As of	
	March 31, 2023	December 31, 2022
Receivables from contracts with customers, less estimated credit losses of \$22,935 and \$21,387	\$ 478,726	\$ 533,622
Other receivables	28,788	27,157
	<u>\$ 507,514</u>	<u>\$ 560,779</u>

Credit loss expense was \$0.5 million and \$1.5 million for the three months ended March 31, 2023 and 2022, respectively.

Accounts payable and accrued liabilities consist of the following:

(in thousands)	As of	
	March 31, 2023	December 31, 2022
Accounts payable	\$ 133,805	\$ 136,186
Accrued compensation and related benefits	112,378	149,823
Other accrued liabilities	290,776	276,996
	<u>\$ 536,959</u>	<u>\$ 563,005</u>

Cash overdrafts of \$3.6 million and \$0.5 million are included in accounts payable as of March 31, 2023 and December 31, 2022, respectively.

5. INVENTORIES, CONTRACTS IN PROGRESS AND VEHICLE FLOOR PLAN PAYABLE

Inventories and contracts in progress consist of the following:

(in thousands)	As of	
	March 31, 2023	December 31, 2022
Raw materials	\$ 67,950	\$ 68,494
Work-in-process	15,141	15,718
Finished goods	160,168	140,548
Contracts in progress	2,961	2,051
	<u>\$ 246,220</u>	<u>\$ 226,811</u>

The Company finances new, used and service loaner vehicle inventory through standardized floor plan facilities with Truist Bank (Truist floor plan facility) and Ford Motor Credit Company (Ford floor plan facility). At March 31, 2023, the floor plan facilities bore interest at variable rates that are based on Secured Overnight Financing Rate (SOFR) and prime-based interest rates. The weighted average interest rate for the floor plan facilities was 5.4% and 2.0% for the three months ended March 31, 2023 and 2022, respectively. As of March 31, 2023, the aggregate capacity under the floor plan facilities was \$106.3 million, of which \$76.9 million had been utilized, and is included in accounts payable and accrued liabilities in the Condensed Consolidated Balance Sheet. Changes in the vehicle

floor plan payable are reported as cash flows from financing activities in the Condensed Consolidated Statements of Cash Flows.

The floor plan facilities are collateralized by vehicle inventory and other assets of the relevant dealership subsidiary, and contains a number of covenants, including, among others, covenants restricting the dealership subsidiary with respect to the creation of liens and changes in ownership, officers and key management personnel. The Company was in compliance with all of these restrictive covenants as of March 31, 2023.

The floor plan interest expense related to the vehicle floor plan arrangements is offset by amounts received from manufacturers in the form of floor plan assistance capitalized in inventory and recorded against cost of goods sold in the Condensed Consolidated Statements of Operations when the associated inventory is sold. For the three months ended March 31, 2023 and 2022, the Company recognized a reduction in cost of goods sold of \$1.4 million and \$0.9 million, respectively, related to manufacturer floor plan assistance.

6. GOODWILL AND OTHER INTANGIBLE ASSETS

Amortization of intangible assets for the three months ended March 31, 2023 and 2022, was \$13.9 million and \$14.9 million, respectively. Amortization of intangible assets is estimated to be approximately \$36 million for the remainder of 2023, \$37 million in 2024, \$29 million in 2025, \$20 million in 2026, \$6 million in 2027 and \$20 million thereafter.

The changes in the carrying amount of goodwill, by segment, were as follows:

(in thousands)	Education	Television Broadcasting	Manufacturing	Healthcare	Automotive	Other Businesses	Total
Balance as of December 31, 2022							
Goodwill	\$ 1,145,502	\$ 190,815	\$ 234,993	\$ 135,870	\$ 84,697	\$ 251,216	\$ 2,043,093
Accumulated impairment losses	(331,151)	—	(34,302)	—	—	(116,687)	(482,140)
	814,351	190,815	200,691	135,870	84,697	134,529	1,560,953
Acquisitions	—	—	—	385	—	—	385
Foreign currency exchange rate changes	6,256	—	—	—	—	—	6,256
Balance as of March 31, 2023							
Goodwill	1,151,758	190,815	234,993	136,255	84,697	251,216	2,049,734
Accumulated impairment losses	(331,151)	—	(34,302)	—	—	(116,687)	(482,140)
	\$ 820,607	\$ 190,815	\$ 200,691	\$ 136,255	\$ 84,697	\$ 134,529	\$ 1,567,594

The changes in carrying amount of goodwill at the Company's education division were as follows:

(in thousands)	Kaplan International	Higher Education	Supplemental Education	Total
Balance as of December 31, 2022				
Goodwill	\$ 579,561	\$ 174,564	\$ 391,377	\$ 1,145,502
Accumulated impairment losses	—	(111,324)	(219,827)	(331,151)
	579,561	63,240	171,550	814,351
Foreign currency exchange rate changes	6,252	—	4	6,256
Balance as of March 31, 2023				
Goodwill	585,813	174,564	391,381	1,151,758
Accumulated impairment losses	—	(111,324)	(219,827)	(331,151)
	\$ 585,813	\$ 63,240	\$ 171,554	\$ 820,607

Other intangible assets consist of the following:

(in thousands)	Useful Life Range	As of March 31, 2023			As of December 31, 2022		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortized Intangible Assets							
Student and customer relationships	2–10 years	\$ 298,022	\$ 236,486	\$ 61,536	\$ 297,766	\$ 230,429	\$ 67,337
Trade names and trademarks	2–15 years	148,286	84,833	63,453	148,102	81,078	67,024
Network affiliation agreements	10 years	17,400	11,112	6,288	17,400	10,367	7,033
Databases and technology	3–6 years	36,251	33,714	2,537	36,216	32,219	3,997
Noncompete agreements	2–5 years	20	16	4	1,000	995	5
Other	1–8 years	43,644	29,909	13,735	43,644	27,618	16,026
		<u>\$ 543,623</u>	<u>\$ 396,070</u>	<u>\$ 147,553</u>	<u>\$ 544,128</u>	<u>\$ 382,706</u>	<u>\$ 161,422</u>
Indefinite-Lived Intangible Assets							
Franchise agreements		\$ 85,858			\$ 85,858		
Trade names and trademarks		83,009			81,905		
FCC licenses		11,000			11,000		
Licensure and accreditation		150			150		
Other		21			21		
		<u>\$ 180,038</u>			<u>\$ 178,934</u>		

7. DEBT

The Company's borrowings consist of the following:

(in thousands)	Maturities	Stated Interest Rate	Effective Interest Rate	As of	
				March 31, 2023	December 31, 2022
Unsecured notes ⁽¹⁾	2026	5.75%	5.75%	\$ 397,725	\$ 397,548
Revolving credit facility	2027	4.80% - 8.38%	5.81%	168,766	200,236
Truist Bank commercial note ⁽²⁾	2031	6.10% - 6.37%	6.33%	23,276	23,522
Truist Bank commercial note	2032	6.38% - 6.72%	6.54%	63,483	66,513
Truist Bank commercial note ⁽³⁾	2032	6.13% - 6.47%	6.40%	26,211	26,548
Pinnacle Bank term loan	2024	4.15%	4.18%	8,152	8,433
Other indebtedness	2025 - 2030	0.00% - 16.00%		3,506	3,560
Total Debt				<u>691,119</u>	<u>726,360</u>
Less: current portion				(123,018)	(155,813)
Total Long-Term Debt				<u>\$ 568,101</u>	<u>\$ 570,547</u>

(1) The carrying value is net of \$2.3 million and \$2.5 million of unamortized debt issuance costs as of March 31, 2023 and December 31, 2022, respectively.

(2) The carrying value is net of \$0.1 million of unamortized debt issuance costs as of March 31, 2023 and December 31, 2022.

(3) The carrying value is net of \$0.1 million of unamortized debt issuance costs as of March 31, 2023 and December 31, 2022.

At March 31, 2023 and December 31, 2022, the fair value of the Company's 5.75% unsecured notes, based on quoted market prices (Level 2 fair value assessment), totaled \$393.7 million and \$395.1 million, respectively.

The outstanding balance on the Company's \$300 million unsecured revolving credit facility was \$168.8 million as of March 31, 2023, consisting of U.S. dollar borrowings of \$107 million with interest payable at SOFR plus 1.375% or prime rate plus 0.375%, and British Pound (GBP) borrowings of £50 million with interest payable at Daily Sterling Overnight Index Average (SONIA) plus 1.375%.

The fair value of the Company's other debt, which is based on Level 2 inputs, approximates its carrying value as of March 31, 2023 and December 31, 2022. The Company is in compliance with all financial covenants of the revolving credit facility, commercial notes, and Pinnacle Bank term loan as of March 31, 2023.

During the three months ended March 31, 2023 and 2022, the Company had average borrowings outstanding of approximately \$735.0 million and \$665.0 million, respectively, at average annual interest rates of approximately 5.8% and 4.3%, respectively. During the three months ended March 31, 2023 and 2022, the Company incurred net interest expense of \$13.1 million and \$10.7 million, respectively.

During the three months ended March 31, 2023 and 2022, the Company recorded interest expense of \$1.5 million and \$3.4 million, respectively, to adjust the fair value of the mandatorily redeemable noncontrolling interest. The fair value of the mandatorily redeemable noncontrolling interest was based on the fair value of the underlying subsidiaries owned by GHC One and GHC Two, after taking into account any debt and other noncontrolling interests of its subsidiary investments. The fair value of the owned subsidiaries is determined by reference to either a discounted cash flow or EBITDA multiple, which approximates fair value (Level 3 fair value assessment).

8. FAIR VALUE MEASUREMENTS

The Company's financial assets and liabilities measured at fair value on a recurring basis were as follows:

(in thousands)	As of March 31, 2023			
	Level 1	Level 2	Level 3	Total
Assets				
Money market investments ⁽¹⁾	\$ —	\$ 2,249	\$ —	\$ 2,249
Marketable equity securities ⁽²⁾	603,543	—	—	603,543
Other current investments ⁽³⁾	8,020	4,816	—	12,836
Interest rate swaps ⁽⁴⁾	—	1,682	—	1,682
Total Financial Assets	\$ 611,563	\$ 8,747	\$ —	\$ 620,310
Liabilities				
Contingent consideration liabilities ⁽⁵⁾	\$ —	\$ —	\$ 8,206	\$ 8,206
Mandatorily redeemable noncontrolling interest ⁽⁶⁾	—	—	32,309	32,309
Total Financial Liabilities	\$ —	\$ —	\$ 40,515	\$ 40,515

(in thousands)	As of December 31, 2022			
	Level 1	Level 2	Level 3	Total
Assets				
Money market investments ⁽¹⁾	\$ —	\$ 7,686	\$ —	\$ 7,686
Marketable equity securities ⁽²⁾	609,921	—	—	609,921
Other current investments ⁽³⁾	7,471	5,016	—	12,487
Interest rate swaps ⁽⁴⁾	—	2,636	—	2,636
Total Financial Assets	\$ 617,392	\$ 15,338	\$ —	\$ 632,730
Liabilities				
Contingent consideration liabilities ⁽⁵⁾	\$ —	\$ —	\$ 8,423	\$ 8,423
Foreign exchange swap ⁽⁷⁾	—	333	—	333
Mandatorily redeemable noncontrolling interest ⁽⁶⁾	—	—	30,845	30,845
Total Financial Liabilities	\$ —	\$ 333	\$ 39,268	\$ 39,601

- (1) The Company's money market investments are included in cash and cash equivalents and the value considers the liquidity of the counterparty.
- (2) The Company's investments in marketable equity securities are held in common shares of U.S. corporations that are actively traded on U.S. stock exchanges. Price quotes for these shares are readily available.
- (3) Includes U.S. Government Securities, corporate bonds, mutual funds and time deposits. These investments are valued using a market approach based on the quoted market prices of the security or inputs that include quoted market prices for similar instruments and are classified as either Level 1 or Level 2 in the fair value hierarchy.
- (4) Included in Deferred Charges and Other Assets. The Company utilized a market approach model using the notional amount of the interest rate swap multiplied by the observable inputs of time to maturity and market interest rates.
- (5) Included in Accounts payable and accrued liabilities and Other Liabilities. The Company determined the fair value of the contingent consideration liabilities using either a Monte Carlo simulation, Black-Scholes model, or probability-weighted analysis depending on the type of target included in the contingent consideration requirements (revenue, EBITDA, client retention). All analyses included estimated financial projections for the acquired businesses and acquisition-specific discount rates.
- (6) The fair value of the mandatorily redeemable noncontrolling interest is based on the fair value of the underlying subsidiaries owned by GHC One and GHC Two, after taking into account any debt and other noncontrolling interests of its subsidiary investments. The fair value of the owned subsidiaries is determined using enterprise value analyses which include an equal weighing between guideline public company and discounted cash flow analyses.
- (7) Included in Accounts payable and accrued liabilities, and valued based on a valuation model that calculates the differential between the contract price and the market-based forward rate.

The following tables provide a reconciliation of changes in the Company's financial liabilities measured at fair value on a recurring basis, using Level 3 inputs:

(in thousands)	Contingent consideration liabilities	Mandatorily redeemable noncontrolling interest
As of December 31, 2022	\$ 8,423	\$ 30,845
Acquisition of business	220	—
Changes in fair value ⁽¹⁾	—	1,468
Accretion of value included in net income ⁽¹⁾	315	—
Settlements or distributions	(752)	(4)
As of March 31, 2023	\$ 8,206	\$ 32,309

(in thousands)	Contingent consideration liabilities	Mandatorily redeemable noncontrolling interest
As of December 31, 2021	\$ 14,881	\$ 13,661
Acquisition of business	(3)	—
Changes in fair value ⁽¹⁾	—	3,423
Accretion of value included in net income ⁽¹⁾	76	—
Settlements or distributions	—	(53)
As of March 31, 2022	\$ 14,954	\$ 17,031

(1) Changes in fair value and accretion of value of contingent consideration liabilities are included in Selling, general and administrative expenses and the changes in fair value of mandatorily redeemable noncontrolling interest is included in Interest expense in the Company's Condensed Consolidated Statements of Operations.

During the three months ended March 31, 2023, the Company recorded long-lived asset impairment charges of \$0.7 million. The remeasurement of the long-lived assets is classified as a Level 3 fair value assessment due to the significance of unobservable inputs developed in the determination of the fair value. The Company used a discounted cash flow model to determine the estimated fair value of the long-lived assets and made estimates and assumptions regarding future cash flows and discount rates.

During the three months ended March 31, 2023, the Company recorded gains of \$1.8 million to equity securities that are accounted for as cost method investments based on observable transactions for identical or similar investments of the same issuer.

9. REVENUE FROM CONTRACTS WITH CUSTOMERS

The Company generated 79% of its revenue from U.S. domestic sales for each of the three months ended March 31, 2023 and 2022. The remaining 21% of revenue was generated from non-U.S. sales for each of the three months ended March 31, 2023 and 2022.

For the three months ended March 31, 2023, the Company recognized 55% of its revenue over time as control of the services and goods transferred to the customer, and the remaining 45% at a point in time, when the customer obtained control of the promised goods. For the three months ended March 31, 2022, the Company recognized 61% of its revenue over time, and the remaining 39% at a point in time.

Contract Assets. As of March 31, 2023, the Company recognized a contract asset of \$34.1 million related to a contract at a Kaplan International business, which is included in Deferred Charges and Other Assets. The Company expects to recognize an additional \$323.1 million related to this contract over the next six years. As of December 31, 2022, the contract asset was \$26.3 million.

Deferred Revenue. The Company records deferred revenue when cash payments are received or due in advance of the Company's performance, including amounts which are refundable. The following table presents the change in the Company's deferred revenue balance:

(in thousands)	As of		%
	March 31, 2023	December 31, 2022	
Deferred revenue	\$ 377,050	\$ 385,507	(2)

In April 2020, GHG received \$31.5 million under the expanded Medicare Accelerated and Advanced Payment Program modified by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) as a result of COVID-19. The Department of Health and Human Services started to recoup this advance 365 days after the payment was

issued. The advance has been recouped in full as of September 30, 2022. For the three months ended March 31, 2022, GHG recognized \$6.4 million of the balance in revenue for claims submitted for eligible services.

The majority of the change in the deferred revenue balance is related to the cyclical nature of services in the Kaplan international division. During the three months ended March 31, 2023, the Company recognized \$183.7 million related to the Company's deferred revenue balance as of December 31, 2022.

Revenue allocated to remaining performance obligations represents deferred revenue amounts that will be recognized as revenue in future periods. As of March 31, 2023, the deferred revenue balance related to certain medical and nursing qualifications with an original contract length greater than twelve months at Kaplan Supplemental Education was \$6.8 million. Kaplan Supplemental Education expects to recognize 67% of this revenue over the next twelve months and the remainder thereafter.

Costs to Obtain a Contract. The following table presents changes in the Company's costs to obtain a contract asset:

(in thousands)	Balance at Beginning of Period	Costs associated with new contracts	Less: Costs amortized during the period	Other	Balance at End of Period
2023	\$ 31,647	\$ 16,068	\$ (19,637)	\$ 541	\$ 28,619

The majority of other activity was related to currency translation adjustments for the three months ended March 31, 2023.

10. EARNINGS PER SHARE

The Company's unvested restricted stock awards contain nonforfeitable rights to dividends and, therefore, are considered participating securities for purposes of computing earnings per share pursuant to the two-class method. The diluted earnings per share computed under the two-class method is lower than the diluted earnings per share computed under the treasury stock method, resulting in the presentation of the lower amount in diluted earnings per share. The computation of the earnings per share under the two-class method excludes the income attributable to the unvested restricted stock awards from the numerator and excludes the dilutive impact of those underlying shares from the denominator.

The following reflects the Company's net income and share data used in the basic and diluted earnings per share computations using the two-class method:

(in thousands, except per share amounts)	Three Months Ended March 31	
	2023	2022
Numerator:		
Numerator for basic earnings per share:		
Net income attributable to Graham Holdings Company common stockholders	\$ 52,272	\$ 95,624
Less: Dividends paid-common stock outstanding and unvested restricted shares	(15,812)	(15,497)
Undistributed earnings	36,460	80,127
Percent allocated to common stockholders	99.35 %	99.35 %
	36,225	79,611
Add: Dividends paid-common stock outstanding	15,711	15,397
Numerator for basic earnings per share	\$ 51,936	\$ 95,008
Add: Additional undistributed earnings due to dilutive stock options	1	1
Numerator for diluted earnings per share	\$ 51,937	\$ 95,009
Denominator:		
Denominator for basic earnings per share:		
Weighted average shares outstanding	4,759	4,871
Add: Effect of dilutive stock options	17	14
Denominator for diluted earnings per share	4,776	4,885
Graham Holdings Company Common Stockholders:		
Basic earnings per share	\$ 10.91	\$ 19.50
Diluted earnings per share	\$ 10.88	\$ 19.45

Earnings per share amounts may not recalculate due to rounding.

Diluted earnings per share excludes the following weighted average potential common shares, as the effect would be antidilutive, as computed under the treasury stock method:

(in thousands)	Three Months Ended March 31	
	2023	2022
Weighted average restricted stock	10	16

The diluted earnings per share amounts for the three months ended March 31, 2023 and March 31, 2022 exclude the effects of 105,000 stock options and contingently issuable shares outstanding as their inclusion would have been antidilutive due to a market condition.

In the three months ended March 31, 2023 and 2022, the Company declared regular dividends totaling \$3.30 and \$3.16 per common share, respectively.

11. PENSION AND POSTRETIREMENT PLANS

Defined Benefit Plans. The total benefit arising from the Company's defined benefit pension plans consists of the following components:

(in thousands)	Three Months Ended March 31	
	2023	2022
Service cost	\$ 9,243	\$ 6,031
Interest cost	11,534	7,670
Expected return on assets	(38,338)	(41,963)
Amortization of prior service cost	410	709
Recognized actuarial gain	(10,140)	(17,229)
Net Periodic Benefit	(27,291)	(44,782)
Special separation benefit expense	4,129	—
Total Benefit	\$ (23,162)	\$ (44,782)

In the first quarter of 2023, the Company recorded \$4.1 million in expenses related to Separation Incentive Programs for certain Leaf Group and Code3 employees, which will be funded from the assets of the Company's pension plans.

The total cost arising from the Company's Supplemental Executive Retirement Plan (SERP) consists of the following components:

(in thousands)	Three Months Ended March 31	
	2023	2022
Service cost	\$ 148	\$ 228
Interest cost	1,165	822
Amortization of prior service cost	—	9
Recognized actuarial loss	—	166
Net Periodic Cost	\$ 1,313	\$ 1,225

Defined Benefit Plan Assets. The Company's defined benefit pension obligations are funded by a portfolio made up of private investment funds, a U.S. stock index fund, and a relatively small number of stocks and high-quality fixed-income securities that are held by a third-party trustee. The assets of the Company's pension plans were allocated as follows:

	As of	
	March 31, 2023	December 31, 2022
U.S. equities	57 %	59 %
Private investment funds	17 %	16 %
International equities	12 %	11 %
U.S. stock index fund	7 %	7 %
U.S. fixed income	7 %	7 %
	100 %	100 %

The Company manages approximately 41% of the pension assets internally, of which the majority is invested in private investment funds with the remaining investments in Berkshire Hathaway stock, a U.S. stock index fund, and short-term fixed-income securities. The remaining 59% of plan assets are managed by two investment companies. The goal of the investment managers is to produce moderate long-term growth in the value of these assets, while protecting them against large decreases in value. Both investment managers may invest in a combination of equity and fixed-income securities and cash. The managers are not permitted to invest in securities of the Company or in alternative investments. One investment manager cannot invest more than 15% of the assets at the time of purchase in the stock of Alphabet and Berkshire Hathaway, and no more than 30% of the assets it manages in specified international exchanges at the time the investment is made. The other investment manager cannot invest more than 20% of the assets at the time of purchase in the stock of Berkshire Hathaway, and no more than 15% of the assets it manages in specified international exchanges at the time the investment is made, and no less than 10% of the assets could be invested in fixed-income securities. Excluding the exceptions noted above, the investment managers cannot invest more than 10% of the assets in the securities of any other single issuer, except for obligations of the U.S. Government, without receiving prior approval from the Plan administrator.

In determining the expected rate of return on plan assets, the Company considers the relative weighting of plan assets, the historical performance of total plan assets and individual asset classes and economic and other indicators of future performance. In addition, the Company may consult with and consider the input of financial and other professionals in developing appropriate return benchmarks.

The Company evaluated its defined benefit pension plan asset portfolio for the existence of significant concentrations (defined as greater than 10% of plan assets) of credit risk as of March 31, 2023. Types of concentrations that were evaluated include, but are not limited to, investment concentrations in a single entity, type of industry, foreign country and individual fund. At March 31, 2023, the pension plan held investments in one common stock and one private investment fund that exceeded 10% of total plan assets, valued at \$876.6 million, or approximately 33% of total plan assets. At December 31, 2022, the pension plan held investments in one common stock and one private investment fund that exceeded 10% of total plan assets, valued at \$842.6 million, or approximately 33% of total plan assets.

Other Postretirement Plans. The total benefit arising from the Company's other postretirement plans consists of the following components:

(in thousands)	Three Months Ended March 31	
	2023	2022
Interest cost	\$ 22	\$ 24
Amortization of prior service credit	(1)	(2)
Recognized actuarial gain	(626)	(711)
Net Periodic Benefit	\$ (605)	\$ (689)

12. OTHER NON-OPERATING INCOME

A summary of non-operating income is as follows:

(in thousands)	Three Months Ended March 31	
	2023	2022
Gain on a cost method investment	\$ 1,831	\$ —
Foreign currency loss, net	(1,504)	(1,047)
Gain on sale of business	1,000	945
Gain on sale of cost method investments	785	1,075
Gain on sale of investments in affiliates	15	604
Other gain, net	956	1,299
Total Other Non-Operating Income	\$ 3,083	\$ 2,876

The gain on cost method investment resulted from observable price changes in the fair value of the underlying equity securities accounted for under the cost method (see Notes 3 and 8).

During the three months ended March 31, 2023 and 2022, the Company recorded contingent consideration gains of \$1.0 million and \$0.9 million, respectively, related to the disposition of Kaplan University (KU) in 2018.

13. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The other comprehensive income (loss) consists of the following components:

(in thousands)	Three Months Ended March 31					
	2023			2022		
	Before-Tax Amount	Income Tax	After-Tax Amount	Before-Tax Amount	Income Tax	After-Tax Amount
Foreign currency translation adjustments:						
Translation adjustments arising during the period	\$ 8,994	\$ —	\$ 8,994	\$ (1,738)	\$ —	\$ (1,738)
Pension and other postretirement plans:						
Amortization of net prior service cost included in net income	409	(105)	304	716	(184)	532
Amortization of net actuarial gain included in net income	(10,766)	2,769	(7,997)	(17,774)	4,581	(13,193)
	(10,357)	2,664	(7,693)	(17,058)	4,397	(12,661)
Cash flow hedges:						
(Loss) gain for the period	(930)	214	(716)	1,642	(378)	1,264
Other Comprehensive Income (Loss)	\$ (2,293)	\$ 2,878	\$ 585	\$ (17,154)	\$ 4,019	\$ (13,135)

The accumulated balances related to each component of other comprehensive income (loss) are as follows:

(in thousands, net of taxes)	Cumulative Foreign Currency Adjustment	Unrealized Gain on Pensions and Other Postretirement Plans	Cash Flow Hedges	Accumulated Other Comprehensive Income
Balance as of December 31, 2022	\$ (54,638)	\$ 388,591	\$ 2,198	\$ 336,151
Other comprehensive income (loss) before reclassifications	8,994	—	(542)	8,452
Net amount reclassified from accumulated other comprehensive income	—	(7,693)	(174)	(7,867)
Net other comprehensive income (loss)	8,994	(7,693)	(716)	585
Balance as of March 31, 2023	\$ (45,644)	\$ 380,898	\$ 1,482	\$ 336,736

The amounts and line items of reclassifications out of Accumulated Other Comprehensive Income (Loss) are as follows:

(in thousands)	Three Months Ended March 31		Affected Line Item in the Condensed Consolidated Statements of Operations
	2023	2022	
Pension and Other Postretirement Plans:			
Amortization of net prior service cost	\$ 409	\$ 716	(1)
Amortization of net actuarial gain	(10,766)	(17,774)	(1)
	(10,357)	(17,058)	Before tax
	2,664	4,397	Provision for Income Taxes
	(7,693)	(12,661)	Net of Tax
Cash Flow Hedges	(174)	184	Interest expense
Total reclassification for the period	\$ (7,867)	\$ (12,477)	Net of Tax

(1) These accumulated other comprehensive income components are included in the computation of net periodic pension and postretirement plan cost (see Note 11) and are included in non-operating pension and postretirement benefit income in the Company's Condensed Consolidated Statements of Operations.

14. CONTINGENCIES

Litigation, Legal and Other Matters. The Company and its subsidiaries are subject to complaints and administrative proceedings and are defendants in various civil lawsuits that have arisen in the ordinary course of their businesses, including contract disputes; actions alleging negligence, libel, defamation and invasion of privacy; trademark, copyright and patent infringement; violations of employment laws and applicable wage and hour laws; and statutory or common law claims involving current and former students and employees. Although the outcomes of the legal claims and proceedings against the Company cannot be predicted with certainty, based on currently available information, management believes that there are no existing claims or proceedings that are likely to have a material effect on the Company's business, financial condition, results of operations or cash flows. However, based on currently available information, management believes it is reasonably possible that future losses from existing and threatened legal, regulatory and other proceedings in excess of the amounts recorded could reach approximately \$15 million.

In 2015, Kaplan sold substantially all of the assets of the KHE Campuses (KHEC) business to Education Corporation of America. In 2018, certain subsidiaries of Kaplan contributed the institutional assets and operations of KU to a new university: an Indiana nonprofit, public-benefit corporation affiliated with Purdue University, known as Purdue University Global. Kaplan could be held liable to the current owners of KU and the KHEC schools related to the pre-sale conduct of the schools, and the pre-sale conduct of the schools has been and could be the subject of future compliance reviews, regulatory proceedings or lawsuits that could result in monetary liabilities or fines or other sanctions. On May 6, 2021, Kaplan received a notice from the Department of Education (ED) that it would be conducting a fact-finding process pursuant to the borrower defense to repayment (BDTR) regulations to determine the validity of more than 800 BDTR claims and a request for documents related to several of Kaplan's previously owned schools. Beginning in July 2021, Kaplan started receiving the claims and related information requests. In total, Kaplan received 1,449 borrower defense applications that seek discharge of approximately \$35 million in loans, excluding interest. Most claims received are from former KU students. The ED's process for adjudicating these claims is subject to the borrower defense regulations including those finalized in 2022 and effective July 1, 2023, but it is not clear to what extent the ED will exclude claims based on the underlying statutes of limitations, evidence provided by Kaplan, or any prior investigation related to schools attended by the student applicants. Compared to the previous rule, the new rule in part, expands actions that can give rise to claims for discharge; provides that the borrower's claim will be presumed true if the institution does not provide any responsive evidence; provides an easier process for group claims; and relies on current program review penalty hearing processes for

discharge recoupment. Under the rule, the recoupment process applies only to loans first disbursed after July 1, 2023; however, the discharge process and standards apply to any pending application regardless of loan date. Kaplan believes it has defenses that would bar any student discharge or school liability including that the claims are barred by the applicable statute of limitations, unproven, incomplete and fail to meet regulatory filing requirements. Kaplan expects to vigorously defend any attempt by the ED to hold Kaplan liable for any ultimate student discharges and has responded to all claims with documentary and narrative evidence to refute the allegations, demonstrate their lack of merit, and support the denial of all such claims by the ED. If the claims are successful, the ED may seek reimbursement for the amount discharged from Kaplan. If the ED initiates a reimbursement action against Kaplan following approval of former students' BDTR applications, Kaplan may be subject to significant liability. In November 2022 the Northern District of California approved the settlement agreement in the lawsuit *Sweet v. Cardona*. The Plaintiffs in that lawsuit claimed that the ED failed to properly consider and decide pending BDTR claims. As part of the settlement, the ED agreed to discharge loans of borrowers who attended 150 specific schools, including all schools formerly owned by Kaplan, and who had BDTR claims pending as of the June 22, 2022 settlement execution date. This discharge will likely cover each of the 1,449 applications the ED sent to Kaplan and to which Kaplan responded. The ED and the Court made clear that these discharges as part of a settlement are not determinations that the pending BDTR claims are valid and the fact of the settlement discharge cannot be used as evidence of any determination of wrongdoing by the institutions. However, despite the fact that the loans are discharged per the settlement, the ED may still attempt to separately adjudicate the associated BDTR claims and follow the regulatory process for seeking recoupment from the institutions for such claims. On October 27, 2022, the ED released a final rule that among other things, changes the Title IV definition of "Nonprofit" institution to generally exclude from that definition any institution that is an obligor on a debt owed to a former owner of the institution or that maintains a revenue-based service agreement with a former owner of the institution. The final rule has an effective date of July 1, 2023 and could subject Purdue Global to additional regulatory requirements.

15. BUSINESS SEGMENTS

The Company has seven reportable segments: Kaplan International, Kaplan Higher Education, Kaplan Supplemental Education, Television Broadcasting, Manufacturing, Healthcare and Automotive.

The following tables summarize the financial information related to each of the Company's business segments:

(in thousands)	Three Months Ended March 31	
	2023	2022
Operating Revenues		
Education	\$ 378,041	\$ 358,012
Television broadcasting	112,877	123,419
Manufacturing	114,584	115,940
Healthcare	102,059	67,255
Automotive	232,561	150,967
Other businesses	92,008	99,617
Corporate office	—	—
Intersegment elimination	(584)	(489)
	<u>\$ 1,031,546</u>	<u>\$ 914,721</u>
Income (Loss) from Operations before Amortization of Intangible Assets and Impairment of Long-Lived Assets		
Education	\$ 27,456	\$ 24,558
Television broadcasting	29,945	41,258
Manufacturing	12,190	15,138
Healthcare	3,890	7,288
Automotive	10,843	7,078
Other businesses	(27,906)	(27,430)
Corporate office	(14,073)	(13,007)
	<u>\$ 42,345</u>	<u>\$ 54,883</u>
Amortization of Intangible Assets and Impairment of Long-Lived Assets		
Education	\$ 4,416	\$ 4,146
Television broadcasting	1,362	1,360
Manufacturing	4,862	5,163
Healthcare	954	929
Automotive	—	—
Other businesses	3,095	3,314
Corporate office	—	—
	<u>\$ 14,689</u>	<u>\$ 14,912</u>
Income (Loss) from Operations		
Education	\$ 23,040	\$ 20,412
Television broadcasting	28,583	39,898
Manufacturing	7,328	9,975
Healthcare	2,936	6,359
Automotive	10,843	7,078
Other businesses	(31,001)	(30,744)
Corporate office	(14,073)	(13,007)
	<u>\$ 27,656</u>	<u>\$ 39,971</u>
Equity in Earnings of Affiliates, Net	4,661	2,604
Interest Expense, Net	(13,090)	(10,702)
Non-Operating Pension and Postretirement Benefit Income, Net	31,845	50,505
Gain on Marketable Equity Securities, Net	18,022	46,912
Other Income, Net	3,083	2,876
Income Before Income Taxes	<u>\$ 72,177</u>	<u>\$ 132,166</u>

(in thousands)	Three Months Ended March 31	
	2023	2022
Depreciation of Property, Plant and Equipment		
Education	\$ 8,968	\$ 8,505
Television broadcasting	3,036	3,289
Manufacturing	2,282	2,428
Healthcare	1,104	410
Automotive	1,113	777
Other businesses	3,369	3,915
Corporate office	153	151
	\$ 20,025	\$ 19,475
Pension Service Cost		
Education	\$ 2,198	\$ 2,536
Television broadcasting	860	926
Manufacturing	275	328
Healthcare	4,357	186
Automotive	5	6
Other businesses	572	520
Corporate office	976	1,529
	\$ 9,243	\$ 6,031

Asset information for the Company's business segments is as follows:

(in thousands)	As of	
	March 31, 2023	December 31, 2022
Identifiable Assets		
Education	\$ 1,952,768	\$ 1,987,042
Television broadcasting	424,185	431,084
Manufacturing	488,192	486,487
Healthcare	255,542	249,845
Automotive	440,036	427,221
Other businesses	445,409	475,583
Corporate office	66,087	70,567
	\$ 4,072,219	\$ 4,127,829
Investments in Marketable Equity Securities	603,543	609,921
Investments in Affiliates	194,960	186,419
Prepaid Pension Cost	1,671,477	1,658,046
Total Assets	\$ 6,542,199	\$ 6,582,215

The Company's education division comprises the following operating segments:

(in thousands)	Three Months Ended March 31	
	2023	2022
Operating Revenues		
Kaplan international	\$ 227,076	\$ 204,513
Higher education	76,345	75,808
Supplemental education	73,587	76,304
Kaplan corporate and other	5,375	4,345
Intersegment elimination	(4,342)	(2,958)
	<u>\$ 378,041</u>	<u>\$ 358,012</u>
Income (Loss) From Operations before Amortization of Intangible Assets and Impairment of Long-Lived Assets		
Kaplan international	\$ 21,301	\$ 20,564
Higher education	6,661	5,037
Supplemental education	3,751	3,371
Kaplan corporate and other	(4,416)	(4,433)
Intersegment elimination	159	19
	<u>\$ 27,456</u>	<u>\$ 24,558</u>
Amortization of Intangible Assets	\$ 3,939	\$ 4,146
Impairment of Long-Lived Assets	\$ 477	\$ —
Income (Loss) from Operations		
Kaplan international	\$ 21,301	\$ 20,564
Higher education	6,661	5,037
Supplemental education	3,751	3,371
Kaplan corporate and other	(8,832)	(8,579)
Intersegment elimination	159	19
	<u>\$ 23,040</u>	<u>\$ 20,412</u>
Depreciation of Property, Plant and Equipment		
Kaplan international	\$ 6,330	\$ 5,755
Higher education	996	1,020
Supplemental education	1,509	1,639
Kaplan corporate and other	133	91
	<u>\$ 8,968</u>	<u>\$ 8,505</u>
Pension Service Cost		
Kaplan international	\$ 80	\$ 72
Higher education	922	1,081
Supplemental education	1,024	1,182
Kaplan corporate and other	172	201
	<u>\$ 2,198</u>	<u>\$ 2,536</u>

Asset information for the Company's education division is as follows:

(in thousands)	As of	
	March 31, 2023	December 31, 2022
Identifiable Assets		
Kaplan international	\$ 1,449,063	\$ 1,479,833
Higher education	182,720	174,033
Supplemental education	256,050	268,499
Kaplan corporate and other	64,935	64,677
	<u>\$ 1,952,768</u>	<u>\$ 1,987,042</u>

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

This analysis should be read in conjunction with the condensed consolidated financial statements and the notes thereto.

Results of Operations

The Company reported net income attributable to common shares of \$52.3 million (\$10.88 per share) for the first quarter of 2023, compared to \$95.6 million (\$19.45 per share) for the first quarter of 2022.

Items included in the Company's net income for the first quarter of 2023:

- \$4.1 million in expenses related to non-operating Separation Incentive Programs (SIPs) at other businesses (after-tax impact of \$3.1 million, or \$0.64 per share);
- \$18.0 million in net gains on marketable equity securities (after-tax impact of \$13.3 million, or \$2.76 per share);
- \$1.8 million in net earnings of affiliates whose operations are not managed by the Company (after-tax impact of \$1.3 million, or \$0.28 per share);
- non-operating gain of \$2.6 million from the write-up and sale of a cost method investment (after-tax impact of \$2.0 million, or \$0.41 per share); and
- \$1.5 million in interest expense to adjust the fair value of the mandatorily redeemable noncontrolling interest (after-tax impact of \$1.4 million, or \$0.29 per share).

Items included in the Company's net income for the first quarter of 2022:

- \$46.9 million in net gains on marketable equity securities (after-tax impact of \$34.7 million, or \$7.05 per share);
- \$0.4 million in net earnings of affiliates whose operations are not managed by the Company (after-tax impact of \$0.3 million, or \$0.05 per share);
- Non-operating gain of \$1.7 million from sales of an equity method and cost method investment (after-tax impact of \$1.3 million, or \$0.26 per share); and
- \$3.4 million in interest expense to adjust the fair value of the mandatorily redeemable noncontrolling interest (after-tax impact of \$3.3 million, or \$0.67 per share).

Revenue for the first quarter of 2023 was \$1,031.5 million, up 13% from \$914.7 million in the first quarter of 2022. Revenues increased at education, healthcare and automotive, partially offset by declines at television broadcasting, manufacturing and other businesses. The Company reported operating income of \$27.7 million for the first quarter of 2023, compared to \$40.0 million for the first quarter of 2022. Operating results declined at television broadcasting, manufacturing, healthcare and other businesses, partially offset by increases at education and automotive.

Division Results

Education

Education division revenue totaled \$378.0 million for the first quarter of 2023, up 6% from \$358.0 million for the same period of 2022. Kaplan reported operating income of \$23.0 million for the first quarter of 2023, compared to \$20.4 million for the first quarter of 2022.

A summary of Kaplan's operating results is as follows:

(in thousands)	Three Months Ended		% Change
	March 31		
	2023	2022	
Revenue			
Kaplan international	\$ 227,076	\$ 204,513	11
Higher education	76,345	75,808	1
Supplemental education	73,587	76,304	(4)
Kaplan corporate and other	5,375	4,345	24
Intersegment elimination	(4,342)	(2,958)	—
	<u>\$ 378,041</u>	<u>\$ 358,012</u>	6
Operating Income (Loss)			
Kaplan international	\$ 21,301	\$ 20,564	4
Higher education	6,661	5,037	32
Supplemental education	3,751	3,371	11
Kaplan corporate and other	(4,416)	(4,433)	0
Amortization of intangible assets	(3,939)	(4,146)	5
Impairment of long-lived assets	(477)	—	—
Intersegment elimination	159	19	—
	<u>\$ 23,040</u>	<u>\$ 20,412</u>	13

Kaplan International includes postsecondary education, professional training and language training businesses largely outside the United States. Kaplan International revenue increased 11% for the first quarter of 2023 (19% on a constant currency basis). The increase is due largely to growth at Pathways, Languages and Australia, partially offset by a decline at Singapore. Kaplan International reported operating income of \$21.3 million in the first quarter of 2023, compared to \$20.6 million in the first quarter of 2022. The improved results are due largely to improved results at Pathways and Australia, and a reduction in losses at Languages, partially offset by declines at UK Professional and Singapore.

Higher Education includes the results of Kaplan as a service provider to higher education institutions. In the first quarter of 2023, Higher Education revenue and operating results were higher due to a modest increase in the Purdue Global fee recorded. For the first quarter of 2023 and 2022, Kaplan recorded a portion of the fee with Purdue Global based on an assessment of its collectability under the TOSA. Enrollments at Purdue Global for the first quarter of 2023 increased 4% compared to the first quarter of 2022. The Company will continue to assess the collectability of the fee with Purdue Global on a quarterly basis to make a determination as to whether to record all or part of the fee in the future and whether to make adjustments to fee amounts recognized in earlier periods.

As of March 31, 2023, Kaplan had a total outstanding accounts receivable balance of \$100.9 million from Purdue Global related to amounts due for reimbursements for services, fees earned and a deferred fee. Included in this total, Kaplan has a \$19.5 million long-term receivable balance due from Purdue Global at March 31, 2023, related to the advance of \$20 million during the initial KU Transaction.

Supplemental Education includes Kaplan's standardized test preparation programs and domestic professional and other continuing education businesses. Supplemental Education revenue declined 4% for the first quarter of 2023 due largely to declines in retail comprehensive test preparation demand. Overall, demand for graduate and pre-college test preparation programs has declined due to the strength of U.S. employment markets and the decline in test-takers, while demand for professional programs remained stable. Operating results improved in the first quarter of 2023 due to savings from reduced headcount, partially offset by lower revenues.

Kaplan corporate and other represents unallocated expenses of Kaplan, Inc.'s corporate office, other minor businesses and certain shared activities.

Television Broadcasting

A summary of television broadcasting's operating results is as follows:

(in thousands)	Three Months Ended		% Change
	March 31		
	2023	2022	
Revenue	\$ 112,877	\$ 123,419	(9)
Operating Income	28,583	39,898	(28)

Graham Media Group, Inc. owns seven television stations located in Houston, TX; Detroit, MI; Orlando, FL; San Antonio, TX; Jacksonville, FL; and Roanoke, VA, as well as SocialNewsDesk, a provider of social media

management tools designed to connect newsrooms with their users. Revenue at the television broadcasting division decreased 9% to \$112.9 million in the first quarter of 2023, from \$123.4 million in the same period of 2022. The revenue decline is due primarily to winter Olympics and Super Bowl advertising at the Company's NBC affiliates in the first quarter of 2022, as well as declines in retransmission, digital and political advertising revenues. Operating income for the first quarter of 2023 declined 28% to \$28.6 million, from \$39.9 million in the same period of 2022, due to reduced revenues and higher network fees. While per subscriber rates from cable, satellite and OTT providers have grown, overall cable and satellite subscribers are down due to cord cutting, resulting in retransmission revenue net of network fees in 2023 expected to be similar compared with 2022.

Manufacturing

A summary of manufacturing's operating results is as follows:

(in thousands)	Three Months Ended		% Change
	March 31		
	2023	2022	
Revenue	\$ 114,584	\$ 115,940	(1)
Operating Income	7,328	9,975	(27)

Manufacturing includes four businesses: Hoover, a supplier of pressure impregnated kiln-dried lumber and plywood products for fire retardant and preservative applications; Dekko, a manufacturer of electrical workspace solutions, architectural lighting and electrical components and assemblies; Joyce/Dayton, a manufacturer of screw jacks and other linear motion systems; and Forney, a global supplier of products and systems that control and monitor combustion processes in electric utility and industrial applications.

Manufacturing revenues decreased 1% in the first quarter of 2023. The revenue decline is due primarily to lower revenues at Forney and Dekko, partially offset by increased revenues at Joyce and Hoover. Revenues grew at Hoover due to increased product demand, partially offset by significantly lower wood prices. Overall, Hoover results included wood gains on inventory sales in the first quarter of 2023 and 2022, with gains in the first quarter of 2023 substantially lower than the prior year. Manufacturing operating results declined in the first quarter of 2023, due primarily to declines at Hoover, Dekko and Forney, partially offset by an increase at Joyce. Excluding the impact of wood gains, Hoover and the manufacturing segment operating results improved in the first quarter of 2023.

Healthcare

A summary of healthcare's operating results is as follows:

(in thousands)	Three Months Ended		% Change
	March 31		
	2023	2022	
Revenue	\$ 102,059	\$ 67,255	52
Operating Income	2,936	6,359	(54)

Graham Healthcare Group (GHG) provides home health and hospice services in seven states. GHG also provides other healthcare services, including nursing care and prescription services for patients receiving in-home infusion treatments through its 76.5% interest in CSI Pharmacy Holdings Company, LLC (CSI). In May 2022, GHG acquired two small businesses, one of which expanded GHG's home health operations into Kansas and Missouri. In July 2022, GHG acquired a 100% interest in a multi-state provider of Applied Behavior Analysis clinics and in August 2022, GHG acquired two small businesses, which expanded GHG's hospice services into Missouri and Ohio. Healthcare revenues increased 52% for the first quarter of 2023, largely due to significant growth at CSI and from businesses acquired in the first quarter of 2023 and in 2022, along with growth in home health and hospice services.

In 2022, GHG implemented a new pension credit retention program in order to improve employee retention and utilize the Company's surplus pension assets. The GHG pilot program offers a pension credit up to \$50,000 per employee, cliff vested after three years of continuous employment for certain existing employees and new employees hired from January 1, 2022 through December 31, 2024. GHG recorded pension expense of \$4.2 million related to this program in the first quarter of 2023.

The decline in GHG operating results in the first quarter of 2023 is due to an increase in pension expense related to the new GHG pension credit retention program and an increase in net losses from newly acquired businesses. Excluding pension expense and net losses from newly acquired businesses, GHG operating results increased in the first quarter of 2023 due to improved results in home health and hospice.

The Company also holds interests in four home health and hospice joint ventures managed by GHG, whose results are included in equity in earnings of affiliates in the Company's Condensed Consolidated Statements of Operations. The Company recorded equity in earnings of \$2.7 million and \$1.9 million for the first quarter of 2023 and 2022, respectively, from these joint ventures. During the first quarter of 2022, GHG, through its Residential Home Health Illinois and Residential Hospice Illinois affiliates, acquired an interest in the home health and hospice assets of NorthShore University HealthSystem, an integrated healthcare delivery system serving patients throughout the Chicago, IL area. The transaction resulted in a decrease to GHG's interest in Residential Hospice Illinois and a \$0.6 million non-operating gain was recorded in the first quarter of 2022 related to the change in interest.

Automotive

A summary of automotive's operating results is as follows:

(in thousands)	Three Months Ended		% Change
	March 31		
	2023	2022	
Revenue	\$ 232,561	\$ 150,967	54
Operating Income	10,843	7,078	53

Automotive includes six automotive dealerships in the Washington, D.C. metropolitan area: Ourisman Lexus of Rockville, Ourisman Honda of Tysons Corner, Ourisman Jeep Bethesda, Ourisman Ford of Manassas and Ourisman Toyota of Woodbridge and Ourisman Chrysler-Dodge-Jeep-Ram (CDJR) of Woodbridge, which were acquired on July 5, 2022 from the Lustine Automotive Group. Christopher J. Ourisman, a member of the Ourisman Automotive Group family of dealerships, and his team of industry professionals operate and manage the dealerships; the Company holds a 90% stake.

Revenues for the first quarter of 2023 increased significantly due to the acquisitions of the Toyota and CDJR dealerships and sales growth at the Ford, Honda and Lexus dealerships, partially offset by lower revenue at the Jeep dealership due to a decline in new vehicle sales. Additionally, all of the dealerships reported sales growth for services and parts. Operating results for the first quarter of 2023 improved significantly due largely to the Toyota and CDJR acquisitions, and improved results at the Lexus, Ford and Honda dealerships, partially offset by a decline at the Jeep dealership due to lower revenues and margins.

Other Businesses

A summary of revenue by category for other businesses:

(in thousands)	Three Months Ended		% Change
	March 31		
	2023	2022	
Operating Revenues			
Retail ⁽¹⁾	\$ 32,397	\$ 43,089	(25)
Media ⁽²⁾	25,404	30,790	(17)
Specialty ⁽³⁾	34,207	25,738	33
	\$ 92,008	\$ 99,617	(8)

(1) Includes Leaf Marketplace and Framebridge

(2) Includes Leaf Media, Code3, Slate, Foreign Policy, Pinna and City Cast

(3) Includes Clyde's Restaurant Group, Decile and CyberVista

Overall, revenue from other businesses declined 8% in the first quarter of 2023. Retail revenue declined due to significantly lower revenue at Leaf Marketplace, and a modest decline at Framebridge; Media revenue declined due to lower revenue at Leaf Media and Code3, partially offset by revenue growth at Slate and Foreign Policy; and Specialty revenue increased due to significant revenue growth at Clyde's Restaurant Group (CRG).

Overall, operating results at other businesses were down slightly in the first quarter of 2023 due primarily to increased losses at Leaf, Framebridge, Code3 and City Cast, partially offset by improved results at CRG, Slate, Foreign Policy, Decile and Pinna.

Leaf Group

Leaf Group Ltd. (Leaf) is a consumer internet company, headquartered in Santa Monica, CA, that builds enduring, creator-driven brands that reach passionate audiences in large and growing lifestyle categories, including fitness and wellness (Well+Good, Livestrong.com and MyPlate App), and home, art and design (Saatchi Art, Society6 and

Hunker). Leaf has three major operating divisions: Society6 Group and Saatchi Art Group (Marketplace businesses) and the Media Group.

Revenue for Society6 Group and the Media Group declined substantially in the first quarter of 2023, while Saatchi Art Group reported modest revenue growth. Revenue decreases at Society6 Group are due to declines in traffic, conversion rates and related sales for both direct to consumer and business to business categories, partly from a reduction in marketing spend; revenue declines at the Media Group are due to reduced traffic and the soft digital advertising market for both direct and programmatic categories. Overall, Leaf reported significant operating losses in each of the first quarters of 2023 and 2022, with an increase in operating losses in the first quarter of 2023. In the first quarter of 2023, Leaf implemented a SIP to reduce the number of employees, which is being funded by the assets of the Company's pension plan; \$2.9 million in related non-operating pension expense was recorded in the first quarter of 2023.

Clyde's Restaurant Group

CRG owns and operates 11 restaurants and entertainment venues in the Washington, D.C. metropolitan area, including Old Ebbitt Grill and The Hamilton. CRG reported an operating profit for the first quarter of 2023, compared with an operating loss in the first quarter of 2022. Both revenues and operating results improved significantly in the first quarter of 2023, due to strong guest traffic and the absence of any significant adverse impact from the COVID-19 pandemic.

Framebridge

Framebridge is a custom framing service company, headquartered in Washington, D.C., with 19 retail locations in the Washington, D.C., New York City, Atlanta, GA, Philadelphia, PA, Boston, MA and Chicago, IL areas and two manufacturing facilities in Kentucky and New Jersey. Framebridge is exploring opportunities for further store expansion for the remainder of the year. Revenues declined slightly in the first quarter of 2023 as Framebridge worked through a significant backlog of orders in the first quarter of 2022 that had built-up in the fourth quarter of 2021. In the fourth quarter of 2022, Framebridge successfully managed their production operations for timely completion of holiday orders without a significant backlog of orders going into the first quarter of 2023. The revenue decline was partially offset by increased retail revenue from same-store sales growth and operating additional retail stores compared to the same period in 2022. Framebridge is an investment stage business and reported significant operating losses in the first quarters of 2023 and 2022.

Other

Other businesses also include Code3, a performance marketing agency focused on driving performance for brands through three core elements of digital success: media, creative and commerce; Slate and Foreign Policy, which publish online and print magazines and websites; and three investment stage businesses, Decile, Pinna and City Cast. Slate, Foreign Policy and City Cast reported revenue increases in the first quarter of 2023. Losses from each of these six businesses in the first quarter of 2023 adversely affected operating results. Other businesses also included CyberVista, which was sold in October 2022 when the Company announced a strategic merger of CyberVista and CyberWire, a B2B cybersecurity audio network to form a new parent company, N2K Networks. The Company's investment in N2K Networks is reported as an equity method investment.

In the first quarter of 2023, Code3 implemented a SIP to reduce the number of employees, which is being funded by the assets of the Company's pension plan; \$1.2 million in related non-operating pension expense was recorded in the first quarter of 2023.

Corporate Office

Corporate office includes the expenses of the Company's corporate office and certain continuing obligations related to prior business dispositions.

Equity in Earnings of Affiliates

At March 31, 2023, the Company held an approximate 18% interest in Intersection Holdings, LLC (Intersection), a company that provides digital marketing and advertising services and products for cities, transit systems, airports, and other public and private spaces; and a 49.9% interest in N2K Networks on a fully diluted basis. The Company also holds interests in several other affiliates, including a number of home health and hospice joint ventures managed by GHG and two joint ventures managed by Kaplan. Overall, the Company recorded equity in earnings of affiliates of \$4.7 million for the first quarter of 2023, compared to \$2.6 million for the first quarter of 2022. These amounts include \$1.8 million and \$0.4 million in net earnings for the first quarter of 2023 and 2022, respectively, from affiliates whose operations are not managed by the Company.

Net Interest Expense and Related Balances

The Company incurred net interest expense of \$13.1 million for the first quarter of 2023, compared to \$10.7 million for the first quarter of 2022. The Company recorded interest expense of \$1.5 million in the first quarter of 2023 and \$3.4 million in the first quarter of 2022 to adjust the fair value of the mandatorily redeemable noncontrolling interest at GHG. The increase in net interest expense relates primarily to increased debt at the automotive dealerships and higher interest rates on the Company's variable debt.

At March 31, 2023, the Company had \$691.1 million in borrowings outstanding at an average interest rate of 5.9%, and cash, marketable equity securities and other investments of \$771.1 million. At March 31, 2023, the Company had \$168.8 million outstanding on its \$300 million revolving credit facility.

Non-operating Pension and Postretirement Benefit Income, net

The Company recorded net non-operating pension and postretirement benefit income of \$31.8 million for the first quarter of 2023, compared to \$50.5 million for the first quarter of 2022.

In the first quarter of 2023, the Company recorded \$4.1 million in expenses related to non-operating SIPs at other businesses.

Gain on Marketable Equity Securities, net

Overall, the Company recognized \$18.0 million and \$46.9 million in net gains on marketable equity securities in the first quarter of 2023 and 2022, respectively.

Other Non-Operating Income

The Company recorded total other non-operating income, net, of \$3.1 million for the first quarter of 2023, compared to \$2.9 million for the first quarter of 2022. The 2023 amounts included a \$1.8 million fair value increase on a cost method investment; \$1.0 million in gains related to the sale of businesses and contingent consideration; a \$0.8 million gain on sale of a cost method investment, and other items; partially offset by \$1.5 million in foreign currency losses. The 2022 amounts included a \$1.1 million gain on sale of a cost method investment; \$0.9 million in gains related to the sale of businesses and contingent consideration; a \$0.6 million gain on sale of an equity affiliate, and other items; partially offset by \$1.0 million in foreign currency losses.

Provision for Income Taxes

The Company's effective tax rate for the first quarter of 2023 and 2022 was 26.6% and 26.9%, respectively.

Earnings Per Share

The calculation of diluted earnings per share for the first quarter of 2023 was based on 4,775,586 weighted average shares outstanding, compared to 4,885,212 for the first quarter of 2022. At March 31, 2023, there were 4,763,614 shares outstanding. On September 10, 2020, the Board of Directors authorized the Company to acquire up to 500,000 shares of its Class B common stock; the Company has remaining authorization for 109,626 shares as of March 31, 2023.

Financial Condition: Liquidity and Capital Resources

The Company considers the following when assessing its liquidity and capital resources:

(In thousands)	As of	
	March 31, 2023	December 31, 2022
Cash and cash equivalents	\$ 123,469	\$ 169,319
Restricted cash	31,253	21,113
Investments in marketable equity securities and other investments	616,379	622,408
Total debt	691,119	726,360

Cash generated by operations is the Company's primary source of liquidity. The Company maintains investments in a portfolio of marketable equity securities, which is considered when assessing the Company's sources of liquidity. An additional source of liquidity includes the undrawn portion of the Company's \$300 million revolving credit facility, amounting to \$131.2 million at March 31, 2023.

During the first three months of 2023, the Company's cash and cash equivalents decreased by \$45.9 million, due to net repayments of borrowings, share repurchases, capital expenditures, additional investments in marketable equity securities and equity affiliates, and dividend payments, which was offset by cash generated from operations and the

proceeds from the sale of marketable equity securities. In the first three months of 2023, the Company's borrowings decreased by \$35.2 million, primarily due to repayments under the revolving credit facility.

As of March 31, 2023 and December 31, 2022, the Company had money market investments of \$2.2 million and \$7.7 million, that are included in cash and cash equivalents. At March 31, 2023, the Company held approximately \$100 million in cash and cash equivalents in businesses domiciled outside the U.S., of which approximately \$7 million is not available for immediate use in operations or for distribution. Additionally, Kaplan's business operations outside the U.S. retain cash balances to support ongoing working capital requirements, capital expenditures, and regulatory requirements. As a result, the Company considers a significant portion of the cash and cash equivalents balance held outside the U.S. as not readily available for use in U.S. operations.

At March 31, 2023, the fair value of the Company's investments in marketable equity securities was \$603.5 million, which includes investments in the common stock of four publicly traded companies. During the first three months of 2023, the Company purchased \$4.6 million of marketable equity securities and sold marketable equity securities that generated proceeds of \$29.0 million. At March 31, 2023, the net unrealized gain related to the Company's investments totaled \$369.4 million.

The Company had working capital of \$514.3 million and \$534.1 million at March 31, 2023 and December 31, 2022, respectively. The Company maintains working capital levels consistent with its underlying business requirements and consistently generates cash from operations in excess of required interest or principal payments.

At March 31, 2023 and December 31, 2022, the Company had borrowings outstanding of \$691.1 million and \$726.4 million, respectively. The Company's borrowings at March 31, 2023 were mostly from \$400.0 million of 5.75% unsecured notes due June 1, 2026, \$168.8 million in outstanding borrowings under the Company's revolving credit facility and commercial notes of \$113.0 million at the automotive subsidiary. The Company's borrowings at December 31, 2022 were mostly from \$400.0 million of 5.75% unsecured notes due June 1, 2026, \$200.2 million in outstanding borrowings under the Company's revolving credit facility and commercial notes of \$116.6 million at the automotive subsidiary. The interest on the \$400.0 million of 5.75% unsecured notes is payable semiannually on June 1 and December 1.

During the three months ended March 31, 2023 and 2022, the Company had average borrowings outstanding of approximately \$735.0 million and \$665.0 million, respectively, at average annual interest rates of approximately 5.8% and 4.3%, respectively. During the three months ended March 31, 2023 and 2022, the Company incurred net interest expense of \$13.1 million and \$10.7 million, respectively.

On April 4, 2023, Standard & Poor's affirmed the Company's credit rating and maintained the outlook as Stable. On August 30, 2022, Moody's affirmed the Company's credit rating and maintained the outlook as Stable.

The Company's current credit ratings are as follows:

	Moody's	Standard & Poor's
Long-term	Ba1	BB
Outlook	Stable	Stable

The Company expects to fund its estimated capital needs primarily through existing cash balances and internally generated funds, and, as needed, from borrowings under its revolving credit facility. As of March 31, 2023, the Company had \$168.8 million outstanding under the \$300 million revolving credit facility. In management's opinion, the Company will have sufficient financial resources to meet its business requirements in the next 12 months, including working capital requirements, capital expenditures, interest payments, potential acquisitions and strategic investments, dividends and stock repurchases.

In summary, the Company's cash flows for each period were as follows:

(In thousands)	Three Months Ended March 31	
	2023	2022
Net cash provided by operating activities	\$ 22,811	\$ 44,892
Net cash (used in) provided by investing activities	(1,954)	19,523
Net cash used in financing activities	(57,802)	(64,362)
Effect of currency exchange rate change	1,235	(208)
Net decrease in cash and cash equivalents and restricted cash	\$ (35,710)	\$ (155)

Operating Activities. Cash provided by operating activities is net income adjusted for certain non-cash items and changes in assets and liabilities. The Company's net cash flow provided by operating activities were as follows:

(In thousands)	Three Months Ended March 31	
	2023	2022
Net Income	\$ 52,977	\$ 96,566
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, amortization and long-lived asset impairments	34,714	34,387
Amortization of lease right-of-use asset	16,492	17,569
Net pension benefit and special separation benefit expense	(23,162)	(44,782)
Other non-cash activities	(24,778)	(24,518)
Change in operating assets and liabilities	(33,432)	(34,330)
Net Cash Provided by Operating Activities	\$ 22,811	\$ 44,892

Net cash provided by operating activities consists primarily of cash receipts from customers, less disbursements for costs, benefits, income taxes, interest and other expenses.

For the first three months of 2023 compared to the first three months of 2022, the decrease in net cash provided by operating activities is primarily driven by lower net income, net of non-cash adjustments.

Investing Activities. The Company's net cash flow (used in) provided by investing activities were as follows:

(In thousands)	Three Months Ended March 31	
	2023	2022
Net proceeds from sales of marketable equity securities	\$ 22,866	\$ 55,731
Purchases of property, plant and equipment	(22,554)	(14,207)
Investments in equity affiliates, cost method and other investments	(4,735)	(23,698)
Other	2,469	1,697
Net Cash (Used in) Provided by Investing Activities	\$ (1,954)	\$ 19,523

Net proceeds from sale of marketable equity securities. During the first three months of 2023 and 2022, the Company sold marketable equity securities that generated proceeds of \$29.0 million and \$55.7 million, respectively. The Company purchased \$4.6 million of marketable equity securities during the first three months of 2023.

Capital Expenditures. The amounts reflected in the Company's Condensed Consolidated Statements of Cash Flows are based on cash payments made during the relevant periods, whereas the Company's capital expenditures for the first three months of 2023 of \$22.3 million include assets acquired during the quarter. The Company estimates that its capital expenditures will be in the range of \$90 million to \$100 million in 2023.

Investment in equity affiliates. During the first three months of 2022, GHG invested an additional \$18.5 million in two affiliates to fund their acquisition of an interest in a health system in Illinois.

Financing Activities. The Company's net cash flow used in financing activities were as follows:

(In thousands)	Three Months Ended March 31	
	2023	2022
Net payments under revolving credit facility	\$ (33,000)	\$ (37,000)
Repayments of borrowings	(3,999)	(977)
Net proceeds from (repayments of) vehicle floor plan payable	7,196	(3,889)
Common shares repurchased	(23,439)	(9,527)
Dividends paid	(7,910)	(7,749)
Other	3,350	(5,220)
Net Cash Used in Financing Activities	\$ (57,802)	\$ (64,362)

Borrowings and Vehicle Floor Plan Payable. In the first three months of 2023 and 2022, the Company made repayments on the \$300 million revolving credit facility. In the first three months of 2023 and 2022, the Company used vehicle floor plan financing to fund the purchase of new, used and service loaner vehicles at its automotive division. The proceeds from (repayments of) the vehicle floor plan payable fluctuates with changes in the amount of vehicle inventory held by the automotive dealerships.

Common Stock Repurchases. During the first three months of 2023, the Company purchased a total of 38,795 shares of its Class B common stock at a cost of approximately \$23.4 million. On September 10, 2020, the Board of Directors authorized the Company to acquire up to 500,000 shares of its Class B common stock. The Company did not announce a ceiling price or time limit for the purchases. At March 31, 2023, the Company had remaining authorization from the Board of Directors to purchase up to 109,626 shares of Class B common stock.

Dividends. The quarterly dividend rate per share was \$1.65 and \$1.58 for the first three months of 2023 and 2022, respectively. The Company expects to pay a dividend of \$6.60 per share in 2023.

There were no other significant changes to the Company's contractual obligations or other commercial commitments from those disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

Forward-Looking Statements

All public statements made by the Company and its representatives that are not statements of historical fact, including certain statements in this report, in the Company's Annual Report on Form 10-K and in the Company's 2022 Annual Report to Stockholders, are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those projected as a result of certain risks and uncertainties. Other forward-looking statements include comments about expectations related to acquisitions or dispositions or related business activities, including the TOSA, the Company's business strategies and objectives, the prospects for growth in the Company's various business operations and the Company's future financial performance. As with any projection or forecast, forward-looking statements are subject to various risks and uncertainties, including the risks and uncertainties described in Item 1A of the Company's Annual Report on Form 10-K, that could cause actual results or events to differ materially from those anticipated in such statements. Accordingly, undue reliance should not be placed on any forward-looking statement made by or on behalf of the Company. The Company assumes no obligation to update any forward-looking statement after the date on which such statement is made, even if new information subsequently becomes available.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

The Company is exposed to market risk in the normal course of its business due primarily to its ownership of marketable equity securities, which are subject to equity price risk; to its borrowing and cash-management activities, which are subject to interest rate risk; and to its foreign business operations, which are subject to foreign exchange rate risk. The Company's market risk disclosures set forth in its 2022 Annual Report filed on Form 10-K have not otherwise changed significantly.

Item 4. Controls and Procedures.

(a) Evaluation of Disclosure Controls and Procedures

An evaluation was performed by the Company's management, with the participation of the Company's Chief Executive Officer (principal executive officer) and the Company's Chief Financial Officer (principal financial officer), of the effectiveness of the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), as of March 31, 2023. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures, as designed and implemented, are effective in ensuring that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms and is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, in a manner that allows timely decisions regarding required disclosure.

(b) Changes in Internal Control Over Financial Reporting

There has been no change in the Company's internal control over financial reporting during the quarter ended March 31, 2023 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

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

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

During the quarter ended March 31, 2023, the Company purchased shares of its Class B Common Stock as set forth in the following table:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan*	Maximum Number of Shares that May Yet Be Purchased Under the Plan*
January 1 -31	6,109	\$ 622.26	6,109	142,312
February 1 - 28	6,078	663.78	6,078	136,234
March 1 - 31	26,608	586.40	26,608	109,626
	<u>38,795</u>	\$ 604.17	<u>38,795</u>	

*On September 10, 2020, the Company's Board of Directors authorized the Company to purchase, on the open market or otherwise, up to 500,000 shares of its Class B Common Stock. There is no expiration date for this authorization. All purchases made during the quarter ended March 31, 2023 were open market transactions and some of these shares were purchased under a 10b5-1 plan.

Item 6. Exhibits.

Exhibit Number	Description
3.1	<u>Restated Certificate of Incorporation of the Company dated November 13, 2003 (incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K for the fiscal year ended December 28, 2003).</u>
3.2	<u>Certificate of Amendment, effective November 29, 2013, to the Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to the Company's current Report on Form 8-K dated November 29, 2013).</u>
3.3	<u>By-Laws of the Company as amended and restated through November 29, 2013 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K dated November 29, 2013).</u>
4.1	<u>Senior Notes Indenture dated as of May 30, 2018, between the Company and The Bank of New York Mellon Trust Company, N.A., as Trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated May 30, 2018).</u>
4.2	<u>First Supplemental Indenture, dated as of March 24, 2020, among Graham Healthcare Group, Inc., a Delaware corporation, a subsidiary of the Company, and The Bank of New York Mellon Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020).</u>
4.3	<u>Second Supplemental Indenture, dated as of January 6, 2022, among Graham Automotive LLC, a Delaware limited liability company, a subsidiary of Graham Holdings Company, a Delaware corporation, and The Bank of New York Mellon Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.3 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2021).</u>
31.1	<u>Rule 13a-14(a)/15d-14(a) Certification of the Chief Executive Officer.</u>
31.2	<u>Rule 13a-14(a)/15d-14(a) Certification of the Chief Financial Officer.</u>
32	<u>Section 1350 Certification of the Chief Executive Officer and the Chief Financial Officer.</u> *
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File, formatted in Inline XBRL and included as Exhibit 101

* Furnished herewith.

SIGNATURES

Pursuant to the requirements 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.

GRAHAM HOLDINGS COMPANY
(Registrant)

Date: May 3, 2023

/s/ Timothy J. O'Shaughnessy

Timothy J. O'Shaughnessy,
President & Chief Executive Officer
(Principal Executive Officer)

Date: May 3, 2023

/s/ Wallace R. Cooney

Wallace R. Cooney,
Chief Financial Officer
(Principal Financial Officer)

RULE 13a-14(a)/15d-14(a) CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Timothy J. O'Shaughnessy, Chief Executive Officer (principal executive officer) of Graham Holdings Company (the "Registrant"), certify that:

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

/s/ Timothy J. O'Shaughnessy

Timothy J. O'Shaughnessy
Chief Executive Officer
May 3, 2023

RULE 13a-14(a)/15d-14(a) CERTIFICATION OF THE CHIEF FINANCIAL OFFICER
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Wallace R. Cooney, Chief Financial Officer (principal financial officer) of Graham Holdings Company (the "Registrant"), certify that:

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

/s/ Wallace R. Cooney

Wallace R. Cooney
Chief Financial Officer
May 3, 2023

SECTION 1350 CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER AND THE CHIEF FINANCIAL OFFICER
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Graham Holdings Company (the "Company") on Form 10-Q for the period ended March 31, 2023 (the "Report"), Timothy J. O'Shaughnessy, Chief Executive Officer (principal executive officer) of the Company and Wallace R. Cooney, Chief Financial Officer (principal financial officer) of the Company, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Timothy J. O'Shaughnessy

Timothy J. O'Shaughnessy
Chief Executive Officer
May 3, 2023

/s/ Wallace R. Cooney

Wallace R. Cooney
Chief Financial Officer
May 3, 2023