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

FORM 10-K

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

For the fiscal year ended October 31, 2024

or

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

Commission file number: 001-00566

GREIF, INC.

(Exact name of Registrant as specified in its charter)

Delaware	31-4388903
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
425 Winter Road, Delaware Ohio	43015
(Address of principal executive offices)	*(Zip Code)*

Registrant's telephone number, including area code: (740) 549-6000

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 A Common Stock	GEF	New York Stock Exchange
Class B Common Stock	GEF.B	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant (1) has filed all reports 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files). Yes ☒ No ☐

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

Act.

Large accelerated filer	☒	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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the Registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the Registrant’s executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

The aggregate market value of voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold as of the last business day of the Registrant’s most recently completed second fiscal quarter was as follows:

Non-voting common equity (Class A Common Stock) $1,531,694,805
Voting common equity (Class B Common Stock) $293,823,122

The number of shares outstanding of each of the Registrant’s classes of common stock, as of December 18, 2024, was as follows:

Class A Common Stock 25,850,270 shares
Class B Common Stock 21,331,127 shares

Listed hereunder are the documents, portions of which are incorporated by reference, and the parts of this Form 10-K into which such portions are incorporated:

1. The Registrant’s Definitive Proxy Statement for use in connection with the Annual Meeting of Stockholders to be held on February 24, 2025 (the “2025 Proxy Statement”), portions of which are incorporated by reference into Parts II and III of this Form 10-K. The 2025 Proxy Statement will be filed within 120 days of October 31, 2024.

IMPORTANT INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

All statements, other than statements of historical facts, included in this Annual Report on Form 10-K of Greif, Inc. and its subsidiaries for the fiscal year ended October 31, 2024 (this “Form 10-K”) or incorporated herein, including, without limitation, statements regarding our future financial position, business strategy, budgets, projected costs, goals, plans and objectives of management for future operations and initiatives, are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Forward-looking statements generally can be identified by the use of forward-looking terminology such as “may,” “will,” “expect,” “intend,” “estimate,” “anticipate,” “aspiration,” “objective,” “project,” “believe,” “continue,” “on track” or “target” or the negative thereof or variations thereon or similar terminology. All forward-looking statements made in this Form 10-K are based on information currently available to our management. Forward-looking statements speak only as of the date the statements were made. Although we believe that the expectations reflected in forward-looking statements have a reasonable basis, we can give no assurance that these expectations will prove to be correct. Forward-looking statements are subject to risks and uncertainties that could cause actual events or results to differ materially from those expressed in or implied by the statements. For a discussion of the most significant risks and uncertainties that could cause our actual results to differ materially from those projected, see “Risk Factors” in Item 1A of this Form 10-K. The risks described in this Form 10-K are not all inclusive, and given these and other possible risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results. All forward-looking statements made in this Form 10-K are expressly qualified in their entirety by reference to such risk factors. Except to the limited extent required by applicable law, we undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Index to Form 10-K Annual Report for the Fiscal Year ended October 31, 2024

Item		Description	Page
Part I	1	Business	3
	1A.	Risk Factors	6
	1B.	Unresolved Staff Comments	16
	1C.	Cybersecurity	16
	2	Properties	18
	3	Legal Proceedings	18
	4	Mine Safety Disclosures	19
Part II	5	Market for the Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	19
	7	Management’s Discussion and Analysis of Financial Condition and Results of Operations	21
	7A.	Quantitative and Qualitative Disclosures about Market Risk	35
	8	Financial Statements and Supplementary Data	37
		Consolidated Statements of Income	37
		Consolidated Statements of Comprehensive Income	38
		Consolidated Balance Sheets	39
		Consolidated Statements of Cash Flows	41
		Consolidated Statements of Changes in Shareholders’ Equity	43
		Note 1 – Basis of Presentation and Summary of Significant Accounting Policies	44
		Note 2 – Acquisitions and Divestitures	50
		Note 3 – Goodwill and Other Intangible Assets	57
		Note 4 – Restructuring Charges	58
		Note 5 – Long-Term Debt	60
		Note 6 – Financial Instruments and Fair Value Measurements	62
		Note 7 – Stock-Based Compensation	64
		Note 8 – Income Taxes	66
		Note 9 – Post-Retirement Benefit Plans	69
		Note 10 – Contingent Liabilities and Environmental Reserves	77
		Note 11 – Earnings Per Share	77
		Note 12 – Leases	79
		Note 13 – Business Segment Information	80
		Note 14 – Comprehensive Income (Loss)	83
		Note 15 – Redeemable Noncontrolling Interests	84
		Report of Independent Registered Public Accounting Firm	85
	9	Changes in and Disagreements with Accountants on Accounting and Financial Disclosures	87
	9A.	Controls and Procedures	87
		Report of Independent Registered Public Accounting Firm	89
	9B.	Other Information	90
Part III	10	Directors, Executive Officers and Corporate Governance	90
	11	Executive Compensation	90
	12	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	90
	13	Certain Relationships and Related Transactions, and Director Independence	91
	14	Principal Accountant Fees and Services	91
Part IV	15	Exhibits and Financial Statement Schedules	92
	16	Form 10-K Summary	97
		Signatures	97

PART I

ITEM 1. BUSINESS

General Development of Business

We are a leading global producer of industrial packaging products and services with operations in over 35 countries. We offer a comprehensive line of rigid industrial packaging products, such as steel, fibre and plastic drums, rigid intermediate bulk containers, jerrycans and other small plastics, closure systems for industrial packaging products, transit protection products, water bottles and remanufactured and reconditioned industrial containers, and services, such as container life cycle management, logistics, warehousing and other packaging services. We produce and sell containerboard, corrugated sheets, corrugated containers and other corrugated products to customers in North America in industries such as packaging, automotive, food and building products. We also produce and sell coated recycled paperboard and uncoated recycled paperboard, some of which are used to produce and sell industrial products (tubes and cores, construction products and protective packaging). We also produce and sell bulk and specialty partitions made from both containerboard and uncoated recycled paperboard. In addition, we purchase and sell recycled fiber and produce and sell adhesives used in our paperboard products. We sell timber to third parties from our timberland in the southeastern United States that we manage to maximize long-term value. In addition, we sell, from time to time, timberland and special use land, which consists of surplus land, higher and better use (“HBU”) land and development land. Our customers range from Fortune 500 companies to medium and small-sized companies in a cross section of industries.

Through the end of our 2024 fiscal year, our fiscal year began on November 1 and ended on October 31 of the following year. Any references in this Form 10-K to the years, or to any quarter of those years, relates to the fiscal year or quarter, as the case may be, ended in that year, unless otherwise stated. However, we are changing our fiscal year end, effective for the 2025 fiscal year. Our 2025 fiscal year will begin on November 1, 2024 and end on September 30, 2025, and accordingly, will consist of eleven months. Our fourth fiscal quarter of 2025 will be the two month period ending September 30, 2025. Thereafter, our fiscal year will begin on October 1 and end on September 30 of the following year.

As used in this Form 10-K, the terms “Greif,” the “Company,” “we,” “us,” and “our” refer to Greif, Inc. and its subsidiaries.

Financial Information about Segments

For fiscal year 2024, we operated in seven operating segments, which are aggregated into three reportable segments: Global Industrial Packaging; Paper Packaging & Services; and Land Management. Information related to our reportable segments is included in Note 13 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K.

Beginning with our first quarter of 2025 we will operate in four operating segments and four reportable segments: Customized Polymer Solutions; Durable Metal Solutions; Sustainable Fiber Solutions; and Integrated Solutions.

Narrative Description of Business

Sales

In the Global Industrial Packaging reportable segment, we are a leading global producer of industrial packaging products, such as steel, fibre and plastic drums, rigid intermediate bulk containers, jerrycans and other small plastics, closure systems for industrial packaging products, transit protection products, water bottles and remanufactured and reconditioned industrial containers, and services, such as container life cycle management, logistics, warehousing and other packaging services. We sell our industrial packaging products on a global basis to customers in industries such as chemicals, paints and pigments, food and beverage, petroleum, industrial coatings, agriculture, pharmaceutical and minerals, among others.

In the Paper Packaging & Services reportable segment, we produce and sell containerboard, corrugated sheets, corrugated containers and other corrugated products to customers in North America in industries such as packaging, automotive, food and building products. Our corrugated container products are used to ship such diverse products as home appliances, small machinery, grocery products, automotive components, books and furniture, as well as numerous other applications. We also produce and sell coated recycled paperboard and uncoated recycled paperboard, some of which are used to produce and sell industrial products (tubes and cores, construction products and protective packaging), which ultimately serve both industrial and consumer markets. We produce and sell bulk and specialty partitions made from both containerboard and uncoated recycled board. In addition, we purchase and sell recycled fiber and produce and sell adhesives used in our paperboard products.

In the Land Management reportable segment, we are focused on the active harvesting and regeneration of our United States timber properties to achieve sustainable long-term yields. While timber sales are subject to fluctuations, we seek to maintain a

consistent cutting schedule, within the limits of market and weather conditions. We also sell, from time to time, timberland and special use land, which consists of surplus land, HBU land and development land. As of October 31, 2024, we owned approximately 175,000 acres of timber properties in the southeastern United States.

Due to the variety of our products, we have many customers buying different types of our products, and due to the scope of our sales, no one customer is considered principal in our total operations.

Markets

The markets in which we sell our products are highly competitive with many participants. Although no single company dominates, we face significant competitors in each of our businesses. Our competitors include large vertically integrated companies as well as numerous smaller companies. The industries in which we compete are particularly sensitive to price fluctuations caused by shifts in industry capacity and other cyclical industry conditions. Other competitive factors include design, quality and service, with varying emphasis depending on product line.

In the global industrial packaging industry, we compete by offering a comprehensive line of products on a global basis. In the containerboard industry, we compete by concentrating on providing value-added, higher-margin corrugated products to niche markets. In our other paper packaging businesses, we compete by offering a comprehensive range of uncoated and coated paperboard products and diverse tube, core, partitions and other specialty products.

In addition, over the past several years we have closed higher cost facilities and otherwise restructured our operations, which we believe has significantly improved our cost competitiveness.

Resources

Steel, resin and containerboard, as well as used industrial packaging for reconditioning, are the principal raw materials for the Global Industrial Packaging reportable segment, and pulpwood, old corrugated containers and recycled coated and uncoated paperboard are the principal raw materials for the Paper Packaging & Services reportable segment. We satisfy most of our needs for these raw materials through purchases on the open market or under short-term and long-term supply agreements. All of these raw materials are purchased in highly competitive, price-sensitive markets, which have historically exhibited price, demand and supply cyclicality. From time to time, some of these raw materials have been in short supply at certain of our manufacturing facilities. In those situations, we ship the raw materials in short supply from one or more of our other facilities with sufficient supply to the facility or facilities experiencing the shortage. To date, raw material shortages have not had a material adverse effect on our financial condition or results of operations.

Government Laws and Regulations

We must comply with extensive laws, rules and regulations in the United States and in each of the countries where we conduct business with respect to a variety of matters, including the compliance with government laws and regulations concerning the environment and health and safety matters. We do not believe that future compliance with government laws and regulations will have a material adverse effect on our capital expenditures, competitive position, results of operations or financial condition.

As to environmental matters, our operations are subject to extensive federal, state, local and international laws, regulations, rules and ordinances relating to pollution, the protection of the environment, the generation, storage, handling, transportation, treatment, disposal and remediation of hazardous substances and waste materials and numerous other environmental laws and regulations. In the ordinary course of business, we are subject to periodic environmental inspections and monitoring by various governmental agencies. In addition, certain of our production facilities require environmental permits that are subject to revocation, modification and renewal. As of the date of filing this Form 10-K, and based on current information, we believe that the probable costs of the remediation of company-owned property will not have a material adverse effect on our financial condition or results of operations. We believe that we have adequately reserved for our liability for these matters as of October 31, 2024.

As to health and safety matters, our manufacturing operations involve the use of heavy equipment, machinery and chemicals and require the performance of activities that create safety exposures. We are subject to extensive federal, state, local and international laws, regulations, rules and ordinances relating to occupational health and safety. We have established safety policies, programs, procedures and training for our manufacturing operations, and our safety programs include measures required for compliance with these government laws and regulations. In addition, our safety programs include the ongoing identification and elimination of workplace exposures that can lead to injuries and sharing of health and safety best practices. We do not believe that future compliance with health and safety laws and regulations will have a material adverse effect on our capital expenditures, results of operations or financial condition.

We do not believe that compliance with federal, state, local and international laws and regulations that have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, has had or will have a material adverse effect upon our capital expenditures, competitive position, results of operations or financial condition.

See also Note 10 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information concerning environmental expenses and cash expenditures for the years ended October 31, 2024, 2023 and 2022, and our reserves for environmental liabilities as of October 31, 2024 and 2023.

Human Capital

Our Company's values and culture are critical to our ability to attract, hire and retain talented employees for our global businesses. We seek to engage, develop and incentivize our employees to pursue our vision: "Be the best customer service company in the world." We depend on our employees to provide differentiated customer service and create value for our customers through a solutions-based approach with the goal of earning our customers' trust and loyalty. We work to accomplish this goal by looking to our purpose, "We create packaging solutions for life's essentials," vision and values set forth in "The Greif Way."

Our "Build to Last" strategy provides a platform to support our strategic growth and development under four key missions: creating thriving communities; delivering legendary customer service; protecting our future; and ensuring financial strength. Each employee has a part in driving these key missions wherever they are located in the world, and ultimately, our success is dependent on all of our employees working together to keep these priorities at the forefront of their activities. Within our "creating thriving communities" mission, we are focused on establishing a foundation for action that supports health and safety; equity and inclusion; and talent development and engagement.

Health and Safety

Safeguarding the health and safety of our employees is our first and foremost priority. We are committed to providing a safe working environment for all our employees with a philosophy of Zero Harm. We have implemented an incident tracking system that we call the LIFE program to assist with identifying global and regional leading indicators that facilitate the creation of programs and safety action plans that may help to reduce conditions and behaviors that lead to at-risk situations and the use of technology and automation to eliminate such conditions. We utilize a global safety scorecard with standardized safety metrics globally to understand, improve and correct safety risk and culture. To promote a continuous focus on safety, we have safety committees that consist of employees and management at all our facilities. We have implemented safety meetings at all levels in the organization from CEO to shop floor, both in the facilities and in office or remote locations creating a safety mindset that everyone is a safety leader regardless of their position, so that our safety culture is understood and practiced every day while developing a behavior commitment culture for each and every employee. We are steadfast in our commitment to employee safety. For example, we hold an annual global safety week focused on Zero Harm by sharing best practices and learnings to mitigate safety risks through interactive activities related to machine safety devices, good housekeeping and safe equipment operations. In addition, we have regular safety communications that target all employees, and we have an annual award that recognizes facilities that have achieved certain criteria for proactive actions and behaviors.

We are also committed to the total well-being of all our employees and their families with a variety of physical, mental and social wellness programs. These programs differ by region and include Company-sponsored or subsidized health care insurances, voluntary health fairs and employee assistance programs to improve mental health and wellness.

Equity and Inclusion

In accordance with our values, we encourage our employees to embrace an inclusive culture of language, location and thought. Our success depends on maintaining a culture where every employee communicates with respect, candor and trust. We rely on the unique qualities and talents of our employees to help us achieve our Build to Last strategy. We strive to create an inclusive and equitable working environment as well as promoting equitable treatment within our workforce, including the support of multiple colleague-led resource groups, fostering an environment where our employees feel valued and appreciated for the distinct voice they bring to our Company. In addition, we strive to compensate our employees fairly and equitably and continue to monitor pay equity data and educate our managers to make objective compensation decisions in line with our Company's compensation policies.

Talent Development

Attracting, developing and retaining talented employees is an integral aspect of our human capital strategy and critical to our success. We continuously strive to create learning and development opportunities for all our employees. Our development and training programs are designed to enhance leadership, develop a customer service mindset and improve engagement at all levels within our organization. We utilize Greif University, a centralized training platform offering a variety of learning and development offerings, including recorded internal trainings, on-demand courses, assessments and a learning library. Greif University allows employees to access LinkedIn Learning, an online learning and skill building platform that empowers employees to develop skills to grow their career. We have a performance development review and talent development process in which managers provide regular feedback and coaching to assist with the development of our employees, including the use of individual development plans to assist with career development. To foster employee engagement, we encourage and value feedback from our employees and conduct annual engagement surveys of all our global employees to better understand our employee's level of engagement and identify areas of improvement to build high performing teams to meet our strategic goals.

Other Information

As of October 31, 2024, our approximately 14,000 full-time employees were located in the following geographic regions: 57% in North America; 26% in Europe, Middle East and Africa; 9% in Asia Pacific; and 8% in Latin America. Our global workforce is 18% female and 82% male, with approximately 38% represented by labor unions.

Financial Information about Geographic Areas

Our operations are located in North and Latin America, Europe, the Middle East, Africa and the Asia Pacific regions. Information related to our geographic areas of operation is included in Note 13 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K.

Available Information

We maintain a website at www.greif.com. We file reports with the United States Securities and Exchange Commission ("SEC"). We make these reports available, free of charge, on or through our website, which include but are not limited to, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy and information statements and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we have electronically filed such material with, or furnished it to, the SEC.

Any of the materials we file with the SEC may also be read and/or copied at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. Information on the operation of the SEC's Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC at www.sec.gov.

ITEM 1A. RISK FACTORS

Statements contained in this Form 10-K may be "forward-looking" within the meaning of Section 21E of the Exchange Act. Such forward-looking statements are subject to certain risks and uncertainties that could cause our operating results to differ materially from those projected. The following factors, among others, in some cases have affected, and in the future could affect, our actual financial or operational performance, or both.

Risks Related to Market and Economic Factors

Historically, our Business has been Sensitive to Changes in General Economic or Business Conditions.

Our customers generally consist of other manufacturers and suppliers who purchase industrial packaging products and containerboard and uncoated and coated recycled boxboard and related products for their own containment and shipping purposes. Because we supply a cross section of industries, including chemicals, lubricants, films, paints and pigments, food and beverage, personal care, fragrances, petroleum, industrial coatings, carpeting, agriculture, agrochemical, pharmaceuticals, mineral products, packaging, automotive, construction and building products industries, and have operations in many countries, demand for our products and services has historically corresponded to changes in general economic and business conditions of the industries and countries in which we operate. The overall demand and prices for our products and services could decline as a result of numerous factors outside of our control, including an economic recession, increased labor costs, availability of and increased cost of energy, and disruptions in supply chains to our business, our customers, their end markets and our suppliers, changes in industrial production processes or consumer preference, changes in laws and regulations, inflation, tariffs, changes in published pricing indices, fluctuations in interest rates and currency exchange rates and changes in the fiscal or monetary

policies of governments in the regions in which we operate. Accordingly, our financial performance is substantially dependent upon the general economic and business conditions existing in these industries and countries where we do business, and any prolonged or substantial economic downturn or geopolitical uncertainty in the markets in which we operate could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our Global Operations Subject us to Political Risks, Instability and Currency Exchange that Could Adversely Affect our Results of Operations.

We are a global company with operations in over 35 countries with approximately 37% of our fiscal 2024 sales derived from non-U.S. operations. Management of global operations is complex, and our operations outside the United States are subject to additional risks that may not exist, or may not be as significant, with respect to our operations within the United States.

Within our global footprint, we have operations in Europe, Middle East and Asia Pacific. As regards the Eastern Europe region, the length, impact and outcome of the ongoing military conflict in Ukraine is highly unpredictable. The Russian invasion of Ukraine and the ongoing conflict between those two countries have amplified, and may continue to amplify, certain risks to our operations, including increased foreign exchange volatility, disruptions to financial and credit markets, energy supply (specifically in Europe), supply chain disruptions, customer demand, increased risks of cybersecurity incidents, increased costs to ensure compliance with global and local laws and regulations, economic recessions in certain neighboring European countries or globally due to inflationary and other pressures, and delays in the ability, or even the inability, to access cash or earnings from Russia. In addition, the imposition of new or increased sanctions, tariffs, quotas, exchange or price controls, trade barriers or similar restrictions resulting from the conflict between Russia and Ukraine could negatively impact our business and operations.

In the event that our operations in Russia cease for any reason, that event would result in an impairment charge, as we would not likely generate a fair market return on those assets. In addition, the Russian government has implemented strict currency controls that restrict the movement of capital. This includes limits on the amount of money that can be taken out of the country, directly impacting dividend payments. Although we have been able to pay the de minimus dividends permitted by the Russian government, we have been generally unable to transfer money out of Russia, and do not expect that this will change in 2025. We will continue to monitor the effects of this conflict, including risks that may affect our business, and we will adjust our plans accordingly as the situation progresses. As of October 31, 2024 and the fiscal year then ended, our operations in Russia accounted for approximately 3% of our net sales, approximately 9% of our operating profit and approximately 2% of our total assets.

As a result of our general global operations, we are subject to certain risks that could disrupt our operations or force us to incur unanticipated costs or exit a specific country. These risks, which can vary substantially by country, may include economic or political instability, geopolitical events (such as the Russian invasion of Ukraine, Middle East conflicts in Gaza, Lebanon, Iran, Syria, Israel and Yemen, governmental unrest in South Korea, and tensions between China and Taiwan and North Korea and Japan), corruption, social and ethnic unrest, the regulatory environment (including the risks of operating in developing or emerging markets in which there are significant uncertainties regarding the interpretation and enforceability of legal requirements), hyperinflation and fluctuations in the value of local currency versus the U.S. dollar, repatriating cash from foreign countries to the U.S., downturns or changes in economic conditions (including in relation to commodity inflation), adverse tax consequences or rulings, nationalization or any change in social, political or labor conditions in any of these countries, or regions impacting matters such as sustainability, environmental regulations and trade policies and agreements.

We also have indebtedness, agreements to purchase raw materials and agreements to sell finished products that are denominated in Russian Ruble, Euro, Brazilian Real, Hungarian Forint, Turkish Lira, British Pound and other currencies. Our operating performance is affected by fluctuations in currency exchange rates by:

- translations into U.S. dollars for financial reporting purposes of the assets and liabilities of our non-U.S. operations conducted in local currencies; and
- gains or losses from transactions conducted in currencies other than the operation’s functional currency.

The Current and Future Challenging Global Economy and Disruption and Volatility of the Financial and Credit Markets may Adversely Affect our Business.

Current global economic conditions are challenging to our global business operations. Such conditions have had, and may continue to have, a negative impact on our financial results. Future economic downturns, either in the United States, Europe or in other regions in which we do business could negatively affect our business and results of operations. With the volatility in the current global economic climate, inflation and geopolitical events around the world, including the conflict between Russia and Ukraine, various conflicts in the Middle East, governmental unrest in South Korea, and tensions between China and Taiwan and

North Korea and Japan, it is difficult for us to predict the complete impact of the forgoing matters on our business and results of operations. Due to these current and future economic conditions, our customers may face financial difficulties, disruption in their supply chains and the unavailability of or reduction in commercial credit or increased debt levels that may result in decreased sales by and revenues to our Company. Certain of our customers may cease operations or seek bankruptcy protection, which would reduce our cash flows and adversely impact our results of operations. Our customers that are financially viable and not experiencing economic distress may nevertheless elect to reduce the volume of orders for our products or close facilities in an effort to remain financially stable or as a result of the unavailability of commercial credit which would negatively affect our results of operations. We may experience difficulties in servicing, renewing or repaying our outstanding debt due to continued volatility in the global economy. We may also have difficulty accessing the global credit markets if there is a tightening of commercial credit availability, which would result in decreased ability to fund capital-intensive strategic projects.

Further, we may experience challenges in forecasting revenues and operating results due to these global economic conditions. The difficulty in forecasting revenues and operating results may result in volatility in the market price of our common stock.

In addition, the lenders under our senior secured credit agreement and other borrowing facilities described in Item 7 of this Form 10-K under Liquidity and Capital Resources - Borrowing Arrangements and the counterparties with whom we maintain interest rate swap agreements, currency forward contracts and derivatives and other hedge agreements may be unable to perform their lending or payment obligations in whole or in part, or may cease operations or seek bankruptcy protection, which would negatively affect our cash flows and our results of operations.

The equipment that we use in our manufacturing operations is expensive and requires continued maintenance. We may require significant capital investment to maintain our equipment. If our existing sources of capital prove insufficient, there can be no assurance that we will be able to obtain capital to finance these expenditures on favorable terms, or at all. Any inability by us to maintain our equipment as needed or any inability to obtain capital for expenditures on equipment maintenance on favorable terms could have an adverse effect on our business, financial position and results of operations.

Risks Related to Industry Conditions

The Continuing Consolidation of our Customer Base and Suppliers may Intensify Pricing Pressure.

Over the last few years, many of our large industrial packaging, containerboard and coated and uncoated recycled boxboard and related products customers have acquired, or been acquired by, companies with similar or complementary product lines. In addition, many of our suppliers of raw materials such as steel, resin and paper, have undergone a similar process of consolidation. This consolidation has increased the concentration of our largest customers, resulting, in some cases, in increased pricing pressures from our customers, and in other cases, a decreasing customer base due to customers becoming more vertically integrated. The consolidation of our largest suppliers has resulted in limited sources of supply and increased cost pressures from our suppliers. Any future consolidation of our customer base or our suppliers could negatively impact our business, financial condition, results of operations and cash flows. Furthermore, if one or more of our major customers reduces, delays or cancels substantial orders, if one or more of our major suppliers is unable to timely produce and deliver our orders, or if we are unable to broaden our customer base and increase specialty product offerings to offset the effects of consolidation, our business, financial condition, results of operations and cash flows may be materially and adversely affected, particularly for the period in which the reduction, delay or cancellation occurs and also possibly for subsequent periods.

We Operate in Highly Competitive Industries.

Each of our operating segments operates in highly competitive industries. The most important competitive factors we face are price, quality, customer service and on-time delivery. To the extent any of our competitors become more successful with respect to any of these key competitive factors, we could lose customers and our sales could decline. Moreover, we anticipate that the lower customer demand patterns that we experienced throughout fiscal years 2023 and 2024 will continue on an overall basis through 2025, which may cause our competitors to reduce prices to maintain or increase their sales volumes, which could adversely impact our sales volumes and our margins. In addition, due to the tendency of certain customers to diversify their suppliers, we could be unable to increase or maintain sales volumes with particular customers. Certain of our competitors are substantially larger and have significantly greater financial resources.

In addition, some of our products are made from raw materials that are subject to pronounced and at times, rapid price fluctuations, such as metal, which is used in the manufacture of steel drums and containers and intermediate bulk container (“IBC”) cages, old corrugated containers (“OCC”), which impacts our paper products, and oil, which in turn affects the price of resin for plastic drums and containers, including IBC bottles. Particularly in well-developed markets in Europe and in the United States, any substantial increases in the supply of industrial packaging resulting from capacity increases, the stockpiling of raw materials or other types of opportunistic behavior by our competitors in a period of high raw materials prices, or price

wars, could adversely affect our margins and the profitability of our business. With many of our customers, we have implemented raw material price adjustment mechanisms based on industrial index pricing, however these price adjustment mechanisms lag market price changes and our ability to pass through costs to our customers could take months to realize which in turn could adversely impact our product margins. Although price is a significant basis of competition in our industry, we also compete on the basis of product reliability, the ability to deliver products on a global scale and our reputation for quality and customer service. If we fail to maintain our current standards for product quality, the scope of our distribution capabilities or our customer relationships, our reputation and business, financial condition, results of operations and cash flows could be adversely affected.

Negative media reports about us or our businesses, whether accurate or inaccurate, could damage our reputation and relationships with our customers and suppliers, cause customers and suppliers to terminate their relationship with us, or impair our ability to effectively compete, which could adversely affect our business, financial condition, results of operations and cash flows.

Our Business is Sensitive to Changes in Industry Demands and Customer Preferences.

Industry demand for certain of our industrial packaging and paper products in our United States operations, and industrial packaging products in European and other international markets has varied in recent years, and more recently related to reduced demand and inflationary pressures, causing competitive pricing for those products. In addition, disruptions within our customers' labor supply could reduce customer demand and negatively impact our business. As demand decreases, we see an increase in competition on price, which could consequentially impact our sales and margins. We seek to offset the impacts of these pressures by focusing on quality and customer service.

We compete in industries that are capital intensive, which generally leads to continued production as long as prices are sufficient to cover marginal costs. We are making significant capital investments in line with our long-term business strategy, such as investments in new and improved equipment automation and technology to increase capacity, productivity and safety. As a result, changes in industry demands (including any resulting industry over-capacity) and increased new capacity for production of industrial packaging and paper products by competitors, may cause substantial price competition and, in turn, we may not be able to derive the expected return on investment from our strategic investments which could negatively impact our business, financial condition, results of operations and cash flows. Additionally, customer preferences are constantly changing based on, among other factors, cost, convenience, health, environmental and social concerns, and customers may choose to use different packaging products than the products we manufacture as their business models change, or may choose to use alternative, more sustainable materials for their packaging products, or simply forego the packaging of certain products entirely. For example, in the United States, sales of fibre drums continue to decline on a year over year basis as some customers select other packaging solutions for their products. Any shift away from packaging products we manufacture or changes in customer preferences to more sustainable supply chain solutions may adversely affect our business, financial condition, results of operations and cash flows.

Raw Material Shortages, Price Fluctuations, Global Supply Chain Disruptions and High Inflation may Adversely Impact our Results of Operations.

The principal raw materials used in the manufacture of our products are steel, resin, pulpwood, recycled pulp from OCC, recycled coated and uncoated boxboard and containerboard and used industrial packaging for reconditioning, which we purchase or otherwise acquire in highly competitive, price sensitive markets. We have long-term supply contracts in place for obtaining a portion of our principal raw materials. These raw materials have historically exhibited price and demand cyclicality. In addition, the European Union ("EU")'s Packaging & Packaging Waste Regulation that recently went into force will require post-consumer resin ("PCR") to be incorporated into plastic products sold in the EU. As such, prices for PCR may increase, and we may also face a shortage of PCR supply necessary to meet regulatory requirements, which could have a material adverse effect on our business, financial condition and results of operations.

In addition, we manufacture certain component parts and other products for our rigid industrial packaging products and adhesives for our paper products, and sell those parts and products to other companies, including competitors. Some of the raw materials, products and component parts have been, and in the future may be, in short supply. For example, the availability of these raw materials, component parts and products and/or our ability to purchase and transport them may be unexpectedly disrupted by adverse weather conditions, natural disasters, man-made disasters, geopolitical conflicts, a substantial economic downturn in the industries that provide any of those raw material requirements, or competition for use of raw materials and component parts in other regions or countries. As a result of inflation and continued economic slowdown, we may continue to incur significant raw material prices increases in the future which would likely have an adverse effect on our operating margins. While we have taken steps to minimize the impact of these increased costs by working closely with our suppliers and customers, there can be no assurances that unforeseen future events in the global supply chain, and our ability to pass on

inflationary costs on to our customers could have a material adverse effect on our business, financial condition and results of operations.

The disruptions to the global economy starting in 2020 and continuing throughout 2024, which were intensified by the Russian invasion of Ukraine and the ongoing conflict between those two countries, have impeded global supply chains in some regions in which we operate more than others, resulting in longer lead times.

Energy and Transportation Price Fluctuations and Shortages may Adversely Impact our Manufacturing Operations and Costs.

The cost of producing our products is sensitive to the price of energy, including its impact on transport costs. Energy prices, in particular oil and natural gas, have fluctuated in recent years, and specifically in Europe related to the Russian invasion of Ukraine and the ongoing conflict between those two countries, which had a corresponding effect on our operation and production costs and may have the same effect on our customers causing volatility in demand for our products and services. We are currently seeking alternative energy resources in Europe and elsewhere that may take years to fully implement and savings to be realized, if any. Potential legislation, regulatory action and international treaties related to climate change, especially those related to the regulation of greenhouse gases, may result in significant increases in energy costs as well as taxes, and other governmental charges. There can be no assurance that we will be able to recoup any past or future increases in the cost of energy and transportation.

Risks Related to our Operations

We may Encounter Difficulties or Liabilities Arising from Acquisitions or Divestitures.

We have invested a substantial amount of capital in acquisitions, joint ventures and strategic investments and we expect that we will continue to do so in the foreseeable future. We are continually evaluating acquisitions, divestitures and strategic investments that are significant to our business both in the United States and internationally. Acquisitions, joint ventures and strategic investments involve numerous risks, including the failure to identify suitable acquisition candidates, complete acquisitions on acceptable terms and conditions, retain key customers, employees and contracts, the inability to integrate businesses without material disruption, unanticipated costs incurred in connection with integrating businesses, the incurrence of liabilities greater than anticipated or operating results that are less than anticipated, the inability to realize the projected value, and the inability to realize projected synergies. In addition, acquisitions, joint ventures and strategic investments and associated integration activities require time and attention of management and other key personnel. There can be no assurance that any acquisitions, joint ventures and strategic investments will be successfully integrated into our operations, that competition for acquisitions will not intensify or that we will be able to complete such acquisitions, joint ventures and strategic investments on acceptable terms and conditions. The costs of unsuccessful acquisition, joint venture and strategic investment efforts may adversely affect our business, financial condition, results of operations and cash flows.

Additionally, in connection with any acquisitions or divestitures, we may become subject to contingent liabilities or legal claims, including but not limited to third party liability and other tort claims; claims for breach of contract; employment-related claims; environmental, health and safety regulatory actions and liabilities; permitting, regulatory or other legal compliance issues; or tax liabilities. If we become subject to any of these liabilities or claims, and they are not adequately covered by insurance or an enforceable indemnity or similar agreement from a creditworthy counterparty, we may be responsible for significant out-of-pocket expenditures. These liabilities, if they materialize, could have an adverse effect on our business, financial condition, results of operations and cash flows.

We may Incur Additional Rationalization Costs and there is no Guarantee that our Efforts to Reduce Costs will be Successful.

We have reorganized portions of our operations from time to time in recent years, particularly following acquisitions or divestments of businesses, and periods of economic downturn due to local, regional or global economic conditions. For 2025, we have created a new strategic business unit structure based on our products rather than geography. We will continue to implement continuous improvement initiatives necessary or desirable to improve our business portfolio, address underperforming assets and generate additional cash. These initiatives may result in initial inefficiencies as employees and business operations adapt to the new structure. These initiatives may also result in reductions in selling, general and administrative costs throughout our Company and have and will likely continue to result in the rationalization of manufacturing facilities.

The rationalization of our manufacturing facilities may result in temporary constraints upon our ability to manufacture the quantity of products necessary to fill orders and thereby complete sales in a timely manner. In addition, system upgrades at our

manufacturing facilities that impact ordering, production scheduling and other related manufacturing processes are complex, and could impact or delay production targets. A prolonged delay in our ability to fill orders on a timely basis could affect customer demand for our products and increase the size of our product inventories, causing future reductions in our manufacturing schedules and adversely affecting our results of operations. Moreover, our continuous development and production of new products will often involve the retooling of existing manufacturing facilities. This retooling may limit our production capacity at certain times in the future, which could adversely affect our business, financial condition, results of operations and cash flow. In addition, the expansion and reconfiguration of existing manufacturing facilities could increase the risk of production delays, as well as require significant investments of capital.

While we expect these initiatives to result in significant profit opportunities and savings throughout our organization, our estimated profits and savings are based on assumptions that may prove to be inaccurate, and as a result, there can be no assurance that we will realize these profits and cost savings or that, if realized, these profits and cost savings will be sustained. Failure to achieve or delays in achieving projected levels of efficiencies and cost savings from such measures, or unanticipated inefficiencies resulting from manufacturing and administrative reorganization actions in progress or contemplated, could adversely affect our business, financial condition, results of operations and cash flows and harm our reputation.

Several Operations are Conducted by Joint Ventures that we Cannot Operate Solely for our Benefit.

Several operations, particularly in developing countries, are conducted through joint ventures. In countries that require us to conduct business through a joint venture with a local joint venture partner, the loss of a joint venture partner or a joint venture partner's loss of its ability to conduct business in such country may impact our ability to conduct business in that country. Sanctions that apply to a partner of a joint venture or to a joint venture's directors or officers could also impact our ability to conduct business through that joint venture.

In joint ventures, we share ownership with one or more parties who may or may not have the same goals, strategies, priorities or resources as we do. In general, joint ventures are intended to be operated for the benefit of all co-owners, rather than for our exclusive benefit. Operating a business as a joint venture often requires additional organizational formalities as well as time-consuming procedures for sharing information, accounting and making decisions. In certain cases, our joint venture partners must agree in order for the applicable joint venture to take certain actions, including acquisitions, the sale of assets, borrowing money and granting liens on joint venture property. Our inability to take unilateral action that we believe is in our best interest may have an adverse effect on the financial performance of the joint venture and the return on our investment. Finally, we may be required on a legal or practical basis or both, to accept liability for obligations of a joint venture beyond our economic interest, including in cases where our co-owner becomes bankrupt or is otherwise unable to meet its commitments.

Certain of the Agreements that Govern our Joint Ventures Provide our Partners With Put or Call Options.

The agreements that govern certain of our current joint ventures under certain circumstances provide the joint venture partner with the right to sell their participation in the joint venture to us or the right to acquire our participation in the joint venture. Some of the joint venture agreements provide that the joint venture partner can sell its participation for a certain purchase price calculated on the basis of a fixed multiple. Such put and call rights may result in financial risks for us. In addition, such rights could negatively impact our operations if as a result of their exercise we lose access to members of our management teams that are familiar with local markets or distribution and manufacturing channels.

Our Ability to Attract, Develop and Retain Talented and Qualified Employees, Managers and Executives is Critical to our Success.

Our ability to attract, develop and retain talented and qualified employees at all levels within our organization, including production employees, key managers and executives is critical to the success of our business. We need an engaged workforce to serve our customers and meet our business objectives. Competitive pressures and a tight labor market within and outside our industry, may make it more difficult and expensive to attract, hire and effectively onboard qualified employees. Increased turnover of production employees, the retirement of or unforeseen loss of key officers and employees without appropriate succession planning or the ability to develop or hire replacements could make it difficult to manage our business and meet our business objectives, resulting in a material adverse effect on our business, financial condition, results of operations and cash flows. In addition, failing to promote gender equality and provide equal pay for work of equal value can lead to public backlash, legal penalties, brand damage, reduced employee morale and productivity, and failing to address violence and harassment in the workplace can result in internal and external risks, including legal consequences, regulatory penalties, reputational risks, decreased employee morale and productivity, turnover, absenteeism, and loss of revenue.

Our Business may be Adversely Impacted by Work Stoppages and Other Labor Relations Matters.

We are subject to the risk of work stoppages and other labor relations matters, with approximately 38% of our employees around the world represented by unions. We have experienced work stoppages and strikes in the past, and there may be work stoppages and strikes in the future. Any prolonged work stoppage or strike at any one of our principal manufacturing facilities could have a negative impact on our business, financial condition, results of operations and cash flows. In addition, upon the expiration of existing collective bargaining agreements, we may not reach new agreements without union action and any such new agreements may not be on terms satisfactory to us.

We may be Subject to Losses that Might not be Covered in Whole or in Part by Existing Insurance Reserves or Insurance Coverage and General Insurance Premium and Deductible Increases.

We are self-insured or carry large deductibles for certain types of insurance claims, which includes, but is not limited to, claims made under our employee medical and dental insurance programs and workers' compensation, auto and general liability claims. We utilize outside actuarial services to establish reserves for estimated costs related to pending claims, administrative fees and claims incurred but not reported. Because establishing reserves is an inherently uncertain process involving estimates, currently established reserves may not be adequate to cover the actual liability for claims made under our employee medical and dental insurance programs and for certain of our workers' compensation and liability claims. If it is concluded that our estimates are incorrect and our reserves are inadequate for these claims, we will need to increase our reserves, which could adversely affect our financial condition, results of operations and cash flows.

We have comprehensive liability, fire and extended coverage insurance on our facilities and operations, with policy specifications and insured limits customarily carried for similar properties. However, there are certain types of losses, such as losses resulting from wars, acts of terrorism, windstorms, floods, wildfires, earthquakes or other natural disasters, or environmental conditions and pollution, that may be uninsurable or subject to restrictive policy conditions or subject to very large deductibles. In these instances, should a loss occur in excess of insured limits, we could lose capital invested in that property, as well as the anticipated future revenues derived from the manufacturing activities conducted at that property, while remaining obligated for any financial obligations related to the property. Any such loss would adversely impact our business, financial condition, results of operations and cash flows. We purchase insurance policies covering general liability and product liability with substantial policy limits. However, there can be no assurance that any liability claim would be adequately covered by our applicable insurance policies or would not be excluded from coverage based on the terms and conditions of the policy. This could also apply to any applicable contractual indemnity. We also purchase environmental liability policies where legally required and may elect to purchase coverage in other circumstances in order to transfer all or a portion of environmental liability risk through insurance. However, there can be no assurance that any environmental liability claim would be adequately covered by our applicable insurance policies or would not be excluded from coverage based on the terms and conditions of the policy. We do not purchase crop insurance for our timberland holdings, and a forest fire or other event could damage a material amount of timber.

The costs of insurance coverage continue to increase, along with increases in the level of deductibles, and the availability of some insurance coverages is decreasing due to increased and more complex litigation, extensive property damage caused by natural disasters, increased cybersecurity breaches, large jury verdicts and other business and employment litigation and losses. Any substantial increases in our insurance premiums, deductibles or the availability of insurance policies could adversely affect our business, financial condition, results of operations and cash flows.

Our Business Depends on the Uninterrupted Operations of our Facilities, Systems and Business Functions, Including our Information Technology ("IT") and Other Business Systems.

Our business is dependent upon our ability to execute, in an efficient and uninterrupted fashion, necessary business functions, such as accessing key business data, financial information, order processing, invoicing and the operation of IT dependent manufacturing equipment. A significant portion of the communication between our employees, customers and suppliers around the world depends on the reliability of our IT systems. A significant interruption or major failure of the Internet, a shut-down of or inability to access one or more of our facilities, a power outage, unavailability, obsolescence or a failure of one or more of our IT, telecommunications or other systems would substantially impair our ability to perform daily functions on a timely basis and could result in a material adverse impact on our operations and adversely affect our sales.

Initiatives intended to make our cost structure, business processes and systems more efficient may not achieve the expected benefits and could inadvertently have an adverse effect on our business, operating results, financial condition and cash flows. We continuously seek to make our cost structure and business processes more efficient, including by implementing changes to our business information systems. These efforts may involve a significant investment of financial and human resources and significant changes to our current operating processes.

We have established a business continuity plan in an effort to ensure the continuation of core business operations in the event that normal operations could not be performed due to a catastrophic event. While we continue to test and assess our business continuity plan to ensure it meets the needs of our core business operations and addresses multiple business interruption events, there is no assurance that core business operations could be performed upon the occurrence of such an event which may have a material adverse effect on our business, financial condition, results of operations and cash flows.

A Cyber-Attack, Security Breach of Customer, Employee, Supplier or Company Information and Data Privacy Risks and Costs of Compliance with New Regulations may have a Material Adverse Effect on our Business, Financial Condition, Results of Operations and Cash Flows.

In the conduct of our business, we rely extensively on computer systems, including third-party systems, to collect, use, transmit, store and report data on information systems and interact with customers, vendors and employees. Increased global IT security threats and more sophisticated and targeted computer crime and increased ransomware attacks pose a risk to the security of our systems and networks and third-party systems and networks with our data (including employee and customer data), and the confidentiality, availability and integrity of our data. Despite our security measures, our IT systems and infrastructure may be vulnerable to computer viruses, cyber-attacks, and/or security breaches caused by employee error, malfeasance or other disruptions, with heightened risks due to geopolitical conflicts. These threats also may be further enhanced in frequency or effectiveness through threat actors' use of artificial intelligence technologies, which are becoming more widely adopted and increasingly sophisticated. Any such threat could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. A security breach of our computer systems or third-party systems with our data could interrupt or damage our operations or harm our reputation, or both. In addition, we could be subject to legal claims or proceedings, liability under laws that protect the privacy of personal information and regulatory penalties if confidential information relating to customers, suppliers, employees or other parties is misappropriated from our computer system or third-party systems with our data. To date, we have seen no material impact on our business or operations from these threats. However, we cannot ensure that our security efforts will prevent unauthorized access or loss of functionality to our or our third-party providers' systems. For further discussion pertaining to cybersecurity strategy and related roles and responsibilities, see Part I, Item 1C of this Form 10-K.

The regulatory framework for privacy issues continues to evolve worldwide with increased regulatory and enforcement focus on data protection in the U.S. and abroad, and an actual or alleged failure to comply with applicable U.S. or foreign data protection laws, regulations or other data protection standards in the countries in which we do business may expose us to litigation (including in some instances, class action litigation), fines, sanctions or other penalties, which could harm our business reputation, and could have an adverse effect on our financial condition, results of operations and cash flows. The data privacy landscape is continuously expanding and has significantly increased responsibilities for companies collecting, using and processing personal data, as well as significantly increased penalties for noncompliance of security and data breach obligations, specifically in the EU under the General Data Protection Regulation, in China under the Personal Information Protection Law, and in Brazil under the General Personal Data Protection Law, in addition to U.S. privacy laws in numerous states. Many of these regulations are complex and their interpretation, application and enforcement are often uncertain. This regulatory and enforcement environment is increasingly challenging and may present material obligations and risks to our business, including significantly expanded compliance burdens and enforcement risks and could result in substantial costs and a material adverse effect on our business, financial condition, results of operations and cash flows.

Risks Related to Financial Reporting

We Could be Subject to Changes in our Tax Rates, the Adoption of New U.S. or Foreign Tax Legislation or Exposure to Additional Tax Liabilities.

The multinational nature of our business subjects us to taxation in the United States and numerous foreign jurisdictions. Due to economic and political conditions, tax rates in various jurisdictions may be subject to significant change. Our future effective tax rates could be affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, or changes in tax laws or their interpretation.

The Organization for Economic Cooperation and Development has issued proposed guidance which establishes a 15% global minimum tax ("Pillar Two tax"). In December 2022, the EU issued a directive requiring member states to enact a 15% minimum tax into their domestic laws effective for fiscal years beginning on or after December 31, 2023. We do not anticipate the Pillar Two global minimum tax to have a material impact to our financial condition, results of operations or cash flows. We will continue to monitor the status of the Pillar Two tax implementation in the jurisdictions in which we operate.

Tax laws are complex and subject to varying interpretations. At this time, we believe we are properly reflecting the provision for taxes on income using all current enacted global tax laws in every jurisdiction in which we operate. However, there can be

no assurance that our tax positions will not be challenged by relevant tax authorities or that we would be successful in any such challenge.

We have a Significant Amount of Goodwill and Long-lived Assets Which, if Impaired in the Future, Would Adversely Impact our Results of Operations.

At October 31, 2024, the carrying value of our goodwill was $1,953.7 million. We may be required to record future impairments of our long-lived assets as we continue to restructure our business. Decisions to sell or close plants could reduce the estimated useful life of an asset group or indicate that the fair value of the asset group is less than the carrying value. We may also experience declines in particular businesses due to competition or other outside forces indicating our long-lived assets are not recoverable. In addition, certain future events and circumstances, including deterioration of market conditions, higher cost of capital, a decline in actual and expected consumption and demand, could result in changes to those assumptions and judgments. Any resulting impairments will impact net income in the period in which the triggering event, such as permanent or sustaining reduction in cash flows, occurs and could be significant, which could have an adverse effect on our financial condition and results of operations.

Risks Related to Regulatory and Legal Costs

Changing Climate, Global Climate Change Regulations and Greenhouse Gas Effects may Adversely Affect our Operations and Financial Performance.

There is continuing concern that emissions of greenhouse gases (“GHG”) and other human activities have or will cause significant changes in weather patterns and increase the frequency or severity of extreme weather events, including droughts, wildfires and flooding. These types of extreme weather events have and may continue to adversely impact us, our suppliers, our customers and their ability to purchase our products and our ability to timely receive appropriate raw materials to manufacture and transport our products on a timely basis.

We believe it is likely that the scientific and political attention to issues concerning the extent and causes of climate change will continue, with new and more restrictive legislation regulations and focus on environmental, social and governance (“ESG”) initiatives that could affect our financial condition, results of operations and cash flows. Foreign, federal, state and local regulatory and legislative bodies have enacted or proposed various legislative and regulatory measures relating to increased transparency and standardization of reporting related to factors that may include climate change, regulating GHG emissions, recycling of plastic materials, and energy policies, including waste tax, and other governmental charges and mandates. In March 2024, the U.S. Securities and Exchange Commission (the “SEC”) adopted final rules that, among other things, provide a framework for the reporting of climate-related risks. However, the SEC voluntarily stayed implementation of the final rules pending completion of judicial review. The final rules, to the extent they survive ongoing and possibly additional forthcoming legal challenges, will require us to provide certain climate-related information beginning with our disclosures for the fiscal year ending September 30, 2026. As such, the final disclosure requirements and reporting timeline are currently unknown, as is the cost of compliance with the new disclosure requirements in their final form. The State of California has enacted legislation that will require large U.S. companies doing business in California to make broad-based climate-related disclosures starting as early as 2026, and other states are also considering new climate change disclosure requirements. In addition, the EU Corporate Sustainability Reporting Directive (“CSRD”) became effective in 2023. CSRD applies to both EU and non-EU in-scope entities and would require them to provide expansive disclosures on various sustainability topics. Reporting obligations will start for fiscal year 2026 with the first publication in fiscal year 2027. The EU Corporate Sustainability Due Diligence Directive (“CS3D”) became effective in July 2024. We are further assessing our obligations under CSRD and CS3D while developing a compliance strategy and beginning to prepare for compliance and expect that compliance could require substantial effort in the future. We will likely need to be prepared to contend with overlapping, yet distinct, climate-related disclosure requirements in multiple jurisdictions. The compliance with foreign, federal, state and local legislation and regulations concerning climate-related disclosures may result in our Company incurring additional costs and capital expenditures, and the failure to comply with such legislation and regulations could result in fines to our Company and could affect our business, financial condition, results of operations and cash flows. We could also face increased costs related to defending and resolving legal claims and other litigation related to climate change and the alleged impact of our operations on climate change.

We, along with other companies in many business sectors, including our customers, are considering and implementing ESG and sustainability strategies, specifically ways to reduce GHG emissions. As a result, our customers may request that changes be made to our products or facilities, as well as other aspects of our production processes, that increase costs and may require the investment of capital. The failure to comply with these requests could adversely affect our relationships with some customers, which in turn could adversely affect our business, financial condition, results of operations and cash flows.

We may be Unable to Achieve Our Greenhouse Gas Emission Reduction Target by 2030.

In April 2021, we announced a GHG emission reduction target to reduce our absolute Scope 1 and 2 emissions by 28 percent from a 2019 baseline by 2030 as part of our ESG and sustainability strategy. Achievement of this target depends on our execution of operational strategies relating to investments in energy efficient equipment and options to utilize other alternative energy sources. Execution of these strategies and achievements of our 2030 target is subject to risk and uncertainties, many of which are out of our control. These risks and uncertainties include, but are not limited to our ability to execute our strategies and achieve our goals within the currently projected costs and expected timeframes; availability, use and success of on and off-site renewable energy; availability and cost of zero-emissions electric equipment and vehicles; outcome of research efforts and future technology developments such as growing our post-consumer resin product offerings and downgauging our current portfolio; availability of purchasing high quality recycled materials; growing our life cycle services network; the increased cost and availability of virtual power purchase agreements; the long timeline to complete certain sustainability projects; and the impact of acquisitions and divestitures. There are no assurances that we will be able to successfully execute our strategies and achieve our 2030 target. Failure to achieve our target could damage our reputation, customer and investor relationships or our access to financing. Further, given investors' increased focus related to environmental, social and governance matters, such a failure could cause stockholders to reduce their ownership holdings, all of which, in turn could adversely affect our business, financial condition, results of operations and cash flows and reduce our stock price.

Legislation/Regulation Related to Environmental and Health and Safety Matters Could Negatively Impact our Operations and Financial Performance.

We must comply with extensive laws, rules and regulations in the United States, Europe and in each of the countries where we conduct business regarding environmental matters, such as air, soil and water quality and waste disposal. We must also comply with extensive laws, rules and regulations regarding safety, health and corporate social responsibility matters. There can be no assurance that compliance with existing and new laws, rules and regulations will not require significant expenditures.

In addition, laws, rules and regulations, as well as the interpretation and administration of such laws and regulations by governmental agencies, can change and restrict or prohibit the manner in which we conduct our current operations, require additional permits to engage in some or all of our current operations, or increase the cost of some or all our operations. For example, the U.S. EPA has indicated potential forthcoming changes to the regulatory framework that may impact our reconditioning business requiring a change to our processes and operations going forward. Such changes could adversely affect our business, financial condition, results of operations and cash flows.

We are also subject to transportation safety regulations promulgated by the U.S. Department of Transportation ("DOT") and agencies in other jurisdictions. Both the DOT regulations and standards issued by the United Nations and adopted by various jurisdictions outside the United States set forth requirements related to the transportation of both hazardous and nonhazardous materials in some of our packaging products and subject our Company to random inspections and testing to ensure compliance. Failure to comply could result in fines to us and could affect our business, financial condition, results of operations and cash flows.

We are subject to laws, rules and regulations relating to certain raw materials used in our business or present in our products. For example, per- and polyfluoroalkyl substances ("PFAS") are a group of chemicals that have been manufactured and used in consumer and industrial products since the 1940's. PFAS compounds do not easily degrade and have been shown to accumulate over time in the environment. In the U.S., Europe and other countries where we operate, there is heightened governmental and regulatory scrutiny on PFAS usage in packaging products and its role in the contamination of soil, air and water. Governmental inquiries or requirements involving PFAS could lead to us incurring liability for damages or other costs, civil proceedings, including personal injury claims, class actions, the imposition of fines and penalties, or other remedies, as well as restrictions on or added costs for our business operations going forward. These laws, rules and regulations, as well as investigations and resulting claims by individuals, including class actions, and other businesses, could adversely affect our reputation with our customers generally, and could adversely affect our business, financial condition, results of operations and cash flows.

At the EU-level, many laws and regulations are designed to protect human health and the environment. For example, Directive 2004/35/EC concerns obligations to remedy damages to the environment, which could require us to remediate contamination identified at sites we own or use. Other EU regulations and directives limit pollution from industrial activities, reduce emissions to air, water and soil, protect water resources, reduce waste, promote recycling, reuse or reduction of materials used, achieving a circular economy, protect employee health and safety and regulate the registration, evaluation, authorization and restriction of chemicals. The European Commission published its "Fit for 55" package in July 2021; a collection of legislative proposals and amendments to existing rules aimed at implementing the EU's target of cutting greenhouse gas emissions by 55% by 2030. In addition to existing green taxes on energy use, EU plastic taxes have been introduced. Specifically, there is heightened focus and in some cases a requirement by customers and regulators to use PCR to manufacture more sustainable packaging. If we are

unable to effectively source PCR or innovate our current product offerings to meet this demand, this could negatively affect our business and results of operations. In addition, the EU Packaging & Packaging Waste Regulation that recently went into force is to be implemented over an 18-month period and imposes new requirements in terms of recycled content, recyclability and reuse from 2030 for some of our products. Failure to comply with these and other laws, or a change in the applicable legal framework, for example the increased enforcement of environmental regulations in the U.S., Europe, China and other countries or customer requirements, could affect our business, financial condition, results of operations and cash flows, in addition to those of our customers.

Our customers in the food and pharmaceutical industry are subject to increasing laws, rules and regulations relating to safety. As a result, customers may demand that changes be made to our products or facilities, as well as other aspects of our production processes, that may require the investment of capital. The failure to comply with these requests could adversely affect our relationships with some customers and result in negative effects on our business, financial condition, results of operations and cash flows.

Product Liability Claims and Other Legal Proceedings Could Adversely Affect our Operations and Financial Performance.

We produce packaging products and provide services for our customers' products, including sensitive products such as food ingredients, pharmaceutical ingredients and hazardous substances. Incidents involving these product types can involve risk of recall, contamination, spillage, leakage, fires, and explosions, which can threaten individual health, impact the environment and cause the breakdown or failure of equipment or processes and the performance of facilities below expected levels of capacity. If any of our customers have such incidents involving our products, they may bring product liability claims against us. While we have built extensive operational processes to ensure that the design and manufacture of our products meet rigorous quality standards, there can be no assurance that we or our customers will not experience operational process failures that could result in potential product, safety, regulatory or environmental claims and associated litigation. We are also subject to a variety of legal proceedings and legal compliance risks in our areas of operation around the globe. Any such claims, whether with or without merit, could be time consuming and expensive to defend and could divert management's attention and resources. In accordance with customary practice, we maintain insurance against some, but not all, of these potential claims. In the future, we may not be able to maintain insurance at commercially acceptable premium and deductible levels at all. In addition, the levels of insurance we maintain may not be adequate to fully cover any and all losses or liabilities. If any significant judgment or claim is not fully insured or indemnified against, it could have a material adverse impact on our business, financial condition, results of operations and cash flows.

We may Incur Fines or Penalties, Damage to our Reputation or other Adverse Consequences if our Employees, Agents or Business Partners Violate, or are Alleged to have Violated, Anti-bribery, Competition or Other Laws.

We cannot provide assurance that our internal controls will always protect us from reckless or criminal acts committed by our employees, agents or business partners that would violate U.S. and non-U.S. laws, including anti-bribery, competition, trade sanctions and regulation, and other laws. Any such improper actions could subject us to civil or criminal investigations in the U.S. and in other jurisdictions, could lead to substantial civil or criminal monetary and non-monetary penalties against us or our subsidiaries, and could damage our reputation. Even the allegation or appearance of our employees, agents or business partners acting improperly or illegally could damage our reputation and result in significant expenditures in investigating and responding to such actions.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

Risk Management and Strategy

We recognize the importance of effective cybersecurity risk management to our operations and interests. Our cybersecurity program is designed to protect our employees, our customers and our assets through the effective identification and mitigation of cyber risks. The program, led by the Senior Director, Global Information Technology ("IT") Security under the oversight of the Chief Information and Digital Officer ("CIDO"), encompasses a broad range of preventative, detective and responsive measures relevant to our business needs and designed to reduce our specific risks.

The cybersecurity program is modeled after and assessed against the National Institute of Standards and Technology Cybersecurity Framework ("NIST CSF"). The NIST CSF is not a certification program and our use does not imply compliance with specific, related standards – the NIST CSF is used as a guide for designing and managing cybersecurity programs.

Risks and exposures associated with our cybersecurity program are integrated into our overall enterprise risk management program and share common methodologies, reporting channels and governance processes. These processes and the governance for identifying and managing risks apply across our enterprise risk management program to other legal, compliance, strategic, operational and financial risk areas.

Core elements of our cyber program include, but are not limited to:

- Risk assessments to identify cybersecurity risks that may impact us in material ways, including risks associated with our use of third-party service providers;
- Cybersecurity awareness training for our employees and ongoing technical training for cybersecurity personnel;
- Procedural and technical security controls implemented and managed by cross-functional teams;
- An incident response plan that includes procedures for responding to cybersecurity events, including those arising from our use of third-party service providers or partners;
- Periodic evaluation of security controls through system assessments and vulnerability scanning;
- Partnerships with external providers where appropriate to supplement our internal expertise, perform security assessments and penetration testing, consult on best-practices and support incident response activities with forensic analysis.

As of October 31, 2024, we are not aware of any cybersecurity incidents that have materially impacted, or are reasonably likely to materially impact, our operations or financial condition.

Governance and Oversight

Board Oversight

While our Board has responsibility for oversight of risk management on an enterprise-wide basis, it has delegated certain risk oversight responsibilities to its committees. The Audit Committee of our Board of Directors has responsibility for oversight of our cybersecurity risk management program. Full responsibilities of the Audit Committee are set forth in the publicly available Audit Committee Charter on our website. The Committee receives quarterly cybersecurity updates covering risks, mitigation plans, and cybersecurity incidents. The full Board of Directors is provided with periodic cybersecurity updates from the CIDO or the Senior Director, Global IT Security, or both.

In the event of an urgent cybersecurity incident where full Audit Committee or Board involvement is not practical or timely, the Chairperson of the Board of Directors, the Chairperson of the Audit Committee, and the Chief Executive Officer have been appointed as an incident oversight group.

Management Oversight

The Senior Director, Global IT Security has primary responsibility for the management of ongoing cyber risks under the oversight of the CIDO. The Senior Director holds a Certified Information Systems Security Professional certification and has nearly 30 years of experience in technology, including over 10 years in software development and enterprise architecture and over 15 years implementing, maturing and leading cybersecurity programs. The CIDO is responsible for global IT strategy and operations and has nearly 30 years of experience leading enterprise technology organizations. The CIDO and Senior Director, together with others on their teams, are informed about the monitoring, prevention, detection, mitigation and remediation of cybersecurity incidents through their management of and participation in the cybersecurity risk management policies, processes and operations discussed above.

The Company's management team has designated a Cybersecurity Advisory Council (the "Council"), which consists of members of management, including the Senior Director, Global IT Security and a cross-section of Company leaders. The Council ensures strong alignment within the Company with the objectives of the cyber program, providing input on policy and risk decisions. The Council receives periodic briefings on security status, incidents, and mitigation plans.

ITEM 2. PROPERTIES

The following are our principal operating locations that are either leased or owned as of October 31, 2024. We consider our operating properties to be in satisfactory condition and adequate to meet our present needs. However, we expect to make further additions, improvements and consolidations of our properties to support our business. Our global headquarters is located in Delaware, Ohio, USA. We utilize two main shared service center locations, with one in North America and the other in Europe.

Location	Global Industrial Packaging	Paper Packaging & Services	Total
Argentina	3	—	3
Belgium	2	—	2
Brazil	9	—	9
Canada	2	4	6
China	10	—	10
France	5	—	5
Germany	4	—	4
Hungary	2	—	2
Israel	1	—	1
Italy	3	—	3
Mexico	2	—	2
Netherlands	5	—	5
Poland	1	—	1
Portugal	1	—	1
Russia	9	—	9
Saudi Arabia	2	—	2
Singapore	1	—	1
South Africa	3	—	3
Spain	3	—	3
Sweden	1	—	1
United Kingdom	4	—	4
United States	41	72	113
Totals	114	76	190

Classification	Global Industrial Packaging	Paper Packaging & Services	Total
Owned	64	40	104
Leased	50	36	86
Totals	114	76	190

We also own a substantial amount of timber properties. Our timber properties consisted of approximately 175,000 acres in the southeastern United States as of October 31, 2024.

ITEM 3. LEGAL PROCEEDINGS

We are not a party to any pending legal proceedings that are material to our business or financial condition.

From time to time, we have been a party to legal proceedings arising at the country, state or local level involving environmental sites to which we have shipped, directly or indirectly, small amounts of toxic waste, such as paint solvents. As of the filing date of this Form 10-K, we have been classified only as a “de minimis” participant in such proceedings. We are not a party to any legal proceedings involving a governmental authority and arising under any federal, state or local provisions that have been enacted or adopted regulating the discharge of materials into the environment or primarily for the purpose of protecting the environment and involving potential monetary sanctions in excess of $300,000, other than as described below.

On February 7, 2023, TPG Plastics ("TPG"), a subsidiary of Ipackchem Group SAS, which we acquired on March 26, 2024, received a letter from the United States Environmental Protection Agency ("U.S. EPA") informing TPG that the U.S. EPA had determined through testing that certain portable fuel containers ("PFCs") that were sold between 2018 and 2022 had failed emission testing. TPG also received a letter from The California Air Resources Board ("CARB"), dated November 7, 2023, informing TPG that compliance testing performed by CARB revealed that certain PFCs sold in 2018 to 2022 were noncompliant with California's PFC performance standards. TPG had already discontinued the manufacture of PFCs that were subject to the U.S. EPA in and CARB letters before the end of 2022.

We have cooperated with the governmental agencies in these investigations and proceedings. As of the filing date of this Form 10-K, no citations have been issued or fines assessed with respect to any of these proceedings. However, we anticipate that monetary sanctions imposed by the U.S. EPA and the CARB will exceed $300,000 (exclusive of interest and costs).

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Shares of our Class A and Class B Common Stock are listed on the New York Stock Exchange under the symbols GEF and GEF.B, respectively.

As of December 18, 2024, there were 295 stockholders of record of the Class A Common Stock and 51 stockholders of record of the Class B Common Stock.

We pay quarterly dividends of varying amounts computed on the basis described in Note 11 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K. The annual dividends paid for the last two years are as follows:

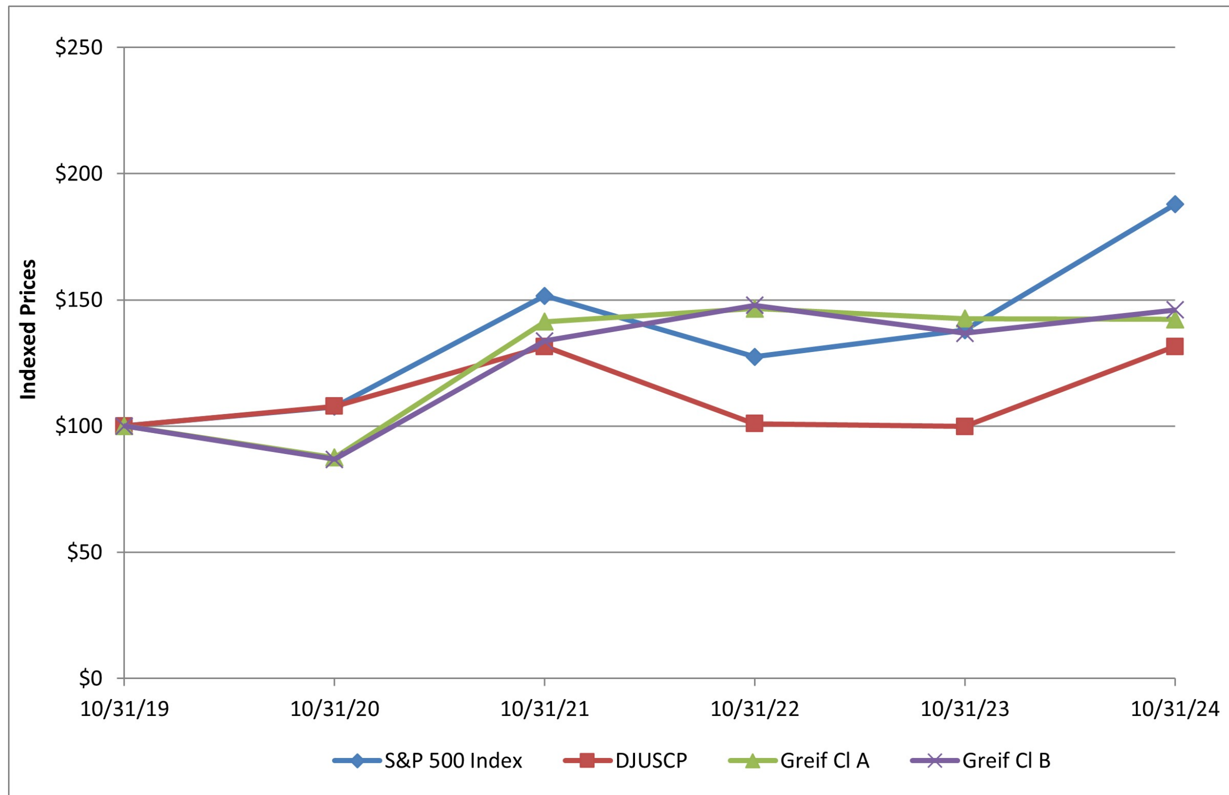
2024 Dividends per Share – Class A $2.10; Class B $3.14

2023 Dividends per Share – Class A $2.02; Class B $3.02

The terms of our current secured credit facilities and United States accounts receivable credit facility limit our ability to make restricted payments, which include dividends and purchases, redemptions and acquisitions of our equity interests. The payment of dividends and other restricted payments are subject to the condition that certain defaults do not exist under the terms of our current secured credit facilities and United States accounts receivable credit facility and, in the event that certain defaults exist, are limited in amount by a formula based, in part, on our consolidated net income. See "Liquidity and Capital Resources – Borrowing Arrangements" in Item 7 of this Form 10-K.

Performance Graph

The following graph compares the performance of shares of our Class A and B Common Stock to that of the Standard and Poor's 500 ("S&P 500") Index and the Dow Jones United States Containers and Packaging Index ("DJUSCP") assuming $100 invested on October 31, 2019 and reinvestment of dividends for each subsequent year. The graph does not purport to represent our value.



ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The terms “Greif,” the “Company,” “we,” “us” and “our” as used in this discussion refer to Greif, Inc. and its subsidiaries.

Greif Business System 2.0

The Greif Business System is a quantitative, systematic and disciplined business process that Greif has utilized for nearly 20 years. Through our focus on continuous improvement on safety, people, mindset and culture, we have accelerated our processes to Greif Business System 2.0. We believe this System increases our ability to quickly scale and implement innovation, initiatives and best practices on a global basis. In turn, we expect this to facilitate improved productivity, efficiency and value creation.

RESULTS OF OPERATIONS

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. Generally Accepted Accounting Principles (“GAAP”). The preparation of these consolidated financial statements, in accordance with these principles, require us to make estimates and assumptions that affect the reported amount of assets and liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities at the date of our consolidated financial statements.

Historical revenues and earnings may or may not be representative of future operating results due to various economic and other factors. See “Risk Factors” in Item 1A of this Form 10-K.

The non-GAAP financial measures of EBITDA and Adjusted EBITDA are used throughout the following discussion of our results of operations, both for our consolidated and segment results. For our consolidated results, EBITDA is defined as net income, plus interest expense, net, plus debt extinguishment charges, plus income tax expense, plus depreciation, depletion and amortization, and Adjusted EBITDA is defined as EBITDA plus acquisition and integration related costs, plus restructuring charges, plus non-cash asset impairment charges, plus (gain) loss on disposal of properties, plants and equipment, net, plus (gain) loss on disposal of businesses, net, plus non-cash pension settlement (income) charges, plus other costs.

Since we do not calculate net income by reportable segment, EBITDA and Adjusted EBITDA by reportable segment are reconciled to operating profit by reportable segment. In that case, EBITDA is defined as operating profit by reportable segment less other (income) expense, net, less non-cash pension settlement (income) charges, less equity earnings of unconsolidated affiliates, net of tax, plus depreciation, depletion and amortization expense for that reportable segment, and Adjusted EBITDA is defined as EBITDA plus acquisition and integration related costs, plus restructuring charges, plus non-cash asset impairment charges, plus (gain) loss on disposal of properties, plants and equipment, net, plus (gain) loss on disposal of businesses, net, plus non-cash pension settlement (income) charges, plus other costs, for that reportable segment.

We use EBITDA and Adjusted EBITDA as financial measures to evaluate our historical and ongoing operations and believe that these non-GAAP financial measures are useful to enable investors to perform meaningful comparisons of our historical and current performance. The foregoing non-GAAP financial measures are intended to supplement and should be read together with our financial results. These non-GAAP financial measures should not be considered an alternative or substitute for, and should not be considered superior to, our reported financial results. Accordingly, users of this financial information should not place undue reliance on the non-GAAP financial measures.

Change in Fiscal Year

We are changing our fiscal year end, effective for the 2025 fiscal year. Our 2025 fiscal year will begin on November 1, 2024 and end on September 30, 2025, and accordingly, will consist of eleven months. Our fourth fiscal quarter of 2025 will be the two months ending September 30, 2025. Thereafter, our fiscal year will begin on October 1 and end on September 30 of the following year.

Change in Reportable Segments

Information in this Management’s Discussion and Analysis of Financial Condition and Results of Operations includes the financial results in our three reportable segments: Global Industrial Packaging (“GIP”); Paper Packaging & Services; and Land Management. Beginning with our first fiscal quarter of 2025, we implemented changes to our reporting structure, moving to a material solution-based structure. We believe this structure will enable us to more efficiently utilize our robust scale and global network of facilities, align operations to capitalize on our deep subject matter expertise, enable further innovation and growth,

and optimize cross-selling and margin expansion opportunities. This internal re-alignment has resulted in a change in our reportable segments.

Starting November 1, with the first fiscal quarter of 2025, we will report our financial results in four reportable segments: Customized Polymer Solutions; Durable Metal Solutions; Sustainable Fiber Solutions; and Integrated Solutions. The products and services included in each of these reportable segments are as follows:

- **Customized Polymer Solutions**: Operations in the Customized Polymer Solutions reportable segment involve the production and sale of a comprehensive line of polymer based packaging products, such as plastic drums, rigid intermediate bulk containers and small plastics. Our polymer-based packaging products and services are sold on a global basis to customers in industries such as chemicals, food and beverage, agricultural, pharmaceutical and mineral products, among others.
- **Durable Metal Solutions**: Operations in the Durable Metal Solutions reportable segment involve the production and sale of metal-based packaging products, including a wide variety of steel drums. Our metal-based packaging products are sold on a global basis to customers in industries such as chemicals, petroleum, agriculture and paints and coatings, among others.
- **Sustainable Fiber Solutions**: Operations in the Sustainable Fiber Solutions reportable segment involve the production and sale of fiber-based packaging products, including fiber drums, containerboard, corrugated sheets, corrugated containers, tubes and cores and specialty partitions made from both containerboard, uncoated recycled board and coated recycled board. Our fiber-based packaging products are sold in North America in industries such as packaging, automotive, construction, food and beverage and building products. In addition, this reportable segment is involved in the management and sale of timber, timberland and special use properties in the southeastern United States.
- **Integrated Solutions**: Operations in the Integrated Solutions reportable segment involve the production and sale of complimentary packaging products, such as paints, linings and closure systems for industrial packaging products and related services, such as container life cycle management. In addition, this reportable segment is involved in the purchase and sale of recycled fiber and the production and sale of adhesives used in our paperboard products. These products and services are used internally by us and are also sold to external customers.

Tabular Financial Results

The following table sets forth the net sales, operating profit, EBITDA and Adjusted EBITDA for each of our reportable segments for 2024, 2023 and 2022:

Year Ended October 31, *(in millions)*	**2024**	**2023**	**2022**
Net sales:			
Global Industrial Packaging	$ 3,124.3	$ 2,936.8	$ 3,652.4
Paper Packaging & Services	2,303.5	2,260.5	2,675.1
Land Management	20.3	21.3	22.0
Total net sales	$ 5,448.1	$ 5,218.6	$ 6,349.5
Operating profit:			
Global Industrial Packaging	$ 341.1	$ 334.3	$ 313.7
Paper Packaging & Services	115.6	264.1	298.5
Land Management	7.9	7.1	9.0
Total operating profit	$ 464.6	$ 605.5	$ 621.2
EBITDA:			
Global Industrial Packaging	$ 454.9	$ 415.7	$ 383.5
Paper Packaging & Services	253.9	398.8	439.0
Land Management	10.1	9.3	11.8
Total EBITDA	$ 718.9	$ 823.8	$ 834.3
Adjusted EBITDA:			
Global Industrial Packaging	$ 423.7	$ 425.4	$ 458.2
Paper Packaging & Services	261.5	387.9	450.5
Land Management	9.1	8.9	8.8
Total Adjusted EBITDA	$ 694.3	$ 822.2	$ 917.5

The following table sets forth EBITDA and Adjusted EBITDA, reconciled to net income and operating profit, for our consolidated results for 2024, 2023 and 2022:

Year Ended October 31, *(in millions)*	**2024**	**2023**	**2022**
Net income	$ 295.5	$ 379.1	$ 394.0
Plus: interest expense, net	134.9	96.3	61.2
Plus: debt extinguishment charges	—	—	25.4
Plus: income tax expense	27.2	117.8	137.1
Plus: depreciation, depletion and amortization expense	261.3	230.6	216.6
EBITDA	$ 718.9	$ 823.8	$ 834.3
Net income	$ 295.5	$ 379.1	$ 394.0
Plus: interest expense, net	134.9	96.3	61.2
Plus: non-cash pension settlement charges	—	3.5	—
Plus: debt extinguishment charges	—	—	25.4
Plus: other expense, net	10.1	11.0	8.9
Plus: income tax expense	27.2	117.8	137.1
Plus: equity earnings of unconsolidated affiliates, net of tax	(3.1)	(2.2)	(5.4)
Operating profit	464.6	605.5	621.2
Less: non-cash pension settlement charges	—	3.5	—
Less: other expense, net	10.1	11.0	8.9
Less: equity earnings of unconsolidated affiliates, net of tax	(3.1)	(2.2)	(5.4)
Plus: depreciation, depletion and amortization expense	261.3	230.6	216.6
EBITDA	718.9	823.8	834.3
Plus: acquisition and integration related costs	18.5	19.0	8.7
Plus: restructuring charges	5.4	18.7	13.0
Plus: non-cash asset impairment charges	2.6	20.3	71.0
Plus: gain on disposal of properties, plants and equipment, net	(8.8)	(2.5)	(8.1)
Plus: gain on disposal of businesses, net	(46.0)	(64.0)	(1.4)
Plus: non-cash pension settlement charges	—	3.5	—
Plus: other costs*	3.7	3.4	—
Adjusted EBITDA	$ 694.3	$ 822.2	$ 917.5

*includes fiscal year-end change costs and share-based compensation impact of disposals of businesses

The following table sets forth EBITDA and Adjusted EBITDA for each of our reportable segments, reconciled to the operating profit for each reportable segment, for 2024, 2023 and 2022:

Year Ended October 31, *(in millions)*	**2024**	**2023**	**2022**
Global Industrial Packaging			
Operating profit	$ 341.1	$ 334.3	$ 313.7
Less: non-cash pension settlement charges	—	3.5	—
Less: other expense, net	11.6	12.6	9.5
Less: equity earnings of unconsolidated affiliates, net of tax	(3.1)	(2.2)	(5.4)
Plus: depreciation and amortization expense	122.3	95.3	73.9
EBITDA	454.9	415.7	383.5
Plus: acquisition and integration related costs	17.2	12.2	0.4
Plus: restructuring charges	(2.8)	4.2	9.1
Plus: non-cash asset impairment charges	1.3	1.9	69.4
Plus: gain on disposal of properties, plants and equipment, net	(2.9)	(4.4)	(2.8)
Plus: gain on disposal of businesses, net	(46.0)	(9.4)	(1.4)
Plus: non-cash pension settlement charges	—	3.5	—
Plus: other costs*	2.0	1.7	—
Adjusted EBITDA	$ 423.7	$ 425.4	$ 458.2
Paper Packaging & Services			
Operating profit	$ 115.6	$ 264.1	$ 298.5
Less: other income, net	(1.5)	(1.6)	(0.6)
Plus: depreciation and amortization expense	136.8	133.1	139.9
EBITDA	253.9	398.8	439.0
Plus: acquisition and integration related costs	1.3	6.8	8.3
Plus: restructuring charges	8.2	14.5	3.9
Plus: non-cash asset impairment charges	1.3	18.4	1.6
Plus: (gain) loss on disposal of properties, plants and equipment, net	(4.9)	2.3	(2.3)
Plus: gain on disposal of businesses, net	—	(54.6)	—
Plus: other costs*	1.7	1.7	—
Adjusted EBITDA	$ 261.5	$ 387.9	$ 450.5
Land Management			
Operating profit	$ 7.9	$ 7.1	$ 9.0
Plus: depreciation and depletion expense	2.2	2.2	2.8
EBITDA	10.1	9.3	11.8
Plus: gain on disposal of properties, plants and equipment, net	(1.0)	(0.4)	(3.0)
Adjusted EBITDA	$ 9.1	$ 8.9	$ 8.8

*includes fiscal year-end change costs and share-based compensation impact of disposals of businesses

Year 2024 Compared to Year 2023

Net Sales

Net sales were $5,448.1 million for 2024 compared with $5,218.6 million for 2023. The $229.5 million increase was primarily due to contributions from recent acquisitions and higher volumes across the Global Industrial Packaging segment and the Paper Packaging & Services segment, respectively, partially offset by lower prices in the Paper Packaging & Services segment due to lower published pricing indices. See the "Segment Review" below for additional information on net sales by reportable segment.

Gross Profit

Gross profit was $1,070.8 million for 2024 compared with $1,146.1 million for 2023. The $75.3 million decrease was primarily due to higher raw material costs and higher costs for transportation and manufacturing, partially offset by the same factors that impacted net sales. See the "Segment Review" below for additional information on gross profit by reportable segment. Gross profit margin was 19.7 percent for 2024 compared with 22.0 percent for 2023, primarily impacted by the Paper Packaging & Services segment further explained in the respective segment commentary. The decrease in gross profit margin was primarily due to higher raw material input costs in the Paper Packaging & Services segment due to higher published index purchase prices.

Selling, General and Administrative Expenses

Selling, general and administrative ("SG&A") expenses were $634.5 million for 2024 compared with $549.1 million for 2023. The $85.4 million increase was primarily due to recent acquisitions, including amortization costs, short-term incentive costs and costs incurred for strategic investments. SG&A expenses were 11.6 percent of net sales for 2024 compared with 10.5 percent of net sales for 2023.

Financial Measures

Operating profit was $464.6 million for 2024 compared with $605.5 million for 2023. Net income was $295.5 million for 2024 compared with $379.1 million for 2023. Adjusted EBITDA was $694.3 million for 2024 compared with $822.2 million for 2023. The reasons for changes in operating profit and Adjusted EBITDA for each reportable segment are described below in the "Segment Review."

Trends

We anticipate that the multi-year period of industrial contraction will continue into the 2025 fiscal year. We have not identified any compelling demand inflection on the horizon, although there has been increased demand for our containerboard products in the U.S. and some increased demand for industrial packaging in EMEA.

We expect the prices for steel, old corrugated containers, resin and other direct materials, as well as prices for transportation, labor and utilities, to remain relatively stable through the year.

Segment Review

Global Industrial Packaging

Key factors influencing profitability in the Global Industrial Packaging reportable segment are:

- Selling prices, product mix, customer demand and sales volumes;
- Raw material costs, primarily steel, resin, containerboard and used industrial packaging for reconditioning;
- Energy and transportation costs;
- Benefits from executing the Greif Business System 2.0;
- Restructuring charges;
- Acquisition of businesses and facilities;
- Divestiture of businesses and facilities; and
- Impact of foreign currency translation.

Net sales were $3,124.3 million for 2024 compared with $2,936.8 million for 2023. The $187.5 million increase in net sales was primarily due to contributions from recent acquisitions, higher volumes and higher average selling prices, partially offset by negative foreign currency translation impacts.

Gross profit was $669.4 million for 2024 compared with $634.4 million for 2023. The $35.0 million increase in gross profit was primarily due to contributions from recent acquisitions. Gross profit margin was 21.4 percent for 2024 compared with 21.6 percent for 2023.

Operating profit was $341.1 million for 2024 compared with $334.3 million for 2023. The $6.8 million increase was primarily due to a $46.1 million gain from the divestiture of Delta Petroleum Company, Inc. (the "Delta Divestiture") during the third quarter of 2024 and the same factors that impacted gross profit, partially offset by higher SG&A expenses related to recent acquisitions, including amortization costs, compensation expenses and costs incurred for strategic investments. Adjusted EBITDA was $423.7 million for 2024 compared with $425.4 million for 2023. The $1.7 million decrease was primarily due to higher SG&A expenses related to recent acquisitions and compensation expenses, offset by the same factors that impacted gross profit.

Paper Packaging & Services

Key factors influencing profitability in the Paper Packaging & Services reportable segment are:

- Selling prices, product mix, customer demand and sales volumes;
- Raw material costs, primarily old corrugated containers;
- Energy and transportation costs;
- Benefits from executing the Greif Business System 2.0;
- Restructuring charges;
- Acquisition of businesses and facilities; and
- Divestiture of businesses and facilities.

Net sales were $2,303.5 million for 2024 compared with $2,260.5 million for 2023. The $43.0 million increase was primarily due to higher volumes and contributions from recent acquisitions, partially offset by lower average selling prices as a result of lower published containerboard and boxboard prices.

Gross profit was $391.6 million for 2024 compared with $502.5 million for 2023. The $110.9 million decrease in gross profit was primarily due to higher raw material costs, transportation and manufacturing costs, partially offset by the same factors that impacted net sales. Gross profit margin was 17.0 percent for 2024 compared with 22.2 percent for 2023. The decrease in gross profit margin was primarily due to higher raw material input costs caused by higher published index purchase prices.

Operating profit was $115.6 million for 2024 compared with $264.1 million for 2023. The $148.5 million decrease in operating profit was primarily due to the same factors that impacted gross profit, a $54.6 million gain from the divestiture of Tama Paperboard, LLC in the Paper Packaging & Services segment (the "Tama Divestiture") during the first quarter of 2023 and higher SG&A expenses related to recent acquisitions, including amortization costs and short-term incentive costs. Adjusted EBITDA was $261.5 million for 2024 compared with $387.9 million for 2023. The $126.4 million decrease was primarily due to the same factors that impacted gross profit and higher SG&A expenses related to recent acquisitions and short-term incentive costs.

Land Management

As of October 31, 2024, our Land Management reportable segment consisted of approximately 175,000 acres of timber properties in the southeastern United States. Key factors influencing profitability in the Land Management reportable segment are:

- Planned level of timber sales;
- Selling prices and customer demand;
- Gains on timberland sales; and
- Gains on the disposal of development, surplus and HBU properties ("special use property").

Net sales were $20.3 million for 2024 compared with $21.3 million for 2023.

Gross profit was $9.8 million for 2024 compared with $9.2 million for 2023.

Operating profit was $7.9 million for 2024 compared with $7.1 million for 2023. Adjusted EBITDA was $9.1 million for 2024 compared with $8.9 million for 2023.

In order to maximize the value of our timber properties, we continue to review our current portfolio and explore the development of certain of these properties. This process has led us to characterize our property as follows:

- Surplus property, meaning land that cannot be efficiently or effectively managed by us, whether due to parcel size, lack of productivity, location, access limitations or for other reasons;
- HBU property, meaning land that in its current state has a higher market value for uses other than growing and selling timber;
- Development property, meaning HBU land that, with additional investment, may have a significantly higher market value than its HBU market value; and
- Core timberland, meaning land that is best suited for growing and selling timber.

We report the sale of core timberland property in timberland gains, the sale of HBU and surplus property in gain on disposal of properties, plants and equipment, net and the sale of timber and development property under net sales and cost of products sold in our consolidated statements of income. All HBU and development property, together with surplus property, is used to productively grow and sell timber until the property is sold.

Whether timberland has a higher value for uses other than growing and selling timber is a determination based upon several variables, such as proximity to population centers, anticipated population growth in the area, the topography of the land, aesthetic considerations, including access to lakes or rivers, the condition of the surrounding land, availability of utilities, markets for timber and economic considerations both nationally and locally. Given these considerations, the characterization of land is not a static process, but requires an ongoing review and re-characterization as circumstances change.

As of October 31, 2024, we estimated that there were 7,500 acres in the United States of special use property, which we expect will be available for sale in the next four to six years.

Income Tax Expense

We had operations in over 35 countries during our fiscal year 2024. Our operations outside the United States are subject to additional risks that may not exist, or be as significant, within the United States. Because of our global operations in numerous countries, we are required to address different and complex tax systems and issues which are constantly changing.

The Organization for Economic Co-operation and Development proposed a global minimum tax of 15% of reported profits (“Pillar 2”) that has been agreed upon in principle by over 140 countries. During 2023, many countries began to incorporate Pillar 2 model rule concepts into their domestic laws. Although the model rules provide a framework for applying the minimum tax, countries may enact Pillar 2 slightly differently than the model rules and on different timelines and may adjust domestic tax incentives in response to Pillar 2. We do not anticipate the Pillar Two global minimum tax to have a material impact to our financial condition, results of operations or cash flows.

Preparation of our financial statements requires the use of estimates and assumptions that affect the reported amounts of our assets, liabilities, revenues and expenses. The numerous tax jurisdictions in which we operate, along with the variety and complexity of the various tax laws, creates a level of uncertainty and requires judgment when addressing the impact of complex tax issues. Our effective tax rate and the amount of tax expense are dependent upon various factors, including the following: the tax laws of the jurisdictions in which income is earned; the ability to realize deferred tax assets; negotiation and dispute resolution with taxing authorities in the U.S. and international jurisdictions; and changes in tax laws.

The provision for income taxes is computed using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized currently based on the anticipated future tax consequences of changes in the temporary differences between the book and tax bases of assets and liabilities. This method includes an estimate of the future realization of tax benefits associated with tax losses. Deferred tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those assets are expected to be realized or settled.

Income tax expense for 2024 was $27.2 million on $319.6 million of pretax income and for 2023 was $117.8 million on $494.7 million of pretax income. The $90.6 million decrease in income tax expense for 2024 was primarily attributable to a decrease in pre-tax earnings in 2024 and the recognition of a deferred tax asset related to the onshoring of certain intangible property.

We analyze potential income tax liabilities related to uncertain tax positions in the United States and international jurisdictions. The analysis of potential income tax liabilities results in estimates recognized for uncertain tax positions following the guidance of Accounting Standards Codification ("ASC") 740, "Income Taxes." The estimation of potential tax liabilities related to uncertain tax positions involves significant judgment in evaluating the impact of uncertainties in the application of ASC 740 and complex tax laws. We periodically analyze both potential income tax liabilities and existing liabilities for uncertain tax positions resulting in both new reserves and adjustments to existing reserves in light of changing facts and circumstances. This includes the release of existing liabilities for uncertain tax positions based on the expiration of statutes of limitation. During 2024, the recognition of new uncertain tax position liabilities recorded during the current year were reduced by lapses in the statute of limitations, resulting in an overall net increase in our uncertain tax position liability. The net 2024 activity in uncertain tax positions provided a $0.8 million increase in tax expense over the prior year.

The ultimate resolution of potential income tax liabilities may result in a payment that is materially different from our current estimates. If our estimates recognized under ASC 740 prove to be different than what is ultimately resolved, such resolution could have a material impact on our financial condition and results of operations. While predicting the final outcome or the timing of the resolution of any particular tax matter is subject to various risks and uncertainties, we believe that our tax accounts related to uncertain tax positions are appropriately stated.

See Note 8 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for further information.

Year 2023 Compared to Year 2022

Results of our fiscal year 2023 compared to our fiscal year 2022 are included in our Annual Report on Form 10-K for the year ended October 31, 2023, File No. 001-00566 (see Item 7 therein).

LIQUIDITY AND CAPITAL RESOURCES

Our primary sources of liquidity are operating cash flows and borrowings under our senior secured credit facilities and proceeds from our trade accounts receivable credit facilities. We use these sources to fund our working capital needs, capital expenditures, cash dividends, debt repayment and acquisitions. We anticipate continuing to fund these items in a like manner. We currently expect that operating cash flows, borrowings under our senior secured credit facilities and proceeds from our trade accounts receivable credit facilities will be sufficient to fund our anticipated working capital, capital expenditures, cash dividends, debt repayment and other liquidity needs for at least 12 months.

Cash Flow

Year Ended October 31, *(in millions)*	**2024**	**2023**
Net cash provided by operating activities	$ 356.0	$ 649.5
Net cash used in investing activities	(658.3)	(670.2)
Net cash provided by financing activities	324.3	69.7
Effects of exchange rates on cash	(5.2)	(15.2)
Net increase in cash and cash equivalents	16.8	33.8
Cash and cash equivalents at beginning of year	180.9	147.1
Cash and cash equivalents at end of year	$ 197.7	$ 180.9

Operating Activities

During 2024 and 2023, cash (used in) provided by change in accounts receivable was $(43.4) million and $130.3 million, respectively. The unfavorable change in accounts receivable levels was primarily due to an increase in net sales.

During 2024 and 2023, cash (used in) provided by change in inventories was $(26.4) million and $101.0 million, respectively. The unfavorable change in inventories was primarily due to increases in raw material prices and purchases to meet demand.

During 2024 and 2023, cash (used in) provided by change in accounts payable was $18.9 million and $(79.8) million, respectively. The favorable change in accounts payable levels was primarily due to increase in raw material prices and purchases to meet demand.

Investing Activities

During 2024 and 2023, we invested $186.5 million and $213.6 million, respectively, of cash in capital expenditures. These investments exclude $5.2 million and $6.0 million of cash purchases and investments in timber properties during 2024 and 2023, respectively.

During 2024, we paid $568.8 million for the purchases of businesses, net of cash acquired, primarily for the acquisition of Ipackchem Group SAS (“Ipackchem”) on March 26, 2024 (“Ipackchem Acquisition”). During 2023, we paid $542.4 million for purchases of businesses, net of cash acquired, primarily for the acquisition of Lee Container Corporate, Inc. (“Lee Container”) on December 15, 2022 (the “Lee Container Acquisition”), the acquisition from approximately 10% to 80% of our ownership interest in Centurion Container LLC (“Centurion”) on March 31, 2023 (the “Centurion Acquisition”), and the acquisition of a 51% ownership interest in ColePak, LLC (“ColePak”) on August 23, 2023 (the “ColePak Acquisition”).

During 2024, we received $89.0 million of cash from sale of businesses, primarily from the Delta Divestiture. During 2023, we received $105.3 million of cash from sale of businesses, primarily from the Tama Divestiture.

Financing Activities

We paid cash dividends to our stockholders in the amount of $121.0 million and $116.5 million for the years ended October 31, 2024 and 2023, respectively. We paid dividends to non-controlling interests in the amount of $25.7 million and $14.2 million for the years ended October 31, 2024 and 2023, respectively, with the increase primarily coming from recent acquisitions.

During 2024 and 2023, we borrowed $497.2 million and $257.0 million of long-term debt, net of payments, respectively.

During 2023, we paid $63.9 million to repurchase Class A Common Stock through an accelerated share repurchase agreement and to repurchase Class A and Class B Common Stock through open market purchases.

Financial Obligations

Borrowing Arrangements

Long-term debt is summarized as follows:

(in millions)	**October 31, 2024**	**October 31, 2023**
2022 Credit Agreement - Term Loans	$ 1,707.4	$ 1,493.8
2023 Credit Agreement - Term Loans	288.8	296.3
Accounts receivable credit facilities	357.9	351.0
2022 Credit Agreement - Revolving Credit Facility	373.7	77.3
Other debt	1.3	—
	2,729.1	2,218.4
Less current portion	95.8	88.3
Less deferred financing costs	7.1	8.7
Long-term debt, net	$ 2,626.2	$ 2,121.4

2022 Credit Agreement

We and certain of our subsidiaries are parties to a senior secured credit agreement (the “2022 Credit Agreement”) with a syndicate of financial institutions.

The 2022 Credit Agreement provides for (a) an $800.0 million secured revolving credit facility, consisting of a $725.0 million multicurrency facility and a $75.0 million U.S. dollar facility, maturing on March 1, 2027, (b) a $1,100.0 million secured term loan A-1 facility with quarterly principal installments that commenced on July 31, 2022 and continue through January 31, 2027, with any outstanding principal balance of such term loan A-1 facility being due and payable on maturity on March 1, 2027, (c) a $515.0 million secured term loan A-2 facility with quarterly principal installments that commenced on July 31, 2022 and continue through January 31, 2027, with any outstanding principal balance of such term loan A-2 being due and payable on maturity on March 1, 2027, and (d) as further described below, a $300.0 million incremental secured term loan A-4 facility with quarterly principal installments that commenced on April 30, 2024 and continue through January 31, 2027, with any

outstanding principal balance of such term loan A-4 being due and payable on maturity on March 1, 2027. Subject to the terms of the 2022 Credit Agreement, the Company has an option to borrow additional funds under the 2022 Credit Agreement with the agreement of the lenders.

On March 25, 2024, the Company and certain of its subsidiaries entered into an incremental term loan agreement (the "Incremental Term Loan A-4 Agreement") with a syndicate of financial institutions. The Incremental Term Loan A-4 Agreement is an amendment to the 2022 Credit Agreement. The Incremental Term Loan A-4 Agreement provided for a loan in the aggregate principal amount of $300.0 million that was made available in a single draw on March 25, 2024 (the "Incremental Term Loan A-4"). Amounts repaid or prepaid in respect of the Incremental Term Loan A-4 may not be reborrowed. The Incremental Term Loan A-4 amortizes at 2.50% per annum in equal quarterly principal installments, with the remaining outstanding principal balance due on March 1, 2027. The terms and provisions of the Incremental Term Loan A-4 are identical in all material respects to the terms and provisions of the other term loans made under the 2022 Credit Agreement. The Company's obligations with respect to the Incremental Term Loan A-4 are secured and guaranteed with the other obligations under the 2022 Credit Agreement on a *pari passu* basis. The Company used the proceeds from the Incremental Term Loan A-4 to repay funds drawn on the revolving credit facility under the 2022 Credit Agreement for the purchase of Ipackchem on March 26, 2024.

Interest is based on Secured Overnight Financing Rate ("SOFR") plus a credit spread adjustment or a base rate that resets periodically plus, in each case, a calculated margin amount that is based on our leverage ratio. Subject to the terms of the 2022 Credit Agreement, we have an option to add borrowings to the 2022 Credit Agreement with the agreement of the lenders. As of October 31, 2024, we had $426.3 million of available borrowing capacity under the $800.0 million secured revolving credit facility.

The repayment of all borrowings under the 2022 Credit Agreement is secured by a security interest in our personal property and the personal property of certain of our U.S. subsidiaries, including equipment and inventory and certain intangible assets, as well as a pledge of the capital stock of substantially all of our U.S. subsidiaries, and is secured, in part, by the capital stock of the non-U.S. borrowers. However, in the event that we receive and maintain an investment grade rating from either Moody's Investors Services, Inc. or Standard & Poor's Financial Services LLC, we may request the release of such collateral.

The 2022 Credit Agreement contains certain covenants, which include financial covenants that require us to maintain a certain leverage ratio and an interest coverage ratio. The leverage ratio generally requires that at the end of any fiscal quarter we will not permit the ratio of (a) our total consolidated indebtedness (less the aggregate amount of our unrestricted cash and cash equivalents), to (b) our consolidated net income plus depreciation, depletion and amortization, interest expense (including capitalized interest), income taxes, and minus certain extraordinary gains and non-recurring gains (or plus certain extraordinary losses and non-recurring losses) and plus or minus certain other items for the preceding twelve months (as used in this paragraph only "EBITDA") to be greater than 4.00 to 1.00; provided that such leverage ratio is subject to (i) a covenant step-up (as defined in the 2022 Credit Agreement) increase adjustment of 0.50 upon the consummation of, and the following three fiscal quarters after, certain specified acquisitions, and (ii) a collateral release decrease adjustment of 0.25x during any collateral release period (as defined in the 2022 Credit Agreement). The interest coverage ratio generally requires that at the end of any fiscal quarter we will not permit the ratio of (a) our consolidated EBITDA, to (b) our consolidated interest expense to the extent paid or payable, to be less than 3.00 to 1.00, during the applicable preceding twelve month period. As of October 31, 2024, we were in compliance with the covenants and other agreements in the 2022 Credit Agreement.

2023 Credit Agreement

On May 17, 2023, we and Greif Packaging LLC, a direct wholly owned subsidiary of Greif, Inc. entered into a $300.0 million senior secured credit agreement (the "2023 Credit Agreement") with CoBank, ACB ("CoBank"), who acted as lender and is acting as administrative agent of the 2023 Credit Agreement. The 2023 Credit Agreement is permitted incremental equivalent debt under the terms of the 2022 Credit Agreement. The 2023 Credit Agreement provides for a $300.0 million secured term loan facility with quarterly principal installments that commenced on July 31, 2023 and continue through January 31, 2028, with any outstanding principal balance of such term loan being due and payable on maturity on May 17, 2028. We used the borrowing under the 2023 Credit Agreement to repay and refinance a portion of the outstanding borrowings under the 2022 Credit Agreement. Interest accruing under the 2023 Credit Agreement is based on SOFR plus a credit spread adjustment or a base rate that resets periodically plus, in each case, a calculated margin amount that is based on our leverage ratio.

The repayment of all borrowings under the 2023 Credit Agreement is secured by a security interest in certain of our personal property and certain of the personal property of certain of our U.S. subsidiaries, including equipment and inventory and certain intangible assets, as well as a pledge of the capital stock of substantially all of our U.S. subsidiaries. However, in the event that we receive and maintain an investment grade rating from either Moody's Investors Services, Inc. or Standard & Poor's

Financial Services LLC, we may request the release of such collateral. Our obligations under the 2023 Credit Agreement are secured on a pari passu basis with the obligations arising under the 2022 Credit Agreement.

The 2023 Credit Agreement contains covenants, including financial covenants, substantially the same as the covenants in 2022 Credit Agreement, as described above, and a "most favored lender" provision related to the 2022 Credit Agreement. As of October 31, 2024, we were in compliance with the covenants and other agreements in the 2023 Credit Agreement.

United States Trade Accounts Receivable Credit Facility

We have a $300.0 million U.S. Receivables Financing Facility Agreement (the "U.S. RFA") that matures on May 16, 2025. As of October 31, 2024, there was a $273.7 million ($270.9 million as of October 31, 2023) outstanding balance under the U.S. RFA that is reported as long-term debt in the consolidated balance sheets because we intend to refinance these obligations on a long-term basis and have the intent and ability to consummate a long-term refinancing by renewing the existing agreement or entering into new financing arrangements. The U.S. RFA also contains events of default and covenants that are substantially the same as the covenants under the 2022 Credit Agreement. As of October 31, 2024, we were in compliance with these covenants. Proceeds of the U.S. RFA are available for working capital and general corporate purposes.

International Trade Accounts Receivable Credit Facilities

We have a €100.0 million ($108.2 million as of October 31, 2024) European Receivables Financing Agreement (the "European RFA") that matures on April 22, 2025. As of October 31, 2024, there was a $84.2 million outstanding balance on the European RFA that is reported as long-term debt in the consolidated balance sheets because we intend to refinance these obligations on a long-term basis and have the intent and ability to consummate a long-term refinancing by renewing the existing agreement or entering into new financing arrangements. As of October 31, 2024, we were in compliance with the covenants that relate to the European RFA. Proceeds of the European RFA are available for working capital and general corporate purposes.

See Note 5 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information regarding our financial obligations.

Financial Instruments

Interest Rate Derivatives

As of October 31, 2024, we have various interest rate swaps with a total notional amount of $1,400.0 million ($1,300.0 million as of October 31, 2023), amortizing down over the term, in which we receive variable interest rate payments based on SOFR and in return are obligated to pay interest at a weighted average fixed interest rate of 2.97%. These derivatives are designated as cash flow hedges for accounting purposes and will mature between March 1, 2027 and July 16, 2029.

Accordingly, the gain or loss on these derivative instruments are reported as a component of other comprehensive income and reclassified into earnings in the same line item associated with the forecasted transactions and in the same period during which the hedged transaction affects earnings.

Foreign Exchange Hedges

We conduct business in international currencies and are subject to risks associated with changing foreign exchange rates. Our objective is to reduce volatility associated with foreign exchange rate changes to allow management to focus its attention on business operations. Accordingly, we enter into various contracts that change in value as foreign exchange rates change to protect the value of certain existing foreign currency assets and liabilities, commitments and anticipated foreign currency cash flows.

As of October 31, 2024 and 2023, we had outstanding foreign currency forward contracts in the notional amount of $74.1 million and $66.0 million, respectively.

Cross Currency Swaps

We have operations and investments in various international locations and are subject to risks associated with changing foreign exchange rates. We have cross currency interest rate swaps that synthetically swap $447.6 million ($319.3 million as of October 31, 2023) of U.S. fixed rate debt to Euro denominated fixed rate debt. We receive a weighted average rate of 1.27%. These agreements are designated as either net investment hedges or cash flow hedges for accounting purposes and will mature between August 10, 2026 and November 3, 2028.

Accordingly, the gain or loss on the net investment hedge derivative instruments is included in the foreign currency translation component of other comprehensive income until the net investment is sold, diluted or liquidated. The gain or loss on the cash flow hedge derivative instruments is included in the unrealized foreign exchange component of other expense, offset by the underlying gain or loss on the underlying cash flows that are being hedged. Interest payments received from the cross currency swap are excluded from the net investment hedge effectiveness assessment and are recorded in interest expense, net on the consolidated statements of income.

See Note 6 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional disclosures regarding our financial instruments.

Other Liquidity Considerations

Post-Retirement Benefit Plans

We have no near-term post-retirement benefit plan funding obligations. We intend to make a post-retirement benefit plan contribution of $6.6 million during 2025, which we anticipate will consist of $1.2 million of employer contributions and $5.4 million of benefits paid directly by the employer. See Note 9 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information regarding our post-retirement benefit plans.

Contingent Liabilities and Environmental Reserves

Environmental reserves are estimates based on current remediation plans, and actual liabilities could significantly differ from the reserve estimates. See Note 10 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information regarding our contingent liabilities and environmental reserves.

Stock Repurchase Program

Our Board of Directors has authorized the repurchase of Class A Common Stock or Class B Common Stock or any combination of the foregoing. As of October 31, 2024, the remaining number of shares that could be repurchased under this authorization was 2,504,836 shares. We did not repurchase any shares of our Class A or Class B Common Stock during 2024.

See Note 11 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information regarding this program and the repurchase of shares of Class A and B Common Stock.

Critical Accounting Policies

A summary of our significant accounting policies is included in Note 1 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K. We believe that the consistent application of these policies enables us to provide readers of the consolidated financial statements with useful and reliable information about our results of operations and financial condition. The following are the accounting policies that we believe are most important to the portrayal of our results of operations and financial condition and require our most difficult, subjective or complex judgments.

Other items that could have a significant impact on the financial statements include the risks and uncertainties listed in Part I, Item 1A – Risk Factors. Actual results could differ materially using different estimates and assumptions, or if conditions are significantly different in the future.

Business Combinations

Under the acquisition method of accounting, we allocate the fair value of purchase consideration transferred to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values on the date of the acquisition. The fair values assigned, defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between willing market participants, are based on estimates and assumptions determined by management. The excess purchase consideration over the aggregate fair value of tangible and intangible assets, net of liabilities assumed, is recorded as goodwill. When determining the fair value of assets acquired and liabilities assumed, we make significant estimates and assumptions, especially with respect to intangible assets. Our estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. During the measurement period, not to exceed one year from the date of acquisition, we may record adjustments to the assets acquired and liabilities assumed, with a corresponding offset to goodwill if new information is obtained related to facts and circumstances that existed as of the acquisition date. After the measurement period, any subsequent adjustments are reflected in the consolidated statements of operations. Acquisition costs, such as legal and consulting fees, are expensed as incurred. See

Note 2 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for additional information regarding our acquisitions.

Valuation of Goodwill

We account for goodwill in accordance with ASC 350, "Intangibles – Goodwill and Other." Under ASC 350, goodwill is not amortized, but instead is tested for impairment either annually on August 1 or when events and circumstances indicate an impairment may have occurred. Our goodwill impairment assessment is performed by reporting unit. A reporting unit is the operating segment, or a business one level below that operating segment (the component level) if discrete financial information is prepared and regularly reviewed by segment management. However, components are aggregated as a single reporting unit if they have similar economic characteristics. In conducting the annual impairment tests, the estimated fair value of each of our reporting units is compared to its carrying amount including goodwill. If the estimated fair value exceeds the carrying amount, then no impairment exists. If the carrying amount exceeds the estimated fair value, we record an impairment of goodwill equal to the amount by which the carrying value exceeds the fair value of the reporting unit, not to exceed the recorded amount of goodwill.

The Global Industrial Packaging reportable segment consists of five operating segments: Global Industrial Packaging – North America; Global Industrial Packaging – Latin America; Global Industrial Packaging – Europe, Middle East and Africa; Global Industrial Packaging – Asia Pacific; and Global Industrial Packaging – Ipackchem. Each of these operating segments also qualify as a component that has discrete financial information available that is reviewed by segment management on a regular basis. As such, these components also represent our reporting units for purposes of goodwill impairment testing.

The Paper Packaging & Services reportable segment is also an operating segment. This operating segment consists of multiple components that have discrete financial information available that is reviewed by segment management on a regular basis. We have evaluated those components and concluded that they are economically similar and should be aggregated into single reporting unit. For the purpose of aggregating our components, we review the long-term performance of gross profit margin and operating profit margin. Additionally, we review qualitative factors such as common customers, similar products, similar manufacturing processes, sharing of resources, level of integration and interdependency of processes across components. We place greater weight on the qualitative factors outlined in ASC 280 "Segment Reporting" and consider the guidance in ASC 350 in determining whether two or more components of an operating segment are economically similar and can be aggregated into a single reporting unit.

The estimated fair value of the reporting units utilized in the impairment test is based on a discounted cash flow analysis or income approach and market multiple approach. Under this method, the principal valuation focus is on the reporting unit's cash-generating capabilities. The discount rates used for impairment testing are based on a market participant's weighted average cost of capital. The use of alternative estimates, peer groups or changes in the industry, or adjusting the discount rate, earnings before interest, taxes, depreciation, depletion and amortization, multiples or price earnings ratios used could affect the estimated fair value of the assets and potentially result in impairment. Any identified impairment would result in an adjustment to our results of operations.

In performing the test, we first evaluate qualitative factors, such as macroeconomic conditions and our overall financial performance to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. We then evaluate how significant each of the identified factors could be to the fair value or carrying amount of a reporting unit and weigh those factors in totality in forming a conclusion of whether or not it is more likely than not that the fair value of a reporting unit is less than its carrying amount (the Step 0 Test). If necessary, the next step in the goodwill impairment test involves comparing the fair value of each of the reporting units to the carrying value of those reporting units. If the carrying value of a reporting unit exceeds the fair value of the reporting unit, an impairment loss would be recognized (not to exceed the carrying amount of goodwill). We performed a Step 0 test on the Global Industrial Packaging – Ipackchem reporting unit in 2024.

For all other reporting units with goodwill balances, we proceeded directly to the quantitative impairment testing and the fair value exceeded carrying value by at least 19%, so no impairment was deemed to exist. Net sales, gross profit margin and operating expense forecasts, as well as the selection of discount rates, are the assumptions that are most sensitive and susceptible to change as they require significant management judgment. In addition, certain future events and circumstances, including deterioration of market conditions, higher cost of capital, a decline in actual and expected consumption and demand, could result in changes to those assumptions and judgments. A revision of those assumptions could cause the fair value of the reporting unit to fall below its respective carrying value. If in future years, our reporting units' actual results are not consistent with our estimates and assumptions used to calculate fair value, we may be required to recognize material impairments to goodwill.

The following table summarizes the carrying amount of goodwill by reporting unit for the year ended October 31, 2024 and 2023:

	Goodwill Balance	
(in millions)	**October 31, 2024**	**October 31, 2023**
Global Industrial Packaging		
North America	$ 436.2	$ 461.6
Europe, Middle East and Africa	341.6	330.0
Asia Pacific	96.7	96.0
Ipackchem	273.8	—
Paper Packaging & Services	805.4	805.4
Total	$ 1,953.7	$ 1,693.0

*The Global Industrial Packaging: Latin America and Land Management reporting units have no goodwill balance at either reporting period.

Recent Accounting Standards

See Note 1 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K for a detailed description of recently issued and newly adopted accounting standards.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

We are subject to interest rate risk related to our financial instruments that include borrowings under the 2022 Credit Agreement, the 2023 Credit Agreement and proceeds from U.S. RFA and the European RFA and cross currency and interest rate swap agreements. We do not enter into financial instruments for trading or speculative purposes. The interest rate swap agreements have been entered into to manage our exposure to variability in interest rates.

We have various interest rate swaps with a total notional amount of $1,400.0 million, maturing between March 1, 2027 and July 16, 2029. We receive variable interest rate payments based upon one-month U.S. dollar SOFR, and in return are obligated to pay interest at a weighted average fixed interest rate of 2.97%.

Gains (losses) reclassified to earnings under these interest rate swaps were recorded in the amount of $34.8 million, $28.5 million and $(8.4) million for the years ended October 31, 2024, 2023 and 2022, respectively.

We have various cross currency interest rate swaps that synthetically swap $447.6 million of fixed rate debt to Euro denominated fixed rate debt. We receive a weighted average rate of 1.27%. These agreements are designated as either net investment hedges or cash flow hedges for accounting purposes and will mature between August 10, 2026 and November 3, 2028.

The gain or loss on the net investment hedge derivative instruments is included in the foreign currency translation component of other comprehensive income until the net investment is sold, diluted, or liquidated. The gain or loss on the cash flow hedge derivative instruments is included in the unrealized foreign exchange component of other expense, offset by the underlying gain or loss on the underlying cash flows that are being hedged. Interest payments received from the cross currency swap are excluded from the net investment hedge effectiveness assessment and are recorded in interest expense, net on the consolidated statements of income.

Gains on the cross currency swap agreement was recorded in interest expense for the amount of $6.4 million, $5.1 million and $5.8 million for the years ended October 31, 2024, 2023 and 2022, respectively.

Currency Risk

As a result of our international operations, our operating results are subject to fluctuations in currency exchange rates. The geographic presence of our operations mitigates this exposure to some degree. Additionally, our transaction exposure is somewhat limited because we produce and sell a majority of our products in local currency within most countries in which we operate.

As of October 31, 2024 and 2023 we had outstanding foreign currency forward contracts in the notional amount of $74.1 million and $66.0 million, respectively. The purpose of these contracts is to hedge our exposure to foreign currency transactions and short-term intercompany loan balances in our international businesses. These contracts resulted in realized gains (losses) recorded in other expense, net of $1.0 million, $1.2 million and $(6.2) million for the years ended October 31, 2024, 2023 and 2022, respectively.

A sensitivity analysis (with respect only to these instruments) to changes in the foreign currencies hedged indicates that if the U.S. dollar strengthened by 10 percent, the fair value of these instruments would increase by $2.3 million to a net asset of $2.3 million. Conversely, if the U.S. dollar weakened by 10 percent, the fair value of these instruments would decrease by $2.5 million to a net liability of $2.4 million.

Commodity Price Risk

We purchase commodities such as steel, resin, containerboard, pulpwood and energy. We do not currently engage in material hedging of these commodities.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF INCOME

Year Ended October 31, *(in millions, except per share amounts)*	**2024**	**2023**	**2022**
Net sales	$ 5,448.1	$ 5,218.6	$ 6,349.5
Costs of products sold	4,377.3	4,072.5	5,064.1
Gross profit	1,070.8	1,146.1	1,285.4
Selling, general and administrative expenses	634.5	549.1	581.0
Acquisition and integration related costs	18.5	19.0	8.7
Restructuring charges	5.4	18.7	13.0
Non-cash asset impairment charges	2.6	20.3	71.0
Gain on disposal of properties, plants and equipment, net	(8.8)	(2.5)	(8.1)
Gain on disposal of businesses, net	(46.0)	(64.0)	(1.4)
Operating profit	464.6	605.5	621.2
Interest expense, net	134.9	96.3	61.2
Non-cash pension settlement charges	—	3.5	—
Debt extinguishment charges	—	—	25.4
Other expense, net	10.1	11.0	8.9
Income before income tax expense and equity earnings of unconsolidated affiliates, net	319.6	494.7	525.7
Income tax expense	27.2	117.8	137.1
Equity earnings of unconsolidated affiliates, net of tax	(3.1)	(2.2)	(5.4)
Net income	295.5	379.1	394.0
Net income attributable to noncontrolling interests	(26.7)	(19.9)	(17.3)
Net income attributable to Greif, Inc.	$ 268.8	$ 359.2	$ 376.7
Basic earnings per share attributable to Greif, Inc. common shareholders:			
Class A common stock	$ 4.66	$ 6.22	$ 6.36
Class B common stock	$ 6.98	$ 9.32	$ 9.53
Diluted earnings per share attributed to Greif, Inc. common shareholders:			
Class A common stock	$ 4.64	$ 6.15	$ 6.30
Class B common stock	$ 6.98	$ 9.32	$ 9.53

See accompanying Notes to Consolidated Financial Statements.

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Year Ended October 31, *(in millions)*	**2024**	**2023**	**2022**
Net income	$ 295.5	$ 379.1	$ 394.0
Other comprehensive income (loss), net of tax:			
Foreign currency translation*	2.5	(1.1)	(27.9)
Derivative financial instruments	(37.8)	(1.1)	76.4
Minimum pension liabilities	(4.4)	(11.9)	(1.1)
Other comprehensive (loss) income, net of tax	(39.7)	(14.1)	47.4
Comprehensive income	255.8	365.0	441.4
Comprehensive income attributable to noncontrolling interests	25.6	20.0	10.5
Comprehensive income attributable to Greif, Inc.	$ 230.2	$ 345.0	$ 430.9

*Year ended October 31, 2022 amount includes $113.1 million release of foreign currency translation from business divestment.

See accompanying Notes to Consolidated Financial Statements.

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED BALANCE SHEETS

(in millions)	October 31, 2024	October 31, 2023
ASSETS		
Current assets		
Cash and cash equivalents	$ 197.7	$ 180.9
Trade accounts receivable, net of allowance	746.9	659.4
Inventories:		
Raw materials	299.6	255.8
Finished goods	99.9	82.8
Assets held for sale	3.1	5.0
Prepaid expenses	55.8	46.0
Other current assets	146.4	139.2
	1,549.4	1,369.1
Long-term assets		
Goodwill	1,953.7	1,693.0
Other intangible assets, net of amortization	937.1	792.2
Deferred tax assets	36.9	22.9
Pension assets	46.0	36.2
Operating lease right-of-use assets	284.5	290.3
Finance lease right-of-use assets	38.4	30.5
Other long-term assets	149.5	164.0
	3,446.1	3,029.1
Properties, plants and equipment		
Timber properties, net of depletion	231.2	229.6
Land	158.0	153.7
Buildings	605.6	544.3
Machinery and equipment	2,308.7	2,138.8
Capital projects in progress	159.6	200.5
	3,463.1	3,266.9
Accumulated depreciation	(1,811.0)	(1,704.3)
	1,652.1	1,562.6
Total assets	$ 6,647.6	$ 5,960.8

See accompanying Notes to Consolidated Financial Statements.

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED BALANCE SHEETS

(in millions)	October 31, 2024	October 31, 2023
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 521.9	$ 497.8
Accrued payroll and employee benefits	156.9	137.7
Restructuring reserves	4.9	16.8
Current portion of long-term debt	95.8	88.3
Short-term borrowings	18.6	5.4
Current portion of operating lease liabilities	56.5	53.8
Current portion of finance lease liabilities	5.6	3.4
Other current liabilities	154.2	136.1
	1,014.4	939.3
Long-term liabilities		
Long-term debt	2,626.2	2,121.4
Operating lease liabilities	230.2	240.2
Finance lease liabilities	34.2	27.9
Deferred tax liabilities	295.1	325.6
Pension liabilities	59.2	56.3
Post-retirement benefit obligations	5.6	6.2
Contingent liabilities and environmental reserves	19.1	17.3
Long-term income tax payable	11.7	21.2
Other long-term liabilities	104.5	93.8
	3,385.8	2,909.9
Commitments and Contingencies (Note 10)		
Redeemable Noncontrolling Interests (Note 15)	129.9	125.3
Equity		
Common stock, without par value	230.3	208.4
Treasury stock, at cost	(279.0)	(281.9)
Retained earnings	2,486.2	2,337.9
Accumulated other comprehensive income (loss), net of tax:		
Foreign currency translation	(314.1)	(317.7)
Derivative financial instruments	33.9	71.7
Minimum pension liabilities	(74.9)	(70.5)
Total Greif, Inc. shareholders' equity	2,082.4	1,947.9
Noncontrolling interests	35.1	38.4
Total shareholders' equity	2,117.5	1,986.3
Total liabilities and shareholders' equity	$ 6,647.6	$ 5,960.8

See accompanying Notes to Consolidated Financial Statements.

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

Year Ended October 31, *(in millions)*	2024	2023	2022
Cash flows from operating activities:			
Net income	$ 295.5	$ 379.1	$ 394.0
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, depletion and amortization	261.3	230.6	216.6
Non-cash asset impairment charges	2.6	20.3	71.0
Non-cash pension settlement charges	—	3.5	—
Gain on disposals of properties, plants and equipment, net	(8.8)	(2.5)	(8.1)
Gain on disposals of businesses, net	(46.0)	(64.0)	(1.4)
Unrealized foreign exchange loss (gain)	10.0	12.7	(1.6)
Deferred income tax (benefit) expense	(86.2)	(28.7)	13.4
Debt extinguishment charges	—	—	22.6
Non-cash lease expense	46.6	38.0	35.7
Other, net	3.1	2.2	0.8
Increase (decrease) in cash from changes in certain assets and liabilities, net of impacts from acquisitions:			
Trade accounts receivable	(43.4)	130.3	25.1
Inventories	(26.4)	101.0	6.1
Accounts payable	18.9	(79.8)	(40.5)
Restructuring reserves	(11.9)	4.4	(6.6)
Operating leases	(48.1)	(37.3)	(36.9)
Pension and post-retirement benefit liabilities	(11.4)	(26.9)	(24.7)
Other, net	0.2	(33.4)	(8.0)
Net cash provided by operating activities	356.0	649.5	657.5
Cash flows from investing activities:			
Acquisitions of companies, net of cash acquired	(568.8)	(542.4)	—
Purchases of properties, plants and equipment	(186.5)	(213.6)	(176.3)
Purchases of and investments in timber properties	(5.2)	(6.0)	(6.7)
Proceeds from the sale of properties, plants, equipment and other assets	14.9	8.6	20.3
Proceeds from the sale of businesses	89.0	105.3	139.2
Payments for deferred purchase price of acquisitions	(1.7)	(22.1)	(4.7)
Net cash used in investing activities	(658.3)	(670.2)	(28.2)
Cash flows from financing activities:			
Proceeds from issuance of long-term debt	2,491.2	2,285.6	3,915.8
Payments on long-term debt	(1,994.0)	(2,028.6)	(4,105.2)
Payments on short-term borrowings, net	(12.3)	(0.7)	(36.3)
Proceeds from trade accounts receivable credit facility	348.9	180.2	301.9
Payments on trade accounts receivable credit facility	(344.4)	(145.8)	(365.3)
Dividends paid to Greif, Inc. shareholders	(121.0)	(116.5)	(111.3)
Dividends paid to noncontrolling interests	(25.7)	(14.2)	(17.2)
Payments for debt extinguishment and issuance costs	—	—	(20.8)
Payments for share repurchases	—	(63.9)	(71.1)
Forward contract for accelerated share repurchases	—	—	(15.0)
Tax withholding payments for stock-based awards	(10.6)	(13.7)	—

Purchases of redeemable and mandatorily redeemable noncontrolling interest	—	(7.3)	(6.5)
Other, net	(7.8)	(5.4)	—
Net cash provided by (used in) financing activities	324.3	69.7	(531.0)
Effects of exchange rates on cash	(5.2)	(15.2)	(75.8)
Net increase in cash and cash equivalents	16.8	33.8	22.5
Cash and cash equivalents at beginning of year	180.9	147.1	124.6
Cash and cash equivalents at end of year	$ 197.7	$ 180.9	$ 147.1

Year Ended October 31, *(in millions)*	**2024**	**2023**	**2022**
Supplemental information:			
Non-cash transactions:			
Capital expenditures included in accounts payable	$ 16.7	$ 29.1	$ 24.4
Schedule of interest and income taxes paid:			
Cash payments for interest expense	$ 157.1	$ 112.9	$ 70.3
Cash payments for taxes	$ 107.5	$ 155.2	$ 157.0

See accompanying Notes to Consolidated Financial Statements.

GREIF, INC. AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

	Common Stock		Treasury Stock		Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Greif, Inc. Equity	Non controlling Interests	Total Equity
	Shares	Amount	Shares	Amount					
As of October 31, 2021	48,559	$ 179.3	28,283	$ (134.1)	$ 1,825.6	$ (356.5)	$ 1,514.3	$ 61.3	1,575.6
Net income					376.7		376.7	17.3	394.0
Other comprehensive income (loss):									
Foreign currency translation, net of $113.1 million business divestment release						(21.1)	(21.1)	(6.8)	(27.9)
Derivative financial instruments, net of $25.2 million tax expense						76.4	76.4		76.4
Minimum pension liability adjustment, net of $5.4 million tax expense						(1.1)	(1.1)		(1.1)
Comprehensive income							430.9		441.4
Divestment of noncontrolling interest							—	(23.3)	(23.3)
Current period mark to redemption value of redeemable noncontrolling interest and other					5.5		5.5		5.5
Net income allocated to redeemable noncontrolling interests								(0.1)	(0.1)
Dividends paid to Greif, Inc., Shareholders ($1.88 per Class A share and $2.81 per Class B share)					(111.3)		(111.3)		(111.3)
Dividends paid to noncontrolling interests and other								(15.4)	(15.4)
Dividends earned on RSU shares					(1.3)		(1.3)		(1.3)
Colleague stock purchase plan							—		—
Share repurchases	(1,192)	(15.0)	1,192	(71.1)			(86.1)		(86.1)
Long-term incentive shares issued	51	3.0	(51)	0.1			3.1		3.1
Shared based compensation	—	4.9	—	—			4.9		4.9
Restricted stock, executive	3	0.1	(3)	—			0.1		0.1
Restricted stock, directors	22	1.2	(22)	—			1.2		1.2
As of October 31, 2022	47,443	$ 173.5	29,399	$ (205.1)	$ 2,095.2	$ (302.3)	$ 1,761.3	$ 33.0	$ 1,794.3
Net income					359.2		359.2	19.9	379.1
Other comprehensive income (loss):									
Foreign currency translation						(1.2)	(1.2)	0.1	(1.1)
Derivative financial instruments, net of $0.3 million tax benefit						(1.1)	(1.1)		(1.1)
Minimum pension liability adjustment, net of $4.7 million tax expense						(11.9)	(11.9)		(11.9)
Comprehensive income							345.0		365.0
Current period mark to redemption value of redeemable noncontrolling interest and other					0.1		0.1		0.1
Net income allocated to redeemable noncontrolling interests								(2.7)	(2.7)
Dividends paid to Greif, Inc., Shareholders ($2.02 per Class A share and $3.02 per Class B share)					(116.5)		(116.5)		(116.5)
Dividends paid to noncontrolling interests and other								(11.9)	(11.9)
Dividends earned on RSU shares					(0.1)		(0.1)		(0.1)
Colleague stock purchase plan	—	0.3	—	—			0.3		0.3
Share repurchases	(1,006)	14.5	1,006	(78.9)			(64.4)		(64.4)
Long-term incentive shares issued	350	14.7	(350)	2.0			16.7		16.7
Shared based compensation	—	4.2	—	—			4.2		4.2
Restricted stock, directors	18	1.2	(18)	0.1			1.3		1.3
As of October 31, 2023	46,805	$ 208.4	30,037	$ (281.9)	$ 2,337.9	$ (316.5)	$ 1,947.9	$ 38.4	$ 1,986.3
Net income					268.8		268.8	26.7	295.5
Other comprehensive income (loss):									
Foreign currency translation						3.6	3.6	(1.1)	2.5
Derivative financial instruments, net of $12.9 million tax expense						(37.8)	(37.8)		(37.8)
Minimum pension liability adjustment, net of $0.4 million tax expense						(4.4)	(4.4)		(4.4)
Comprehensive income							230.2		255.8
Current period mark to redemption value of redeemable noncontrolling interest and other					1.0		1.0		1.0
Net income allocated to redeemable noncontrolling interests								(8.5)	(8.5)
Dividends paid to Greif, Inc., Shareholders ($2.10 and $3.14 per Class A share and Class B share, respectively)					(121.0)		(121.0)		(121.0)
Dividends paid to noncontrolling interests and other								(20.4)	(20.4)
Dividends earned on RSU shares					(0.5)		(0.5)		(0.5)
Colleague stock purchase plan	71	4.1	(71)	0.6			4.7		4.7
Long-term incentive shares issued	284	10.6	(284)	2.2			12.8		12.8
Share based compensation	—	6.0	—	—			6.0		6.0
Restricted stock, directors	21	1.2	(21)	0.1			1.3		1.3
As of October 31, 2024	47,181	$ 230.3	29,661	$ (279.0)	$ 2,486.2	$ (355.1)	$ 2,082.4	$ 35.1	$ 2,117.5

See accompanying Notes to Consolidated Financial Statements.

GREIF, INC. AND SUBSIDIARY COMPANIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 – BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Business

Greif, Inc. and its subsidiaries (collectively, “Greif,” “our,” or the “Company”), principally manufacture rigid industrial packaging products, such as steel, fibre and plastic drums, rigid intermediate bulk containers, jerrycans and other small plastics, closure systems for industrial packaging products, transit protection products, water bottles and remanufactured and reconditioned industrial containers, and services, such as container life cycle management, logistics, warehousing and other packaging services. The Company produces and sells containerboard, corrugated sheets, corrugated containers and other corrugated products to customers in North America in industries such as packaging, automotive, food and building products. The Company also produces and sells coated recycled paperboard and uncoated recycled paperboard, some of which are used to produce and sell industrial products (tubes and cores, construction products and protective packaging). The Company produces and sells bulk and specialty partitions made from both containerboard and uncoated recycled paperboard. In addition, the Company also purchases and sells recycled fiber and produces and sells adhesives used in the Company’s paperboard products. The Company owns timber properties in the southeastern United States which are actively harvested and regenerated. The Company has operations in over 35 countries.

Due to the variety of its products, the Company has many customers buying different products and due to the scope of the Company’s sales, no one customer is considered principal in the total operations of the Company.

The Company supplies a cross section of industries, such as chemicals, paints and pigments, food and beverage, petroleum, industrial coatings, agriculture, pharmaceuticals, minerals, packaging, automotive and building products, and makes spot deliveries on a day-to-day basis as its products are required by its customers. The Company does not operate on a backlog to any significant extent and maintains only limited levels of finished goods. Many customers place their orders weekly for delivery during the same week.

The Company’s raw materials are principally steel, resin, containerboard, old corrugated containers, pulpwood, recycled coated and uncoated paperboard and used industrial packaging for reconditioning.

Principles of Consolidation and Basis of Presentation

The consolidated financial statements include the accounts of Greif, Inc., all wholly owned and majority-owned subsidiaries, joint ventures controlled by the Company or for which the Company is the primary beneficiary and equity earnings of unconsolidated affiliates. All intercompany transactions and balances have been eliminated in consolidation. Investments in unconsolidated affiliates are accounted for using the equity method based on the Company’s ownership interest in the unconsolidated affiliate.

The Company’s consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States (“GAAP”). Certain prior year amounts have been reclassified to conform to the current year presentation.

For the 2024 fiscal year and preceding fiscal years presented herein, the Company’s fiscal year began on November 1 and ended on October 31 of the following year. Any references to years or to any quarter of those years, relates to the fiscal year or quarter, as the case may be, ended in that year, unless otherwise stated. The Company is changing its fiscal year end, effective for the 2025 fiscal year. The 2025 fiscal year will begin on November 1, 2024 and end on September 30, 2025, and accordingly, will consist of eleven months. The Company’s fourth fiscal quarter of 2025 will be the two months ending September 30, 2025. Thereafter, the Company’s fiscal year will begin on October 1 and end on September 30 of the following year.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make certain estimates, judgments and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual amounts could differ from estimates. The Company reviews these estimates on an ongoing basis.

Cash and Cash Equivalents

The Company considers highly liquid investments with an original maturity of three months or less to be cash equivalents. The carrying value of cash equivalents approximates fair value.

Allowance for Doubtful Accounts

The allowance for doubtful accounts totaled $6.7 million and $6.2 million as of October 31, 2024 and 2023, respectively. The Company recognizes allowances for bad debts based on the length of time receivables are past due with allowance percentages, based on its historical experiences, applied on a graduated scale relative to the age of the receivable amounts. If the Company is aware of a specific customer's inability to meet its financial obligations to the Company, the Company records a specific allowance for bad debts. Amounts deemed uncollectible are written-off against the allowance for doubtful accounts.

Inventory

The Company primarily uses the FIFO method of inventory valuation. Reserves for slow moving and obsolete inventories are provided based on historical experience, inventory aging and product demand. The reserves for slow moving and obsolete inventories totaled $16.5 million and $12.6 million as of October 31, 2024 and 2023, respectively. The Company continuously evaluates the adequacy of these reserves and adjusts these reserves as required.

Goodwill and Indefinite-Lived Intangibles

Goodwill is the excess of the purchase price of an acquired entity over the amounts assigned to tangible and intangible assets and liabilities assumed in the business combination. The Company accounts for goodwill and purchased indefinite-lived intangible assets in accordance with Accounting Standards Codification ("ASC") 350, "Intangibles – Goodwill and Other." Under ASC 350, goodwill and purchased intangible assets with indefinite lives are not amortized, but instead are tested for impairment at least annually. The Company tests for impairment of goodwill and indefinite-lived intangible assets as of August 1, or more frequently if certain indicators are present or changes in circumstances suggest that impairment may exist.

In accordance with ASC 350, the Company has the option to first assess qualitative factors to determine whether it is necessary to perform the quantitative test for goodwill impairment. If the Company believes, as a result of its qualitative assessment, that it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, the quantitative impairment test is required. The quantitative test for goodwill impairment is conducted at the reporting unit level by comparing the carrying value of each reporting unit to the estimated fair value of the unit. If the carrying value of a reporting unit exceeds its estimated fair value, then the goodwill of the reporting unit is impaired. Goodwill impairment is recognized as the amount that the carrying value exceeds the fair value; not to exceed the balance of goodwill attributable to the reporting unit. When a portion of a reporting unit is disposed of, goodwill is allocated to the gain or loss on that disposition based on the relative fair values of the portion of the reporting unit subject to disposition and the portion of the reporting unit that will be retained.

The Company's determinations of estimated fair value of the reporting units are based on both the market approach and a discounted cash flow analysis utilizing the income approach. Under the market approach, the principal inputs are market prices and valuation multiples for public companies engaged in businesses that are considered comparable to the reporting unit. Under the income approach, the principal inputs are the reporting unit's cash-generating capabilities and the discount rate. The discount rates used in the income approach are based on a market participant's weighted average cost of capital. The use of alternative estimates, including different peer groups or changes in the industry, or adjusting the discount rate, earnings before interest, taxes, depreciation, depletion and amortization forecasts or cash flow assumptions used could affect the estimated fair value of the reporting units and potentially result in goodwill impairment. Any identified impairment would result in an expense to the Company's results of operations. See Note 3 herein for additional information regarding goodwill and other intangible assets.

Other Intangibles

The Company accounts for intangible assets in accordance with ASC 350. Definite lived intangible assets are amortized over their useful lives on a straight-line basis, with amortization expense being recorded on the same basis. The useful lives for definite lived intangible assets vary depending on the type of asset and the terms of contracts or the valuation performed, but generally have the range of:

	Years
Trademarks and trade names	5-15
Customer relationships	5-23
Developed technology	8

Business Combinations

From time to time, the Company acquires businesses and/or assets that augment and complement its operations. In accordance with ASC 805, “Business Combinations,” these acquisitions are accounted for under the purchase method of accounting. Under this method, the Company allocates the fair value of purchase consideration transferred to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values on the date of the acquisition. The excess purchase consideration over the aggregate fair value of tangible and intangible assets, net of liabilities assumed, is recorded as goodwill. The Company’s estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates.

During the measurement period, not to exceed one year from the date of acquisition, the Company may record adjustments to the assets acquired and liabilities assumed, with a corresponding offset to goodwill if new information is obtained related to facts and circumstances that existed as of the acquisition date. After the measurement period, any subsequent adjustments are reflected in the consolidated statements of income. Acquisition costs, such as legal and consulting fees, are expensed as incurred.

The Company classifies costs incurred in connection with acquisitions and their integration as acquisition and integration related costs. These costs are expensed as incurred and consist primarily of transaction costs, legal and consulting fees, integration costs and changes in the fair value of contingent payments (earn-outs) and are recorded within Acquisition and Integration related Costs line item presented on the consolidated income statement. Acquisition transaction costs are incurred during the initial evaluation of a potential targeted acquisition and primarily relate to costs to analyze, negotiate and consummate the transaction as well as financial and legal due diligence activities. Post-acquisition integration activities are costs incurred to combine the operations of an acquired enterprise into the Company’s operations.

The consolidated financial statements include the results of operations from these business combinations from the date of acquisition.

Internal Use Software

Internal use software is accounted for under ASC 985, “Software.” Internal use software is software that is acquired, internally developed or modified solely to meet the Company’s needs and for which, during the software’s development or modification, a plan does not exist to market the software externally. Costs incurred to acquire and develop the software during the application development stage and for upgrades and enhancements that provide additional functionality are capitalized and then amortized over a 3 to 7 year period.

Long-Lived Assets

Properties, plants and equipment are stated at cost. Depreciation on properties, plants and equipment is provided on the straight-line method over the estimated useful lives of the assets, with general useful lives of the assets as follows:

	Years
Buildings	15-30
Machinery and equipment	5-15

Depreciation expense was $167.9 million, $156.8 million and $138.1 million in 2024, 2023 and 2022, respectively. Expenditures for repairs and maintenance are charged to expense as incurred. When properties are retired or otherwise disposed of, the cost and accumulated depreciation are eliminated from the asset and related allowance accounts. Gains or losses are credited or charged to income as incurred.

The Company capitalizes interest on long-term fixed asset projects using a rate that approximates the weighted average cost of borrowing.

The Company tests for impairment of properties, plants and equipment if certain indicators are present to suggest that impairment may exist. Long-lived assets are grouped together at the lowest level, generally at the plant level, for which identifiable cash flows are largely independent of cash flows of other groups of long-lived assets. As events warrant, the Company evaluates the recoverability of long-lived assets, other than goodwill and indefinite-lived intangible assets, by assessing whether the carrying value can be recovered over their remaining useful lives through the expected future undiscounted operating cash flows of the underlying business. Future decisions to change the Company’s manufacturing processes, exit certain businesses, reduce excess capacity, temporarily idle facilities and close facilities could also result in

material impairment losses. Any impairment loss that may be required is determined by comparing the carrying value of the assets to their estimated fair value.

As of October 31, 2024, the Company's timber properties consisted of approximately 175,000 acres, all of which were located in the southeastern United States. The Company's land costs are maintained by tract. Upon acquisition of a new timberland tract, the Company records separate amounts for land, merchantable timber and pre-merchantable timber allocated as a percentage of the values being purchased. The Company begins recording pre-merchantable timber costs at the time the site is prepared for planting. Costs capitalized during the establishment period include site preparation by aerial spray, costs of seedlings, including refrigeration rental and trucking, planting costs, herbaceous weed control, woody release and labor and machinery use. The Company does not capitalize interest costs in the process. Property taxes are expensed as incurred. New road construction costs are capitalized as land improvements and depreciated over a 10 to 20 year period. Road repairs and maintenance costs are expensed as incurred. Costs after establishment of the seedlings, including management costs, pre-commercial thinning costs and fertilization costs, are expensed as incurred. Once the timber becomes merchantable, the cost is transferred from the pre-merchantable timber category to the merchantable timber category in the depletion block.

Merchantable timber costs are maintained by five product classes: pine sawtimber, pine chip-n-saw, pine pulpwood, hardwood sawtimber and hardwood pulpwood, within a depletion block, with each depletion block based upon a geographic district or subdistrict. Currently, the Company has five depletion blocks. These same depletion blocks are used for pre-merchantable timber costs. Each year, the Company estimates the volume of the Company's merchantable timber for the five product classes by each depletion block and depletion costs recognized upon sales are calculated as volumes sold times the unit costs in the respective depletion block. For the years ended October 31, 2024, 2023 and 2022, the Company's depletion expense was not material.

Leases

Leases are accounted for under ASC 842, "Leases" and are categorized as operating or financing leases at inception. The lease term is also determined at lease inception and generally begins on the date the Company takes possession of the full or partial portions of leased premises. Operating lease right of use assets and liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. Operating lease liabilities represent the present value of lease payments not yet paid. Operating lease right of use assets represent the Company's right to use an underlying asset and are based upon the operating lease liabilities adjusted for prepayments or accrued lease payments, initial direct costs, lease incentives, and impairment of operating lease assets. As most of the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. Operating lease expense is recognized on a straight-line basis over the lease term. For operating leases with variable payments dependent upon an index or rate that commence, the Company applies the active index or rate as of the lease commencement date. Variable lease payments not based on an index or rate are not included in the operating lease liability as they cannot be reasonably estimated and are recognized in the period in which the obligation for those payments is incurred. Leases with a term of twelve months or less upon the commencement date are considered short-term leases, are not included on the Company's consolidated balance sheets and are expensed over the lease term.

Self-insurance

The Company is self-insured for certain of the claims made under its employee medical and dental insurance programs. The Company had recorded liabilities totaling $7.2 million and $7.0 million for estimated costs related to outstanding claims as of October 31, 2024 and 2023, respectively. These costs include an estimate for expected settlements on pending claims, administrative fees and an estimate for claims incurred but not reported. These estimates are based on management's assessment of outstanding claims, historical analyses and current payment trends. The Company recorded an estimate for the claims incurred, but not reported using an estimated lag period based upon historical information.

The Company has certain deductibles applied to various insurance policies including general liability, product, vehicle and workers' compensation. The Company maintains net liabilities totaling $21.1 million and $22.2 million for anticipated costs related to general liability, product, vehicle and workers' compensation claims as of October 31, 2024 and 2023, respectively. These costs include an estimate for expected settlements on pending claims, defense costs and an estimate for claims incurred but not reported. These estimates are based on the Company's assessment of its deductibles, outstanding claims, historical analysis, actuarial information and current payment trends.

Income Taxes

Income taxes are accounted for under ASC 740, "Income Taxes." In accordance with ASC 740, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying

amounts of existing assets and liabilities and their respective tax bases, as measured by enacted tax rates that are expected to be in effect in the periods when the deferred tax assets and liabilities are expected to be settled or realized. Valuation allowances are established when management believes it is more likely than not that some portion of the deferred tax assets will not be realized.

The Company’s effective tax rate is impacted by the amount of income generated in each taxing jurisdiction, statutory tax rates and tax planning opportunities available to the Company in the various jurisdictions in which the Company operates. Significant judgment is required in determining the Company’s effective tax rate and in evaluating its tax positions.

Tax benefits from uncertain tax positions are recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, based on the technical merits. The amount recognized is measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon settlement. The Company’s effective tax rate includes the impact of reserve provisions and changes to reserves on uncertain tax positions that are not more likely than not to be sustained upon examination as well as related interest and penalties.

A number of years may elapse before a particular matter, for which the Company has established a reserve, is audited and finally resolved. The number of years with open tax audits varies depending on the tax jurisdiction. While it is often difficult to predict the final outcome or the timing of resolution of any particular tax matter, the Company believes that its reserves reflect the probable outcome of known tax contingencies. Unfavorable settlement of any particular issue would require use of the Company’s cash. Favorable resolution would be recognized as a reduction to the Company’s effective tax rate in the period of resolution.

Restructuring Charges

The Company accounts for all exit or disposal activities in accordance with ASC 420, “Exit or Disposal Cost Obligations.” Under ASC 420, a liability is measured at its fair value and recognized as incurred.

For termination costs associated with employees who are involuntarily terminated under the terms of a one-time benefit arrangement, the Company recognizes liabilities and associated costs as of announcement date unless the employees are required to stay for a certain period of time after restructuring announcement and ratable recognition between the announcement date and termination date is materially different from announcement date recognition. For termination costs associated with a non-lease contract and costs incurred without economic benefit as a result of restructuring activities, the Company recognizes liabilities and associated costs as of contract termination date. Facility exit and employee relocation costs are recognized and measured at their respective fair value in the period in which the liability is incurred. The liability is not recognized before it is incurred, even if the costs are incremental to other operating costs and will be incurred as a direct result of a plan.

Revenue Recognition

Revenue is measured as the amount of consideration the Company expects to be entitled to in exchange for transferring goods or providing services. Customer payment terms are typically less than one year and as such, transaction prices are not adjusted for the effects of a significant financing component. Standalone selling prices for each performance obligation are generally stated in the contract. Variable consideration in the form of volume rebates is estimated based on contract terms and historical experience of actual results limited to the amount which is probable will not result in reversal of cumulative revenue recognized when the variable consideration is resolved. Taxes collected from customers and remitted to governmental authorities are excluded from net sales.

For the vast majority of revenues, contracts with customers are either a purchase order or the combination of a purchase order with a master supply agreement. A performance obligation is considered an individual unit sold. The Company does not bundle products. Prices negotiated with each individual customer are representative of the stand-alone selling price of the product. The Company typically satisfies the performance obligation at a point in time when control is transferred to customers. The point in time when control of goods is transferred is largely dependent on delivery terms.

Contract liabilities relate primarily to prepayments received from the Company’s customers before revenue is recognized and from volume rebates to customers. These amounts are included in other current liabilities in the consolidated balance sheets. The Company does not have any material contract assets. Freight charged to customers is included in net sales in the statement of income.

The Company’s contracts with customers are broadly similar in nature throughout its reportable segments, but the amount, timing and uncertainty of revenue and cash flows may vary in each reportable segment due to geographic factors. See Note 13 herein for additional disclosures of revenue disaggregated by geography for each reportable segment.

Shipping and Handling Fees and Costs

The Company includes shipping and handling fees and costs in cost of products sold.

Other Expense, net

Other expense, net primarily represents foreign currency transaction gains and losses, non-service cost components of net periodic post-retirement benefit costs and other infrequent non-operating items.

Currency Translation

In accordance with ASC 830, “Foreign Currency Matters,” the assets and liabilities denominated in a foreign currency are translated into United States dollars at the rate of exchange existing at period-end, and revenues and expenses are translated at average exchange rates.

The cumulative translation adjustments, which represent the effects of translating assets and liabilities of the Company’s international operations, are presented in the consolidated statements of changes in shareholders’ equity in accumulated other comprehensive income (loss). Transaction gains and losses on foreign currency transactions denominated in a currency other than an entity’s functional currency are credited or charged to income. The amounts included in other expense, net related to foreign currency transaction losses were not material for the years ended October 31, 2024, 2023 and 2022.

Derivative Financial Instruments

In accordance with ASC 815, “Derivatives and Hedging,” the Company records all derivatives in the consolidated balance sheet as either assets or liabilities measured at fair value. Dependent on the designation of the derivative instrument, changes in fair value are recorded to earnings or shareholders’ equity through other comprehensive income (loss).

The Company may from time to time use interest rate swap agreements to hedge against changing interest rates. For interest rate swap agreements designated as cash flow hedges, the net gain or loss on the derivative instrument is reported as a component of other comprehensive income (loss) and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. The Company’s interest rate swap agreements effectively convert a portion of floating rate debt to a fixed rate basis, thus reducing the impact of interest rate changes on future interest expense.

The Company’s cross currency interest rate swap agreements synthetically swap United States dollar denominated fixed rate debt for Euro denominated fixed rate debt and are designated as either net investment hedges or cash flow hedges for accounting purposes. The gain or loss on the net investment hedge derivative instruments is included in the foreign currency translation component of other comprehensive income until the net investment is sold, diluted, or liquidated. The gain or loss on the cash flow hedge derivative instruments is included in the unrealized foreign exchange component of other expense, offset by the underlying gain or loss on the underlying cash flows that are being hedged. Interest payments received from the cross currency swap are excluded from the net investment hedge effectiveness assessment and are recorded in interest expense, net on the consolidated statements of income.

The Company enters into currency forward contracts to hedge certain currency transactions and short-term intercompany loan balances with its international businesses. Such contracts limit the Company’s exposure to both favorable and unfavorable currency fluctuations. These contracts are adjusted to reflect market value as of each balance sheet date, with the resulting changes in fair value being recognized in other expense, net.

Any derivative contract that is either not designated as a hedge, or is so designated but is ineffective, has its changes to market value recognized in earnings immediately. If a cash flow or fair value hedge ceases to qualify for hedge accounting, the contract would continue to be carried on the balance sheet at fair value until settled and have the adjustments to the contract’s fair value recognized in earnings. If a forecasted transaction were no longer probable to occur, amounts previously deferred in accumulated other comprehensive income (loss) would be recognized immediately in earnings.

Fair Value

The Company uses ASC 820, “Fair Value Measurements and Disclosures” to account for fair value. ASC 820 defines fair value, establishes a framework for measuring fair value in GAAP and expands disclosures about assets and liabilities measured at fair value. Additionally, this standard established a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs.

The three levels of inputs used to measure fair values are as follows:

- Level 1 – Observable inputs such as unadjusted quoted prices in active markets for identical assets and liabilities.
- Level 2 – Observable inputs other than quoted prices in active markets for identical assets and liabilities.
- Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

The Company presents various fair value disclosures in Note 6 and Note 9 of the Notes to Consolidated Financial Statements included in Item 8 of this Form 10-K.

Newly Adopted Accounting Standards

There have been no new accounting pronouncements adopted since the filing of the 2023 Form 10-K.

Recently Issued Accounting Standards

In December 2023, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2023-09, "Income Taxes (Topic 740): Improvements to Tax Disclosures,” which is intended to improve the effectiveness of income tax disclosures. This ASU is effective for fiscal years beginning after December 15, 2024, with early adoption permitted. The effective date for the Company to adopt this ASU is for the fiscal year beginning October 1, 2025. The Company is in the process of determining the potential impact of adopting this guidance on its financial position, results of operations, comprehensive income, cash flow and disclosures.

In November 2023, the FASB issued ASU 2023-07, "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures,” which is intended to improve reportable segment disclosure requirements. This ASU is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The effective date for the Company to adopt this ASU is for the fiscal year and interim periods beginning November 1, 2024 and October 1, 2025 respectively. The Company is in the process of determining the potential impact of adopting this guidance on its financial position, results of operations, comprehensive income, cash flow and disclosures.

In November 2024, the FASB issued ASU 2024-03, "Income Statement - Reporting Comprehensive Income - Expense Disaggregation Disclosures (Subtopic 220-40): Disaggregation of Income Statement Expenses,” which is intended to improve disclosures related to certain income statement expenses of the Company. This ASU is effective for fiscal years beginning after December 15, 2026, and interim periods within fiscal years beginning after December 15, 2027, with early adoption permitted. The effective date for the Company to adopt this ASU is for the fiscal year and interim periods beginning October 1, 2027 and October 1, 2028 respectively. The Company is in the process of determining the potential impact of adopting this guidance on its financial position, results of operations, comprehensive income, cash flow and disclosures.

NOTE 2 — ACQUISITIONS AND DIVESTITURES

2024 Acquisitions

Ipackchem Acquisition

The Company acquired Ipackchem Group SAS (“Ipackchem”) on March 26, 2024 (the “Ipackchem Acquisition”). Ipackchem is a global market leader in the production of high-performance plastic packaging, including premium barrier and non-barrier jerrycans and other small plastic containers. The total purchase price for this acquisition was $582.1 million. The Company incurred transaction costs of $8.9 million to complete this acquisition.

The following table summarizes the consideration transferred to acquire Ipackchem and the preliminary valuation of identifiable assets acquired and liabilities assumed at the acquisition date:

(in millions)	Amounts Recognized as of the Acquisition Date	Measurement Period Adjustments	Amount Recognized as of Acquisition Date (as Adjusted)
Fair value of consideration transferred			
Cash consideration	$ 582.1	$ —	$ 582.1
Recognized amounts of identifiable assets acquired and liabilities assumed			
Cash and cash equivalents	$ 14.5	$ —	$ 14.5
Accounts receivable	50.9	—	50.9
Inventories	36.7	—	36.7
Other current assets	4.9	(0.6)	4.3
Intangibles	231.7	1.4	233.1
Operating lease right-of-use assets	15.1	2.4	17.5
Finance lease right-of-use assets	8.2	2.2	10.4
Other long-term assets	1.0	—	1.0
Properties, plants and equipment	91.5	(6.5)	85.0
Total assets acquired	454.5	(1.1)	453.4
Accounts payable	(17.2)	—	(17.2)
Short-term borrowings	(26.2)	—	(26.2)
Other current liabilities	(13.2)	0.1	(13.1)
Operating lease liabilities	(14.2)	(3.3)	(17.5)
Finance lease liabilities	(10.0)	(0.5)	(10.5)
Long-term deferred tax liability	(62.1)	6.4	(55.7)
Other long-term liabilities	(5.3)	(2.0)	(7.3)
Total liabilities assumed	(148.2)	0.7	(147.5)
Total identifiable net assets	$ 306.3	(0.4)	305.9
Goodwill	$ 275.8	$ 0.4	$ 276.2

The Company recognized goodwill related to this acquisition of $276.2 million. The goodwill recognized in this acquisition was attributable to the acquired assembled workforce, expected synergies and economies of scale, none of which qualify for recognition as a separate intangible asset. Ipackchem is reported within the Global Industrial Packaging segment to which the goodwill was assigned. The goodwill is not expected to be deductible for tax purposes.

The cost approach was used to determine the fair value for land, building, improvements and equipment. The cost approach measures the value by estimating the cost to acquire, or construct, comparable assets and adjusts for age and condition. The Company assigned to land use rights, building and improvements a useful life ranging from 1 year to 21 years and equipment a useful life ranging from 1 year to 10 years. Acquired property, plant and equipment are being depreciated over their estimated remaining useful lives on a straight-line basis.

The fair value for acquired customer relationship intangibles was determined as of the acquisition date based on estimates and judgments regarding expectations for the future after-tax cash flows arising from the revenue from customer relationships that existed on the acquisition date over their estimated lives, including the probability of expected future contract renewals and revenue, less a contributory assets charge, all of which is discounted to present value. The fair value for acquired developed technology was determined as of the acquisition date based on estimates and judgments regarding expectations for the future after-tax cash flows arising from the revenue from developed technology that existed on the acquisition date over their estimated lives. The fair values of the trademark intangible assets were determined utilizing the relief from royalty method, which is a form of the income approach. Under this method, a royalty rate based on observed market royalties is applied to projected revenue supporting the trademarks and discounted to present value using an appropriate discount rate.

Acquired intangible assets are being amortized over the estimated useful lives on a straight-line basis. The following table summarizes the preliminary purchase price allocation and weighted average remaining useful lives for identifiable intangible assets acquired as of the acquisition date:

(in millions)		Purchase Price Allocation	Weighted Average Estimated Useful Life
Customer relationships	$	183.8	13.5
Developed technology		39.0	8.0
Trademarks		10.3	5.0
Total intangible assets	$	233.1	

The Company has not yet finalized the determination of the fair value of assets acquired and liabilities assumed, specifically income taxes and contingencies. The Company expects to finalize these amounts within one year of the acquisition date. The estimate of fair value and purchase price allocation were based on information available at the time of closing the acquisition, and the Company continues to evaluate the underlying inputs and assumptions that are being used in the fair value estimates of all assets acquired and liabilities assumed. Accordingly, these preliminary estimates are subject to adjustments during the measurement period, not to exceed one year from the acquisition date, based upon new information obtained about facts and circumstances that existed as of the date of closing the acquisition.

Ipackchem's results of operations have been included in the Company's financial statements for the period subsequent to the acquisition date of March 26, 2024. Ipackchem contributed net sales of $138.8 million for the year ended October 31, 2024.

Pro Forma Results

The following unaudited supplemental pro forma data presents consolidated information as if the Ipackchem Acquisition had been completed on November 1, 2022. These amounts were calculated after adjusting Ipackchem's results to reflect interest expense incurred on the debt to finance the acquisition, additional depreciation and amortization that would have been charged assuming the fair value of property, plant and equipment and intangible assets had been applied from November 1, 2022, the adjusted income tax expense, and related transaction costs.

	Twelve Months Ended October 31,			
(in millions, except per share amounts)		2024		2023
Pro forma net sales	$	5,537.0	$	5,439.5
Pro forma net income attributable to Greif, Inc.		289.0		354.6
Basic earnings per share attributable to Greif, Inc. common shareholders:				
Class A common stock	$	5.01	$	6.14
Class B common stock	$	7.50	$	9.20
Diluted earnings per share attributable to Greif, Inc. common shareholders:				
Class A common stock	$	4.98	$	6.07
Class B common stock	$	7.50	$	9.20

The unaudited supplemental pro forma financial information is based on the Company's preliminary assignment of purchase price and therefore subject to adjustment upon finalizing the purchase price assignment. The pro forma data should not be considered indicative of the results that would have occurred if the acquisition and related financing had been consummated on the assumed completion dates, nor are they indicative of future results.

2023 Acquisitions

ColePak Acquisition

The Company acquired a 51% ownership interest in ColePak, LLC ("ColePak") on August 23, 2023 (the "ColePak Acquisition"). ColePak is a manufacturer of bulk and specialty partitions made from both containerboard and uncoated recycled board and is the second largest supplier of paper partitions in North America. The total purchase price for this acquisition, net of cash acquired, was $74.6 million. The fair value of the remaining noncontrolling interest of 49% after the acquisition was $72.1 million, which was determined using a Monte Carlo option pricing model, and is redeemable through contractual terms.

The following table summarizes the consideration transferred to acquire ColePak and the valuation of identifiable assets acquired and liabilities assumed at the acquisition date:

(in millions)	Amounts Recognized as of the Acquisition Date	Measurement Period Adjustments	Amount Recognized as of Acquisition Date (as Adjusted)
Fair value of consideration transferred			
Cash consideration	$ 74.6	$ —	$ 74.6
Noncontrolling interest	72.1	—	72.1
Recognized amounts of identifiable assets acquired and liabilities assumed			
Accounts receivable	$ 6.7	$ —	$ 6.7
Inventories	3.3	—	3.3
Intangibles	59.0	—	59.0
Operating lease right-of use assets	8.6	—	8.6
Properties, plants and equipment	19.4	—	19.4
Total assets acquired	97.0	—	97.0
Accounts payable and other current liabilities	(1.8)	—	(1.8)
Operating lease liabilities	(8.6)	—	(8.6)
Total liabilities assumed	(10.4)	—	(10.4)
Total identifiable net assets	$ 86.6	$ —	$ 86.6
Goodwill	$ 60.1	$ —	$ 60.1

The Company recognized goodwill related to this acquisition of $60.1 million. The goodwill recognized in this acquisition was attributable to the acquired assembled workforce, expected synergies, economies of scale and expanded market presence, none of which qualify for recognition as a separate intangible asset. ColePak is reported within the Paper Packaging & Services segment to which the goodwill was assigned. The goodwill is expected to be deductible for tax purposes.

The fair value for acquired customer relationship intangibles was determined as of the acquisition date based on estimates and judgments regarding expectations for the future after-tax cash flows arising from the revenue from customer relationships that existed on the acquisition date over their estimated lives, including the probability of expected future contract renewals and revenue, less a contributory assets charge, all of which is discounted to present value. The fair values of the trademark intangible assets were determined utilizing the relief from royalty method, which is a form of the income approach. Under this method, a royalty rate based on observed market royalties is applied to projected revenue supporting the trademarks and discounted to present value using an appropriate discount rate.

Acquired intangible assets are being amortized over the estimated useful lives on a straight-line basis. The following table summarizes the purchase price allocation and weighted average remaining useful lives for identifiable intangible assets acquired as of the acquisition date:

(in millions)	Purchase Price Allocation	Weighted Average Estimated Useful Life
Customer relationships	$ 50.6	15.0
Trademarks	8.4	5.0
Total intangible assets	$ 59.0	

As of October 31, 2024, the Company had completed the determination of the fair value of assets acquired and liabilities assumed related to the ColePak Acquisition.

Centurion Acquisition

The Company completed its acquisition of controlling influence over Centurion Container LLC (“Centurion”) on March 31, 2023 (the “Centurion Acquisition”), by increasing the Company’s ownership interest in Centurion from approximately 10% to 80%. Centurion is a leader in the North American intermediate bulk container (“IBC”) reconditioning industry and is involved in IBC rebottling, reconditioning and distribution. The total purchase price for this acquisition, net of cash acquired, was $144.5 million. The fair value of the remaining noncontrolling interest of 20% after the acquisition was $40.9 million, which was determined using the implied enterprise value based on the purchase price and redemption mechanism, and is redeemable through contractual terms.

Prior to the acquisition, the Company accounted for its approximately 10% ownership interest under the equity method of accounting. The acquisition of a controlling financial interest was accounted for as a step acquisition in accordance with ASC 805. As a result, fair value of our previously held interest in Centurion of $16.8 million was valued using a discounted cash flow model, resulting in a gain of $9.8 million. The gain was reflected in the consolidated statements of income within the gain on disposal of businesses, net line.

The following table summarizes the consideration transferred to acquire Centurion and the valuation of identifiable assets acquired and liabilities assumed at the acquisition date:

(in millions)	Amounts Recognized as of the Acquisition Date	Measurement Period Adjustments	Amount Recognized as of Acquisition Date (as Adjusted)
Fair value of consideration transferred			
Cash consideration	$ 144.5	$ —	$ 144.5
Noncontrolling interest	40.9	—	40.9
Previously held interest	16.8	—	16.8
Recognized amounts of identifiable assets acquired and liabilities assumed			
Accounts receivable	$ 12.4	$ —	$ 12.4
Inventories	2.0	—	2.0
Prepaid and other current assets	0.4	—	0.4
Intangibles	83.4	9.4	92.8
Operating lease assets	10.2	—	10.2
Properties, plants and equipment	7.7	—	7.7
Total assets acquired	116.1	9.4	125.5
Accounts payable	(4.2)	—	(4.2)
Other current liabilities	(4.3)	—	(4.3)
Operating lease liabilities	(10.2)	—	(10.2)
Total liabilities assumed	(18.7)	—	(18.7)
Total identifiable net assets	$ 97.4	$ 9.4	$ 106.8
Goodwill	$ 104.8	$ (9.4)	$ 95.4

The Company recognized goodwill related to this acquisition of $95.4 million. The goodwill recognized in this acquisition was attributable to the acquired assembled workforce, expanded market presence and enhanced business network, none of which qualify for recognition as a separate intangible asset. Centurion is reported within the Global Industrial Packaging segment to which the goodwill was assigned. The goodwill is expected to be deductible for tax purposes.

The fair value for acquired customer relationship intangibles was determined as of the acquisition date based on estimates and judgments regarding expectations for the future after-tax cash flows arising from the revenue from customer relationships that existed on the acquisition date over their estimated lives, including the probability of expected future contract renewals and revenue, less a contributory assets charge, all of which is discounted to present value. The fair values of the trademark intangible assets were determined utilizing the relief from royalty method, which is a form of the income approach. Under this

method, a royalty rate based on observed market royalties is applied to projected revenue supporting the trademarks and discounted to present value using an appropriate discount rate.

Acquired intangible assets are being amortized over the estimated useful lives on a straight-line basis. The following table summarizes the purchase price allocation and weighted average remaining useful lives for identifiable intangible assets acquired as of the acquisition date:

(in millions)	Purchase Price Allocation	Weighted Average Estimated Useful Life
Customer relationships	$ 77.5	12.0
Favorable leases	1.6	19.0
Trademarks	13.7	5.0
Total intangible assets	$ 92.8	

As of April 30, 2024, the Company had completed the determination of the fair value of assets acquired and liabilities assumed related to the Centurion Acquisition.

Lee Container Acquisition

The Company acquired Lee Container Corporation, Inc. ("Lee Container") on December 15, 2022 (the "Lee Container Acquisition"). Lee Container is an industry-leading manufacturer of high-performance barrier and conventional blow molded containers, jerrycans and small plastics. The total purchase price for this acquisition, net of cash acquired, was $303.0 million.

The following table summarizes the consideration transferred to acquire Lee Container and the valuation of identifiable assets acquired and liabilities assumed at the acquisition date:

(in millions)	Amounts Recognized as of the Acquisition Date	Measurement Period Adjustments	Amount Recognized as of Acquisition Date (as Adjusted)
Fair value of consideration transferred			
Cash consideration	$ 302.8	$ 0.2	$ 303.0
Recognized amounts of identifiable assets acquired and liabilities assumed			
Accounts receivable	$ 21.9	$ (0.4)	$ 21.5
Inventories	27.5	(5.2)	22.3
Prepaid and other current assets	0.5	—	0.5
Intangibles	133.5	—	133.5
Finance lease assets	32.4	1.0	33.4
Properties, plants and equipment	54.7	—	54.7
Total assets acquired	270.5	(4.6)	265.9
Accounts payable	(3.9)	—	(3.9)
Accrued payroll and employee benefits	(1.3)	—	(1.3)
Other current liabilities	(3.1)	2.9	(0.2)
Finance lease liabilities	(30.6)	(2.8)	(33.4)
Total liabilities assumed	(38.9)	0.1	(38.8)
Total identifiable net assets	$ 231.6	(4.5)	227.1
Goodwill	$ 71.2	$ 4.7	$ 75.9

The Company recognized goodwill related to this acquisition of $75.9 million. The goodwill recognized in this acquisition was attributable to the acquired assembled workforce, expected synergies and economies of scale, none of which qualify for

recognition as a separate intangible asset. Lee Container is reported within the Global Industrial Packaging segment to which the goodwill was assigned. The goodwill is expected to be deductible for tax purposes.

The cost approach was used to determine the fair value for building improvements and equipment. The cost approach measures the value by estimating the cost to acquire, or construct, comparable assets and adjusts for age and condition. The Company assigned building improvements a useful life ranging from 1 year to 9 years and equipment a useful life ranging from 1 year to 19 years. Acquired property, plant and equipment are being depreciated over their estimated remaining useful lives on a straight-line basis.

The fair value for acquired customer relationship intangibles was determined as of the acquisition date based on estimates and judgments regarding expectations for the future after-tax cash flows arising from the revenue from customer relationships that existed on the acquisition date over their estimated lives, including the probability of expected future contract renewals and revenue, less a contributory assets charge, all of which is discounted to present value. The fair values of the trademark intangible assets were determined utilizing the relief from royalty method, which is a form of the income approach. Under this method, a royalty rate based on observed market royalties is applied to projected revenue supporting the trademarks and discounted to present value using an appropriate discount rate.

Acquired intangible assets are being amortized over the estimated useful lives on a straight-line basis. The following table summarizes the purchase price allocation and weighted average remaining useful lives for identifiable intangible assets acquired as of the acquisition date:

(in millions)		Purchase Price Allocation	Weighted Average Estimated Useful Life
Customer relationships	$	120.0	15.0
Trademarks		13.5	5.0
Total intangible assets	$	133.5	

As of January 31, 2024, the Company had completed the determination of the fair value of assets acquired and liabilities assumed related to the Lee Container Acquisition.

Pro Forma Results

The following unaudited supplemental pro forma data presents consolidated information as if the ColePak Acquisition, Centurion Acquisition and Lee Container Acquisition had been completed on November 1, 2021. These amounts were calculated after adjusting ColePak's, Centurion's and Lee Container's results to reflect interest expense incurred on the debt to finance the acquisitions, additional depreciation and amortization that would have been charged assuming the fair value of property, plant and equipment and intangible assets had been applied from November 1, 2021, the adjusted tax expense, and related transaction costs.

(in millions, except per share amounts)	Twelve Months Ended October 31, 2023	
Pro forma net sales	$	5,276.5
Pro forma net income attributable to Greif, Inc.		361.0
Basic earnings per share attributable to Greif, Inc. common shareholders:		
Class A common stock	$	6.25
Class B common stock	$	9.36
Diluted earnings per share attributable to Greif, Inc. common shareholders:		
Class A common stock	$	6.18
Class B common stock	$	9.36

The pro forma data should not be considered indicative of the results that would have occurred if the acquisition and related financing had been consummated on the assumed completion dates, nor are they indicative of future results.

Divestitures

Delta Divestiture

During the third quarter of 2024, the Company completed its divestiture of a U.S. business in the Global Industrial Packaging segment, Delta Petroleum Company, Inc. (the "Delta Divestiture"), for net cash proceeds of $91.2 million. The Delta Divestiture did not qualify as discontinued operations because it did not represent a strategic shift that has had a major impact on the Company's operations or financial results. The Delta Divestiture resulted in a $46.1 million gain on sale of business, including goodwill allocated to the sale of $26.1 million.

Tama Divestiture

During the first quarter of 2023, the Company completed its divestiture of a U.S. business in the Paper Packaging & Services segment, Tama Paperboard, LLC (the "Tama Divestiture"), for current net cash proceeds of $100.0 million. The Tama Divestiture did not qualify as discontinued operations as it did not represent a strategic shift that has had a major impact on the Company's operations or financial results. The Tama Divestiture resulted in a $54.6 million gain on sale of business, including goodwill allocated to the sale of $22.5 million.

NOTE 3 – GOODWILL AND OTHER INTANGIBLE ASSETS

The following table summarizes the changes in the carrying amount of goodwill by reportable segment for the years ended October 31, 2024 and 2023:

(in millions)	Global Industrial Packaging	Paper Packaging & Services	Total
Balance at October 31, 2022	$ 696.6	$ 767.9	$ 1,464.5
Goodwill acquired	175.4	60.1	235.5
Goodwill allocated to divestitures and businesses held for sale	—	(22.5)	(22.5)
Currency translation	15.6	(0.1)	15.5
Balance at October 31, 2023	$ 887.6	$ 805.4	$ 1,693.0
Goodwill acquired	278.5	—	278.5
Goodwill allocated to divestitures	(26.1)	—	(26.1)
Currency translation	8.3	—	8.3
Balance at October 31, 2024	$ 1,148.3	$ 805.4	$ 1,953.7

The Company reviews goodwill by reporting unit and indefinite-lived intangible assets for impairment as required by ASC 350, "Intangibles – Goodwill and Other," either annually on August 1, or whenever events and circumstances indicate impairment may have occurred. A reporting unit is the operating segment, or a business unit one level below that operating segment (the component level) if discrete financial information is prepared and regularly reviewed by segment management. The components are aggregated into reporting units for purposes of goodwill impairment testing to the extent they share similar qualitative and quantitative characteristics.

The Company performed its annual goodwill impairment test as of August 1, 2024. The Company's goodwill reporting units either passed the Step 0 test or the fair value of the Company's goodwill reporting units exceeded the carrying value, resulting in no impairment. Discount rates, revenue growth rates and gross margins are the assumptions that are most sensitive and susceptible to change as they require significant management judgment. In addition, certain future events and circumstances, including deterioration of market conditions, higher cost of capital, a decline in actual and expected consumption and demand, could result in changes to these assumptions and judgments. A revision of these assumptions could cause the fair value of the reporting unit to fall below its respective carrying value. As for all of the Company's reporting units, if in future years, the reporting unit's actual results are not consistent with the Company's estimates and assumptions used to calculate fair value, the Company may be required to recognize material impairments to goodwill.

The following table summarizes the carrying amount of net intangible assets by class as of October 31, 2024 and 2023:

(in millions)	Gross Intangible Assets	Accumulated Amortization	Net Intangible Assets
October 31, 2024:			
Indefinite lived:			
Trademarks and trade names	$ 7.9	$ —	$ 7.9
Definite lived:			
Customer relationships	1,188.0	332.1	855.9
Trademarks and trade names	54.8	18.8	36.0
Developed technology	38.9	3.3	35.6
Other	2.1	0.4	1.7
Total	$ 1,291.7	$ 354.6	$ 937.1
October 31, 2023:			
Indefinite lived:			
Trademarks and trade names	$ 7.9	$ —	$ 7.9
Definite lived:			
Customer relationships	1,031.1	283.2	747.9
Trademarks and trade names	44.3	9.6	34.7
Other	2.1	0.4	1.7
Total	$ 1,085.4	$ 293.2	$ 792.2

Gross intangible assets increased by $206.3 million for the year ended October 31, 2024. The increase was attributable to $231.6 million additional assets from acquisitions and $5.0 million of currency fluctuations, which was offset by the write-off of $30.3 million fully amortized assets.

Amortization expense was $91.5 million, $71.9 million and $58.2 million for the years ended October 31, 2024, 2023 and 2022, respectively. Amortization expense for the next five years is expected to be $96.8 million in 2025, $96.6 million in 2026, $96.5 million in 2027, $91.9 million in 2028 and $87.6 million in 2029.

Definite lived intangible assets for the periods presented are subject to amortization and are being amortized using the straight-line method over periods that are contractually or legally determined, or over the period a market participant would benefit from the asset. Indefinite lived intangibles of approximately $7.9 million as of October 31, 2024, related primarily to the Tri-Sure trademark and trade names related to Box Board and Pachmas, are not amortized, but rather are tested for impairment at least annually.

NOTE 4 – RESTRUCTURING CHARGES

The following is a reconciliation of the beginning and ending restructuring reserve balances for the years ended October 31, 2024 and 2023:

(in millions)	Employee Separation Costs	Other Costs	Total
Balance at October 31, 2022	$ 11.2	$ 1.1	$ 12.3
Costs incurred and charged to expense	11.8	6.9	18.7
Costs paid or otherwise settled	(6.6)	(7.6)	(14.2)
Balance at October 31, 2023	$ 16.4	$ 0.4	$ 16.8
Costs incurred and charged to expense	(1.4)	6.8	5.4
Costs paid or otherwise settled	(10.2)	(7.1)	(17.3)
Balance at October 31, 2024	$ 4.8	$ 0.1	$ 4.9

The focus for restructuring activities in 2024 was to optimize and integrate operations and close underperforming plants in the Paper Packaging & Services reportable segment and to optimize and rationalize operations in the Global Industrial Packaging reportable segment. During the year ended October 31, 2024, the Company recorded restructuring charges of $5.4 million, as compared to $18.7 million of restructuring charges recorded during the year ended October 31, 2023. The restructuring activity for the year ended October 31, 2024 consisted of ($9.0) million release of prior period restructuring severance accrual no longer probable of occurring, $7.6 million in employee separation costs and $6.8 million in other restructuring costs, primarily consisting of professional fees and other fees associated with restructuring activities. There were four plants closed or divested in 2024 and a total of 126 employees severed throughout 2024 as part of the Company's restructuring efforts.

The focus for restructuring activities in 2023 was to optimize and integrate operations and close underperforming plants in the Paper Packaging & Services reportable segment and to optimize and rationalize operations in the Global Industrial Packaging reportable segment. During 2023, the Company recorded restructuring charges of $18.7 million, consisting of $11.8 million in employee separation costs and $6.9 million in other restructuring costs, primarily consisting of professional fees and other fees associated with restructuring activities. There were nine plants closed or divested in 2023 and a total of 456 employees severed throughout 2023 as part of the Company's restructuring efforts.

The focus for restructuring activities in 2022 was to optimize and integrate operations in the Paper Packaging & Services reportable segment and to rationalize operations and close underperforming assets in the Global Industrial Packaging reportable segment. During 2022, the Company recorded restructuring charges of $13.0 million, consisting of $6.3 million in employee separation costs and $6.7 million in other restructuring costs, primarily consisting of professional fees incurred for services specifically associated with employee separation and relocation. There were seventeen plants closed or divested in 2022 and a total of 132 employees severed throughout 2022 as part of the Company's restructuring efforts.

The following is a reconciliation of the total amounts expected to be incurred from open restructuring plans or plans that are being formulated and have not been announced as of the filing date of this Form 10-K. Remaining amounts expected to be incurred were $12.7 million as of October 31, 2024:

(in millions)	Total Amounts Expected to be Incurred	Amounts Incurred During the year ended October 31, 2024	Amounts Remaining to be Incurred
Global Industrial Packaging:			
Employee separation costs	$ (2.2)	$ (4.3)	2.1
Other restructuring costs	2.7	1.5	1.2
	0.5	(2.8)	3.3
Paper Packaging & Services:			
Employee separation costs	3.2	2.9	0.3
Other restructuring costs	14.4	5.3	9.1
	17.6	8.2	9.4
Total	$ 18.1	$ 5.4	$ 12.7

NOTE 5 – LONG-TERM DEBT

Long-term debt is summarized as follows:

(in millions)	October 31, 2024	October 31, 2023
2022 Credit Agreement - Term Loans	$ 1,707.4	$ 1,493.8
2023 Credit Agreement - Term Loans	288.8	296.3
Accounts receivable credit facilities	357.9	351.0
2022 Credit Agreement - Revolving Credit Facility	373.7	77.3
Other debt	1.3	—
	2,729.1	2,218.4
Less current portion	95.8	88.3
Less deferred financing costs	7.1	8.7
Long-term debt, net	$ 2,626.2	$ 2,121.4

Credit Agreements

The Company and certain of its subsidiaries are parties to a senior secured credit agreement (the "2022 Credit Agreement") with a syndicate of financial institutions.

The 2022 Credit Agreement provides for (a) an $800.0 million secured revolving credit facility, consisting of a $725.0 million multicurrency facility and a $75.0 million U.S. dollar facility, maturing on March 1, 2027, (b) a $1,100.0 million secured term loan A-1 facility with quarterly principal installments that commenced on July 31, 2022 and continue through January 31, 2027, with any outstanding principal balance of such term loan A-1 facility being due and payable on maturity on March 1, 2027, and (c) a $515.0 million secured term loan A-2 facility with quarterly principal installments that commenced on July 31, 2022 and continue through January 31, 2027, with any outstanding principal balance of such term loan A-2 being due and payable on maturity on March 1, 2027, and (d) as further described below, a $300.0 million incremental secured term loan A-4 facility with quarterly principal installments that commenced on April 30, 2024 and continue through January 31, 2027, with any outstanding principal balance of such term loan A-4 being due and payable on maturity on March 1, 2027. Subject to the terms of the 2022 Credit Agreement, the Company has an option to borrow additional funds under the 2022 Credit Agreement with the agreement of the lenders.

On March 25, 2024, the Company and certain of its subsidiaries entered into an incremental term loan agreement (the "Incremental Term Loan A-4 Agreement") with a syndicate of financial institutions. The Incremental Term Loan A-4 Agreement is an amendment to the 2022 Credit Agreement. The Incremental Term Loan A-4 Agreement provided for a loan in the aggregate principal amount of $300.0 million that was made available in a single draw on March 25, 2024 (the "Incremental Term Loan A-4"). Amounts repaid or prepaid in respect of the Incremental Term Loan A-4 may not be reborrowed. The Incremental Term Loan A-4 amortizes at 2.50% per annum in equal quarterly principal installments, with the remaining outstanding principal balance due on March 1, 2027. The terms and provisions of the Incremental Term Loan A-4 are identical in all material respects to the terms and provisions of the other term loans made under the 2022 Credit Agreement. The Company's obligations with respect to the Incremental Term Loan A-4 are secured and guaranteed with the other obligations under the 2022 Credit Agreement on a *pari passu* basis. The Company used the proceeds from the Incremental Term Loan A-4 to repay funds drawn on the revolving credit facility under the 2022 Credit Agreement for the purchase of Ipackchem on March 26, 2024.

Interest is based on Secured Overnight Financing Rate ("SOFR") plus a credit spread adjustment or a base rate that resets periodically plus, in each case, a calculated margin amount that is based on the Company's leverage ratio.

On May 17, 2023, the Company and Greif Packaging LLC, a direct wholly owned subsidiary of Greif, Inc. ("Greif Packaging"), entered into a $300.0 million senior secured credit agreement (the "2023 Credit Agreement" and, together with the 2022 Credit Agreement, the "2022 and 2023 Credit Agreements") with CoBank, ACB ("CoBank"), which acted as a lender and is acting as administrative agent of the 2023 Credit Agreement. The 2023 Credit Agreement is permitted incremental equivalent debt under the terms of the 2022 Credit Agreement. The 2023 Credit Agreement provides for a $300.0 million secured term loan facility with quarterly principal installments that commenced on July 31, 2023 and continue through January 31, 2028, with any outstanding principal balance of such term loan being due and payable on maturity on May 17, 2028. The Company

used the borrowing under the 2023 Credit Agreement to repay and refinance a portion of the outstanding borrowings under the 2022 Credit Agreement.

Interest accruing under the 2023 Credit Agreement is based on SOFR plus a credit spread adjustment or a base rate that resets periodically plus, in each case, a calculated margin amount that is based on the Company's leverage ratio.

As of October 31, 2024, $2,369.9 million was outstanding under the 2022 and 2023 Credit Agreements. The current portion was $95.8 million, and the long-term portion was $2,274.1 million. The weighted average interest rate for borrowings under the 2022 and 2023 Credit Agreements was 6.52% for the year ended October 31, 2024. The actual interest rate for borrowings under the 2022 and 2023 Credit Agreements was 6.36% as of October 31, 2024. The deferred financing costs associated with the term loan portion of the 2022 and 2023 Credit Agreements totaled $7.0 million as of October 31, 2024 and are recorded as a reduction of long-term debt on the consolidated balance sheets. The deferred financing costs associated with the revolving portion of the 2022 Credit Agreement totaled $2.5 million as of October 31, 2024 and are recorded within other long-term assets on the consolidated balance sheets.

United States Trade Accounts Receivable Credit Facility

Greif Receivables Funding LLC ("Greif Funding"), Greif Packaging, for itself and as servicer, and certain other U.S. subsidiaries of the Company entered into a Third Amended and Restated Transfer and Administration Agreement, dated as of September 24, 2019 (the "Third Amended TAA"), with Bank of America, N.A., as the agent, managing agent, administrator and committed investor, and various investor groups, managing agents and administrators, from time to time parties thereto, to provide for a receivables financing facility (the "U.S. RFA"). On May 17, 2024, the Third Amended TAA was amended with a new maturity date of May 16, 2025 and provides an accounts receivables facility of $300.0 million. The weighted average interest rate for borrowings under the U.S. RFA was 6.21% for the year ended October 31, 2024. The deferred financing costs associated with the U.S. RFA totaled $0.1 million as of October 31, 2024 and are recorded as a reduction of long-term debt on the consolidated balance sheets.

Greif Funding is a direct subsidiary of Greif Packaging and is included in the Company's consolidated financial statements. However, because Greif Funding is a separate and distinct legal entity from the Company, the assets of Greif Funding are not available to satisfy the liabilities and obligations of the Company, Greif Packaging or other subsidiaries of the Company, and the liabilities of Greif Funding are not the liabilities or obligations of the Company or its other subsidiaries.

The U.S. RFA is secured by certain trade accounts receivables related to the Global Industrial Packaging and the Paper Packaging & Services businesses of Greif Packaging and other subsidiaries of the Company in the United States and bears interest at a variable rate based on the London InterBank Offered Rate or an applicable base rate, plus a margin, or a commercial paper rate, all as provided in the Third Amended TAA. Interest is payable on a monthly basis and the principal balance is payable upon termination of the U.S. RFA. As of October 31, 2024, there was a $273.7 million ($270.9 million as of October 31, 2023) outstanding balance under the U.S. RFA that is reported as long-term debt in the consolidated balance sheets because the Company intends to refinance this obligation on a long-term basis and has the intent and ability to consummate a long-term refinancing.

International Trade Accounts Receivable Credit Facilities

On April 19, 2024, Cooperage Receivables Finance B.V. and Greif Services Belgium BV, an indirect wholly owned subsidiary of Greif, Inc., amended and restated the Nieuw Amsterdam Receivables Financing Agreement (the "European RFA") with affiliates of a major international bank. The amended and restated European RFA matures April 22, 2025. The European RFA provides an accounts receivable financing facility of up to €100.0 million ($108.2 million as of October 31, 2024) secured by certain European accounts receivable. As of October 31, 2024, $84.2 million ($80.1 million as of October 31, 2023) was outstanding on the European RFA that is reported as long-term debt on the consolidated balance sheets because the Company intends to refinance these obligations on a long-term basis and has the intent and ability to consummate a long-term refinancing. The weighted average interest rate for borrowings under the European RFA was 4.67% for the year ended October 31, 2024.

Other

As of October 31, 2024, annual scheduled payments and maturities, including the current portion of long-term debt, were $455.0 million in 2025, $95.8 million in 2026, $1,912.0 million in 2027, $266.3 million in 2028 and zero thereafter.

NOTE 6 – FINANCIAL INSTRUMENTS AND FAIR VALUE MEASUREMENTS

Recurring Fair Value Measurements

The following table presents the fair value of those assets and (liabilities) measured on a recurring basis as of October 31, 2024 and 2023:

	October 31, 2024							
	Assets				Liabilities			
(in millions)	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Interest rate derivatives	$ —	$ 40.4	$ —	$ 40.4	$ —	$ (5.6)	$ —	$ (5.6)
Foreign exchange hedges	—	0.2	—	0.2	—	(0.1)	—	(0.1)
Insurance annuity	—	—	18.9	18.9	—	—	—	—
Cross currency swap	—	17.6	—	17.6	—	(6.4)	—	(6.4)

	October 31, 2023							
	Assets				Liabilities			
(in millions)	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Interest rate derivatives	$ —	$ 78.4	$ —	$ 78.4	$ —	$ —	$ —	$ —
Foreign exchange hedges	—	0.1	—	0.1	—	(0.1)	—	(0.1)
Insurance annuity	—	—	18.8	18.8	—	—	—	—
Cross currency swap	—	18.9	—	18.9	—	—	—	—

The carrying amounts of cash and cash equivalents, trade accounts receivable, accounts payable, current liabilities and short-term borrowings as of October 31, 2024 and 2023 approximate their fair values because of the short-term nature of these items and are not included in this table.

Interest Rate Derivatives

As of October 31, 2024, the Company has various interest rate swaps with a total notional amount of $1,400.0 million ($1,300.0 million as of October 31, 2023), maturing between March 1, 2027 and July 16, 2029. The Company will receive variable rate interest payments based upon one-month U.S. dollar SOFR, and in return the Company will be obligated to pay interest at a weighted average fixed interest rate of 2.97%. This effectively will convert the borrowing rate on an amount of debt equal to the notional amount of the interest rate swaps from a variable rate to a fixed rate.

These derivatives are designated as cash flow hedges for accounting purposes. Accordingly, the gain or loss on these derivative instruments are reported as a component of other comprehensive income and reclassified into earnings in the same line item associated with the forecasted transaction and in the same period during which the hedged transaction affects earnings. See Note 14 herein for additional disclosures of the aggregate gain or loss included within other comprehensive income. The assumptions used in measuring fair value of these interest rate derivatives are considered level 2 inputs, which are based upon observable market rates, including SOFR and interest paid based upon a designated fixed rate over the life of the swap agreements.

Gains (losses) reclassified to earnings under these contracts were $34.8 million, $28.5 million and $(8.4) million for the years ended October 31, 2024, 2023 and 2022. A derivative gain of $17.0 million, based upon interest rates at October 31, 2024, is expected to be reclassified from accumulated other comprehensive income (loss) to earnings in the next twelve months.

Foreign Exchange Hedges

The Company conducts business in various international currencies and is subject to risks associated with changing foreign exchange rates. The Company's objective is to reduce volatility associated with foreign exchange rate changes. Accordingly, the Company enters into various contracts that change in value as foreign exchange rates change to protect the value of certain existing foreign currency assets and liabilities, commitments and anticipated foreign currency cash flows. As of October 31, 2024, the Company had outstanding foreign currency forward contracts in the notional amount of $74.1 million ($66.0 million as of October 31, 2023).

Adjustments to fair value are recognized in earnings, offsetting the impact of the hedged profits. The assumptions used in measuring fair value of foreign exchange hedges are considered level 2 inputs, which were based on observable market pricing for similar instruments, principally foreign exchange futures contracts.

Realized gains (losses) recorded in other expense, net under fair value contracts were $1.0 million, $1.2 million and $(6.2) million for the years ended October 31, 2024, 2023 and 2022, respectively. Unrealized net gains (losses) recognized by the Company in other expense, net were $0.1 million, zero and $(0.2) million for the years ended October 31, 2024, 2023 and 2022, respectively.

Cross Currency Swap

As of October 31, 2024, the Company has various cross currency interest rate swaps that synthetically swap $447.6 million ($319.3 million as of October 31, 2023) of U.S. fixed rate debt to Euro denominated fixed rate debt. The Company receives a weighted average rate of 1.27% on these swaps. These agreements are designated as either net investment hedges or cash flow hedges for accounting purposes and will mature between August 10, 2026 and November 3, 2028.

The gain or loss on the net investment hedge derivative instruments is included in the foreign currency translation component of other comprehensive income until the net investment is sold, diluted, or liquidated. See Note 14 herein for additional disclosures of the aggregate gain or loss included within other comprehensive income. The gain or loss on the cash flow hedge derivative instruments is included in the unrealized foreign exchange component of other expense, offset by the underlying gain or loss on the underlying cash flows that are being hedged. Interest payments received for the cross currency swap are excluded from the net investment hedge effectiveness assessment and are recorded in interest expense, net on the consolidated statements of income. The assumptions used in measuring fair value of the cross currency swap are considered level 2 inputs, which are based upon the Euro to United States dollar exchange rate market.

For the years ended October 31, 2024, 2023 and 2022, gains recorded in interest expense, net under the cross currency swap agreements were $6.4 million, $5.1 million and $5.8 million, respectively.

Other Financial Instruments

The fair values of the Company's 2022 Credit Agreement, the 2023 Credit Agreement, the U.S. RFA and the European RFA do not materially differ from carrying value as the Company's cost of borrowing is variable and approximates current borrowing rates. The fair values of the Company's long-term obligations are estimated based on either the quoted market prices for the same or similar issues or the current interest rates offered for the debt of the same remaining maturities, which are considered level 2 inputs in accordance with ASC 820, "Fair Value Measurements and Disclosures."

Pension Plan Assets

On an annual basis the Company compares the asset holdings of its pension plan to targets it previously established. The pension plan assets are categorized as equity securities, debt securities, fixed income securities, insurance annuities or other assets, which are considered level 1, level 2 and level 3 fair value measurements. The typical asset holdings include:

- Common stock: Valued based on quoted prices and are primarily exchange-traded.
- Mutual funds: Valued at the Net Asset Value ("NAV") available daily in an observable market.
- Common collective trusts: Unit value calculated based on the observable NAV of the underlying investment.
- Pooled separate accounts: Unit value calculated based on the observable NAV of the underlying investment.
- Government and corporate debt securities: Valued based on readily available inputs such as yield or price of bonds of comparable quality, coupon, maturity and type.
- Insurance annuity: Value is derived based on the value of the corresponding liability.

Non-Recurring Fair Value Measurements

The assumptions used in measuring fair value of long-lived assets are considered level 3 inputs, which include bids received from third parties, recent purchase offers, market comparable information and discounted cash flows based on assumptions that market participants would use. The assumptions used in measuring fair value of assets and liabilities held for sale are considered level 3 inputs, which include recent purchase offers, market comparables and/or data obtained from commercial real estate brokers. On an annual basis or when events or circumstances indicate impairment may have occurred, the Company performs impairment tests for goodwill and indefinite-lived intangibles as defined under ASC 350, "Intangibles-Goodwill and Other."

The Company recognized asset impairment charges of $2.6 million and $20.3 million for the years ended October 31, 2024 and 2023.

The following table presents quantitative information about the significant unobservable inputs used to determine the fair value of the impairment of long-lived assets held and used, net assets held for sale, goodwill and indefinite-lived intangibles for the twelve months ended October 31, 2024 and 2023:

	Quantitative Information about Non-Recurring Fair Value Measurements			
(in millions)	**Fair Value of Impairment**	**Valuation Technique**	**Unobservable Input**	**Range of Input Values**
October 31, 2024				
Impairment of Long-Lived Assets	$ 2.6	Discounted Cash Flows, Indicative Bids	Discounted Cash Flows, Indicative Bids	N/A
Total	$ 2.6			
October 31, 2023				
Impairment of Long-Lived Assets	$ 20.3	Discounted Cash Flows, Indicative Bids	Discounted Cash Flows, Indicative Bids	N/A
Total	$ 20.3			

During the year ended October 31, 2024, the Company wrote down long-lived assets with a carrying value of $10.7 million to a fair value of $8.1 million, resulting in recognized asset impairment charges of $2.6 million. These charges include $1.3 million related to properties, plants and equipment, net, in the Global Industrial Packaging reportable segment and $1.3 million related to properties, plants and equipment, net, in the Paper Packaging & Services reportable segment.

During the year ended October 31, 2023, the Company wrote down long-lived assets with a carrying value of $30.5 million to a fair value of $10.2 million, resulting in recognized asset impairment charges of $20.3 million. These charges include $1.9 million related to properties, plants and equipment, net, in the Global Industrial Packaging reportable segment and $18.4 million related to properties, plants and equipment, net, in the Paper Packaging & Services reportable segment.

During the year ended October 31, 2022, the Company wrote down long-lived assets with a carrying value of $4.0 million to a fair value of $0.0 million, resulting in recognized asset impairment charges of $4.0 million. These charges include $2.3 million related to properties, plants and equipment, net, in the Global Industrial Packaging reportable segment and $1.7 million related to properties, plants and equipment, net, in the Paper Packaging & Services reportable segment. During the year ended October 31, 2022, the Company entered into a definitive agreement to divest its approximately 50% equity interest in the Flexible Products & Services business (the "FPS Divestiture"). This agreement triggered the reclassification of the Flexible Products & Services business to assets and liabilities held for sale, which further resulted in recognized impairment charges of $62.4 million in the first quarter of 2022. During the year ended October 31, 2022, the Company wrote down indefinite-lived intangible, resulting in recognized impairment charges of $4.6 million.

NOTE 7 – STOCK-BASED COMPENSATION

Stock-based compensation is accounted for in accordance with ASC 718, "Compensation – Stock Compensation," which requires companies to estimate the fair value of share-based awards on the date of grant using an option-pricing model.

The Company's material stock-based compensation plans include the Long-Term Incentive Plan, which consists of the 2020 Long-Term Incentive Plan (the "2020 LTIP") and the 2006 Amended and Restated Long-Term Incentive Plan (the "2006

LTIP"); and the Amended and Restated Outside Directors Equity Award Plan (the "Outside Directors Plan"). The total stock compensation expense recorded under all plans was $16.8 million, $21.4 million and $34.4 million for periods ended October 31, 2024, 2023 and 2022 respectively.

Long-Term Incentive Plan

The Long-Term Incentive Plan is intended to focus management on the key measures that drive superior performance over the longer term. The Long-Term Incentive Plan provides key employees with incentive compensation based upon consecutive and overlapping three-year performance periods that commence at the start of every year. For each three-year performance period, the performance goals are based on performance criteria as determined by the Compensation Committee.

2020 Long-Term Incentive Plan

For the three-year performance periods ending after fiscal 2021, awards have been made under the 2020 LTIP. Participants may be granted restricted stock units ("RSUs") or performance stock units ("PSUs") or a combination thereof.

The Company grants RSUs based on a three-year vesting period on the basis of service only. The RSUs are an equity-classified plan measured at fair value on the grant date recognized ratably over the service period. Dividend-equivalent rights may be granted in connection with an RSU award and are recognized in conjunction with the Company's dividend issuance and settled upon vesting of the award. Upon vesting, the RSUs are to be awarded in shares of Class A Common Stock.

The Company has made the following grants of RSUs under the 2020 LTIP:

Grant Date	December 12, 2023	December 14, 2022	December 16, 2021
Service Period	11/1/2023 - 9/30/2026	11/1/2022 - 10/31/2025	11/1/2021 - 10/31/2024
RSUs Granted	120,843	105,753	99,006
Weighted Average Fair Value of RSUs	$62.83	$68.99	$60.54

During 2024, the Company issued 53,060 shares of Class A Common Stock, which excludes shares withheld for the payment of taxes owed by recipients for RSUs vested, for the performance period commenced on November 1, 2020 and ended October 31, 2023.

The Company grants PSUs for a three-year performance period based upon service, performance criteria and market conditions. The performance criteria are based on targeted levels of (a) adjusted earnings before interest, taxes, depreciation, depletion and amortization and (b) total shareholder return as determined by the Compensation Committee. The PSUs are a liability-classified plan wherein the fair value of the PSUs awarded is determined at each reporting period using a Monte Carlo simulation. A Monte Carlo simulation uses assumptions including the risk-free interest rate, expected volatility of the Company's stock price and expected life of the awards to determine a fair value of the market condition throughout the vesting period. If earned, the PSUs are to be awarded in shares of Class A Common Stock.

The following table summarizes the key assumptions used in estimating the value of PSUs:

Grant Date	December 12, 2023	December 14, 2022	December 16, 2021
Performance Period	11/1/2023 - 9/30/2026	11/1/2022 - 10/31/2025	11/1/2021 - 10/31/2024
PSUs Granted	202,402	183,218	162,392
Weighted Average Fair Value of PSUs at Grant Date	$60.77	$70.06	$60.08
Weighted Average Fair Value of PSUs at Valuation Date	$100.72	$—	$109.01
Valuation Date Stock Price	$62.44	$62.44	$62.44
Risk-Free Rate at Valuation Date	4.1%	4.2%	—%
Estimated Volatility at Valuation Date	27.7%	26.7%	—%

During 2024, the Company issued 229,859 shares of Class A Common Stock, which excludes shares withheld for the payment of taxes owed by recipients for PSUs vested, for the performance period commenced on November 1, 2020 and ended October 31, 2023.

2006 Amended and Restated Long-Term Incentive Plan

For the three-year performance period ending in fiscal 2021, awards were made under the 2006 LTIP, with the performance goals based on targeted levels of adjusted earnings before interest, taxes, depreciation, depletion and amortization. For this performance period, awards were to be paid 50% in cash and 50% in restricted stock. All restricted stock awards under the 2006 LTIP were fully vested at the date of award. Under the 2006 LTIP, the Company granted 51,593 shares of restricted Class A Common Stock with a grant date fair value of $59.83 for 2022.

The total stock compensation expense recorded under the Long-Term Incentive Plan was $15.5 million, $20.1 million and $33.1 million for the periods ended October 31, 2024, 2023 and 2022, respectively.

Amended and Restated Outside Directors Equity Award Plan

Under the Outside Directors Plan, the Company granted 20,925 shares of restricted Class A Common Stock with a grant date fair value of $63.31 in 2024 and 18,144 shares of restricted Class A Common Stock with a grant date fair value of $70.41 in 2023. The total expense recorded under the Outside Directors Plan was $1.3 million, $1.3 million and $1.3 million for the periods ended October 31, 2024, 2023 and 2022, respectively. All restricted stock awards under the Outside Directors Plan are fully vested at the date of award.

NOTE 8 – INCOME TAXES

The provision for income taxes consists of the following:

	Year Ended October 31,		
(in millions)	**2024**	**2023**	**2022**
Current			
Federal	$ 44.7	$ 77.4	$ 54.6
State and local	8.9	19.6	19.9
Non-U.S.	59.8	49.1	49.2
Total Current	113.4	146.1	123.7
Deferred			
Federal	(61.5)	(18.8)	12.5
State and local	(12.7)	(8.6)	(6.6)
Non-U.S.	(12.0)	(0.9)	7.5
Total Deferred	(86.2)	(28.3)	13.4
Tax expense	$ 27.2	$ 117.8	$ 137.1

The U.S. income before income tax expense was $85.1 million, $240.7 million and $333.5 million in 2024, 2023 and 2022, respectively. The non-U.S. income before income tax expense was $234.5 million, $254.0 million and $192.2 million in 2024, 2023 and 2022, respectively.

The following is a reconciliation of the provision for income taxes based on the federal statutory rate to the Company's effective income tax rate:

	Year Ended October 31,		
	2024	**2023**	**2022**
Federal statutory rate	21.00 %	21.00 %	21.00 %
Impact of foreign tax rate differential	1.26 %	1.78 %	2.03 %
State and local taxes, net of federal tax benefit	(1.04)%	1.71 %	2.01 %
Net impact of changes in valuation allowances	(3.32)%	(2.21)%	(1.05)%
Permanent book-tax differences	5.71 %	(0.25)%	1.60 %
Withholding taxes	5.14 %	2.95 %	2.33 %
Tax credits	(6.63)%	(1.40)%	(0.99)%
Impact of intangible property transfers	(15.38)%	— %	— %
Other items, net	1.77 %	0.23 %	(0.84)%
Company's effective income tax rate	8.51 %	23.81 %	26.09 %

The primary items that decreased the Company's effective income tax rate from the federal statutory rate in 2024 were recognition of a deferred tax asset related to the onshoring of certain intangible property, tax credits and release of valuation allowances. The decreases were partially offset by permanent differences between book income and taxable income, including the allocation of goodwill to the Delta Divestiture for which a tax benefit will not be realized, and withholding taxes.

The primary items that increased the Company's effective income tax rate from the federal statutory rate in 2023 were changes in the mix of earnings among tax jurisdictions, including jurisdictions for which valuation allowances have been recorded, state and local taxes and withholding taxes. The increases were partially offset by tax credits and release of valuation allowances.

The primary items that increased the Company's effective income tax rate from the federal statutory rate in 2022 were changes in the mix of earnings among tax jurisdictions, including jurisdictions for which valuation allowances have been recorded, state and local taxes, withholding taxes and the net $58.6 million book loss recorded for the FPS Divestiture and other disposals of businesses for which limited tax benefits were available. The increases were partially offset by decreases in valuation allowances and recording additional capital losses which are expected to be fully utilized.

The components of the Company's deferred tax assets and liabilities as of October 31 for the years indicated were as follows:

(in millions)	2024	2023
Deferred tax assets		
Net operating loss and other carryforwards	$ 126.5	$ 104.9
Incentive liabilities	20.5	18.6
Operating lease liabilities	68.1	70.3
Other reserves	12.5	16.0
Research and development expenses	56.7	29.7
Other	70.3	45.4
Total deferred tax assets	354.6	284.9
Valuation allowance	(87.4)	(97.3)
Net deferred tax assets	$ 267.2	$ 187.6
Deferred tax liabilities		
Properties, plants and equipment	$ 181.1	$ 157.2
Operating lease assets	68.1	70.3
Timberland transactions	52.7	51.6
Goodwill and other intangible assets	163.2	150.6
Pension liabilities	8.9	10.6
Other	51.4	50.0
Total deferred tax liabilities	525.4	490.3
Net deferred tax liability	$ 258.2	$ 302.7

As of October 31, 2024 and 2023, the Company had deferred income tax benefits of $126.5 million and $104.9 million, respectively, from net operating losses and other tax credit carryforwards. For the fiscal year ended October 31, 2024, these losses and carryforwards consist of $19.5 million, $10.2 million and $96.8 million in U.S. Federal, U.S. state and non-U.S. jurisdictions, respectively. For the fiscal year ended October 31, 2023, these losses and carryforwards consist of $7.5 million, $10.1 million and $87.3 million in U.S. Federal, U.S. state and non-U.S. jurisdictions, respectively. The Company has recorded valuation allowances of $65.2 million and $82.8 million against non-U.S. deferred tax assets as of October 31, 2024 and 2023, respectively. The Company has also recorded valuation allowances against U.S. deferred tax assets of $22.2 million and $14.5 million, as of October 31, 2024 and 2023, respectively. The Company had net changes in valuation allowances in 2024 of $9.9 million.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

(in millions)	2024	2023	2022
Balance of unrecognized tax benefit at November 1	$ 23.4	$ 24.3	$ 31.0
Increases in tax positions for prior years	1.7	0.6	0.2
Increases in tax positions for current years	3.9	4.1	5.9
Lapse in statute of limitations	(3.6)	(4.6)	(11.4)
Currency translation	0.1	(1.0)	(1.4)
Balance at October 31	$ 25.5	$ 23.4	$ 24.3

The 2024 net increase in unrecognized tax benefits is primarily related to increases in unrecognized tax benefits related to the prior and current year, offset by decreases related to lapses in the statute of limitations. The Company files income tax returns in the U.S. federal jurisdiction, various U.S. state jurisdictions and various non-U.S. jurisdictions and is subject to audit by various taxing authorities for 2016 through the current year. The Company has completed its U.S. federal tax audit for the tax years through 2016, and the statues of limitations have expired for years 2017 through 2020. The Company has filed a refund claim for 2019 and is under audit for this year. Adjustments may only be made up to the amount of the refund claim.

The October 31, 2024, 2023, 2022 balances include $25.5 million, $23.4 million and $24.3 million, respectively, of unrecognized tax benefits that, if recognized, would have an impact on the effective tax rate. The Company also recognizes

accrued interest and penalties related to unrecognized tax benefits in income tax expense net of tax, as applicable. As of October 31, 2024 and 2023, the Company had accrued for the payment of interest and penalties in the amounts of $3.8 million and $4.8 million, respectively.

The Company has estimated the reasonably possible expected net change in unrecognized tax benefits through October 31, 2024 under ASC 740, “Income Taxes.” The Company’s estimate is based on lapses of the applicable statutes of limitations, settlements and payments of uncertain tax positions. Though actual results may materially differ, the estimated net decrease in unrecognized tax benefits for the next 12 months could be up to $6.3 million.

NOTE 9 – POST-RETIREMENT BENEFIT PLANS

Defined Benefit Pension Plans

The Company has certain non-contributory defined benefit pension plans for salaried and hourly employees in the United States, Germany, the Netherlands and the United Kingdom. The Company uses a measurement date of October 31 for its pension plans. The salaried employees plans’ benefits are based primarily on years of service and earnings. The hourly employees plans’ benefits are based primarily upon years of service, and certain benefit provisions are subject to collective bargaining. The Company contributes an amount that is not less than the minimum funding and not more than the maximum tax-deductible amount to these plans. Salaried employees in the United States who commence service on or after November 1, 2007 are not eligible to participate in the U.S. defined benefit pension plan, but are eligible to participate in a defined contribution retirement program. Salaried employees outside the U.S. also have various dates in which they are not eligible to participate in the respective defined benefit pension plans, but are eligible to participate in a defined contribution retirement program. The category “International” represents the non-contributory defined benefit pension plans in Germany, the Netherlands and the United Kingdom for October 31, 2024 and Canada, Germany, the Netherlands, South Africa and the United Kingdom for October 31, 2023.

Pension plan contributions by the Company totaled $7.9 million during 2024, which consisted of $3.4 million of employer contributions and $4.5 million of benefits paid directly by the Company. Pension plan contributions, including benefits paid directly by the Company, totaled $27.5 million and $31.4 million during 2023 and 2022, respectively. Contributions, including benefits paid directly by the Company, during 2025 are expected to be approximately $5.9 million.

The following table presents the number of participants in the defined benefit plans:

October 31, 2024	Consolidated	United States	International
Active participants	1,323	1,239	84
Vested former employees and deferred members	3,129	2,672	457
Retirees and beneficiaries	3,446	2,240	1,206

October 31, 2023	Consolidated	United States	International
Active participants	1,509	1,416	93
Vested former employees and deferred members	3,181	2,690	491
Retirees and beneficiaries	3,570	2,156	1,414

The weighted average assumptions used to measure the year-end benefit obligations as of October 31 were as follows:

As of October 31,	2024	2023
Discount rate	5.11 %	6.05 %
Rate of compensation increase	2.96 %	2.96 %

The weighted average assumptions used to determine the pension cost for the years ended October 31 were as follows:

For the year ended October 31,	2024	2023	2022
Discount rate	6.05 %	5.61 %	2.55 %
Expected return on plan assets	5.84 %	4.99 %	3.86 %
Rate of compensation increase	2.96 %	2.99 %	2.96 %

The discount rate is determined by developing a hypothetical portfolio of individual high-quality corporate bonds available at the measurement date, the coupon and principal payments of which would be sufficient to satisfy the plans' expected future benefit payments as defined for the projected benefit obligation. The discount rate by country is equivalent to the average yield on that hypothetical portfolio of bonds and is a reflection of current market settlement rates on such high quality bonds, government treasuries and annuity purchase rates. To determine the expected long-term rate of return on pension plan assets, the Company considers current and expected asset allocations, as well as historical and expected returns on various categories of plan assets. In developing future return expectations for the defined benefit pension plans' assets, the Company formulates views on the future economic environment, both in the U.S. and globally. The Company evaluates general market trends and historical relationships among a number of key variables that impact asset class returns, such as expected earnings growth, inflation, valuations, yields and spreads, using both internal and external sources. The Company takes into account expected volatility by asset class and diversification across classes to determine expected overall portfolio results given current and expected allocations. The Company uses published mortality tables for determining the expected lives of plan participants and believes that the tables selected are most-closely associated with the expected lives of plan participants as the tables are based on the country in which the participant is employed.

Based on the Company's analysis of future expectations of asset performance, past return results and its current and expected asset allocations, the Company has assumed a 5.84% long-term expected return on those assets for cost recognition in 2024. For the defined benefit pension plans, the Company applies its expected rate of return to a market-related value of assets, which stabilizes variability in the amounts to which the Company applies that expected return.

The Company amortizes experience gains and losses as well as the effects of changes in actuarial assumptions and plan provisions over a period no longer than the average future service of employees.

During the year ended October 31, 2023, plan assets of $7.7 million were used to purchase $5.9 million in annuity contracts and pay $1.8 million in lump sums to retirees to settle the pension obligation and close the Canada pension plans. The settlement items described above resulted in non-cash pension settlement charges of $3.5 million of unrecognized net actuarial loss included in accumulated other comprehensive loss for the year ended October 31, 2023.

During the year ended October 31, 2022, $2.4 million of projected benefit obligation for plan participants in Turkey was irrevocably transferred to a third-party buyer through the sale of business (part of the FPS Divestiture) resulting in a $1.0 million loss in accumulated other comprehensive income for the year ended October 31, 2022 that was recognized as a loss on sale of business.

Benefit Obligations

The components of net periodic pension cost include the following:

For the year ended October 31, 2024 *(in millions)*	**Consolidated**	**United States**	**International**
Service cost	$ 6.8	$ 5.3	$ 1.5
Interest cost	34.9	26.7	8.2
Expected return on plan assets	(43.5)	(33.4)	(10.1)
Amortization of prior service benefit	(0.3)	(0.2)	(0.1)
Recognized net actuarial gain	(0.9)	(0.9)	—
Net periodic pension cost	$ (3.0)	$ (2.5)	$ (0.5)

For the year ended October 31, 2023 *(in millions)*	**Consolidated**	**United States**	**International**
Service cost	$ 8.0	$ 6.5	$ 1.5
Interest cost	35.0	26.8	8.2
Expected return on plan assets	(39.0)	(30.6)	(8.4)
Amortization of prior service benefit	(0.4)	(0.3)	(0.1)
Recognized net actuarial (gain) loss	(2.1)	(2.2)	0.1
Special Events			
Settlement	3.5	—	3.5
Net periodic pension cost	$ 5.0	$ 0.2	$ 4.8

For the year ended October 31, 2022 *(in millions)*	**Consolidated**	**United States**	**International**
Service cost	$ 11.5	$ 10.0	$ 1.5
Interest cost	19.9	16.1	3.8
Expected return on plan assets	(32.5)	(27.0)	(5.5)
Amortization of prior service benefit	(0.4)	(0.3)	(0.1)
Recognized net actuarial loss	7.7	6.0	1.7
Special Events			
Divestiture charge	1.0	—	1.0
Net periodic pension cost	$ 7.2	$ 4.8	$ 2.4

Benefit obligations are described in the following tables. Accumulated and projected benefit obligations (“ABO” and “PBO”) represent the obligations of a pension plan for past service as of the measurement date. ABO is the present value of benefits earned to date with benefits computed based on current compensation levels. PBO is ABO increased to reflect expected future compensation.

The following table sets forth the plans' change in projected benefit obligation:

For the year ended October 31, 2024 *(in millions)*	**Consolidated**	**United States**	**International**
Change in benefit obligation:			
Benefit obligation at beginning of year	$ 604.1	$ 437.5	$ 166.6
Service cost	6.8	5.3	1.5
Interest cost	34.9	26.7	8.2
Plan participant contributions	0.2	—	0.2
Expenses paid from assets	(3.2)	(1.5)	(1.7)
Actuarial loss	52.8	40.8	12.0
Foreign currency effect	8.5	—	8.5
Benefits paid	(49.9)	(38.9)	(11.0)
Other	(0.1)	—	(0.1)
Benefit obligation at end of year	$ 654.1	$ 469.9	$ 184.2

For the year ended October 31, 2023 *(in millions)*	**Consolidated**	**United States**	**International**
Change in benefit obligation:			
Benefit obligation at beginning of year	$ 651.7	$ 470.3	$ 181.4
Service cost	8.0	6.5	1.5
Interest cost	35.0	26.8	8.2
Plan participant contributions	0.2	—	0.2
Expenses paid from assets	(3.4)	(1.7)	(1.7)
Actuarial gain	(24.3)	(12.8)	(11.5)
Foreign currency effect	9.7	—	9.7
Benefits paid	(65.1)	(51.6)	(13.5)
Settlements	(7.7)	—	(7.7)
Benefit obligation at end of year	$ 604.1	$ 437.5	$ 166.6

The following tables set forth the PBO, ABO, plan assets and instances where the ABO exceeds the plan assets for the respective years:

(in millions)	Consolidated	United States	International
Actuarial value of benefit obligations and plan assets			
October 31, 2024			
Projected benefit obligation	$ 654.1	$ 469.9	$ 184.2
Accumulated benefit obligation	640.1	457.4	182.7
Plan assets	640.9	482.8	158.1
October 31, 2023			
Projected benefit obligation	$ 604.1	$ 437.5	$ 166.6
Accumulated benefit obligation	589.8	424.5	165.3
Plan assets	584.0	431.6	152.4
Plans with ABO in excess of Plan assets			
October 31, 2024			
Accumulated benefit obligation	$ 109.4	$ 28.8	$ 80.6
Plan assets	51.7	—	51.7
October 31, 2023			
Accumulated benefit obligation	$ 104.4	$ 28.7	$ 75.7
Plan assets	49.4	—	49.4

The actuarial (gain) loss for all pension plans was primarily related to a change in discount rates used to measure the benefit obligations of those plans.

Future benefit payments for the Company’s global plans, which reflect expected future service, as appropriate, during the next five years, and in the aggregate for the five years thereafter, are as follows:

(in millions)	Expected Benefit Payments
Year(s)	
2025	$ 69.7
2026	61.2
2027	57.1
2028	55.8
2029	55.6
2030-2034	245.7

Plan assets

The assets of all the Company’s plans consist of U.S. and non-U.S. equity securities, government and corporate bonds, cash, insurance annuities and mutual funds.

The investment policy reflects the long-term nature of the plans’ funding obligations. The assets are invested to provide the opportunity for both income and growth of principal. This objective is pursued as a long-term goal designed to provide required benefits for participants without undue risk. It is expected that this objective can be achieved through a well-diversified asset portfolio. All equity investments are made within the guidelines of quality, marketability and diversification mandated by the Employee Retirement Income Security Act and/or other relevant statutes and laws. Investment managers are directed to maintain equity portfolios at a risk level approximately equivalent to that of the specific benchmark established for that portfolio.

The Company’s weighted average asset allocations at the measurement date and the target asset allocations by category are as follows:

Asset Category	2025 Target	2024 Target	2024 Actual
Equity securities	20 %	20 %	21 %
Debt securities	53 %	62 %	53 %
Other	27 %	18 %	26 %
Total	100 %	100 %	100 %

The fair value of the pension plans’ investments is presented below. The inputs and valuation techniques used to measure the fair value of the assets are consistently applied and described in Note 6 of the Notes to the Consolidated Financial Statements.

For the year ended October 31, 2024 *(in millions)*	Consolidated	United States	International
Change in plan assets:			
Fair value of plan assets at beginning of year	$ 584.0	$ 431.6	$ 152.4
Actual return on plan assets	96.9	88.5	8.4
Expenses paid	(3.2)	(1.5)	(1.7)
Plan participant contributions	0.2	—	0.2
Foreign currency impact	8.7	—	8.7
Employer contributions	3.4	—	3.4
Benefits paid out of plan	(45.3)	(35.8)	(9.5)
Other	(3.8)	—	(3.8)
Fair value of plan assets at end of year	$ 640.9	$ 482.8	$ 158.1

For the year ended October 31, 2023 *(in millions)*	Consolidated	United States	International
Change in plan assets:			
Fair value of plan assets at beginning of year	$ 624.6	$ 451.1	$ 173.5
Actual return on plan assets	(0.8)	10.3	(11.1)
Expenses paid	(3.4)	(1.7)	(1.7)
Plan participant contributions	0.2	—	0.2
Foreign currency impact	8.7	—	8.7
Employer contributions	23.7	21.0	2.7
Benefits paid out of plan	(61.3)	(49.1)	(12.2)
Settlements	(7.7)	—	(7.7)
Fair value of plan assets at end of year	$ 584.0	$ 431.6	$ 152.4

The following table presents the fair value measurements for the pension assets:

As of October 31, 2024 *(in millions)*	Fair Value Measurement Level 1	Level 2	Level 3	Total
Asset Category				
Mutual funds	$ 40.0	$ 0.1	$ —	$ 40.1
Cash	6.9	—	—	6.9
Corporate bonds	—	164.5	—	164.5
Government bonds	—	80.1	—	80.1
Other assets	—	4.2	—	4.2
Total Assets in the Fair Value Hierarchy	46.9	248.9	—	295.8
Investments Measured at Net Asset Value				
Insurance contracts				153.6
Common stock funds				97.1
Corporate bond funds				116.9
Investments at Fair Value*	$ 46.9	$ 248.9	$ —	$ 663.4

As of October 31, 2023 *(in millions)*	Fair Value Measurement Level 1	Level 2	Level 3	Total
Asset Category				
Mutual funds	$ 35.5	$ 24.3	$ —	$ 59.8
Cash	11.9	—	—	11.9
Corporate bonds	—	159.1	—	159.1
Government bonds	—	57.5	—	57.5
Other assets	—	4.0	—	4.0
Total Assets in the Fair Value Hierarchy	47.4	244.9	—	292.3
Investments Measured at Net Asset Value				
Insurance contracts				87.9
Common stock funds				83.4
Corporate bond funds				120.4
Investments at Fair Value	$ 47.4	$ 244.9	$ —	$ 584.0

* Excludes net payables of $22.5 million as of October 31, 2024 which consists of interest and pending sales and purchases of securities.

Financial statement presentation including other comprehensive income:

As of October 31, 2024			
(in millions)	**Consolidated**	**United States**	**International**
Unrecognized net actuarial loss	$ 115.1	$ 37.4	$ 77.7
Unrecognized prior service benefit	(0.8)	—	(0.8)
Accumulated other comprehensive loss - pre-tax	$ 114.3	$ 37.4	$ 76.9
Amounts recognized in the consolidated balance sheets consist of:			
Prepaid benefit cost	$ 46.0	$ 41.7	$ 4.3
Accrued benefit liability	(59.2)	(28.8)	(30.4)
Accumulated other comprehensive loss - pre-tax	114.3	37.4	76.9
Net amount recognized	$ 101.1	$ 50.3	$ 50.8
As of October 31, 2023			
(in millions)	**Consolidated**	**United States**	**International**
Unrecognized net actuarial loss	$ 110.3	$ 50.7	$ 59.6
Unrecognized prior service benefit	(1.1)	(0.2)	(0.9)
Accumulated other comprehensive loss - pre-tax	$ 109.2	$ 50.5	$ 58.7
Amounts recognized in the consolidated balance sheets consist of:			
Prepaid benefit cost	$ 36.2	$ 22.8	$ 13.4
Accrued benefit liability	(56.3)	(28.7)	(27.6)
Accumulated other comprehensive loss - pre-tax	109.2	50.5	58.7
Net amount recognized	$ 89.1	$ 44.6	$ 44.5

(in millions)	**October 31, 2024**	**October 31, 2023**
Accumulated other comprehensive loss at beginning of year	$ 109.2	$ 92.0
Increase or (decrease) in accumulated other comprehensive loss		
Net prior service cost amortized	0.3	0.4
Net loss amortized	0.9	2.1
Loss recognized due to settlement	—	(3.5)
Liability loss (gain)	52.8	(24.3)
Asset (gain) loss	(53.5)	39.9
Other adjustments	0.3	—
Increase in accumulated other comprehensive loss	0.8	14.6
Foreign currency impact	4.3	2.6
Accumulated other comprehensive loss at year end	$ 114.3	$ 109.2

Supplemental Employee Retirement Plan

The Company has a supplemental employee retirement plan that is an unfunded plan providing supplementary retirement benefits primarily to certain executives and longer-service employees. The present benefit obligation of the supplemental employee retirement plan is included in the United States defined benefit pension plans above.

Defined contribution plans

The Company has several voluntary 401(k) savings plans that cover eligible employees in the U.S. For certain plans, the Company matches a percentage of each employee’s contribution up to a maximum percentage of base salary. The Company’s contributions to the 401(k) plans were $29.0 million, $29.1 million and $24.4 million in 2024, 2023 and 2022, respectively.

NOTE 10 – CONTINGENT LIABILITIES AND ENVIRONMENTAL RESERVES

Litigation-related Liabilities

The Company may become involved from time-to-time in litigation and regulatory matters incidental to its business, including governmental investigations, enforcement actions, personal injury claims, product liability, employment health and safety matters, commercial disputes, intellectual property matters, disputes regarding environmental clean-up costs, litigation in connection with acquisitions and divestitures, and other matters arising out of the normal conduct of its business. The Company intends to vigorously defend itself in such litigation. The Company does not believe that the outcome of any pending litigation will have a material adverse effect on its consolidated financial statements.

The Company will accrue for contingencies related to litigation and regulatory matters if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Because litigation is inherently unpredictable and unfavorable resolutions can occur, assessing contingencies is highly subjective and requires judgments about future events. The Company regularly reviews contingencies to determine whether its accruals are adequate. The amount of ultimate loss may differ from these estimates.

Environmental Reserves

As of October 31, 2024 and October 31, 2023, the Company has accrued $9.8 million for the Diamond Alkali Superfund Site. It is possible that there could be resolution of uncertainties in the future that would require the Company to record charges, which could be material to future earnings.

Aside from the Diamond Alkali Superfund Site, other environmental reserves of the Company as of October 31, 2024 and October 31, 2023 included $9.3 million and $7.5 million, respectively, for its various facilities around the world.

As of October 31, 2024 and October 31, 2023, the Company's environmental reserves were $19.1 million and $17.3 million, respectively. These reserves are principally based on environmental studies and cost estimates provided by third parties, but also take into account management estimates. The estimated liabilities are reduced to reflect the anticipated participation of other potentially responsible parties in those instances where it is probable that such parties are legally responsible and financially capable of paying their respective shares of relevant costs.

NOTE 11 – EARNINGS PER SHARE

The Company has two classes of common stock and, as such, applies the "two-class method" of computing earnings per share ("EPS") as prescribed in ASC 260, "Earnings Per Share." In accordance with this guidance, earnings are allocated in the same fashion as dividends would be distributed. Under the Company's certificate of incorporation, any distribution of dividends in any year must be made in proportion of one cent a share for Class A Common Stock to one and one-half cents a share for Class B Common Stock, which results in a 40% to 60% split to Class A and B shareholders, respectively. In accordance with this, earnings are allocated first to Class A and Class B Common Stock to the extent that dividends are actually paid, and the remainder is allocated assuming all of the earnings for the period have been distributed in the form of dividends.

The Company calculates EPS as follows:

$$\text{Basic Class A EPS} = \frac{40\% * \text{Average Class A Shares Outstanding}}{40\% * \text{Average Class A Shares Outstanding} + 60\% * \text{Average Class B Shares Outstanding}} * \frac{\text{Undistributed Net Income}}{\text{Average Class A Shares Outstanding}} + \text{Class A Dividends Per Share}$$

$$\text{Diluted Class A EPS} = \frac{40\% * \text{Average Class A Shares Outstanding}}{40\% * \text{Average Class A Shares Outstanding} + 60\% * \text{Average Class B Shares Outstanding}} * \frac{\text{Undistributed Net Income}}{\text{Average Diluted Class A Shares Outstanding}} + \text{Class A Dividends Per Share}$$

$$\text{Basic Class B EPS} = \frac{60\% * \text{Average Class B Shares Outstanding}}{40\% * \text{Average Class A Shares Outstanding} + 60\% * \text{Average Class B Shares Outstanding}} * \frac{\text{Undistributed Net Income}}{\text{Average Class B Shares Outstanding}} + \text{Class B Dividends Per Share}$$

** Diluted Class B EPS calculation is identical to Basic Class B calculation*

The following table provides EPS information for each period, respectively:

	Year Ended October 31,		
(in millions, except per share data)	**2024**	**2023**	**2022**
Numerator			
Numerator for basic and diluted EPS			
Net income attributable to Greif, Inc.	$ 268.8	$ 359.2	$ 376.7
Cash dividends	(121.0)	(116.5)	(111.3)
Undistributed net income attributable to Greif, Inc.	$ 147.8	$ 242.7	$ 265.4
Denominator			
Denominator for basic EPS –			
Class A common stock	25.8	25.6	26.3
Class B common stock	21.3	21.5	22.0
Denominator for diluted EPS –			
Class A common stock	26.0	26.0	26.6
Class B common stock	21.3	21.5	22.0
EPS Basic			
Class A common stock	$ 4.66	$ 6.22	$ 6.36
Class B common stock	$ 6.98	$ 9.32	$ 9.53
EPS Diluted			
Class A common stock	$ 4.64	$ 6.15	$ 6.30
Class B common stock	$ 6.98	$ 9.32	$ 9.53

The Class A Common Stock has no voting rights unless four quarterly cumulative dividends upon the Class A Common Stock are in arrears. The Class B Common Stock has full voting rights. There is no cumulative voting for the election of directors.

Common Stock Repurchases

The Board of Directors has authorized the Company to repurchase shares of the Company's Class A Common Stock or Class B Common Stock or any combination of the foregoing. As of October 31, 2024, the remaining number of shares that may be repurchased under this authorization were 2,504,836. There were no shares repurchased during 2024.

The following table summarizes the Company's Class A and Class B common and treasury shares at the specified dates:

	Authorized Shares	Issued Shares	Outstanding Shares	Treasury Shares
October 31, 2024:				
Class A common stock	128,000,000	42,281,920	25,850,270	16,431,650
Class B common stock	69,120,000	34,560,000	21,331,127	13,228,873
October 31, 2023:				
Class A common stock	128,000,000	42,281,920	25,474,254	16,807,666
Class B common stock	69,120,000	34,560,000	21,331,127	13,228,873

The following is a reconciliation of the shares used to calculate basic and diluted earnings per share:

	Year Ended October 31,		
	2024	2023	2022
Class A Common Stock:			
Basic shares	25,751,386	25,592,928	26,251,536
Assumed conversion of stock options and unvested shares	226,015	406,303	359,176
Diluted shares	25,977,401	25,999,231	26,610,712
Class B Common Stock:			
Basic and diluted shares	21,331,127	21,472,531	21,995,865

NOTE 12 – LEASES

The Company leases certain buildings, warehouses, land, transportation equipment, operating equipment and office equipment with remaining lease terms from less than 1 year up to 18 years. The Company reviews all options to extend, terminate, or purchase a right of use asset at the time of lease inception and accounts for options deemed reasonably certain.

The Company combines lease and non-lease components for all leases, except real estate, for which these components are presented separately. Leases with an initial term of twelve months or less are not capitalized and are recognized on a straight-line basis over the lease term. The implicit rate is not readily determinable for substantially all of the Company's leases, therefore the initial present value of lease payments is calculated utilizing an estimated incremental borrowing rate determined at the portfolio level based on market and Company specific information.

Certain of the Company's leases include variable costs. As the right of use asset recorded on the balance sheet was determined based upon factors considered at the commencement date, changes in these variable expenses are not capitalized and are expensed as incurred throughout the lease term.

As of October 31, 2024, the Company had no significant leases that had not commenced.

The following table presents the lease expense components:

	Year Ended	
(in millions)	October 31, 2024	October 31, 2023
Operating lease cost	$ 72.2	$ 64.4
Finance lease cost - amortization	7.1	4.8
Finance lease cost - interest	2.7	2.4
Other lease cost*	34.0	28.0
Total lease cost	$ 116.0	$ 99.6

*includes variable and short-term lease costs

Future maturity for the Company's lease liabilities, during the next five years, and in the aggregate for the years thereafter, are as follows:

(in millions)	Operating Leases	Finance Leases	Total expected payments
2025	$ 68.2	$ 8.9	$ 77.1
2026	57.7	7.9	65.6
2027	48.0	7.1	55.1
2028	39.4	6.9	46.3
2029	29.4	6.2	35.6
Thereafter	100.6	12.0	112.6
Total lease payments	$ 343.3	$ 49.0	$ 392.3
Less: interest	(56.6)	(9.2)	(65.8)
Lease liabilities	$ 286.7	$ 39.8	$ 326.5

The following table presents the weighted-average lease term and discount rate as of October 31, 2024 and October 31, 2023:

	October 31, 2024	October 31, 2023
Weighted-average remaining lease term (years):		
Operating leases	8.4	9.1
Finance leases	6.4	7.9
Weighted-average discount rate:		
Operating leases	4.71 %	4.50 %
Finance leases	6.05 %	6.18 %

The following table presents other required lease related information:

(in millions)	October 31, 2024	October 31, 2023
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows used for operating liabilities	$ 71.9	$ 64.3
Financing cash flows used for finance leases	6.5	4.5
Leased assets obtained in exchange for new lease liabilities:		
Leased assets obtained in exchange for new operating lease liabilities	69.6	95.0
Leased assets obtained in exchange for new finance lease liabilities	6.4	42.0

NOTE 13 – BUSINESS SEGMENT INFORMATION

The Company has seven operating segments, which are aggregated into three reportable segments: Global Industrial Packaging; Paper Packaging & Services; and Land Management. The Global Industrial Packaging reportable segment is the aggregation of five operating segments: Global Industrial Packaging – North America; Global Industrial Packaging – Latin America; Global Industrial Packaging – Europe, Middle East and Africa; Global Industrial Packaging – Asia Pacific; and Global Industrial Packaging – Ipackchem.

Operations in the Global Industrial Packaging reportable segment involve the production and sale of rigid industrial packaging products, such as steel, fibre and plastic drums, rigid intermediate bulk containers, jerrycans and other small plastics, closure systems for industrial packaging products, transit protection products, water bottles and remanufactured and reconditioned industrial containers, and services, such as container life cycle management, logistics, warehousing and other packaging services. These products and services are sold to customers in industries such as chemicals, paints and pigments, food and beverage, petroleum, industrial coatings, agriculture, pharmaceuticals and mineral products, among others.

On March 26, 2024, the Company completed the Ipackchem Acquisition. Ipackchem is a global market leader in the production of high performance plastic packaging, including premium barrier and non-barrier jerrycans and other small plastic containers,

which complement the Company's Global Industrial Packaging specialty portfolio. The results of Ipackchem are recorded within the Global Industrial Packaging segment.

Operations in the Paper Packaging & Services reportable segment involve the production and sale of containerboard, corrugated sheets, corrugated containers and other corrugated and specialty products to customers in North America in industries such as packaging, automotive, food and building products. The Company's corrugated container products are used to ship such diverse products as home appliances, small machinery, grocery products, automotive components, books and furniture, as well as numerous other applications. The Company also produces and sells coated and uncoated recycled paperboard, along with tubes and cores and a diverse mix of specialty products to customers in North America. Further, the Company produces and sells bulk and specialty partitions made from both containerboard and uncoated recycled paperboard. In addition, the reportable segment is involved in the purchase and sale of recycled fiber.

Operations in the Land Management reportable segment involve the management and sale of timber and special use properties from approximately 175,000 acres of timber properties in the southeastern United States. Land Management's operations focus on the active harvesting and regeneration of its timber properties to achieve sustainable long-term yields. While timber sales are subject to fluctuations, the Company seeks to maintain a consistent cutting schedule, within the limits of market and weather conditions. The Company also sells, from time to time, timberland and special use properties, which consists of surplus properties, higher and better use ("HBU") properties and development properties.

In order to maximize the value of timber property, the Company continues to review its current portfolio and explore the development of certain of these properties. This process has led the Company to characterize property as follows:

- Surplus property, meaning land that cannot be efficiently or effectively managed by the Company, whether due to parcel size, lack of productivity, location, access limitations or for other reasons.
- HBU property, meaning land that in its current state has a higher market value for uses other than growing and selling timber.
- Development property, meaning HBU land that, with additional investment, may have a significantly higher market value than its HBU market value.
- Timberland, meaning land that is best suited for growing and selling timber.

The disposal of surplus and HBU property is reported in the consolidated statements of income under "gain on disposals of properties, plants and equipment, net" and the sale of development property is reported under "net sales" and "cost of products sold." All HBU, development and surplus property is used by the Company to productively grow and sell timber until sold.

Whether timberland has a higher value for uses other than growing and selling timber is a determination based upon several variables, such as proximity to population centers, anticipated population growth in the area, the topography of the land, aesthetic considerations, including access to water, the condition of the surrounding land, availability of utilities, markets for timber and economic considerations both nationally and locally. Given these considerations, the characterization of land is not a static process, but requires an ongoing review and re-characterization as circumstances change.

The following tables present net sales disaggregated by geographic area for each reportable segment for the year ended October 31, 2024:

	Year Ended October 31, 2024			
(in millions)	**United States**	**Europe, Middle East and Africa**	**Asia Pacific and Other Americas**	**Total**
Global Industrial Packaging	$ 1,124.0	$ 1,388.0	$ 612.3	$ 3,124.3
Paper Packaging & Services	2,261.4	—	42.1	2,303.5
Land Management	20.3	—	—	20.3
Total net sales	$ 3,405.7	$ 1,388.0	$ 654.4	$ 5,448.1

The following tables present net sales disaggregated by geographic area for each reportable segment for the year ended October 31, 2023:

	Year Ended October 31, 2023			
(in millions)	United States	Europe, Middle East and Africa	Asia Pacific and Other Americas	Total
Global Industrial Packaging	$ 1,093.0	$ 1,310.9	$ 532.9	$ 2,936.8
Paper Packaging & Services	2,218.0	—	42.5	2,260.5
Land Management	21.3	—	—	21.3
Total net sales	$ 3,332.3	$ 1,310.9	$ 575.4	$ 5,218.6

The following reportable segment information is presented for each of the three years in the period ended October 31:

(in millions)	2024	2023	2022
Operating profit:			
Global Industrial Packaging	$ 341.1	$ 334.3	$ 313.7
Paper Packaging & Services	115.6	264.1	298.5
Land Management	7.9	7.1	9.0
Total operating profit	$ 464.6	$ 605.5	$ 621.2
Depreciation, depletion and amortization expense:			
Global Industrial Packaging	$ 122.3	$ 95.3	$ 73.9
Paper Packaging & Services	136.8	133.1	139.9
Land Management	2.2	2.2	2.8
Total depreciation, depletion and amortization expense	$ 261.3	$ 230.6	$ 216.6
Capital expenditures:			
Global Industrial Packaging	$ 76.0	$ 83.9	$ 55.1
Paper Packaging & Services	88.9	120.6	90.6
Land Management	0.2	1.1	—
Total segment	165.1	205.6	145.7
Corporate and other	9.1	12.6	16.2
Total capital expenditures	$ 174.2	$ 218.2	$ 161.9

The following table presents total assets by reportable segment and total long lived assets, net by geographic area:

(in millions)	October 31, 2024	October 31, 2023
Assets:		
Global Industrial Packaging	$ 3,439.1	$ 2,737.5
Paper Packaging & Services	2,538.8	2,541.1
Land Management	255.0	253.2
Total segment	6,232.9	5,531.8
Corporate and other	414.7	429.0
Total assets	$ 6,647.6	$ 5,960.8
Long lived assets, net*:		
United States	$ 1,455.3	$ 1,468.6
Europe, Middle East and Africa	373.7	311.9
Asia Pacific and other Americas	146.0	102.9
Total properties, plants and equipment, net	$ 1,975.0	$ 1,883.4

*includes property, plants and equipment, net, operating lease assets and finance lease assets

NOTE 14 – COMPREHENSIVE INCOME (LOSS)

The following table provides the roll forward of accumulated other comprehensive income (loss) for the years ended October 31, 2024 and 2023:

(in millions)	Foreign Currency Translation	Derivative Financial Instruments	Minimum Pension Liability Adjustment	Accumulated Other Comprehensive Income (Loss)
Balance as of October 31, 2022	$ (316.5)	$ 72.8	$ (58.6)	$ (302.3)
Other Comprehensive Income (Loss)	$ (1.2)	$ (1.1)	$ (11.9)	$ (14.2)
Balance as of October 31, 2023	$ (317.7)	$ 71.7	$ (70.5)	$ (316.5)
Other Comprehensive Income (Loss)	3.6	(37.8)	(4.4)	(38.6)
Balance as of October 31, 2024	$ (314.1)	$ 33.9	$ (74.9)	$ (355.1)

The components of accumulated other comprehensive income above are presented net of tax, as applicable.

NOTE 15 – REDEEMABLE NONCONTROLLING INTERESTS

Redeemable noncontrolling interests related to joint ventures are held by the respective noncontrolling interest owners. The holders of these interests share in the profits and losses of these entities on a pro-rata basis with the Company. However, the noncontrolling interest owners have the right to put all or a portion of those noncontrolling interests to the Company at a formulaic price after a set period of time, specific to each agreement.

Redeemable noncontrolling interests are reflected in the consolidated balance sheets at redemption value. The following table provides the rollforward of the redeemable noncontrolling interest for the years ended October 31, 2024 and 2023:

(in millions)	Redeemable Noncontrolling Interest
Balance as of October 31, 2022	$ 15.8
Current period mark to redemption value	(0.1)
Repurchase of redeemable shareholder interest	(4.6)
Acquisition of redeemable shareholder interest	113.0
Redeemable noncontrolling interest share of income	2.7
Dividends to redeemable noncontrolling interest and other	(1.5)
Balance as of October 31, 2023	125.3
Current period mark to redemption value	(1.0)
Acquisition of redeemable shareholder interest	2.0
Redeemable noncontrolling interest share of income	8.5
Dividends to redeemable noncontrolling interest and other	(4.9)
Balance as of October 31, 2024	$ 129.9

Report of Independent Registered Public Accounting Firm

To the shareholders and Board of Directors of Greif, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Greif, Inc. and subsidiary companies (the "Company") as of October 31, 2024 and 2023, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for each of the three years in the period ended October 31, 2024, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company as of October 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended October 31, 2024, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of October 31, 2024, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated December 23, 2024, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Goodwill - Paper Packaging & Services Reporting Unit and Global Industrial Packaging - Asia Pacific Reporting Unit - Refer to Note 3 to the Financial Statements

*Critical Audit Matter Descriptio*n

The Company's evaluation of goodwill for impairment involves comparing the carrying value of the reporting unit to the estimated fair value of the reporting unit. The Company's determination of the estimated fair value of the reporting units is based on both the market approach and a discounted cash flow analysis utilizing the income approach. The determination of the estimated fair value of the reporting units using the market approach and the income approach requires management to make significant estimates and assumptions related to the valuation of the reporting units. Changes in these assumptions could have a significant impact on either the fair value of the reporting unit, the amount of any goodwill impairment charge, or both. The Company's consolidated goodwill balance was $1,954 billion as of October 31, 2024, of which $805 million and $96 million were allocated to the Paper Packaging & Services ("PPS") reporting unit and Global Industrial Packaging - Asia Pacific ("GIP APAC") reporting unit, respectively. The estimated fair value of the PPS and GIP APAC reporting units exceeded their carrying value, therefore no impairment was recognized.

We identified the valuation of the PPS and the GIP APAC reporting units as a critical audit matter because of the significant judgments made by management to estimate their fair values. This required a high degree of auditor judgment and an increased extent of effort to evaluate the reasonableness of management's estimates and assumptions related to the forecasts of future net sales, gross profit margins and operating expenses, as well as the selection of valuation multiples and discount rates, including the need to involve our internal fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the forecasts of future net sales, gross profit margins and operating expenses, as well as the selection of valuation multiples and discount rates for the PPS and GIP APAC reporting units included the following, among others:

- We tested the effectiveness of internal controls over management's goodwill impairment evaluation, including those over the determination of the fair value of the PPS and GIP APAC reporting units, such as controls related to management's forecast of future net sales, gross profit margins, operating expenses, and EBITDA, as well as the selection of valuation multiples and discount rates.
- We performed a sensitivity analysis of the forecasts of future net sales, gross profit margins, operating expenses, and EBITDA and discount rates, which included their impact on future cash flows.
- We evaluated management's ability to accurately forecast net sales, gross profit margins, operating expenses, and EBITDA and evaluated the reasonableness of these assumptions by comparing management's forecasts for historical periods to actual results for those periods.
- We evaluated the reasonableness of management's forecasts of future net sales, gross profit margins, operating expenses, and EBITDA by comparing the forecasts to historical and forecasted information included in third-party macroeconomic benchmarking reports.
- With the assistance of our internal fair value specialists, we evaluated the reasonableness of the long-term net sales growth rates, the selection of valuation multiples, and discount rates by:
    - Testing the source information underlying the determination of long-term net sales growth rates, the selection of valuation multiples, and discount rates, including the mathematical accuracy of the calculations.
    - Comparing the long-term net sales growth rates to third-party macroeconomic benchmarking reports.
    - Developing a range of independent estimates for the selection of valuation multiples and discount rates and comparing the valuation multiples and discount rates selected by management to those ranges.
- We evaluated the experience, qualifications, and objectivity of management's experts.

/s/ Deloitte & Touche LLP

Columbus, Ohio
December 23, 2024

We have served as the Company's auditor since 2014.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

None.

ITEM 9A. CONTROLS AND PROCEDURES

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting that occurred during the most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Disclosure Controls and Procedures

We completed the Ipackchem Acquisition on March 26, 2024. The scope of our assessment of the effectiveness of internal controls over financial reporting for the fiscal year ended October 31, 2024, will not include the Ipackchem Acquisition. This exclusion is in accordance with the Securities and Exchange Commission’s general guidance that an assessment of a recently acquired business may be omitted from the scope of assessment in the year of acquisition.

With the participation of our principal executive officer and principal financial officer, our management has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”)), as of the end of the period covered by this report. Based upon that evaluation, our principal executive officer and principal financial officer have concluded that, as of the end of the period covered by this report:

- Information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission;
- Information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure; and
- Our disclosure controls and procedures are effective.

Management’s Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting. Internal control over financial reporting is the process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States. Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to allow for the preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors;
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our consolidated financial statements; and
- provide reasonable assurance as to the detection of fraud.

All internal control systems have inherent limitations, including the possibility of circumvention and overriding of controls, and therefore can provide only reasonable assurance of achieving the designed control objectives. The Company’s internal control system is supported by written policies and procedures, contains self-monitoring mechanisms, and is audited by the internal audit function. Appropriate actions are taken by management to correct deficiencies as they are identified. As allowed by the Securities and Exchange Commission’s general guidance, management excluded Ipackchem, which was acquired in 2024, from its assessment of internal control over financial reporting. This acquisition constituted approximately 10% of total assets and approximately 3% of net sales, included in our consolidated financial statements as of and for the year ended October 31, 2024.

As of October 31, 2024, management has assessed the effectiveness of the Company’s internal control over financial reporting. In making this assessment, we used the criteria described in “Internal Control - Integrated Framework (2013)” issued by the

Committee of Sponsoring Organizations of the Treadway Commission. Based on our assessment, management concluded that the Company's internal control over financial reporting was effective as of October 31, 2024.

Our internal control over financial reporting as of October 31, 2024, has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which appears herein.

Report of Independent Registered Public Accounting Firm

To the shareholders and Board of Directors of Greif, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Greif, Inc. and subsidiary companies (the “Company”) as of October 31, 2024, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of October 31, 2024, based on criteria established in Internal Control—Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended October 31, 2024, of the Company and our report dated December 23, 2024, expressed an unqualified opinion on those financial statements.

As described in Management’s Annual Report on Internal Control over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Ipackchem Group SAS, which was acquired on March 26, 2024, and whose financial statements constitute approximately 10% of total assets and approximately 3% of total net sales of the consolidated financial statement amounts as of and for the year ended October 31, 2024. Accordingly, our audit did not include the internal control over financial reporting at Ipackchem Group SAS.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed 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. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Columbus, Ohio
December 23, 2024

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding our directors required by Items 401(a) and (d)-(f) of Regulation S-K will be found under the caption "Proposal Number 1 – Election of Directors" in the 2025 Proxy Statement, which information is incorporated herein by reference. Information regarding our executive officers required by Items 401(b) and (d)-(f) of Regulation S-K will be contained under the caption "Corporate Governance - Executive Officers of the Company" in the 2025 Proxy Statement, which information is incorporated herein by reference.

We have a separately designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. As of the date of this filing, the members of the Audit Committee were Robert Patterson, Karen Morrison, Jillian Evanko and B. Andrew Rose. Mr. Patterson is Chairperson of the Audit Committee. Our Board of Directors has determined that Mr. Patterson is an "Audit Committee Financial Expert," as that term is defined in Item 401(h)(2) of Regulation S-K, and "Independent," as that term is defined in Rule 10A-3 of the Exchange Act.

Information regarding the filing of reports of ownership under Section 16(a) of the Exchange Act by our officers and directors and persons owning more than 10 percent of a registered class of our equity securities required by Item 405 of Regulation S-K will be found under the caption "Corporate Governance—Stock Holdings of Certain Owners and Management—Delinquent Section 16(a) Reports" in the 2025 Proxy Statement, which information is incorporated herein by reference.

Information concerning the procedures by which stockholders may recommend nominees to our Board of Directors will be found under the caption "Other Matters - Stockholder Recommendations for Director Nominees" in the 2025 Proxy Statement. There has been no material change to the nomination procedures we previously disclosed in the proxy statement for our 2024 annual meeting of stockholders.

Our Board of Directors has adopted a code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer, controller and persons performing similar functions. This code of ethics is posted on our Internet Web site at www.greif.com under "Investors—Corporate Governance—Governance Documents." Copies of this code of ethics are also available to any person, without charge, by making a written request to us. Requests should be directed to Greif, Inc., Attention: Corporate Secretary, 425 Winter Road, Delaware, Ohio 43015. Any amendment (other than any technical, administrative or other non-substantive amendment) to, or waiver from, a provision of this code will be posted on our website described above within four business days following its occurrence.

ITEM 11. EXECUTIVE COMPENSATION

The 2025 Proxy Statement will contain information regarding the following matters: information regarding executive compensation required by Item 402 of Regulation S-K will be found under the caption "Compensation Discussion and Analysis;" information required by Item 407(e)(4) of Regulation S-K will be found under the caption "Compensation Committee Matters - Compensation Committee Interlocks and Insider Participation;" and information required by Item 407(e)(5) of Regulation S-K will be found under the caption "Compensation Committee Matters- Compensation Committee Report." This information is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information regarding security ownership of certain beneficial owners and management required by Item 403 of Regulation S-K will be found under the caption "Corporate Governance - Stock Holdings of Certain Owners and Management" in the 2025 Proxy Statement, which information is incorporated herein by reference.

Information regarding equity compensation plan information required by Item 201(d) of Regulation S-K will be found under the caption "Executive Compensation Tables - Equity Compensation Plan Information" in the 2025 Proxy Statement, which information is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information regarding certain relationships and related transactions required by Item 404 of Regulation S-K will be found under the caption “Other Matters - Certain Relationships and Related Transactions” in the 2025 Proxy Statement, which information is incorporated herein by reference.

Information regarding the independence of our directors required by Item 407(a) of Regulation S-K will be found under the caption “Corporate Governance – Director Independence” in the 2025 Proxy Statement, which information is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information regarding principal accounting fees and services required by Item 9(e) of Schedule 14A will be found under the caption “Audit Committee Matters - Fees of Independent Registered Public Accounting Firm” in the 2025 Proxy Statement, which information is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

EXHIBITS

Exhibit No.	Description of Exhibit	If Incorporated by Reference, Document with which Exhibit was Previously Filed with SEC
2.1	Sale and Purchase Agreement dated November 17, 2023, among the sellers listed in Schedule 1 thereto, SK Impact Group S.à r.l., Ipack, Ipack II, Fuluolin II, Ipackchem Group SAS, Greif International Holding B.V., and Greif Packaging LLC.	Current Report on Form 8-K dated March 27, 2024, File No. 001-00566 (see Exhibit 10.2 therein).
2.2	Amendment No.1 dated March 26, 2024 to the Sale and Purchase Agreement dated November 17, 2023, among the sellers listed in Schedule 1 thereto, SK Impact Group S.à r.l., Ipack, Ipack II, Fuluolin II, Ipackchem Group SAS, Greif France Holding SAS, and Greif Packaging LLC.	Current Report on Form 8-K dated March 27, 2024, File No. 001-00566 (see Exhibit 10.3 therein).
3.1	Amended and Restated Certificate of Incorporation of Greif, Inc.	Annual Report on Form 10-K for the fiscal year ended October 31, 1997, File No. 001-00566 (see Exhibit 3(a) therein).
3.2	Amendment to Amended and Restated Certificate of Incorporation of Greif, Inc.	Definitive Proxy Statement on Form 14A dated January 27, 2003, File No. 001-00566 (see Exhibit A therein).
3.3	Amendment to Amended and Restated Certificate of Incorporation of Greif, Inc.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2007, File No. 001-00566 (see Exhibit 3.1 therein).
3.4	Third Amended and Restated By-Laws of Greif, Inc.	Current Report on Form 8-K dated September 3, 2021, File No. 001-00566 (see Exhibit 99.2 therein).
3.5	Amendment to Third Amended and Restated By-Laws of Greif, Inc.	Current Report on Form 8-K dated December 11, 2023, File No. 001-00566 (see Exhibit 99.3 therein).
4	Description of the Registrant's Securities Registered under Section 12 of the Securities Exchange Act of 1934.	Annual Report on Form 10-K for the fiscal year ended October 31, 2019, File No. 001-00566 (see Exhibit 4.3 therein).
10.1*	Greif, Inc. Second Amended and Restated Directors' Deferred Compensation Plan, effective January 1, 2008.	Contained herein.
10.2*	Supplemental Retirement Benefit Agreement.	Annual Report on Form 10-K for the fiscal year ended October 31, 1999, File No. 001-00566 (see Exhibit 10(i) therein).
10.3*	Greif, Inc. Second Amended and Restated Supplemental Executive Retirement Plan.	Annual Report on Form 10-K for the fiscal year ended October 31, 2007, File No. 001-00566 (see Exhibit 10(f) therein).
10.4*	Greif, Inc. 2020 Long-Term Incentive Plan.	Annual Report on Form 10-K for the fiscal year ended October 31, 2020, File No. 001-00566 (See Exhibit 10.8 therein).
10.5*	Form of Performance Stock Unit Award Document for the Greif, Inc. 2020 Long-Term Incentive Plan.	Annual Report on Form 10-K for the fiscal year ended October 31, 2020, File No. 001-00566 (See Exhibit 10.9 therein).
10.6*	Form of Restricted Stock Unit Award Document – Time Vesting for the Greif, Inc. 2020 Long-Term Incentive Plan.	Annual Report on Form 10-K for the fiscal year ended October 31, 2020, File No. 001-00566 (See Exhibit 10.10 therein).
10.7*	Greif, Inc. Performance-Based Incentive Compensation Plan.	Definitive Proxy Statement on Form 14A dated January 25, 2002, File No. 001-00566 (see Exhibit B therein).

Exhibit No.	Description of Exhibit	If Incorporated by Reference, Document with which Exhibit was Previously Filed with SEC
10.8*	Amendment No. 1 to the Greif, Inc. Performance-Based Incentive Compensation Plan.	Annual Report on Form 10-K for the fiscal year ended October 31, 2011, File No. 001-00566 (See Exhibit 10(i) therein).
10.9*	Amendment No. 2 to the Greif, Inc. Performance-Based Incentive Compensation Plan.	Annual Report on Form 10-K for the fiscal year ended October 31, 2013, File No. 001-00566 (See Exhibit 10.10 therein).
10.10*	Amendment No. 3 to the Greif, Inc. Performance-Based Incentive Compensation Plan.	Annual Report on Form 10-K for the fiscal year ended October 31, 2017, File No. 001-00566 (See Exhibit 10.11 therein).
10.11*	Greif, Inc. 2001 Management Equity Incentive and Compensation Plan.	Definitive Proxy Statement on Form DEF 14A dated January 26, 2001, File No. 001-00566 (see Exhibit A therein).
10.12*	Amendment No. 1 to the Greif, Inc. 2001 Management Equity Incentive and Compensation Plan.	Annual Report on Form 10-K for the fiscal year ended October 31, 2011, File No. 001-00566 (See Exhibit 10(k) therein).
10.13*	Amendment No. 2 to the Greif, Inc. 2001 Management Equity Incentive and Compensation Plan.	Annual Report on Form 10-K for the fiscal year ended October 31, 2015, File No. 001-00566 (See Exhibit 10.13.2 therein).
10.14*	Amendment No. 3 to the Greif, Inc. 2001 Management Equity Incentive and Compensation Plan.	Annual Report on Form 10-K for the fiscal year ended October 31, 2020, File No. 001-00566 (See Exhibit 10.18 therein).
10.15*	Greif, Inc. Amended and Restated Outside Directors Equity Award Plan.	Quarterly Report on Form 10-Q for the fiscal quarter ended January 31, 2023, File No. 001-00566 (see Exhibit 10.1 therein).
10.16*	Stock Option Award Agreement for the Greif, Inc. Amended and Restated Outside Directors Equity Award Plan.	Registration Statement on Form S-8, File No. 333-123133 (see Exhibit 4(c) therein).
10.17*	Restricted Share Award Agreement for the Greif, Inc. Amended and Restated Outside Directors Equity Award Plan.	Registration Statement on Form S-8, File No. 333-123133 (see Exhibit 4(d) therein).
10.18*	Greif, Inc. Amended and Restated Nonqualified Deferred Compensation Plan, effective June 1, 2008.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2020, File No. 001-00566 (see Exhibit 10.5 therein).
10.19*	Amendment No. 1 to the Greif, Inc. Amended and Restated Nonqualified Deferred Compensation Plan.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2020, File No. 001-00566 (see Exhibit 10.6 therein).
10.20*	Greif, Inc. Nonqualified Supplemental Deferred Compensation Plan, effective January 1, 2020.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2020, File No. 001-00566 (see Exhibit 10.3 therein).
10.21*	Amendment No. 1 to the Greif, Inc. Nonqualified Supplemental Deferred Compensation Plan.	Current Report on Form 8-K dated June 30, 2023, File No. 001-00566 (see Exhibit 10.1 therein).
10.22*	Form Nonqualified Supplemental Deferred Compensation Plan Participation Letter.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2020, File No. 001-00566 (see Exhibit 10.4 therein).
10.23*	Defined Contribution Supplemental Executive Retirement Plan.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2013, File No. 001-00566 (see Exhibit 10.1 therein).
10.24*	Incentive Compensation Recovery Policy.	Annual Report on Form 10-K for the fiscal year ended October 31, 2022, File No. 001-00566 (see Exhibit 24 therein).

Exhibit No.	Description of Exhibit	If Incorporated by Reference, Document with which Exhibit was Previously Filed with SEC
10.25	Second Amended and Restated Credit Agreement, dated March 1, 2022, among Greif, Inc., Greif Packaging LLC, Greif International Holding B.V., and Greif Beheer B.V., as borrowers, each financial institution party thereto, as lenders, Wells Fargo Securities, LLC, JPMorgan Chase Bank, National Association, BOFA Securities, Inc., MUFG Bank, Ltd, U.S. Bank National Association, and TD Bank, N.A., as joint lead arrangers and joint book managers, and JPMorgan Chase Bank, as administrative agent for the lenders.	Quarterly Report on Form 10-Q for the fiscal quarter ended January 31, 2022, File No. 001-00566 (see Exhibit 10.1 therein).
10.26	Incremental Term Loan Agreement, dated March 25, 2024, as an amendment to the Second Amended and Restated Credit Agreement, dated March 1, 2022, among Greif, Inc., as borrower, and certain other Greif US subsidiaries, as guarantors, a syndicate of lenders, as lenders, Wells Fargo Securities, LLC, as Lead Arranger, and JPMorgan Chase Bank, as Administrative Agent.	Current Report on Form 8-K dated March 27, 2024, File No. 001-00566 (see Exhibit 10.1 therein).
10.27	Credit Agreement, dated May 17, 2023, among Greif, Inc., as the Company, Greif Packaging LLC, as the Borrower, CoBank, ACB, as Administrative Agent, and the Other Lenders Party hereto, CoBank, ACB, as Lead Arranger and Bookrunner.	Current Report on Form 8-K dated May 19, 2023, File No. 001-00566 (see Exhibit 99.1 therein).
10.28	Letter dated April 19, 2024, between Coöperatieve Rabobank U.A., Nieuw Amsterdam Receivables Corporation B.V., Greif, Inc., Greif Service Belgium BV and Cooperage Receivables Finance B.V., extending the maturity date of the European receivables financing arrangement to April 22, 2025.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2024, File No. 001-00566 (see Exhibit 10.1 therein).
10.29	Third Amended and Restated Sale Agreement, dated September 24, 2019, by and among Greif Packaging LLC, Delta Petroleum Company, Inc., American Flange & Manufacturing Co., Inc., Caraustar Mill Group, Inc., Caraustar Industrial and Consumer Products Group, Inc., Caraustar Recovered Fiber Group, Inc., The Newark Group, Inc., Caraustar Consumer Products Group, LLC, Caraustar Custom Packaging Group, Inc., Tama Paperboard, LLC, Cascade Paper Converters Co. and each other entity from time to time party hereto as an Originator, as Originators and Greif Receivables Funding LLC.	Current Report on Form 8-K dated September 26, 2019, File No. 001-00566 (see Exhibit 99.1 therein).
10.30	Amendment No. 1, dated May 17, 2023, to the Third Amended and Restated Sale Agreement.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2023, File No. 001-00566 (see Exhibit 10.2 therein).
10.31	Third Amended and Restated Transfer and Administration Agreement, dated September 24, 2019, by and among Greif Receivables Funding LLC, Greif Packaging LLC, Greif Packaging LLC, Delta Petroleum Company, Inc., American Flange & Manufacturing Co. Inc., Caraustar Mill Group, Inc., Caraustar Industrial and Consumer Products Group, Inc., Caraustar Recovered Fiber Group, Inc., The Newark Group, Inc., Caraustar Consumer Products Group, LLC, Caraustar Custom Packaging Group, Inc., Tama Paperboard, LLC, Cascade Paper Converters Co., and each other entity from time to time party hereto as an Originator, as Originators, Bank of America, N.A., and the various investor groups, managing agents and administrators from time to time parties here to.	Annual Report on Form 10-K for the fiscal year ended October 31, 2019, File No. 001-00566 (see Exhibit 10.26 therein).
10.32	Amendment No. 1 to the Third Amended and Restated Transfer and Administration Agreement.	Annual Report on Form 10-K for the fiscal year ended October 31, 2020, File No. 001-00566 (see Exhibit 10.36 therein).

Exhibit No.	Description of Exhibit	If Incorporated by Reference, Document with which Exhibit was Previously Filed with SEC
10.33	Amendment No. 2 to the Third Amended and Restated Transfer and Administration Agreement.	Quarterly Report on Form 10-Q for the fiscal quarter ended January 31, 2021, File No. 001-00566 (see Exhibit 10.1 therein).
10.34	Amendment No. 3 to the Third Amended and Restated Transfer and Administration Agreement.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2021, File No. 001-00566 (see Exhibit 10.2 therein).
10.35	Amendment No. 4 to the Third Amended and Restated Transfer and Administration Agreement.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2022, File No. 001-00566 (see Exhibit 10.3 therein).
10.36	Amendment No. 5, dated May 17, 2023, to the Third Amended and Restated Transfer and Administration Agreement.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2023, File No. 001-00566 (see Exhibit 10.3 therein).
10.37	Omnibus Amendment No. 6, dated May 17, 2024, to the Third Amended and Restated Transfer and Administration Agreement dated September 24, 2019, by and among Greif Receivables Funding LLC, as seller, Container Life Cycle Management LLC, Lee Container, LLC, and Lee Container Iowa, LLC, Greif Packaging LLC, Delta Petroleum Company, Inc., American Flange & Manufacturing Co. Inc., Caraustar Mill Group, Inc., Caraustar Industrial and Consumer Products Group, Inc., Caraustar Recovered Fiber Group, Inc., The Newark Group, Inc., Caraustar Consumer Products Group, LLC, and Cascade Paper Converters Co., as originators.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2024, File No. 001-00566 (see Exhibit 10.2 therein).
10.38	Assignment agreement, dated March 31, 2020, by and among Greif Receivables Funding LLC, Greif Packaging LLC, Custom Packaging Group LLC, the other Originators party hereto, Greif, Inc., the Investors, Administrators and Managing Agents party hereto and Bank of America, N.A., as Agent.	Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2020, File No. 001-00566 (see Exhibit 10.1 therein).
19	Insider Trading Policy	Contained herein.
21	Subsidiaries of the Registrant.	Contained herein.
23	Consent of Deloitte & Touche LLP. (PCAOB Firm ID: 34)	Contained herein.
24.1	Powers of Attorney for John W. McNamara, Bruce A. Edwards, Mark A. Emkes, Robert M. Patterson, Kimberly T. Scott, and Karen A. Morrison.	Annual Report on Form 10-K for the fiscal year ended October 31, 2022, File No. 001-00566 (see Exhibit 24 therein).
24.2	Power of Attorney for Frank C. Miller.	Annual Report on Form 10-K for the fiscal year ended October 31, 2023, File No. 001-00566 (see Exhibit 24.2 therein).
24.3	Power of Attorney for Jillian C. Evanko and B. Andrew Rose.	Contained herein.
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934.	Contained herein.
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934.	Contained herein.
32.1	Certification of Chief Executive Officer required by Rule 13a-14(b) of the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code.	Contained herein.

Exhibit No.	Description of Exhibit	If Incorporated by Reference, Document with which Exhibit was Previously Filed with SEC
32.2	Certification of Chief Financial Officer required by Rule 13a-14(b) of the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code.	Contained herein.
101	The following financial statements from the Company's Annual Report on Form 10-K for the year ended October 31, 2024, formatted in Inline XBRL (Extensive Business Reporting Language): (i) Consolidated Statements of Income, (ii) Consolidated Statements of Comprehensive Income, (iii) Consolidate Balance Sheets, (iv) Consolidated Statements of Cash Flow, (v) Consolidated Statements of Changes in Shareholders' Equity and (vi) Notes to Consolidated Financial Statements.	Contained herein.

* Executive compensation plans and arrangements required to be filed pursuant to Item 601(b)(10) of Regulation S-K.

Financial Statement Schedules:

These schedules are omitted because of the absence of the conditions under which they are required or because the information is set forth in the Consolidated Financial Statements or Notes thereto.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Greif, Inc.
(Registrant)

Date: December 23, 2024

By: /s/ OLE G. ROSGAARD
Ole G. Rosgaard
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Company and in the capacities and on the dates indicated.

/s/ OLE G. ROSGAARD **Ole G. Rosgaard** **President and Chief Executive Officer** **Member of the Board of Directors** **(principal executive officer)**	/s/ LAWRENCE A. HILSHEIMER **Lawrence A. Hilsheimer** **Executive Vice President and Chief Financial Officer** **(principal financial officer)**
/s/ MICHAEL J. TAYLOR **Michael J. Taylor** **Vice President, Corporate Financial Controller** **(principal accounting officer)**	BRUCE A. EDWARDS* **Bruce A. Edwards** **Chairman** **Member of the Board of Directors**
B. ANDREW ROSE* **B. Andrew Rose** **Member of the Board of Directors**	FRANK C. MILLER* **Frank C. Miller** **Member of the Board of Directors**
JILLIAN C. EVANKO* **Jillian C. Evanko** **Member of the Board of Directors**	JOHN W. MCNAMARA* **John W. McNamara** **Member of the Board of Directors**
KAREN A. MORRISON* **Karen A. Morrison** **Member of the Board of Directors**	KIMBERLY T. SCOTT* **Kimberly T. Scott** **Member of the Board of Directors**
MARK A. EMKES* **Mark A. Emkes** **Member of the Board of Directors**	ROBERT M. PATTERSON* **Robert M. Patterson** **Member of the Board of Directors**

* The undersigned, Ole G. Rosgaard, by signing his name hereto, does hereby execute this Form 10-K on behalf of each of the above-named persons pursuant to powers of attorney duly executed by such persons and filed as an exhibit to this Form 10-K.

By: /s/ OLE. G. ROSGAARD
Ole G. Rosgaard

Each of the above signatures is affixed as of December 23, 2024.

GREIF, INC.
SECOND AMENDED AND RESTATED DIRECTORS' DEFERRED COMPENSATION PLAN

ARTICLE I PURPOSE

Greif, Inc. (the **"Company")** is willing to provide members of its Board of Directors (the **"Board")** with supplemental retirement benefits out of its general assets and the opportunity to defer the payment of their Board fees for retirement savings purposes. The Company's goal is to retain and reward its Board members by helping them to accumulate benefits for a comfortable retirement. The Company originally adopted this Directors' Deferred Compensation Plan (the **"Plan")** effective as of September 5, 1996. The Plan document was amended and restated effective as of January 1, 2005. This Plan document is the second amendment and restatement of the original Plan and is effective as of [January 1, 2008].

ARTICLE II ELIGIBILITY AND PARTICIPATION

All non-employee members of the Board **("Directors")** are eligible to participate in the Plan. A Director who elects to defer retainer fees, regular fees, and meeting fees, including committee fees (collectively **"Board Fees"),** or a restricted stock award **("Restricted Stock")** shall become a participant **("Participant")** in this Plan.

Directors may defer Board Fees by executing and returning a **"Cash Compensation Deferral Agreement and Election Form"** (attached to this Plan as Exhibit A) to the Company.

Directors may defer Restricted Stock by executing and returning a **"Restricted Stock Deferral Agreement and Election Form"** (attached to this Plan as Exhibit B) to the Company.

ARTICLE III
ELECTIONS; DESIGNATIONS

A. General Rule

In the year in which a Director first becomes eligible to participate in the Plan, elections to defer payment of Board Fees (as described in Article III(A)(l)) or an award of Restricted Stock (as described in Article III(A)(2)) must be made within thirty (30) days after the date on which such Director first becomes eligible to participate in the Plan; however, such elections shall only relate to Board Fees paid or Restricted Stock awarded for services performed after such election is made. For purposes of this Article III(A), a Director is first eligible to participate in this Plan only if such Director is not a participant in any other agreement, method, program, or arrangement that, along with this Plan, would be treated as a single nonqualified deferred compensation plan under Treasury Regulation Section 1.409A-1(c)(2).

For any subsequent calendar year, an election to defer payment of Board Fees or awards of Restricted Stock must be made no later than December 31 of the prior year.

Once made, an election shall be irrevocable for the calendar year that it is made.

1. Board Fees

An election to defer Board Fees shall continue in effect from year to year until changed by filing a new election; provided, however, that any change shall not be effective until January 1 of the following calendar year. A Participant electing to defer Board Fees must defer at least twenty-five percent (25%) but no more than one hundred percent (100%) of his or her Board Fees.

2. Restricted Stock

An election to defer Restricted Stock must be made each year, in accordance with Article III(A), in order to defer an award of Restricted Stock made in the following year. A Participant electing to defer Restricted Stock must defer at least twenty-five percent (25%) but no more than one hundred percent (100%) of his or her Restricted Stock (rounded down to the next lowest whole share).

B. Designation of Beneficiary

The Company will provide each Participant with a form on which such Participant may designate a beneficiary or beneficiaries to receive payment of benefits under this Plan in the event of the Participant's death. If a Participant fails to designate a beneficiary, or if the Participant's designated beneficiary predeceases the Participant or cannot be located, any death benefits will be paid to the Participant's estate.

ARTICLE IV ACCUMULATIONS; VESTING

A. Unfunded Nature of Plan

The Plan is considered to be an "unfunded" arrangement as amounts generally will not be set aside or held by the Company in a trust, escrow, or similar account or fiduciary relationship on behalf of Participants. Notwithstanding the foregoing, deferrals of Restricted Stock shall be held in a "rabbi trust" established by the Company. Each Participant's rights to benefits under the Plan are equivalent to the rights of any unsecured general creditor of the Company. If the Company makes any investment of funds in conjunction with this Plan, all such investments shall at all times continue to be part of the Company's general assets for all purposes, including any amounts held in the rabbi trust.

Under current federal income tax rules, the amounts credited to a Participant's Accumulations (as defined below), including earnings, will not be taxable income until paid. Thus, the Plan provides the opportunity to defer income and the payment of income taxes.

B. Accumulations

To measure the amount of the Company's obligations to a Participant, the Company will maintain one or more bookkeeping records or accounts to reflect each Participant's cumulative deferral of Board Fees and Restricted Stock (the **"Accumulations").**

C. Value of Accumulations

The amount payable to a Participant under the Plan will be based on the value credited to such Participant's Accumulations account.

1. Board Fees

Each deferral of Board Fees shall be credited to a Participant's Accumulations account in the form of **"Phantom Shares."** Phantom Shares shall have a value equal to the fair market value of the Company's Class A common stock, without par value, as determined from time to time. The number of Phantom Shares credited to each Participant's Accumulations account shall be calculated by dividing the dollar amount of the Board Fees deferred by the value of one (1) Phantom Share on the date of the deferral. For example, if a Participant defers $1,000 of Board Fees at a time when the per share value of the Company's Class A common stock is $60, that Participant's Accumulations account will be credited with 16.66 Phantom Shares ($1,000 divided by $60 per share = 16.66 Phantom Shares). The cumulative value of the Phantom Shares credited to a Participant's Accumulations account, adjusted for changes in capitalization and dividends, as described below, as of any applicable determination date shall be known as the Participant's **"Cash Deferral Value".**

If there is a change in the capitalization structure of the Company (e.g., due to a stock dividend, stock split, recapitalization, merger, consolidation, etc.), a corresponding equitable adjustment will be made in the number of Phantom Shares credited to each Participant's Accumulations account. If a dividend is declared and credited on the Company's Class A common stock, Phantom Shares shall be credited with a corresponding dividend within sixty (60) days of that date. Nothing in this Plan shall be construed as interfering with the discretion or as creating an obligation on the part of the Company to declare dividends on common stock or Phantom Shares.

The Company reserves the right to adjust the earnings or other amounts credited to any Participant's Accumulations account and to determine the value of such Accumulations account as of any date by adjusting such earnings or fair market value for the Company's tax and other costs of providing this Plan.

2. Restricted Stock

Deferrals of Restricted Stock shall not be credited with earnings or interest. Dividends paid on deferrals of Restricted Stock shall be contributed to the rabbi trust and distributed to Participants within sixty (60) days after the dividend payment date and shall not be retained in the Plan as Accumulations.

D. Vesting

Participants shall always be one hundred percent (100%) vested in their Accumulations.

ARTICLE V PAYMENT OF BENEFITS

A. Separation From Service

1. Cash Deferral Value

Unless elected otherwise (as discussed in Article V(C), below) a Participant will receive payment of his or her Cash Deferral Value in substantially equal monthly installments over a ten (10) year period, beginning on the first day of the second month following such Participant's **"Separation from Service"** (as that term is defined in Section 409A of the Internal Revenue Code of 1986, as amended (the **"Code")** and Treasury Regulation Section 1.409A-l(h)) with the Company for any reason other than death. A Participant must give the Company at least thirty (30) days advance written notice of his or her intention to Separate from Service.

[Note: A provision was removed from this Article that prevented a distribution of Accumulations before six months elapsed from the date of crediting as Phantom Shares to the date of conversion to cash for payment because the intent of the provision was unclear and the delay poses potential Section 409A issues. If there is a specific reason for including the provision, it may be possible to draft a Section 409A compliant provision that has the same effect.]

The amount payable each month will either be based on, at the discretion of the Company, (a) an approximately equal amortization based on an assumed interest rate declared by the Company from time to time during the period of distribution or (b) an amortization of the Cash Deferral Value based on the actual earnings, gains, or losses on the investment of a like sum, in which event the monthly benefit payable during a calendar year shall equal the fair market value of such investments as of the preceding December 31, divided by the number of monthly installments remaining to be paid. The Company shall irrevocably select one of the amortization methods for each Participant prior to the date of such Participant's first installment payment.

If the Company elects to purchase investments from which its obligations hereunder will be satisfied, such investments shall remain general assets of the Company for all purposes, subject to the claims of the Company's general creditors. The Company may also elect, in its discretion, to pay benefits in quarterly or annual installments, computed under one of the foregoing methods, rather than monthly installments.

2. Restricted Stock

Unless elected otherwise (as discussed in Article V(C)(2), below) a Participant will receive his or her Restricted Stock in a single distribution on the first day of the second month following such Participant's Separation from Service for any reason other than death.

B. Death Benefits

1. **Cash Deferral Value**

In the event of a Participant's death while receiving installment payments of his or her Cash Deferral Value, the Company will pay the beneficiary or beneficiaries designated by the Participant any remaining payments due under this Plan, using the same method of distribution in effect at the date of such Participant's death.

In the event of a Participant's death prior to his or her Separation from Service for any reason other than death, the Company will pay the Participant's Cash Deferral Value to his or her beneficiary or beneficiaries in accordance with the Participant's distribution election in effect at the date of such Participant's death.

2. **Restricted Stock**

In the event of a Participant's death prior to the distribution of his or her Restricted Stock, the Company will distribute his or her Restricted Stock to the beneficiary or beneficiaries designated by the Participant within ninety (90) days after such Participant's death.

C. Optional Payment Forms and Timing

In lieu of receiving distributions in accordance with Article V(A), above, a Participant may select a different time and a form for payment of his or her Accumulations as follows:

1. **Cash Deferral Value**

In lieu of receiving payment of his or her Cash Deferral Value in installment payments over a ten (10) year period, as described in Article V(A), a Participant may elect to receive payment of his or her Cash Deferral Value as: (a) a single lump sum, (b) annual installment payments over a five (5) year period, or (c) a series of two (2) payments. If a Participant elects to receive a lump sum payment, the Participant must elect to have such payment made upon: (a) a fixed date, or (b) the earlier of (i) a fixed date or (ii) such Participant's Separation from Service. If a Participant's elects to receive annual installment payments over a five (5) year period, the Participant's must elect to have such payments commence upon: (a) a fixed date, or (b) the earlier of (i) a fixed date or (ii) such Participant's Separation from Service. If a Participant elects to receive a series of two (2) payments, the Participant must specify a fixed date for each payment and must specify the percentage of his or her Cash Deferral Value to be paid on each specified date. Any election made under this Article V(C)(l) must be made at the same time the Participant executes the Cash Compensation Deferral Agreement and Election Form.

2. **Restricted Stock**

In lieu of receiving a distribution of Restricted Stock upon his or her Separation from Service, a Participant may elect to receive distribution of Restricted Stock upon: (a) a fixed date that is at least three (3) years after the date the Restricted Stock is awarded, or (b) the earlier of (i) a fixed date that is at least three (3) years after the date the Restricted Stock is awarded, or (ii) the Participant's Separation from Service. Such election must be made at the same time the Participant executes the Restricted Stock Deferral Agreement and Election Form.

3. **Changes to Distribution Elections**

A Participant may change the time and form for payment of his or her Accumulations by filing a new election; provided that such change meets the following requirements: (a) the change may not take effect until at least twelve (12) months after such election is made, (b) the distribution with respect to which such change is made must be deferred (other than a distribution upon death) for at least five (5) years from the date the first amount was scheduled to be distributed, and (c) any change affecting a distribution at a specified time (or pursuant to a fixed schedule) may not be made less than twelve (12) months before the date the first amount was scheduled to be distributed. Such election must be made in a form prescribed by the Company and, subject to this Article V(C)(3), must be irrevocable. Once Accumulations begin to be distributed, no such changes to distributions shall be permitted. For purposes of this Article V(C)(3), a series of installment payments shall be treated as a single payment.

ARTICLE VI MISCELLANEOUS PROVISIONS

A. No Right to Company Assets

As explained previously, this Plan is an unfunded arrangement and does not create a trust of any kind (other than the rabbi trust) or a fiduciary relationship between the Company and a Participant, a Participant's designated beneficiaries, or any other person. To the extent a Participant, a Participant's designated beneficiaries, or any other person acquires a right to receive payments from the Company under this Plan, that right is no greater than the right of any unsecured general creditor of the Company.

B. Modification or Revocation

This Plan will continue in effect until revoked, terminated, or all benefits are paid. However, the Plan may be amended or revoked at any time, in whole or in part, by the Company in its sole discretion. Unless a Participant agrees otherwise, such Participant will still be entitled to the benefit, if any, that such Participant has earned through the date of any amendment or revocation. Such benefits will be payable or distributable at the times and in the amounts provided for in this Plan.

C. Rights Preserved

Nothing in this Plan gives any Director the right to continue to hold such office. The relationship between a Director and the Company shall continue to be determined by the applicable provisions of the governing documents of the Company and by applicable law.

D. Interpretation

The chairman and chief executive officer of the Company, or his designee, shall have full power and authority to interpret, construe, and administer this Plan, and the interpretation and construction thereof and actions thereunder by the chairman and chief executive officer, or his designee, including any valuation of Accumulations or the amount or recipient of the payments to be made therefrom, shall be binding and conclusive on all persons for all purposes. Neither the chairman and chief executive officer nor his or her designee shall be liable to any person for any action taken or omitted in connection with the interpretation and administration of this Plan, provided that the foregoing shall not relieve any person of liability for any action taken or omitted in bad faith. Whenever under this Plan monthly benefits may be payable in substantially

equal monthly installments computed using an interest rate declared by the Company in its sole discretion from time to time during such period of distribution, the calculation of such monthly benefit payments shall be made under any method deemed reasonable by the Company, in its sole discretion.

E. Delayed Payments

In the event of a genuine dispute regarding the amount or timing of payments under the Plan, a delay in the payment of amounts under this Plan shall not cause a violation of Code Section 409A to the extent that such delay satisfies the conditions set forth in Code Section 409A and Treasury Regulation Section 1.409A-3(g).

F. Governing Law

The Company has its principal offices in the State of Ohio. This Plan has been adopted in the State of Ohio and the parties hereby agree that the validity and meaning of this Plan are to be determined, governed, and enforced under the laws of the State of Ohio, except that any applicable conflict or choice of laws principles of Ohio law that would result in the application of the laws of any other state or jurisdiction to the validity, meaning, or performance of this agreement shall not apply.

G. Code Section 409A Compliance

This Plan is intended to comply with Code Section 409A and the Treasury Regulations promulgated thereunder (and any subsequent IRS notices or guidance), and, to the maximum extent permitted by law, this Plan shall be interpreted, administered, and operated in good faith accordingly. Nothing herein shall be construed as an entitlement or guarantee of any particular tax treatment.

H. Payments Upon Income Inclusion Under Code Section 409A

Notwithstanding anything to the contrary contained herein, the Company may accelerate the time or schedule of a payment to a Participant at any time the Plan fails to meet the requirements of Code Section 409A and the Treasury Regulations promulgated thereunder. Such payment may not exceed the amount required to be included in income as a result of the failure to comply with the requirements of Code Section 409A and the Treasury Regulations promulgated thereunder.

Control No: LEG 105

Policy Name: Insider Trading Policy

Responsible Corporate Function/Business Segment: Legal

Effective: June 1, 2024

Coverage: Global – All employees, which includes temporary employees, contractors and subcontractors

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Policy Overview & Objective

It is illegal under the securities laws of the United States for anyone to purchase or sell securities of a public company in open-market transactions while aware of, or in possession of, material non-public information about that company. It is also illegal to disclose material non-public information to others who could then trade in those securities. The objective of this Policy is to protect Greif and its employees by establishing a process to guide Greif employees in the legal trading of Greif securities and to avoid trading in the securities of another public company on the basis of material non-public information obtained in the course of duties for Greif.

The Policy

I. Purpose of this Policy

This Insider Trading Policy ("Policy") provides guidelines with respect to trading in Greif securities and the handling of confidential information about Greif and its subsidiaries and other public companies. This Policy was adopted to promote compliance with the securities laws of the United States and to assist our directors, officers and employees in complying fully with these laws when trading in securities of Greif or of another company.

It is illegal under United States securities laws:

- To trade in Greif securities (defined below) while aware of, or in possession of, material non-public information about Greif;
- To trade in the securities of another public company while aware of, or in possession of, material non-public information about or impacting that company obtained in the course of duties at Greif, whether that company does business with Greif or has a sufficient "market connection" with Greif, which is sometimes referred to as shadow trading; and
- To disclose material non-public information to others who could then trade in Greif securities or the securities of other public companies. That type of disclosure is sometimes referred to as "tipping."

Greif Securities Defined:

- Greif's Class A and B Common Stock, listed for trading on the NYSE

Persons Subject to this Policy

This Policy applies to (Greif and its subsidiaries):

- All Members of the Board of Directors
- All Officers
- All Employees
- Others as determined by Greif (i.e., joint venture partners, contractors or consultants)
- Family members within your household (described below)
- Others who live within your household (described below)
- Others who are subject to your control or influence (described below)
- Entities who are subject to your control or influence (described below)

II. Individual Responsibility

Each individual subject to this Policy has an ethical and legal obligation to protect and maintain the confidential information of Greif and to not engage in transactions in Greif securities while aware of, or in possession of, material non-public information. Each individual (including family members and any controlled entities as defined in this Policy) is responsible in both his or her personal and professional capacity to act in a manner consistent with this Policy. In all cases, the responsibility for determining whether an individual is in possession of material non-public information rests with that individual, and any action on the part of Greif or any of our directors,

officers or employees pursuant to this Policy (or otherwise) does not in any way constitute legal advice or insulate an individual from liability under applicable U.S. securities laws.

This Policy is intended to help prevent even the appearance of improper conduct on the part of directors, officers and employees of Greif or anyone otherwise associated with Greif. This Policy should be read in conjunction with Greif's Code of Conduct. Any questions regarding this Policy in general or the application of this Policy to a particular case should be directed to Greif's General Counsel.

III. Statement of Policy

NO director, officer or employee of Greif who is aware of, or in possession of, material non-public or "inside" information regarding Greif may directly or indirectly through family members or other persons or entities:

- **Trade in Greif securities or engage in any other transaction to take personal advantage of such information;**
- **Make an *initial* election to purchase or make *changes* in elections or sell or reallocate investments in Greif securities in a 401(k) plan, Colleague Stock Purchase Plan or in a dividend reinvestment plan; and**
- **Disclose or "tip" any such "inside" information to another person not required to know such information, including family, friends, business associates, investors or consulting firms, until that information becomes public or is no longer material.**

In addition, NO director, officer or employee who is aware of, or in possession of, material non-public information of any other publicly held company that was obtained in the course of his or her duties at Greif may trade directly or indirectly in that company's securities or pass or "tip" that information to others (except for persons within Greif who have a business "need to know") or otherwise use that information for personal gain until the information becomes public or is no longer material.

A. What is Material Information?

Information is considered "material" if a reasonable investor would consider it important in deciding to buy, hold or sell securities of Greif. Any information that could reasonably be expected to affect the price of Greif's stock is material, whether it is positive or negative. There is no "bright line" test for assessing materiality. Rather, materiality is based on an assessment of all of the facts and circumstances, and is evaluated by enforcement authorities with the benefit of hindsight. Examples of material information include, but are not limited to:

- Company financial problems or successes;
- Earnings forecasts;
- Annual and quarterly financial results and preliminary financial results;
- Events that could result in restating financial information;
- Significant strategic initiatives;
- Major changes in Greif's management;
- Certain proposed acquisitions, dispositions or joint ventures;
- Gain or loss of a significant customer or supplier;
- Dividend actions and stock splits;
- Important product developments;
- A significant lawsuit or claim or resolution of such litigation;

- Significant financing developments; and
- A significant cybersecurity incident.

B. When is Information "Public"?

Non-public information is information that has not yet been made public by Greif. Information is only considered public when Greif makes an official announcement and the investing public has had an adequate opportunity to see or hear and digest such information. As a result, information is not generally deemed public until the third business day after the information has been released to the public.

IV. Consequences of Insider Trading

The consequences of an insider trading violation can be severe:

1. ***Traders and Tippers.*** Directors, officers and employees (or their tippees) who trade while aware of, or in possession of, material non-public information may be subject to the following penalties:

   - A civil penalty of up to three times the profit gained or loss avoided;
   - A criminal fine of up to $5 million (no matter the profit gained or loss avoided); and
   - A jail sentence of up to 20 years.

A director, officer or employee who tips information to a person who then trades is subject to the same penalties as the tippee, even if the director, officer or employee did not trade and did not profit from the tippee's trading.

1. ***Control Persons.*** Greif and its supervisory personnel are subject to the following penalties if they fail to make appropriate steps to prevent illegal insider trading:

   - A civil penalty of up to $1 million or, if greater, three times the profit gained or loss avoided as a result of the employee's violation; and
   - A criminal penalty of up to $25 million.

3. ***Company Imposed Disciplinary Actions.*** Greif may impose disciplinary actions against any violator, up to and including termination of employment for cause. In addition, a violator may be subject to civil or criminal penalties, as well as serious damage to his or her reputation and career. Transactions that may be necessary or justifiable for personal reasons (such as the need for funds for an emergency expenditure) do not excuse noncompliance with this Policy.

V. Trading Window and Pre-Clearance Procedures

Greif has established additional trading approval procedures to assist in the administration of this Policy that **apply only to the select group of individuals described herein**.

1. **Who Requires Pre-Clearance to Trade?**

   Individuals who may have access to material non-public information AND who are notified by the Greif General Counsel and listed by name on the ***"Insider Trading List"*** are prohibited from trading in Greif securities along with their immediate family members and controlled entities, without:

   - obtaining pre-clearance from the General Counsel; and

- making the trade during an open trading window.

2. **<u>How to obtain Pre-clearance.</u>**

If you are subject to the ***Insider Trading List***, you should contact the Greif General Counsel, by telephone, voicemail, e-mail, or facsimile, by 3:00 p.m. Eastern Time in the U.S. at least two (2) business days in advance to pre-clear a proposed transaction. If the General Counsel is not available, you may contact the Deputy General Counsel or Corporate Controller or Treasurer. If you communicate with one of the selected approvers above other than directly in person or by telephone discussion, you must receive an acknowledgement that your communication was received. In any event, the General Counsel will determine whether the transaction is permitted by this Policy and will assist you in complying with any applicable reporting requirements.

These procedures are implemented to assist in the prevention of inadvertent violations and to avoid the appearance of improper transactions that may result, for example, if a director, officer or employee engaged in a trade even though unaware of a pending major development.

3. **<u>Other Pre-Clearance Considerations.</u>**

- If you receive pre-clearance for a transaction in Greif securities, you must complete the trade within five business days after clearance is granted, **but only if you are not aware of, or in possession of, material non-public information.**
- Trading in Greif securities during an open window is <u>not</u> considered a "safe harbor". If you are aware of, or in possession of, material non-public information, you cannot trade.
- Even after receiving pre-clearance, it is possible that you may be advised later that you <u>may not</u> trade in Greif securities, nor may you inform anyone that you have been advised not to trade. You may reapply for pre-clearance at a later date.

1. **<u>When is the Trading Window Open?</u>**

- The trading window typically opens (but is not required to open) on the third full trading day (a day that the NYSE is open) after Greif has released quarterly or annual earnings.
- The trading window typically closes on the 10th day of the following month.
- A trading window may not open and may be suspended by the General Counsel at any time because of:

  (a) certain developments relating to Greif that are not yet disclosed to the public; or
  (b) other reasons deemed appropriate.

Remember: Even if the trading window is open, you cannot trade if you are personally aware of, or in possession of, material non-public information.

2. **<u>Additional Pre-Clearance Requirements for Board of Directors and Section 16 Officers.</u>**

Directors and Section 16 Officers of Greif are required by the U.S. Securities and Exchange Commission ("SEC") to report all trades of Greif securities before the end of the second business day following the date of the transaction. The Greif Legal Department will assist

those individuals with the required filings, but only if those individuals provide the necessary information on a timely basis. The pre-clearance requirements in this Policy are intended to facilitate compliance with these reporting requirements by tracking securities transactions by directors and Section 16 Officers.

3. **Transactions by Family Members and Controlled Entities.**

Individuals who are aware of, or have possession of, material non-public information and/or are listed on Greif's ***Insider Trading List*** must inform the following persons about this Policy:

- family members who reside with you (including a child away at college);
- anyone else who lives in your household;
- any family members who do not live in the same household, but whose transactions in Greif securities are directed by you or are subject to your influence or control (such as parents or children who consult with that person before they trade in Greif securities); and
- any entities that you influence or control (a "controlled entity") including any corporation, proprietorship, partnership, limited liability company, trust or other entity in which the purchase of securities is subject to that person's control.

You are responsible for the transactions of these other persons and controlled entities and therefore should make them aware of the need to confer with you before they trade in Greif securities. For purposes of this Policy and U.S. securities laws, you should treat all transactions in Greif securities by these other persons and controlled entities as if the transactions were from your own account.

VI. Restricted Transactions under Greif Benefit Plans

1. 401(k) Plan. This Policy **does not apply** to ongoing purchases of Greif securities in Greif's 401(k) plan, or any other plan that invests in Greif securities, resulting from your periodic contribution of money to that plan pursuant to a previously elected level of payroll deduction. However, this Policy **does apply** to certain elections you may make under the 401(k) plan, including:

   - an initial election to invest in Greif securities available in the 401(k) plan and any elections to increase or decrease the percentage of your contributions allocated to the investment in Greif securities available in to the 401(k) plan;
   - an election to make an intra-plan transfer of an existing account balance into or out of Greif securities in the plan;
   - an election to borrow money against your plan account if the loan will result in the liquidation of some or all of your Greif securities in the plan; and
   - an election to exit the plan, other than in connection with death, disability or termination of employment.

2. Colleague Stock Purchase Plan. This Policy **does not apply** to ongoing purchases of Greif securities under the Colleague Stock Purchase Plan. However, this Policy **does apply** to certain elections you may make under the Colleague Stock Purchase Plan, including:

   - An initial election to participate in the plan;
   - an election to increase or decrease the percentage of your contributions allocated to that plan;
   - the sale of stock purchased through the plan; and

- an election to exit the plan, other than in connection with death, disability or termination of employment.

3. Dividend Reinvestment Plan. This Policy **does not apply** to ongoing purchases of Greif securities under a dividend reinvestment plan resulting from your reinvestment of dividends paid in Greif stock. However, this Policy **does apply** to certain elections you may make under the dividend reinvestment plan, including:
   - An initial election to participate in the plan;
   - An election to increase or decrease the percentage of your contributions allocated to that plan;
   - The sale of stock purchased through the plan; and
   - An election to exit the plan, other than in connection with death, disability or termination of employment.

4. Incentive Plan Stock Awards. This Policy **does not apply** to the award or vesting of any stock granted under any Greif incentive plan or to the exercise of a tax withholding right under such plan pursuant to which you elect to have Greif withhold shares of stock to satisfy tax withholding requirements upon the award or vesting of any such stock. However, this Policy **does apply** to any open-market sale of such stock after award or vesting.

5. Stock Options. This Policy **does not apply** to the award, vesting or exercise of any stock option granted under any Greif stock option plan, or to the exercise of a tax withholding right under such plan pursuant to which you elect to have Greif withhold shares of stock subject to an option to satisfy tax withholding requirements in connection with the exercise of any such stock option. However, this Policy **does apply** to any open-market sale of Greif securities as part of a broker-assisted cashless exercise of an option or any other open-market sale for the purpose of generating the cash needed to pay the exercise price of an option.

6. Special 401(k) and Pension Plan Blackout Periods**.** This Policy **does apply** to the purchase, sale or transfer of Greif securities in the Greif 401(k) and Greif defined benefit pension plans (and the creation of a Rule 10b5-1 trading plan) during a “fund blackout period.” A fund blackout period exists whenever 50% or more of the participants in a plan that invests or permits investments in Greif securities are unable to conduct transactions in their accounts for more than three (3) consecutive days. Blackout periods typically occur when there is a change in the trustee, record keeper or investment manager for a retirement plan. You will be contacted when these or other restricted trading periods are instituted from time to time.

VII. Rule 10b5-1 Trading Plans

Directors, officers and those listed on the Insider Trading List may not implement a trading plan under Rule 10b5-1 of the Securities Exchange Act of 1934 without prior written clearance from Greif’s General Counsel. Before entering into such a trading plan, you must provide the General Counsel with all relevant documentation at least a week in advance. Such trading plans may only be entered into when you are not aware of, or not in possession of, material non-public information. Trades made pursuant to such a trading plan will not require additional pre-clearance. For directors and Section 16 Officers, Rule 10b5-1 trading plans must provide that

the broker will advise the General Counsel of all transactions made under the trading plan, since such transactions need to be promptly reported on Form 4 to the SEC.

VIII. Prohibited Transactions

Directors, officers and employees cannot engage in short-term or speculative transactions in Greif securities, which includes:

1. Short-Term Trading. Short-term trading of Greif securities may be distracting and may unduly focus you on Greif's short-term stock market performance instead of Greif's long-term business objectives. For these reasons, any director, officer or employee who purchases Greif securities in the open market may not sell any Greif securities during the six months following the purchase (or vice versa).

2. Short Sales. Short sales of Greif securities (i.e., sales of securities that are not then owned) may evidence an expectation on the part of the seller that Greif securities will decline in value and, therefore, signal to the market the lack of confidence in Greif's short-term prospects. In addition, short sales may reduce the seller's incentive to improve performance. For these reasons, short sales of Greif securities are prohibited. Section 16(c) of the Securities Exchange Act of 1934 also prohibits directors and officers from engaging in short sales.

3. Publicly Traded Options. A transaction in options is, in effect, a bet on the short-term movement of Greif stock and therefore creates the appearance that the director, officer or employee is trading based on inside information. Transactions in options also may focus the attention on short-term performance at the expense of Greif's long-term objectives. Accordingly, transactions in puts, calls or other derivative securities on an exchange or in any other organized market are prohibited.

4. Hedging Transactions. Certain forms of hedging or monetization transactions, such as zero-cost collars, equity swaps and forward sale contracts, allow a director, officer or employee to lock in much of the value of stock holdings, often in exchange for all or part of the potential for upside appreciation in the stock. These transactions allow the director, officer or employee to continue to own the covered securities, but without the full risks and rewards of ownership. When that occurs, the director, officer or employee may no longer have the same objectives as Greif's other stockholders. Therefore, directors, officers and employees are prohibited from engaging in any such transactions.

5. Margin Accounts and Pledges. Securities held in a margin account as collateral for a margin loan may be sold by the broker without the customer's consent if the customer fails to meet a margin call. Similarly, securities pledged (or hypothecated) as collateral for a loan may be sold in foreclosure if the borrower defaults on the loan. Because a margin sale or foreclosure sale may occur at a time when the pledgor is aware of, or in possession of, material non-public information or otherwise is not permitted to trade in Greif securities, directors, officers and employees are prohibited from holding Greif securities in a margin account or pledging Greif securities as collateral for a loan.

6. Standing and Limit Orders. Standing and limit orders (except standing and limit orders under approved Rule 10b5-1 plans) create heightened risks for insider trading violations similar to the use of margin accounts. Because there is no control over the timing of purchases or sales that result from standing instructions to a broker, the broker could execute a transaction when a director, officer or employee is aware of, or in possession of,

material non-public information. For this reason, directors, officers and employees are prohibited from engaging in any such transactions.

IX. Communications with Investors, Media and Others

Only the Chairman of the Board, Chief Executive Officer, Chief Financial Officer, General Counsel, Vice President responsible for investor relations, Vice President/Director responsible for communications and any other representative of Greif designated by the Chief Executive Officer may make communications and presentations on Greif's behalf to the media and the investment community. If an inquiry is made, refer the person making the inquiry to Greif's Vice President/Director of communications or General Counsel.

X. Post-Employment Transactions

This Policy continues to apply to your transactions in Greif securities even after your service with Greif ends. If you are aware of, or in possession of, material non-public information when your service with Greif ends, you may not trade in Greif securities until that information has become public or is no longer material.

XI. Company Assistance with this Policy

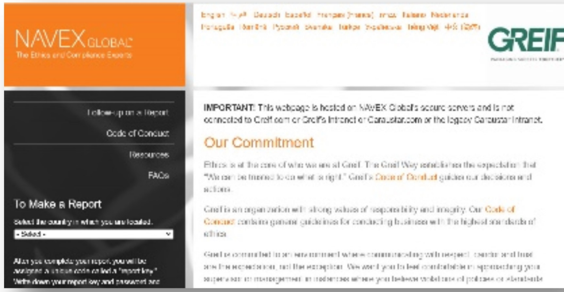
Any questions regarding this Policy in general or the application of this Policy to a particular case should be directed to the Greif General Counsel.

XII. Report All Violations

Any individual who becomes aware of a violation or suspected potential violation of any law, rule, or regulation or of this Policy has a responsibility to take action. Violations or the observation of suspicious activity must not be ignored, hidden, or covered up.

It is suggested that you contact one or more of the following:

- An appropriate supervisor or a member of senior management
- Greif's General Counsel at +1 740-549-6188 or any other member of the Greif Legal Department
- The Audit Committee of Greif's Board of Directors at audit.committee@greif.com or by mail at Audit Committee, Greif, Inc., 425 Winter Road, Delaware, Ohio 43015
- The Greif Ethics Hotline: Concerns can be reported confidentially and anonymously (where permitted by law) to an independent third party information service. This service has staff available 24 hours a day, 7 days a week. To reach the Greif Ethics Hotline, you can visit greif.ethicspoint.com and file a written report or you can call:
    - In North America, call toll-free: 866-834-1825
    - Outside North America, where available, follow the directions at greif.ethicspoint.com under “To Make a Report”



Greif does not permit retaliation of any kind for any report of an actual or potential instance of illegal or unethical misconduct that is made in good faith. Greif also prohibits retaliation against anyone who assists in an investigation. Retaliatory conduct includes discharge, demotion, suspension, threats, harassment, and any other manner of discrimination in the terms and conditions of employment because of a lawful act an employee may have performed.

Any employee who is found to have retaliated against a person who has reported a violation in good faith, or assisted in an investigation, will be subject to disciplinary actions, up to and including termination of employment to the extent permitted by local law.

References
Code of Conduct
Greif Ethics Hotline

Addendum
None

EXHIBIT 21

SUBSIDIARIES OF REGISTRANT

Per item 601(b)(21)(ii) of Regulation S-K, names of particular subsidiaries may be omitted if the unnamed subsidiaries, considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary as of October 31, 2024. Significant subsidiaries are defined in Rule 1-02(w) of Regulation S-X.

Name of Subsidiary	Incorporated or Organized Under Laws of
United States:	
American Flange & Manufacturing Co. Inc.	Delaware
Caraustar Industrial and Consumer Products Group, Inc.	Delaware
Caraustar Recovered Fiber Group, Inc.	Delaware
ColePak, LLC	Delaware
Container Life Cycle Management LLC	Delaware
Greif Packaging LLC	Delaware
Greif US Plastics LLC	Delaware
Soterra LLC	Delaware
Lee Container, LLC	Georgia
Lee Container Iowa, LLC	Iowa
Centurion Container LLC	New Jersey
The Newark Group, Inc.	New Jersey
Box-Board Products, Inc.	North Carolina
Caraustar Mill Group, Inc.	Ohio
International:	
Greif Algeria Spa	Algeria
Greif Argentina S.A.	Argentina
Greif Belgium BV	Belgium
Greif Embalagens Industriais do Brasil Ltda.	Brazil
Caraustar Industrial Canada, Inc.	Canada
Greif Bros. Canada Inc.	Canada
Reliance Products Ltd.	Canada
Greif Embalajes Industriales S.p.A.	Chile
Greif (Huizhou) Packaging Co., Ltd.	China
Greif (Shanghai) Packaging Co., Ltd.	China
Greif (Taicang) Packaging Co., Ltd.	China
Greif (Tianjin) Packaging Co., Ltd.	China
JRB Packaging Co., Ltd.	China
Greif Czech Republic s.r.o	Czech Republic
Greif France SAS	France
Greif France Plastics St-Etienne SAS	France
Greif Packaging Germany GmbH	Germany
Greif Packaging Plastics Germany GmbH	Germany
Greif BSC Europe Kft.	Hungary
Pachmas Packaging Ltd.	Israel
Mullackal Polymer Pvt Ltd	India
Greif Italy S.r.L.	Italy

Greif Malaysia Sdn. Bhd.	Malaysia
Greif Mexico, S.A. de C.V.	Mexico
Greif Netherland B.V.	Netherlands
Greif Tholu B.V.	Netherlands
Greif Poland Sp. z o.o.	Poland
Greif Portugal, Lda.	Portugal
Greif Saudi Arabia Ltd.	Saudi Arabia
Greif Eastern Packaging Pte. Ltd.	Singapore
Greif South Africa (Pty) Ltd.	South Africa
Greif Packaging Spain S.L.	Spain
Greif Sweden AB	Sweden
Greif Mimaysan Ambalaj Sanayi A.S.	Turkey
Greif UK Ltd	United Kingdom
Greif UK Plastics Ltd	United Kingdom

EXHIBIT 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-272073, 333-236627, 333-236628, 333-151475, 333-123133, and 333-61068 on Form S-8 of our reports dated December 23, 2024, relating to the financial statements of Greif, Inc. and the effectiveness of Greif, Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended October 31, 2024.

/s/ Deloitte & Touche LLP

Columbus, Ohio
December 23, 2024

Exhibit 24.3

GREIF, INC.
POWER OF ATTORNEY
FOR
FORM 10-K ANNUAL REPORTS

The undersigned, a director of Greif, Inc., a Delaware corporation (the "Company"), hereby constitutes and appoints Ole Rosgaard and each of his successors to the office of Chief Executive Officer of the Company, and each of them, as my true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for me and in my name, place, and stead, in my capacity as director of the Company, to execute any and all of the Company's Annual Reports on Form 10-K, and any amendments thereto, to be filed with the Securities and Exchange Commission pursuant to Section 13 or 15(d) of the Securities and Exchange Act of 1934, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their substitutes, may lawfully do or cause to be done by virtue hereof.

The undersigned has executed and delivered this Power of Attorney on June 3, 2024.

/s/ Jillian C. Evanko

Signature of Director

GREIF, INC.
POWER OF ATTORNEY
FOR
FORM 10-K ANNUAL REPORTS

The undersigned, a director of Greif, Inc., a Delaware corporation (the "Company"), hereby constitutes and appoints Ole Rosgaard and each of his successors to the office of Chief Executive Officer of the Company, and each of them, as my true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for me and in my name, place, and stead, in my capacity as director of the Company, to execute any and all of the Company's Annual Reports on Form 10-K, and any amendments thereto, to be filed with the Securities and Exchange Commission pursuant to Section 13 or 15(d) of the Securities and Exchange Act of 1934, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their substitutes, may lawfully do or cause to be done by virtue hereof.

The undersigned has executed and delivered this Power of Attorney on August 26, 2024.

/s/ B. Andrew Rose

Signature of Director

EXHIBIT 31.1

CERTIFICATION

I, Ole G. Rosgaard, certify that:

1. I have reviewed this Annual Report on Form 10-K of Greif, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer 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 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 the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 23, 2024

/s/ OLE G. ROSGAARD
Ole G. Rosgaard
President and Chief Executive Officer
(principal executive officer)

EXHIBIT 31.2

CERTIFICATION

I, Lawrence A. Hilsheimer, certify that:

1. I have reviewed this Annual Report on Form 10-K of Greif, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer 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 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 the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 23, 2024

/s/ LAWRENCE A. HILSHEIMER

Lawrence A. Hilsheimer
Executive Vice President and Chief Financial Officer
(principal financial officer)

EXHIBIT 32.1

Certification Required by Rule 13a — 14(b) of the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code

In connection with the Annual Report of Greif, Inc. (the “Company”) on Form 10-K for the annual period ended October 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Ole G. Rosgaard, the President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(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.

Date: December 23, 2024

/s/ OLE G. ROSGAARD
Ole G. Rosgaard
President and Chief Executive Officer

A signed original of this written statement required by Section 906 has been provided to Greif, Inc. and will be retained by Greif, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.2

Certification Required by Rule 13a — 14(b) of the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code

In connection with the Annual Report of Greif, Inc. (the "Company") on Form 10-K for the annual period ended October 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Lawrence A. Hilsheimer, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(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.

Date: December 23, 2024

/s/ LAWRENCE A. HILSHEIMER
Lawrence A. Hilsheimer
Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to Greif, Inc. and will be retained by Greif, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.