

**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 July 31, 2018

OR

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

**For the transition period from _____ to _____
Commission file number 1-14959**

BRADY CORPORATION

(Exact name of registrant as specified in charter)

Wisconsin
**(State or other jurisdiction of
incorporation or organization)**
6555 West Good Hope Road,
Milwaukee, WI
(Address of principal executive offices)

39-0178960
**(IRS Employer
Identification No.)**
53223
(Zip Code)

(414) 358-6600

(Registrant's telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Class A Nonvoting Common Stock, Par Value \$.01 per share	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 Act. Yes No

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>	Emerging growth company	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>		

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

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

The aggregate market value of the non-voting common stock held by non-affiliates of the registrant as of January 31, 2018, was approximately \$1,733,322,847 based on the closing sale price of \$38.25 per share on that date as reported for the New York Stock Exchange. As of September 11, 2018, there were 48,465,547 outstanding shares of Class A Nonvoting Common Stock (the "Class A Common Stock"), and 3,538,628 shares of Class B Common Stock. The Class B Common Stock, all of which is held by affiliates of the registrant, is the only voting stock.

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PART I

Item 1. Business

(a) General Development of Business

Brady Corporation ("Brady," "Company," "we," "us," "our") was incorporated under the laws of the state of Wisconsin in 1914. The Company's corporate headquarters are located at 6555 West Good Hope Road, Milwaukee, Wisconsin 53223, and the telephone number is (414) 358-6600.

Brady Corporation is a global manufacturer and supplier of identification solutions and workplace safety products that identify and protect premises, products and people. The ability to provide customers with a broad range of proprietary, customized and diverse products for use in various applications, along with a commitment to quality and service, a global footprint, and multiple sales channels, have made Brady a leader in many of its markets.

The Company's primary objective is to build upon its market position and increase shareholder value by enabling a highly competent and experienced organization to focus on the following key competencies:

- Operational excellence — Continuous productivity improvement, automation, and process transformation.
- Customer service — Focus on the customer and understanding customer needs.
- Innovation advantage — Technologically-advanced, internally-developed proprietary products that drive revenue growth and sustain gross profit margins.
- Global leadership position in niche markets.
- Digital capabilities.
- Compliance expertise.

The long-term sales growth and profitability of our segments will depend not only on improved demand in end markets and the overall economic environment, but also on our ability to continuously improve operational excellence, focus on the customer, develop and market innovative new products, and to advance our digital capabilities. In our Identification Solutions ("ID Solutions" or "IDS") business, our strategy for growth includes an increased focus on certain industries and products, a focus on improving the customer buying experience, and increasing investment in research and development ("R&D") to develop new products. In our Workplace Safety ("WPS") business, our strategy for growth includes a focus on workplace safety critical industries, innovative new product offerings, compliance expertise, and improving our digital capabilities.

The following were key initiatives supporting the strategy in fiscal 2018:

- Increased our investment in R&D by 14.2% and enhanced our innovation development process and the speed to deliver high-value, innovative products that align with our target markets.
- Drove operational excellence and provided our customers with strong customer service.
- Executed sustainable efficiency gains and increased the use of automation throughout our global operations as well as our selling, general, and administrative structures demonstrated through a reduction in selling, general and administrative ("SG&A") expenses as a percentage of net sales.
- Expanded our digital presence demonstrated through increased WPS digital sales.
- Grew through focused sales and marketing actions in selected vertical markets and strategic accounts.
- Enhanced our global employee development process to attract and retain key talent.

(b) Financial Information About Industry Segments

The information required by this Item is provided in Note 8 of the Notes to Consolidated Financial Statements contained in Item 8 - Financial Statements and Supplementary Data.

(c) Narrative Description of Business

Overview

The Company is organized and managed on a global basis within two reportable segments: Identification Solutions and Workplace Safety.

The IDS segment includes high-performance and innovative industrial and healthcare identification products that are manufactured under multiple brands, including the Brady brand. Industrial identification products are sold through distribution to a broad range of maintenance, repair, and operations ("MRO") and original equipment manufacturing ("OEM") customers and through other channels, including direct sales, catalog marketing, and digital. Healthcare identification products are sold direct and through distribution via group purchasing organizations ("GPO").

The WPS segment includes workplace safety and compliance products, which are sold under multiple brand names primarily through catalog and digital channels to a broad range of MRO customers. Approximately half of the WPS business is derived from internally manufactured products and half is from externally sourced products.

Below is a summary of sales by reportable segment for the fiscal years ended July 31:

	2018	2017	2016
IDS	72.1%	71.9%	71.0%
WPS	27.9%	28.1%	29.0%
Total	100.0%	100.0%	100.0%

ID Solutions

Within the ID Solutions segment, the primary product categories include:

- Facility identification and protection, which includes safety signs, pipe markers, labeling systems, spill control products, lockout/tagout devices, and software and services for safety compliance auditing, procedure writing and training.
- Product identification, which includes materials and printing systems for product identification, brand protection labeling, work in process labeling, and finished product identification.
- Wire identification, which includes hand-held printers, wire markers, sleeves, and tags.
- People identification, which includes name tags, badges, lanyards, and access control software.
- Patient identification, which includes wristbands and labels used in hospitals for tracking and improving the safety of patients.
- Custom wristbands used in the leisure and entertainment industry such as theme parks, concerts and festivals.

Approximately 67% of ID Solutions products are sold under the Brady brand. In the United States, identification products for the utility industry are marketed under the Electromark brand; spill-control products are marketed under the SPC brand; and security and identification badges and systems are marketed under the Identocard, PromoVision, and Brady People ID brands. Wire identification products are marketed under the Modemotecnica brand in Italy and lockout/tagout products are offered under the Scafftag brand in the U.K.; identification and patient safety products in the healthcare industry are available under the PDC Healthcare brand in the U.S. and Europe; and custom wristbands for the leisure and entertainment industry are available under the PDC brand in the U.S. and the B.I.G. brand in Europe.

The ID Solutions segment offers high quality products with rapid response and superior service to provide solutions to customers. The business markets and sells products through multiple channels including distributors, direct sales, catalog marketing, and digital. The ID Solutions sales force partners with end-users and distributors by providing technical application and product expertise.

This segment manufactures differentiated, proprietary products, most of which have been internally developed. These internally developed products include materials, printing systems, and software. IDS competes for business on several factors, including customer support, product innovation, product offering, product quality, price, expertise, production capabilities, and for multinational customers, our global footprint. Competition is highly fragmented, ranging from smaller companies offering minimal product variety, to some of the world's largest major adhesive and electrical product companies offering competing products as part of their overall product lines.

ID Solutions serves customers in many industries, which include industrial manufacturing, electronic manufacturing, healthcare, chemical, oil, gas, automotive, aerospace, governments, mass transit, electrical contractors, leisure and entertainment and telecommunications, among others.

Workplace Safety

Within the Workplace Safety segment, the primary product categories include:

- Safety and compliance signs, tags, and labels.
- Informational signage.
- Asset tracking labels.
- First aid products.
- Industrial warehouse and office equipment.
- Labor law and other compliance posters.

Products within the Workplace Safety segment are sold under a variety of brands including: safety and facility identification products offered under the Seton, Emedco, Signals, Safety Signs, SafetyShop, Signs & Labels and Pervaco brands; first aid supplies under the Accidental Health and Safety, Trafalgar, and Securimed brands; wire identification products marketed under the Carroll brand; and labor law and compliance posters under the Personnel Concepts and Clement Communications brands.

The Workplace Safety segment manufactures a broad range of stock and custom identification products, and also sells a broad range of related resale products. Historically, both the Company and many of our competitors focused their businesses on catalog marketing, often with varying product niches. However, the competitive landscape continues to evolve at an accelerating pace. Many of our competitors extensively utilize e-commerce to promote the sale of their products. A consequence of this shift is price transparency, as prices on non-proprietary products can be easily compared. Therefore, to compete effectively, we continue to build out our e-commerce capabilities and focus on developing unique or customized solutions, dynamic pricing capabilities, enhancing customer experience, and providing compliance expertise as these are critical to retain existing customers and convert new customers. Workplace Safety primarily sells to businesses and serves many industries, including manufacturers, process industries, government, education, construction, and utilities.

Research and Development

The Company focuses its R&D efforts on pressure sensitive materials, printing systems and software, and it mainly supports the IDS segment. Material development involves the application of surface chemistry concepts for top coatings and adhesives applied to a variety of base materials. Systems design integrates materials, embedded software and a variety of printing technologies to form a complete solution for customer applications. In addition, the R&D team supports production and marketing efforts by providing application and technical expertise.

The Company owns patents and tradenames relating to certain products in the United States and internationally. Although the Company believes that patents are a significant driver in maintaining its position for certain products, technology in the areas covered by many of the patents continues to evolve and may limit the value of such patents. The Company's business is not dependent on any single patent or group of patents. Patents applicable to specific products extend for up to 20 years according to the date of patent application filing or patent grant, depending upon the legal term of patents in the various countries where patent protection is obtained. The Company's tradenames are valid ten years from the date of registration, and are typically renewed on an ongoing basis.

The Company spent \$45.3 million, \$39.6 million, and \$35.8 million on its R&D activities during the fiscal years ended July 31, 2018, 2017, and 2016, respectively. The increase in R&D spending in fiscal 2018 compared to the prior year was due to the hiring of additional engineers as well as additional spending on new product development within the IDS and WPS segments. As of July 31, 2018, 248 individuals were engaged in R&D activities for the Company, an increase from 218 as of July 31, 2017.

Operations

The materials used in the products manufactured consist of a variety of plastic and synthetic films, paper, metal and metal foil, cloth, fiberglass, inks, dyes, adhesives, pigments, natural and synthetic rubber, organic chemicals, polymers, and solvents for consumable identification products in addition to electronic components, molded parts and sub-assemblies for printing systems. The Company operates coating facilities that manufacture bulk rolls of label stock for internal and external customers. In addition, the Company purchases finished products for resale.

The Company purchases raw materials, components and finished products from many suppliers. Overall, we are not dependent upon any single supplier for our most critical base materials or components; however, we have chosen in certain situations to sole source, or limit the sources of materials, components, or finished items for design or cost reasons. As a result, disruptions in supply could have an impact on results for a period of time, but we believe any disruptions would simply require qualification of new suppliers and the disruption would be modest. In certain instances, the qualification process could be more costly or take a longer period of time and in rare circumstances, such as a global shortage of critical materials or components, the financial impact could be material. The Company currently operates 39 manufacturing and distribution facilities globally.

The Company carries working capital mainly related to accounts receivable and inventory. Inventory consists of raw materials, work in process and finished goods. Generally, custom products are made to order while an on-hand quantity of stock product is maintained to provide customers with timely delivery. Normal and customary payment terms range from net 10 to 90 days from date of invoice and vary by geography.

The Company has a broad customer base, and no individual customer represents 10% or more of total net sales.

Average time to fulfill customer orders varies from same-day to one month, depending on the type of product, customer request, and whether the product is stock or custom-designed and manufactured. The Company's backlog is not material, does not provide significant visibility for future business and is not pertinent to an understanding of the business.

Environment

Compliance with federal, state and local environmental protection laws during fiscal 2018 did not have a material impact on the Company's business, financial condition or results of operations.

Employees

As of July 31, 2018, the Company employed approximately 6,200 individuals. Brady has never experienced a material work stoppage due to a labor dispute and considers its relations with employees to be good.

(d) Financial Information About Foreign and Domestic Operations and Export Sales

The information required by this Item is provided in Note 8 of the Notes to Consolidated Financial Statements contained in Item 8 — Financial Statements and Supplementary Data.

(e) Information Available on the Internet

The Company's Corporate Internet address is www.bradycorp.com. The Company makes available, free of charge, on or through its Internet website copies of its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to all such reports as soon as reasonably practicable after such reports are electronically filed with or furnished to the SEC. The Company is not including the information contained on or available through its website as part of, or incorporating such information by reference into, this Annual Report on Form 10-K.

Item 1A. Risk Factors

Investors should carefully consider the risks set forth below and all other information contained in this report and other documents we file with the SEC. The risks and uncertainties described below are those that we have identified as material, but are not the only risks and uncertainties facing us. Our business is also subject to general risks and uncertainties that affect many other companies, such as market conditions, geopolitical events, changes in laws or accounting rules, fluctuations in interest rates, terrorism, wars or conflicts, major health concerns, natural disasters or other disruptions of expected economic or business conditions. Additional risks and uncertainties not currently known to us or that we currently believe are immaterial also may impair our business and financial results.

Business Risks

Failure to compete effectively or to successfully execute our strategy may have a negative impact on our business and financial results.

We actively compete with companies that produce and market the same or similar products, and in some instances, with companies that sell different products that are designed for the same end user. Competition may force us to reduce prices or incur additional costs to remain competitive in an environment in which business models are changing rapidly. We compete on the basis of several factors, including customer support, product innovation, product offering, product quality, price, expertise, digital capabilities, production capabilities, and for multinational customers, our global footprint. Present or future competitors may develop and introduce new and enhanced products, offer products based on alternative technologies and processes, accept lower profit, have greater financial, technical or other resources, or have lower production costs or other pricing advantages. Any of these could put us at a disadvantage by threatening our share of sales or reducing our profit margins, which could adversely impact our business and financial results.

Additionally, throughout our global business, distributors and customers may seek lower cost sourcing opportunities, which could result in a loss of business that may adversely impact our business and financial results.

Our strategy is to expand into higher-growth adjacent product categories and markets with technologically advanced new products, as well as to grow our sales generated through the digital channel. While traditional direct marketing channels such as catalogs are an important means of selling our products, an increasing number of customers are purchasing products on the internet. Our strategy to increase sales through the digital channel is an investment in our internet sales capabilities. There is a risk that we may not continue to successfully implement this strategy, or if successfully implemented, not realize its expected benefits due to the continued levels of increased competition and pricing pressure brought about by the internet. Our failure to successfully implement our strategy could adversely impact our business and financial results.

Failure to develop technologically advanced products that meet customer demands, including price expectations, could adversely impact our business and financial results.

Development of technologically advanced new products is targeted as a driver of our organic growth and profitability. Technology is changing rapidly and our competitors are innovating quickly. If we do not keep pace with developing technologically advanced products, we risk product commoditization, deterioration of the value of our brand, and reduced ability to effectively compete. We must continue to develop innovative products, as well as acquire and retain the necessary intellectual property rights in these products. If we fail to make innovations, or we launch products with quality problems, or if customers do not accept our products, then our business and financial results could be adversely affected.

Our failure or the failure of third-party service providers to protect our sites, networks and systems against security breaches, or otherwise to protect our confidential information, could adversely affect our business and financial results.

Our business systems collect, maintain, transmit and store data about our customers, vendors and others, including credit card information and personally identifiable information, as well as other confidential and proprietary information. We also employ third-party service providers that store, process and transmit proprietary, personal and confidential information on our behalf. We rely on encryption and authentication technology licensed from third parties in an effort to securely transmit confidential and sensitive information, including credit card numbers. Our security measures, and those of our third-party service providers, may not detect or prevent all attempts to hack our systems, denial-of-service attacks, viruses, malicious software, break-ins, phishing attacks, social engineering, security breaches or other attacks and similar disruptions that may jeopardize the security of information stored in or transmitted by our sites, networks and systems or that we or our third-party service providers otherwise maintain.

We and our service providers may not have the resources or technical sophistication to anticipate or prevent all types of attacks, and techniques used to obtain unauthorized access to or sabotage systems change frequently and may not be known until launched against us or our third-party service providers. In addition, security breaches can also occur as a result of non-technical issues, including intentional or inadvertent breaches by our employees or by persons with whom we have commercial relationships. Although we maintain privacy, data breach and network security liability insurance, we cannot be certain that our coverage will be adequate or cover liabilities actually incurred, or that insurance will continue to be available to us on economically reasonable terms, or at all. Any compromise or breach of our security measures, or those of our third-party service providers, could adversely impact our ability to conduct business, violate applicable privacy, data security and other laws, and cause significant legal and financial exposure, adverse publicity, and a loss of confidence in our security measures, which could have an adverse effect on our business and financial results.

Demand for our products may be adversely affected by numerous factors, some of which we cannot predict or control. This could adversely affect our business and financial results.

Numerous factors may affect the demand for our products, including:

- Future economic conditions of major markets served.
- Consolidation in the marketplace allowing competitors and customers to be more efficient and more price competitive.
- Future competitors entering the marketplace.
- Decreasing product life cycles.
- Changes in customer preferences.
- Ability to achieve operational excellence.

If any of these factors occur, the demand for our products could suffer, and this could adversely impact our business and financial results.

The loss of large customers or a significant reduction in sales to large customers could adversely affect our business and financial results.

While we have a broad customer base and no individual customer represents 10% or more of total sales, we conduct business with several large customers and distribution companies. Our dependence on these customers makes relationships with them important. We cannot guarantee that these relationships will be retained in the future. Because these large customers account for a significant portion of sales, they may possess a greater capacity to negotiate reduced prices. If we are unable to provide products to our customers at the quality and prices acceptable to them, some of our customers may shift their business to competitors or may substitute another manufacturer's products. If one of our large customers consolidates, is acquired, or loses market share, the result of that event may have an adverse impact on our business. The loss of or reduction of business from one or more of these large customers could have an adverse impact on our business and financial results.

We are a global company headquartered in the United States. We are subject to extensive regulations by U.S. and non-U.S. governmental and self-regulatory entities at various levels of the governing bodies. Failure to comply with laws and regulations could adversely affect our business and financial results.

Our operations are subject to the risks of doing business domestically and globally, including the following:

- Delays or disruptions in product deliveries and payments in connection with international manufacturing and sales.
- Regulations resulting from political and economic instability and disruptions.
- Imposition of new, or change in existing, duties, tariffs and trade agreements.
- Import, export and economic sanction laws.
- Current and changing governmental policies, regulatory, and business environments.
- Disadvantages from competing against companies from countries that are not subject to U.S. laws and regulations including the Foreign Corrupt Practices Act.
- Local labor regulations.
- Regulations relating to climate change, air emissions, wastewater discharges, handling and disposal of hazardous materials and wastes.
- Regulations relating to product content, health, safety and the protection of the environment.
- Specific country regulations where our products are manufactured or sold.
- Regulations relating to compliance with data protection and privacy laws throughout our global business.
- Laws and regulations that apply to companies doing business with the government, including audit requirements of government contracts related to procurement integrity, export control, employment practices, and the accuracy of records and recording of costs.

Further, these laws and regulations are constantly evolving and it is difficult to accurately predict the effect they may have upon our business and financial results.

We cannot provide assurance that our internal controls and compliance systems will always protect us from acts committed by employees, agents or business partners that would violate U.S. and/or non-U.S. laws, including the laws governing payments to government officials, bribery, fraud, anti-kickback and false claims rules, competition, export and import compliance, money laundering and data privacy. Any such improper actions could subject us to civil or criminal investigations in the U.S. and in other jurisdictions, lead to substantial civil or criminal, monetary and non-monetary penalties and related lawsuits by shareholders and others, damage our reputation, and adversely impact our business and financial results.

We depend on key employees and the loss of these individuals could have an adverse effect on our business and financial results.

Our success depends to a large extent upon the continued services of our key executives, managers and other skilled employees. We cannot ensure that we will be able to retain our key executives, managers and employees. The departure of key personnel without adequate replacement could disrupt our business operations. Additionally, we need qualified managers and skilled employees with technical and industry experience to operate our business successfully. If we are unable to attract and retain qualified individuals or our costs to do so increase significantly, our business and financial results could be adversely affected.

Divestitures, contingent liabilities from divested businesses and the failure to properly identify, integrate and grow acquired companies could adversely affect our business and financial results.

We continually assess the strategic fit of our existing businesses and may divest businesses that we determine do not align with our strategic plan, or that are not achieving the desired return on investment. Divestitures pose risks and challenges that could negatively impact our business. When we decide to sell a business or assets, we may be unable to do so on satisfactory terms and within our anticipated time-frame, and even after reaching a definitive agreement to sell a business, the sale is typically subject to pre-closing conditions which may not be satisfied. In addition, the impact of the divestiture on our revenue and net earnings may be larger than projected, which could distract management, and disputes may arise with buyers. We have retained responsibility for and have agreed to indemnify buyers against certain contingent liabilities related to a number of businesses that we have sold. The resolution of these contingencies has not had a material adverse impact on our financial results, but we cannot be certain that this favorable pattern will continue.

Our historical growth has included acquisitions, and our future growth strategy may include acquisitions. If our future growth strategy includes a focus on acquisitions, we may not be able to identify acquisition targets or successfully complete acquisitions due to the absence of quality companies in our target markets, economic conditions, or price expectations from sellers. Acquisitions place significant demands on management, operational, and financial resources. Future acquisitions will require integration of operations, sales and marketing, information technology, and administrative operations, which could decrease the time available to focus on our other growth strategies. We cannot assure that we will be able to successfully integrate acquisitions, that these

acquisitions will operate profitably, or that we will be able to achieve the desired sales growth or operational success. Our business and financial results could be adversely affected if we do not successfully integrate the newly acquired businesses, or if our other businesses suffer due to the increased focus on the acquired businesses.

We are subject to litigation, including product liability claims that could adversely impact our business, financial results, and reputation.

We are a party to litigation that arises in the normal course of our business operations, including product warranty, product liability and recall (strict liability and negligence) claims, patent and trademark matters, contract disputes and environmental, employment and other litigation matters. We face an inherent business risk of exposure to product liability and warranty claims in the event that the use of our products is alleged to have resulted in injury or other damage. In addition, we face an inherent risk that our competitors will allege that aspects of our products infringe their intellectual property or that our intellectual property is invalid, such that we could be prevented from manufacturing and selling our products or prevented from stopping others from manufacturing and selling competing products. To date, we have not incurred material costs related to these types of claims. However, while we currently maintain insurance coverage in amounts that we believe are adequate, we cannot be sure that we will be able to maintain this insurance on acceptable terms or that this insurance will provide sufficient coverage against potential liabilities that may arise. Any claims brought against us, with or without merit, may have an adverse effect on our business, financial results and reputation as a result of potential adverse outcomes. The expenses associated with defending such claims and the diversion of our management's resources and time may have an adverse effect on our business and financial results.

Failure to execute facility consolidations or maintain acceptable operational service metrics may adversely impact our business and financial results.

We continually assess our global footprint and expect to implement additional measures to reduce our cost structure, simplify our business, and standardize our processes, and these actions could result in unplanned operating costs and business disruptions in the future. In addition, the Company is reliant upon certain suppliers for certain raw or finished products. If we experience service disruptions with these suppliers, or if we fail to successfully address these inefficiencies, their effects could adversely impact our business and financial results.

Financial/Ownership Risks

The global nature of our business exposes us to foreign currency fluctuations that could adversely affect our business and financial results.

Approximately 50% of our sales are derived outside the United States. Sales and purchases in currencies other than the U.S. dollar expose us to fluctuations in foreign currencies relative to the U.S. dollar, and may adversely affect our financial results. Increased strength of the U.S. dollar will increase the effective price of our products sold in currencies other than U.S. dollars into other countries. Decreased strength of the U.S. dollar could adversely affect the cost of materials, products, and services purchased overseas. Our sales and expenses are translated into U.S. dollars for reporting purposes, and the strengthening or weakening of the U.S. dollar could result in unfavorable translation effects, which occurred during fiscal years 2016 and 2017. In addition, certain of our subsidiaries may invoice customers in a currency other than its functional currency or may be invoiced by suppliers in a currency other than its functional currency, which could result in unfavorable translation effects on our business and financial results.

Changes in tax legislation or tax rates could adversely affect results of operations and financial statements. Additionally, audits by taxing authorities could result in tax payments for prior periods.

We are subject to income taxes in the U.S. and in many non-U.S. jurisdictions. As such, our earnings are subject to risk due to changing tax laws and tax rates around the world. Our tax filings are subject to audit by U.S. federal, state and local tax authorities and by non-U.S. tax authorities. If these audits result in payments or assessments that differ from our reserves, our future net earnings may be adversely impacted.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Reform Act"). The changes included in the Tax Reform Act are broad and complex. The final transition impacts of the Tax Reform Act may differ from the provisional estimates provided due to changes in interpretations, any legislative action to address questions that arise, any changes in accounting standards for income taxes or related interpretations, or any updates or changes to estimates we have utilized to calculate the transition impacts. Additionally, longstanding international tax norms that determine each country's jurisdiction to tax cross-border international trade are evolving as a result of the Base Erosion and Profit Shifting reporting requirements recommended by the G8, G20 and Organization for Economic Cooperation and Development. As these and other tax laws and related regulations change, our financial results could be materially impacted. Given

the unpredictability of these possible changes and their potential interdependency, it is difficult to assess the overall effect of such potential tax changes on our earnings and cash flow, but such changes could adversely impact our financial results.

We review the probability of the realization of our deferred tax assets quarterly based on forecasts of taxable income in both the U.S. and foreign jurisdictions. As part of this review, we utilize historical results, projected future operating results, eligible carry-forward periods, tax planning opportunities, and other relevant considerations. Adverse changes in profitability and financial outlook in both the U.S. and/or foreign jurisdictions, or changes in our geographic footprint may require changes in the valuation allowance for deferred tax assets. During the year ended July 31, 2018, we recorded a valuation allowance of \$21.4 million against our foreign tax credit carryforwards primarily due to the passage of the Tax Reform Act, which modifies our ability to utilize foreign tax credits in future periods. At any point in time, there are a number of tax proposals at various stages of legislation throughout the globe. While it is impossible for us to predict whether some or all of these proposals will be enacted, it likely would have an impact on our results of operations and our consolidated financial statements.

Failure to execute our strategies could result in impairment of goodwill or other intangible assets, which may negatively impact earnings and profitability.

We have goodwill of \$419.8 million and other intangible assets of \$42.6 million as of July 31, 2018, which represents 43.7% of our total assets. We evaluate goodwill and other intangible assets for impairment on an annual basis, or more frequently if impairment indicators are present, based upon the fair value of each respective asset. These valuations include management's estimates of sales, profitability, cash flow generation, capital structure, cost of debt, interest rates, capital expenditures, and other assumptions. Significant negative industry or economic trends, disruptions to our business, inability to achieve sales projections or cost savings, inability to effectively integrate acquired businesses, unexpected significant changes or planned changes in use of the assets or in entity structure, and divestitures may adversely impact the assumptions used in the valuations. If the estimated fair value of our goodwill or other intangible assets change in future periods, we may be required to record an impairment charge, which would reduce the earnings in such period.

Substantially all of our voting stock is controlled by members of the Brady family, while our public investors hold non-voting stock. The interests of the voting and non-voting shareholders could differ, potentially resulting in decisions that unfavorably affect the value of the non-voting shares.

Substantially all of our voting stock is controlled by Elizabeth P. Bruno, one of our Directors, and William H. Brady III, both of whom are descendants of the Company's founder. All of our publicly traded shares are non-voting. Therefore, Ms. Bruno and Mr. Brady have control in most matters requiring approval or acquiescence by shareholders, including the composition of our Board of Directors and many corporate actions. Such concentration of ownership may discourage a potential acquirer from making a purchase offer that our public shareholders may find favorable, which in turn could adversely affect the market price of our common stock or prevent our shareholders from realizing a premium over our stock price. Certain mutual funds and index sponsors have implemented rules restricting ownership, or excluding from indices, companies with non-voting publicly traded shares. Furthermore, this concentration of voting share ownership may adversely affect the trading price for our non-voting common stock because investors may perceive disadvantages in owning stock in companies whose voting stock is controlled by a limited number of shareholders.

Failure to meet certain financial covenants required by our debt agreements may adversely affect our business and financial results.

As of July 31, 2018, we had \$52.6 million in outstanding indebtedness. In addition, based on the availability under our credit facilities as of July 31, 2018, we had the ability to borrow an additional \$297.0 million under our revolving credit agreement. Our current revolving credit agreement and long-term debt obligations also impose certain restrictions on us. Refer to Management's Discussion and Analysis of Financial Condition and Results of Operations within Item 7 for more information regarding our credit agreement and long-term debt obligations. If we breach any of these restrictions or covenants and do not obtain a waiver from the lenders then, subject to applicable cure periods, the outstanding indebtedness and any other indebtedness with cross-default provisions could be declared immediately due and payable, which could adversely affect our financial results.

Item 1B. Unresolved Staff Comments

None.

Item 2. *Properties*

The Company currently operates 39 manufacturing and distribution facilities across the globe and are split by reporting segment as follows:

IDS: Thirty-one manufacturing and distribution facilities are used for our IDS business. Five are located in each of the United States and China; four in Belgium; three each in Mexico and the United Kingdom; two in Brazil; and one each in Canada, Germany, Hong Kong, India, Japan, Malaysia, Netherlands, Singapore, and South Africa.

WPS: Eight manufacturing and distribution facilities are used for our WPS business. Three are located in France; two are located in Australia; and one each in Germany, the United Kingdom, and the United States.

The Company's present operating facilities contain a total of approximately 2.1 million square feet of space, of which approximately 1.5 million square feet is leased. The Company believes that its equipment and facilities are modern, well maintained, and adequate for present needs.

Item 3. *Legal Proceedings*

The Company is, and may in the future be, party to litigation arising in the normal course of business. The Company is not currently a party to any material pending legal proceedings in which management believes the ultimate resolution would have a material effect on the Company's consolidated financial statements.

Item 4. *Mine Safety Disclosures*

Not applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

(a) Market Information

Brady Corporation Class A Nonvoting Common Stock trades on the New York Stock Exchange under the symbol BRC. The following table sets forth the range of high and low daily closing sales prices for the Company’s Class A stock as reported on the New York Stock Exchange for each of the quarters in the fiscal years ended July 31:

	2018		2017		2016	
	High	Low	High	Low	High	Low
4th Quarter	\$ 40.65	\$ 36.10	\$ 39.80	\$ 33.05	\$ 32.68	\$ 26.29
3rd Quarter	\$ 39.00	\$ 35.90	\$ 39.75	\$ 35.10	\$ 27.82	\$ 21.13
2nd Quarter	\$ 39.75	\$ 36.60	\$ 39.45	\$ 32.55	\$ 26.39	\$ 20.84
1st Quarter	\$ 39.10	\$ 31.95	\$ 35.36	\$ 31.86	\$ 24.29	\$ 19.52

There is no trading market for the Company’s Class B Voting Common Stock.

(b) Holders

As of August 31, 2018, there were 1,080 Class A Common Stock shareholders of record and approximately 9,000 beneficial shareholders. There are three Class B Common Stock shareholders.

(c) Issuer Purchases of Equity Securities

The Company has a share repurchase program for the Company’s Class A Nonvoting Common Stock. The plan may be implemented by purchasing shares in the open market or in privately negotiated transactions, with repurchased shares available for use in connection with the Company’s stock-based plans and for other corporate purposes. On November 13, 2017, the Company’s Board of Directors authorized a share repurchase program of 2,000,000 shares. The Company repurchased 5,100 shares at \$36.00 per share during the three months ended July 31, 2018. As of July 31, 2018, there were 1,959,306 shares authorized to purchase in connection with this share repurchase program.

The following table provides information with respect to the purchase of Class A Nonvoting Common Stock during the three months ended July 31, 2018:

Period	Total Number of Shares Purchased	Average Price paid per share	Total Number of Shares Purchased As Part of Publicly Announced Plans	Maximum Number of Shares That May Yet Be Purchased Under the Plans
May 1, 2018 - May 31, 2018	5,100	\$ 36.00	5,100	1,959,306
June 1, 2018 - June 30, 2018	—	—	—	1,959,306
July 1, 2018 - July 31, 2018	—	—	—	1,959,306
Total	5,100	\$ 36.00	5,100	1,959,306

(i) Dividends

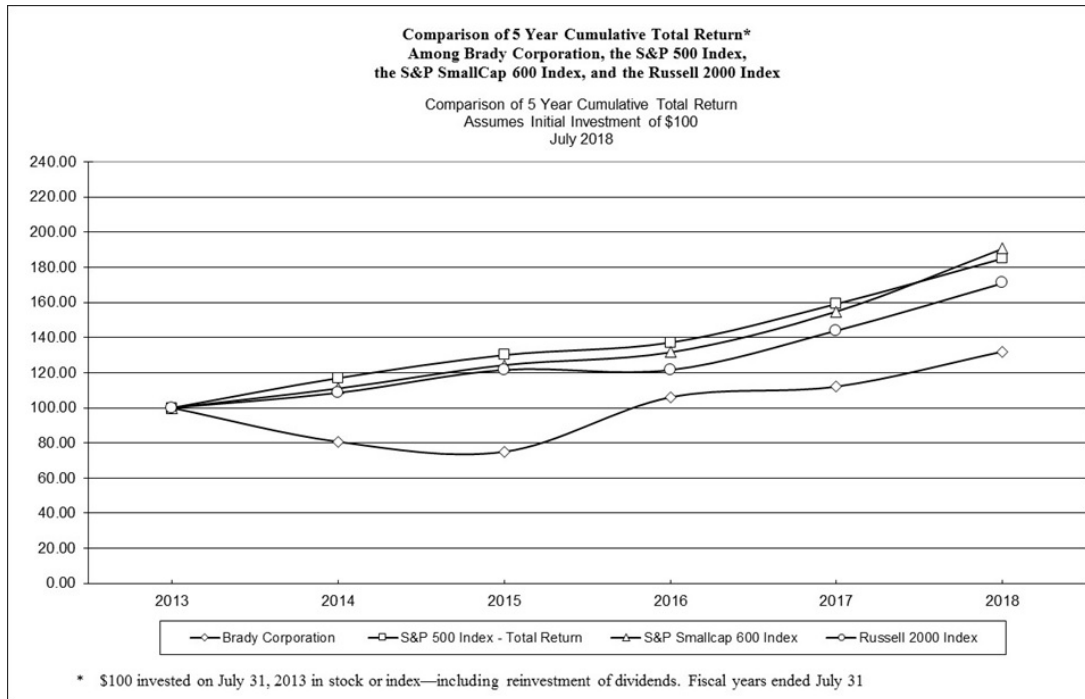
The Company has historically paid quarterly dividends on outstanding common stock. Before any dividend may be paid on the Class B Common Stock, holders of the Class A Common Stock are entitled to receive an annual, noncumulative cash dividend of \$0.01665 per share (subject to adjustment in the event of future stock splits, stock dividends or similar events involving shares of Class A Common Stock). Thereafter, any further dividend in that fiscal year must be paid on all shares of Class A Common Stock and Class B Common Stock on an equal basis. The Company believes that based on its historic dividend practice, this requirement will not impede it in following a similar dividend practice in the future.

During the two most recent fiscal years and for the first quarter of fiscal 2019, the Company declared the following dividends per share on its Class A and Class B Common Stock for the years ended July 31:

	2019		2018				2017			
	1st Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
Class A	\$ 0.2125	\$ 0.2075	\$ 0.2075	\$ 0.2075	\$ 0.2075	\$ 0.2050	\$ 0.2050	\$ 0.2050	\$ 0.2050	
Class B	0.19585	0.19085	0.2075	0.2075	0.2075	0.18835	0.2050	0.2050	0.2050	

(e) Common Stock Price Performance Graph

The graph below shows a comparison of the cumulative return over the last five fiscal years had \$100 been invested at the close of business on July 31, 2013, in each of Brady Corporation Class A Common Stock, the Standard & Poor's (S&P) 500 Index, the Standard and Poor's SmallCap 600 Index, and the Russell 2000 Index.



	2013	2014	2015	2016	2017	2018
Brady Corporation	\$ 100.00	\$ 80.73	\$ 74.99	\$ 106.04	\$ 112.15	\$ 132.08
S&P 500 Index	100.00	116.94	130.05	137.17	159.18	185.03
S&P SmallCap 600 Index	100.00	111.04	124.33	131.61	154.85	190.64
Russell 2000 Index	100.00	108.56	121.62	121.54	143.97	170.94

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Item 6. Selected Financial Data

CONSOLIDATED STATEMENTS OF INCOME AND SELECTED FINANCIAL DATA
Years Ended July 31, 2014 through 2018

	2018	2017	2016	2015	2014
(In thousands, except per share amounts)					
Operating data⁽¹⁾					
Net sales	\$ 1,173,851	\$ 1,113,316	\$ 1,120,625	\$ 1,171,731	\$ 1,225,034
Gross margin	588,291	558,292	558,773	558,432	609,564
Operating expenses:					
Research and development	45,253	39,624	35,799	36,734	35,048
Selling, general and administrative ⁽²⁾	390,342	387,653	405,096	422,704	452,164
Restructuring charges ⁽³⁾	—	—	—	16,821	15,012
Impairment charges ⁽⁴⁾	—	—	—	46,867	148,551
Total operating expenses	435,595	427,277	440,895	523,126	650,775
Operating income (loss)	152,696	131,015	117,878	35,306	(41,211)
Other income (expense):					
Investment and other income (expense)	2,487	1,121	(709)	845	2,402
Interest expense	(3,168)	(5,504)	(7,824)	(11,156)	(14,300)
Net other expense	(681)	(4,383)	(8,533)	(10,311)	(11,898)
Earnings (loss) from continuing operations before income taxes	152,015	126,632	109,345	24,995	(53,109)
Income tax expense (benefit) ⁽⁵⁾	60,955	30,987	29,235	20,093	(4,963)
Earnings (loss) from continuing operations	\$ 91,060	\$ 95,645	\$ 80,110	\$ 4,902	\$ (48,146)
(Loss) Earnings from discontinued operations, net of income taxes ⁽⁶⁾	—	—	—	(1,915)	2,178
Net earnings (loss)	\$ 91,060	\$ 95,645	\$ 80,110	\$ 2,987	\$ (45,968)
Earnings (loss) from continuing operations per Common Share—(Diluted):					
Class A nonvoting	\$ 1.73	\$ 1.84	\$ 1.58	\$ 0.10	\$ (0.93)
Class B voting	\$ 1.72	\$ 1.83	\$ 1.56	\$ 0.08	\$ (0.95)
(Loss) Earnings from discontinued operations per Common Share - (Diluted):					
Class A nonvoting	\$ —	\$ —	\$ —	\$ (0.04)	\$ 0.04
Class B voting	\$ —	\$ —	\$ —	\$ (0.04)	\$ 0.05
Cash Dividends on:					
Class A common stock	\$ 0.83	\$ 0.82	\$ 0.81	\$ 0.80	\$ 0.78
Class B common stock	\$ 0.81	\$ 0.80	\$ 0.79	\$ 0.78	\$ 0.76
Balance Sheet at July 31:					
Total assets	\$ 1,056,931	\$ 1,050,223	\$ 1,043,964	\$ 1,062,897	\$ 1,253,665
Long-term obligations, less current maturities	52,618	104,536	211,982	200,774	159,296
Stockholders' investment	752,112	700,140	603,598	587,688	733,076
Cash Flow Data:					
Net cash provided by operating activities	\$ 143,042	\$ 144,032	\$ 138,976	\$ 93,348	\$ 93,420
Net cash (used in) provided by investing activities	(2,905)	(15,253)	(15,416)	(14,365)	10,207
Net cash used in financing activities	(90,680)	(136,241)	(99,576)	(32,152)	(115,387)
Depreciation and amortization	25,442	27,303	32,432	39,458	44,598
Capital expenditures	(21,777)	(15,167)	(17,140)	(26,673)	(43,398)

(1) Operating data has been impacted by the reclassification of the Die-Cut businesses into discontinued operations in fiscal 2014 and 2015. The Company has elected to not separately disclose the cash flows related to discontinued operations.

- (2) During fiscal 2018, the Company recognized a gain of \$4.7 million on the sale of its Runelandhs Försäljnings AB business.
- (3) During fiscal 2014, the Company approved a plan to consolidate facilities in the Americas, Europe, and Asia in order to enhance customer service, improve efficiency of operations, and reduce operating expenses. This plan resulted in restructuring charges during fiscal 2014 and fiscal 2015. Fiscal 2014 also included restructuring charges from a business simplification project executed in a prior year.
- (4) The Company recognized impairment charges of \$46.9 million and \$148.6 million during the fiscal years ended July 31, 2015 and 2014, respectively. The impairment charges primarily related to the following reporting units: WPS Americas and WPS APAC in fiscal 2015 and People ID in fiscal 2014.
- (5) Fiscal 2018 was significantly impacted by the Tax Reform Act which resulted in total incremental tax expense of \$21.1 million, which consisted of \$1.0 million related to the recording of a deferred tax liability for future withholdings and income taxes on the distribution of foreign earnings, an income tax charge of \$3.3 million related to the deemed repatriation of the historical earnings of foreign subsidiaries, and the impact of the Tax Reform Act on the revaluation of deferred tax assets and liabilities as well as the impact on the Company's fiscal 2018 earnings from the reduced tax rate was an additional income tax expense of \$16.8 million. Fiscal 2015 was significantly impacted by the impairment charges of \$46.9 million, of which \$39.8 million was non-deductible for income tax purposes. Fiscal 2014 was significantly impacted by the impairment charges of \$148.6 million, of which \$61.1 million was non-deductible for income tax purposes.
- (6) The Die-Cut business was sold in two phases. The first phase closed in the fourth quarter of fiscal 2014 and the second and final phase closed in the first quarter of fiscal 2015. The loss from discontinued operations in fiscal 2015 includes a \$0.4 million net loss on the sale of the Die-Cut business, recorded during the three months ended October 31, 2014. The earnings from discontinued operations in fiscal 2014 include a \$1.2 million net loss on the sale of the Die-Cut business recorded during the three months ended July 31, 2014.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

We are a global manufacturer and supplier of identification solutions and workplace safety products that identify and protect premises, products and people. The IDS segment is primarily involved in the design, manufacture, and distribution of high-performance and innovative identification and healthcare products. The WPS segment provides workplace safety and compliance products, approximately half of which are internally manufactured and half of which are externally sourced. Approximately 50% of our total sales are derived outside of the United States. Foreign sales within the IDS and WPS segments are approximately 40% and 70%, respectively.

The ability to provide customers with a broad range of proprietary, customized and diverse products for use in various applications across multiple customers and geographies, along with a commitment to quality and service, have made Brady a leader in many of its markets. The long-term sales growth and profitability of our segments will depend not only on improved demand in end markets and the overall economic environment, but also on our ability to continuously improve the efficiency of our global operations, focus on the customer, develop and market innovative new products, and to advance our digital capabilities. In our IDS business, our strategy for growth includes an increased focus on certain industries and products, a focus on improving the customer buying experience, and increasing investments in R&D. In our WPS business, our strategy for growth includes a focus on workplace safety critical industries, innovative new product offerings, compliance expertise, and improving our digital capabilities.

Results of Operations

A comparison of results of operating income for the fiscal years ended July 31, 2018, 2017, and 2016 is as follows:

(Dollars in thousands)	2018	%Sales	2017	%Sales	2016	%Sales
Net sales	\$ 1,173,851		\$ 1,113,316		\$ 1,120,625	
Gross margin	588,291	50.1%	558,292	50.1%	558,773	49.9%
Operating expenses:						
Research and development	45,253	3.9%	39,624	3.6%	35,799	3.2%
Selling, general and administrative	390,342	33.3%	387,653	34.8%	405,096	36.1%
Total operating expenses	435,595	37.1%	427,277	38.4%	440,895	39.3%
Operating income	\$ 152,696	13.0%	\$ 131,015	11.8%	\$ 117,878	10.5%

References in this Form 10-K to “organic sales” refer to net sales calculated in accordance with U.S. GAAP, excluding the impact of foreign currency translation. The Company’s organic sales disclosures exclude the effects of foreign currency translation as foreign currency translation is subject to volatility that can obscure underlying business trends. Management believes that the non-GAAP financial measure of organic sales is meaningful to investors as it provides them with useful information to aid in identifying underlying sales trends in our businesses and facilitating comparisons of our sales performance with prior periods.

In fiscal 2018, net sales increased 5.4% to \$1,173.9 million, compared to \$1,113.3 million in fiscal 2017. The increase consisted of organic sales growth of 2.6% and a positive foreign currency impact of 3.0% due to the strengthening of certain currencies when compared to the U.S. dollar during the year, partially offset by a sales decline of 0.2% due to the divestiture of Runelandhs Försäljnings AB (“Runelandhs”), a business based in Kalmar, Sweden. Organic sales grew 3.4% and 0.7% in the IDS and WPS segment, respectively. The IDS segment realized sales growth in the Product ID, Wire ID, and the Safety and Facility ID product lines, partially offset by a sales declines in the Healthcare ID product line. Digital sales in the WPS segment improved, but were partially offset by a sales decline in the traditional catalog and other direct sales channels.

In fiscal 2017, net sales decreased 0.7% to \$1,113.3 million, compared to \$1,120.6 million in fiscal 2016, which consisted of organic sales growth of 0.5% and a negative currency impact of 1.2% due to the strengthening of the U.S. dollar against certain other currencies during the year. Organic sales grew 1.6% in the IDS segment and declined 2.0% in the WPS segment. The IDS segment realized sales growth in the Product ID and Wire ID product lines, partially offset by a sales declines in the Healthcare ID product line. Catalog sales in the WPS segment declined, but were partially offset by sales growth in the digital channel.

Gross margin increased 5.4% to \$588.3 million in fiscal 2018 from \$558.3 million in fiscal 2017. As a percentage of net sales, gross margin was 50.1% in both fiscal 2018 and fiscal 2017. Our on-going efforts to streamline manufacturing processes and drive operational efficiencies, including increased automation in our manufacturing facilities, reduced material and labor costs compared to the prior year, thus offsetting inflation and pricing pressures.

Gross margin declined 0.1% to \$558.3 million in fiscal 2017 from \$558.8 million in fiscal 2016. As a percentage of net sales, gross margin increased to 50.1% in fiscal 2017 from 49.9% in fiscal 2016. The increase in gross margin as a percentage of net sales was primarily due to our on-going efforts to streamline manufacturing processes and drive operational efficiencies in manufacturing facilities. These efforts resulted in reduced material and labor costs compared to the prior year.

R&D expenses increased to \$45.3 million in fiscal 2018 from \$39.6 million in fiscal 2017. The increase in R&D spending in fiscal 2018 compared to the prior year was primarily due to the hiring of R&D personnel as well as additional spending on new product development in connection with our focus on increasing new product sales within our IDS and WPS businesses.

R&D expenses increased to \$39.6 million in fiscal 2017 from \$35.8 million in fiscal 2016. The increase in R&D spending in fiscal 2017 compared to the prior year was primarily due to the hiring of R&D personnel as well as increased spending on printing and software solutions projects within our IDS businesses.

Selling, general and administrative (“SG&A”) expenses include selling and administrative costs directly attributed to the IDS and WPS segments, as well as certain other corporate administrative expenses including finance, information technology, human resources, and other administrative expenses. SG&A expenses increased 0.7% to \$390.3 million in fiscal 2018 compared to \$387.7 million in fiscal 2017. SG&A expenses include a gain of \$4.7 million on the sale of Runelandhs which closed in the fourth quarter of fiscal 2018. The increase in SG&A expenses from the prior year was entirely due to the impact of foreign currency translation, partially offset by the gain on the sale of Runelandhs and the Company’s continued efforts to reduce its SG&A cost structure through efficiency gains and ongoing efforts to control general and administrative costs. SG&A expense as a percentage of net sales was 33.3% in fiscal 2018 compared to 34.8% in fiscal 2017. The decrease was a result of the Company’s ongoing efficiency gains and continued efforts to control general and administrative costs as well as the gain of \$4.7 million from the sale of Runelandhs.

SG&A expenses decreased 4.3% to \$387.7 million in fiscal 2017 compared to \$405.1 million in fiscal 2016. The decrease in SG&A expenses from the prior year was primarily due to reduced selling expenses from efficiency gains, continued efforts to control general and administrative costs, and foreign currency translation. These reductions were partially offset by increases in incentive-based compensation. SG&A expenses as a percentage of net sales was 34.8% in fiscal 2017 compared to 36.1% in fiscal 2016. The decrease was a result of the Company’s ongoing efficiency gains and continued efforts to control general and administrative costs.

Operating income increased 16.5% to \$152.7 million in fiscal 2018 compared to \$131.0 million in fiscal 2017. Operating income includes a gain of \$4.7 million on the sale of Runelandhs in fiscal 2018. The increase in operating income from prior year was primarily due to the 5.4% increase in net sales, 5.4% increase in gross margin, reduced SG&A expense as a percentage of net sales, and the gain on the sale of Runelandhs. These improvements leading to the increase in operating income in fiscal 2018 were partially offset by an increase in R&D spending.

Operating income increased to \$131.0 million in fiscal 2017 compared to \$117.9 million in fiscal 2016. The increase of \$13.1 million in operating income was primarily due to reduced SG&A expenses in both IDS and WPS segments, as well as reductions due to foreign currency translation. The decrease in SG&A expenses leading to the increase in operating income in fiscal 2017 was partially offset by an increase in R&D spending.

OPERATING INCOME TO NET EARNINGS

(Dollars in thousands)	2018	% Sales	2017	% Sales	2016	% Sales
Operating income	\$ 152,696	13.0 %	\$ 131,015	11.8 %	\$ 117,878	10.5 %
Other income and (expense):						
Investment and other income (expense)	2,487	0.2 %	1,121	0.1 %	(709)	(0.1)%
Interest expense	(3,168)	(0.3)%	(5,504)	(0.5)%	(7,824)	(0.7)%
Earnings before income taxes	152,015	13.0 %	126,632	11.4 %	109,345	9.8 %
Income tax expense	60,955	5.2 %	30,987	2.8 %	29,235	2.6 %
Net earnings	\$ 91,060	7.8 %	\$ 95,645	8.6 %	\$ 80,110	7.1 %

Investment and Other Income (Expense)

Investment and other income (expense) was \$2.5 million in fiscal 2018 compared to \$1.1 million in fiscal 2017 and an expense of \$0.7 million in fiscal 2016. The increase in investment and other income in 2018 compared to 2017 was primarily due to an increase in the market value of securities held in executive deferred compensation plans and an increase in interest income due to an increase in cash and cash equivalents. The increase in investment and other income (expense) in 2017 compared to 2016 was primarily due to an increase in the market value of securities held in deferred compensation plans.

Interest Expense

Interest expense decreased to \$3.2 million in fiscal 2018 compared to \$5.5 million in fiscal 2017 and \$7.8 million in fiscal 2016. The decline since 2016 was due to the Company's declining principal balance under its outstanding debt agreements.

Income Tax Expense

The Company's effective income tax rate was 40.1% in fiscal 2018. The effective income tax rate was significantly impacted by the U.S. Tax Reform Act enacted in fiscal 2018, which resulted in total incremental tax expense of \$21.1 million during fiscal 2018. This incremental tax expense consisted of \$1.0 million related to the recording of a deferred tax liability for future withholdings and income taxes on the distribution of foreign earnings, an income tax charge of \$3.3 million related to the deemed repatriation of the historical earnings of foreign subsidiaries, and the impact of the Tax Reform Act on the revaluation of deferred tax assets and liabilities as well as the impact on the Company's fiscal 2018 earnings from the reduced tax rate was an additional income tax expense of \$16.8 million. As a result of the U.S. Tax Reform Act, at this time the Company estimates its effective income tax rate to be in the mid-twenties for fiscal 2019.

The Company's effective income tax rate was 24.5% in fiscal 2017. The effective income tax rate was reduced from the applicable U.S. statutory tax rate of 35.0% due to the generation of foreign tax credits from cash repatriations that occurred during the year and geographic profit mix, partially offset by adjustments to the reserve for uncertain tax positions.

The Company's effective income tax rate was 26.7% in fiscal 2016. The effective income tax rate was reduced from the applicable U.S. statutory tax rate of 35.0% due to certain adjustments to tax accruals and reserves, the generation of foreign tax credit carryforwards, R&D tax credits and the domestic manufacturer's deduction.

Business Segment Operating Results

The Company is organized and managed on a global basis within two reportable segments: ID Solutions and Workplace Safety. The Company's internal measure of segment profit and loss reported to the chief operating decision maker for purposes of allocating resources to the segments and assessing performance includes certain administrative costs, such as the cost of finance, information technology, human resources, and certain other administrative costs. However, interest expense, investment and other income (expense), income tax expense, and certain corporate administrative expenses are excluded when evaluating segment performance.

Following is a summary of segment information for the fiscal years ended July 31:

(Dollars in thousands)	2018	2017	2016
NET SALES			
ID Solutions	\$ 846,087	\$ 800,392	\$ 795,511
Workplace Safety	327,764	312,924	325,114
Total	<u>\$ 1,173,851</u>	<u>\$ 1,113,316</u>	<u>\$ 1,120,625</u>
SALES GROWTH INFORMATION			
<i>ID Solutions</i>			
Organic	3.4 %	1.6 %	(0.7)%
Currency	2.3 %	(1.0)%	(3.1)%
Total	<u>5.7 %</u>	<u>0.6 %</u>	<u>(3.8)%</u>
<i>Workplace Safety</i>			
Organic	0.7 %	(2.0)%	(0.7)%
Currency	4.6 %	(1.7)%	(5.0)%
Divestitures	(0.6)%	—%	—%
Total	<u>4.7 %</u>	<u>(3.7)%</u>	<u>(5.7)%</u>
<i>Total Company</i>			
Organic	2.6 %	0.5 %	(0.7)%
Currency	3.0 %	(1.2)%	(3.7)%
Divestitures	(0.2)%	—%	—%
Total	<u>5.4 %</u>	<u>(0.7)%</u>	<u>(4.4)%</u>
SEGMENT PROFIT			
ID Solutions	\$ 143,411	\$ 130,572	\$ 112,276
Workplace Safety	31,712	25,554	30,792
Total	<u>\$ 175,123</u>	<u>\$ 156,126</u>	<u>\$ 143,068</u>
SEGMENT PROFIT AS A PERCENT OF NET SALES			
ID Solutions	16.9 %	16.3 %	14.1 %
Workplace Safety	9.7 %	8.2 %	9.5 %
Total	<u>14.9 %</u>	<u>14.0 %</u>	<u>12.8 %</u>

NET EARNINGS RECONCILIATION

(Dollars in thousands)	Years ended:		
	July 31, 2018	July 31, 2017	July 31, 2016
Total segment profit	\$ 175,123	\$ 156,126	\$ 143,068
Unallocated costs:			
Administrative costs	27,093	25,111	25,190
Gain on sale of business ⁽¹⁾	(4,666)	—	—
Investment and other (income) expense	(2,487)	(1,121)	709
Interest expense	3,168	5,504	7,824
Earnings before income taxes	<u>\$ 152,015</u>	<u>\$ 126,632</u>	<u>\$ 109,345</u>

(1) Gain on the sale of Runelandhs Försäljnings AB relates to the WPS segment during the year ended July 31, 2018.

ID Solutions

Fiscal 2018 vs. 2017

Approximately 65% of net sales in the ID Solutions segment were generated in the Americas region, 25% in Europe, the Middle East and Africa ("EMEA"), and 10% in Asia Pacific ("APAC"). IDS sales increased 5.7% to \$846.1 million in fiscal 2018, compared to \$800.4 million in fiscal 2017. Organic sales increased 3.4% and foreign currency fluctuations increased sales by 2.3% due to the strengthening of other currencies when compared to the U.S. dollar in fiscal 2018 compared to fiscal 2017.

The IDS business in the Americas realized low-single digit organic sales growth in fiscal 2018 compared to fiscal 2017. The increase was primarily due to growth in the Wire ID, Product ID, and Safety and Facility ID product lines. Growth was driven by an increase in sales to distributor channel partners as well as an overall increase in demand from diversified industrial customers. This organic growth was partially offset by a decline in the Healthcare ID product line primarily from pricing pressures caused by the consolidation of group purchasing organizations and healthcare systems along with a reduction in volume in certain product categories, compared to the same period in the prior year. Organic sales grew in the low-single digits in the United States, mid-single digits in Brazil and Canada, and high-single digits in Mexico.

The IDS business in EMEA realized mid-single digit organic sales growth in fiscal 2018 as compared to fiscal 2017. Organic sales growth in 2018 was primarily due to sales increases in the Wire ID, Product ID, and Safety and Facility ID product lines. Organic sales growth was led by businesses based in Western Europe and supplemented by businesses in emerging geographies; in particular, increased printer sales throughout the region drove the organic sales growth.

Organic sales in Asia grew in the mid-single digits in fiscal 2018 compared to fiscal 2017. The IDS Asia region realized organic sales growth in the Product and Wire ID product lines, partially offset by the Safety and Facility ID product line. Organic sales increased throughout most of Asia and was led by China where organic sales increased in the mid-single digits.

Segment profit increased to \$143.4 million in fiscal 2018 from \$130.6 million in fiscal 2017, an increase of \$12.8 million or 9.8%. As a percent of net sales, segment profit increased to 16.9% in fiscal 2018, compared to 16.3% in the prior year. The increase in segment profit was primarily driven by sales growth, operational efficiencies in the Company's manufacturing processes, and efficiencies in SG&A expense in all regions, partially offset by pricing pressures in the healthcare product offerings in the Americas.

Fiscal 2017 vs. 2016

Approximately 70% of net sales in the ID Solutions segment were generated in the Americas region, 20% in EMEA, and 10% in APAC. IDS sales increased 0.6% to \$800.4 million in fiscal 2017, compared to \$795.5 million in fiscal 2016. Organic sales increased 1.6% and foreign currency fluctuations decreased sales by 1.0% due to the strengthening of the U.S. dollar against certain other major currencies in fiscal 2017 compared to fiscal 2016.

The IDS business in the Americas realized low-single digit organic sales growth in fiscal 2017 compared to fiscal 2016. The increase was primarily due to growth in the Wire ID product line due to increased sales of printer consumables, which were partially offset by a sales decline in the Healthcare ID product lines due to pricing pressures within certain product categories from the consolidation of group purchasing organizations. Organic sales grew in the mid-single digits in Canada, low-single digits in Mexico and Brazil, and grew slightly in the United States.

The IDS business in EMEA realized low-single digit organic sales growth in fiscal 2017 as compared to fiscal 2016. Organic sales growth in 2017 was primarily due to sales increases in the Product ID and Safety and Facility ID product lines. Organic sales growth in Western Europe was partially offset by organic sales declines in certain emerging markets due to weak demand in the oil and gas industry.

Organic sales in Asia grew in the high-single digits in fiscal 2017 compared to fiscal 2016. The IDS Asia region realized organic sales growth in both the OEM and MRO product categories in 2017 due to several new customer and project wins along with a general increase in activity within our existing customer base. Organic sales increased within all countries in the Asia region in 2017.

Segment profit increased to \$130.6 million in fiscal 2017 from \$112.3 million in fiscal 2016, an increase of \$18.3 million or 16.3%. As a percent of net sales, segment profit increased to 16.3% in fiscal 2017, compared to 14.1% in the prior year. The increase in segment profit was primarily driven by operational efficiencies in our manufacturing processes in all regions, as well as a reduction in SG&A expense due to ongoing process improvement activities.

Workplace Safety

Fiscal 2018 vs. 2017

Approximately 50% of net sales in the WPS segment were generated in Europe, 35% in the Americas, and 15% in Australia. WPS sales increased 4.7% to \$327.8 million in fiscal 2018, compared to \$312.9 million in fiscal 2017. The increase consisted of organic sales growth of 0.7% and a positive foreign currency impact of 4.6%, partially offset by a sales decline of 0.6% due to the divestiture of the Runelandhs business.

The WPS business in Europe realized low-single digit organic sales growth in fiscal 2018 compared to fiscal 2017. The growth in the region was driven primarily by businesses in the U.K. and France due to improvements in website functionality, growth in new customers, and key account management. Digital channel sales experienced double digit growth, partially offset by a low-single digit decline in traditional catalog sales in the Europe region in fiscal 2018 compared to fiscal 2017.

Organic sales in the Americas declined in the low-single digits in fiscal 2018 compared to fiscal 2017. This decrease was primarily due to lower response rates to catalog promotions, even while large custom orders have been increasing. Traditional catalog channel sales declined in the low-single digits and digital sales declined in the mid-single digits. The rate of decline in the catalog channel lessened in the final two quarters of fiscal 2018. The decline in digital sales was impacted by a transition to a new digital sales platform during fiscal 2018, which is expected to return to sales growth in the near-term.

Organic sales in Australia grew in the low-single digits in fiscal 2018 compared to fiscal 2017. The WPS business has diversified its product offering into many different industries in Australia as sales to the mining industry became less significant over the past several years. Its strategy is continuing to focus on enhancing its expertise in these industries to drive sales growth, while addressing its cost structure to improve profitability.

Segment profit increased to \$31.7 million in fiscal 2018 from \$25.6 million in fiscal 2017, an increase of \$6.1 million, or 23.8%. As a percentage of net sales, segment profit increased to 9.7% in fiscal 2018 compared to 8.2% in the prior year. The increase in segment profit was primarily due to sales growth and reduced SG&A expense.

Fiscal 2017 vs. 2016

Approximately 50% of net sales in the WPS segment were generated in Europe, 35% in the Americas, and 15% in Australia. WPS sales decreased 3.7% to \$312.9 million in fiscal 2017, compared to \$325.1 million in fiscal 2016, which consisted of an organic sales decline of 2.0% and a negative foreign currency impact of 1.7%.

The WPS business in Europe realized low-single digit organic sales growth in fiscal 2017 compared to fiscal 2016. The growth in the region was driven primarily by France and Sweden due to improvements in website functionality, digital sales, and key account management. Digital sales grew by double digits in the Europe region in fiscal 2017 compared to fiscal 2016.

Organic sales in the Americas declined in the high-single digits in fiscal 2017 compared to fiscal 2016. This decrease was primarily in North America due to lower response rates to catalog promotions and pricing pressures in industrial end markets. Although digital sales increased in the low-single digits, the increase was not enough to balance the decline in sales through the catalog channel. In addition, pricing pressures from certain competitors have led to an acceleration of organic sales declines in the region from prior years.

Organic sales in Australia were essentially flat in fiscal 2017 compared to fiscal 2016, following an extended period of organic sales declines. We have started to realize some sales growth by bringing our diverse product offering to many different industries in Australia as our sales to the mining industry have become less significant over the past several years. We continue to focus on enhancing our expertise in these industries to drive sales growth as well as addressing our cost structure to improve profitability.

Segment profit decreased to \$25.6 million in fiscal 2017 from \$30.8 million in fiscal 2016, a decrease of \$5.2 million, or 16.9%. As a percentage of sales, segment profit decreased to 8.2% in fiscal 2017 compared to 9.5% in the prior year. The decrease in segment profit was primarily due to the decline in sales and reduced gross profit margins due to pricing challenges in the Americas region, which was partially offset by reduced selling, general and administrative expenses.

Liquidity & Capital Resources

Cash and cash equivalents were \$181.4 million at July 31, 2018, an increase of \$47.5 million from July 31, 2017. The following summarizes the cash flow statement for fiscal years ended July 31:

(Dollars in thousands)	2018	2017	2016
Net cash flow provided by (used in):			
Operating activities	\$ 143,042	\$ 144,032	\$ 138,976
Investing activities	(2,905)	(15,253)	(15,416)
Financing activities	(90,680)	(136,241)	(99,576)
Effect of exchange rate changes on cash	(1,974)	178	2,752
Net increase (decrease) in cash and cash equivalents	<u>\$ 47,483</u>	<u>\$ (7,284)</u>	<u>\$ 26,736</u>

Fiscal 2018 vs. 2017

Net cash provided by operating activities in fiscal 2018 was comparable with fiscal 2017. The change was driven by an increase in net earnings adjusted for non-cash items which was offset by a decrease in cash provided by working capital in support of growth and a higher incentive compensation payment when compared to prior year.

Net cash used in investing activities was \$2.9 million during fiscal 2018, compared to \$15.3 million in the prior year. The decrease in cash used in investing activities of \$12.4 million was due to cash provided by the sale of Runelandhs offset by an increase in capital expenditures which were used primarily for manufacturing equipment and facility upgrades in the United States, Mexico, and Europe.

Net cash used in financing activities was \$90.7 million during fiscal 2018, compared to \$136.2 million during the prior year. The change of \$45.5 million was primarily due to a decrease of \$58.1 million in net credit facility and debt repayments in the current year resulting from the scheduled principal payment on the private placement note during fiscal 2017, which was partially offset by a \$7.6 million decrease in proceeds from stock option exercises in the current year.

The effect of fluctuations in exchange rates decreased cash balances by \$2.0 million in fiscal 2018, primarily due to cash balances held in certain currencies that depreciated against the U.S. dollar.

Fiscal 2017 vs. 2016

Net cash provided by operating activities increased to \$144.0 million during fiscal 2017 compared to \$139.0 million in the prior year. The increase in cash provided by operating activities of \$5.0 million was primarily due to higher net earnings partially offset by lower non-cash depreciation and amortization.

Net cash used in investing activities was \$15.3 million during fiscal 2017, compared to \$15.4 million in the prior year.

Net cash used in financing activities was \$136.2 million during fiscal 2017, compared to \$99.6 million during the prior year. The increase in cash used in financing activities of \$35.1 million was primarily due to an increase of \$75.3 million in credit facility and debt repayments in fiscal 2017, which was partially offset by a \$14.5 million increase in proceeds from stock option exercises in fiscal 2017. The remainder of the change was due to \$23.6 million of cash used for share repurchases in the prior year, while no shares were repurchased in fiscal 2017.

The effect of fluctuations in exchange rates increased cash balances by \$0.2 million in fiscal 2017, primarily due to cash balances held in certain currencies that appreciated against the U.S. dollar during the current fiscal year.

The Company's cash balances are generated and held in numerous locations throughout the world. At July 31, 2018, approximately 54% of the Company's cash and cash equivalents were held outside the United States. The Company's growth has historically been funded by a combination of cash provided by operating activities and debt financing. The Company believes that its cash flow from operating activities and its borrowing capacity are sufficient to fund its anticipated requirements for working capital, capital expenditures, common stock repurchases, scheduled debt repayments, and dividend payments for the next 12 months. Although the Company believes these sources of cash are currently sufficient to fund domestic operations, annual cash needs could require repatriation of cash to the U.S. from foreign jurisdictions, which may result in additional tax payments.

Refer to Item 8, Note 6, "Debt" for information regarding the Company's debt holdings.

Subsequent Events Affecting Financial Condition

On September 12, 2018, the Company announced an increase in the annual dividend to shareholders of the Company's Class A Common Stock, from \$0.83 to \$0.85 per share. A quarterly dividend of \$0.2125 will be paid on October 31, 2018, to shareholders of record at the close of business on October 10, 2018. This dividend represents an increase of 2.4% and is the 33rd consecutive annual increase in dividends.

Off-Balance Sheet Arrangements

The Company does not have material off-balance sheet arrangements. The Company is not aware of factors that are reasonably likely to adversely affect liquidity trends, other than the risk factors described in this and other Company filings. However, the following additional information is provided to assist those reviewing the Company's consolidated financial statements.

Operating Leases — The leases generally are entered into for investments in facilities such as manufacturing facilities, warehouses and office space and Company vehicles.

Purchase Commitments — The Company has purchase commitments for materials, supplies, services, and property, plant and equipment as part of the ordinary conduct of its business. In the aggregate, such commitments are not in excess of current market prices and are not material to the financial position of the Company. Due to the proprietary nature of many of the Company's materials and processes, certain supply contracts contain penalty provisions for early termination. The Company does not believe a material amount of penalties will be incurred under these contracts based upon historical experience and current expectations.

Other Contractual Obligations — The Company does not have material financial guarantees or other contractual commitments that are reasonably likely to adversely affect liquidity.

Payments Due Under Contractual Obligations

The Company's future commitments at July 31, 2018, for long-term debt, operating lease obligations, purchase obligations, interest obligations, tax obligations and other obligations are as follows (dollars in thousands):

Contractual Obligations	Payments Due by Period					
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years	Uncertain Timeframe
Long-term Debt Obligations and Notes Payable	\$ 52,618	\$ —	\$ 52,618	\$ —	\$ —	\$ —
Operating Lease Obligations	51,210	14,826	18,725	13,612	4,047	—
Purchase Obligations ⁽¹⁾	48,633	48,607	13	—	13	—
Interest Obligations	4,466	2,233	2,233	—	—	—
Tax Obligations	20,430	—	—	—	—	20,430
Other Obligations ⁽²⁾	2,813	377	698	598	1,140	—
Total	\$ 180,170	\$ 66,043	\$ 74,287	\$ 14,210	\$ 5,200	\$ 20,430

(1) Purchase obligations include all open purchase orders as of July 31, 2018.

(2) Other obligations represent expected payments under the Company's U.S. postretirement medical plan and international pension plans as disclosed in Note 4 to the Consolidated Financial Statements, under Item 8 of this report.

Inflation and Changing Prices

Essentially all of the Company's revenue is derived from the sale of its products and services in competitive markets. Because prices are influenced by market conditions, it is not always possible to fully recover cost increases through pricing. Changes in product mix from year to year, timing differences in instituting price changes, and the large amount of part numbers make it impracticable to accurately define the impact of inflation on profit margins.

Critical Accounting Estimates

Management's discussion and analysis of the Company's financial condition and results of operations are based upon the Company's Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. The Company bases these estimates and judgments on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates and judgments.

The Company believes the following accounting estimates are most critical to an understanding of its financial statements. Estimates are considered to be critical if they meet both of the following criteria: (1) the estimate requires assumptions about material matters that are uncertain at the time the accounting estimates are made, and (2) material changes in the estimates are reasonably likely from period to period. For a detailed discussion on the application of these and other accounting estimates, refer to Note 1 to the Company's Consolidated Financial Statements.

Income Taxes

The Company operates in numerous taxing jurisdictions and is subject to regular examinations by U.S. federal, state and non-U.S. taxing authorities. Its income tax positions are based on research and interpretations of the income tax laws and rulings in each of the jurisdictions in which the Company does business. Due to the ambiguity of laws and rulings in each jurisdiction, the differences and interplay in tax laws between those jurisdictions, the uncertainty of how underlying facts may be construed and the inherent uncertainty in estimating the final resolution of complex tax audit matters, the Company's estimates of income tax liabilities may differ from actual payments or assessments.

While the Company has support for the positions it takes on tax returns, taxing authorities may assert interpretations of laws and facts and may challenge cross-jurisdictional transactions. The Company generally re-evaluates the technical merits of its tax positions and recognizes an uncertain tax benefit when (i) there is completion of a tax audit; (ii) there is a change in applicable tax law including a tax case ruling or legislative guidance; or (iii) there is an expiration of the statute of limitations. The gross liability for unrecognized tax benefits, excluding interest and penalties, was \$20.4 million and \$18.4 million as of July 31, 2018 and 2017, respectively. The entire amount of unrecognized tax benefits as of July 31, 2018 and 2017, would affect the effective income tax rate if recognized. Accrued interest and penalties related to unrecognized tax benefits were \$5.8 million and \$5.2 million as of July 31, 2018 and 2017, respectively. The Company recognizes interest and penalties related to unrecognized tax benefits in income tax expense on the Consolidated Statements of Earnings. The Company believes it is reasonably possible the amount of gross unrecognized tax benefits could be reduced by up to \$9.7 million in the next twelve months as a result of the resolution of worldwide tax matters, tax audit settlements, amended tax filings, and/or statute expirations, which would be the maximum amount that would be recognized through the Consolidated Statements of Earnings as an income tax benefit.

On December 22, 2017, the U.S. Tax Cuts and Jobs Act (the "Tax Reform Act") was enacted. Among the significant changes to the U.S. Internal Revenue Code, the Tax Reform Act reduces the U.S. federal corporate income tax rate from 35.0% to 21.0%, imposes a one-time tax on deemed repatriated earnings of foreign subsidiaries, eliminates the domestic manufacturing deduction and moves to a partial territorial system by providing a 100% dividend received deduction on certain qualified dividends from foreign subsidiaries. As the Company has a July 31 fiscal year end, the lower corporate income tax rate will be phased in, resulting in a U.S. statutory federal income tax rate of 26.9% for the fiscal year ended July 31, 2018 and 21.0% for subsequent fiscal years.

As part of the transition to the partial territorial tax system, the Tax Reform Act imposes a one-time tax on the mandatory deemed repatriation of historical earnings of foreign subsidiaries. Companies can claim certain credits for foreign taxes deemed paid on foreign earnings subject to the mandatory deemed repatriation. The Company's provisional calculations resulted in an income tax charge of \$3.3 million related to the deemed repatriation of the historical earnings of foreign subsidiaries during the year ended July 31, 2018. Existing foreign tax credit carryforwards were used to fully offset this tax, resulting in no cash payments related to this charge.

The reduction in the U.S. federal income tax rate requires the Company to remeasure its U.S. deferred tax assets and liabilities to the income tax rate at which the deductible or taxable event is expected to be realized, and changes the statutory U.S. federal tax from 35.0% to 26.9% for the entire year ended July 31, 2018. Additionally, the Company established a valuation allowance for deferred tax assets related to foreign tax credit carryforwards, primarily related to the impact of the Tax Reform Act on the Company's ability to generate future foreign-source income. The provisional impact of the Tax Reform Act related to the remeasurement of deferred tax assets and liabilities, the impact on the Company's fiscal 2018 earnings from the reduced tax rate, and the establishment of the valuation allowance discussed above resulted in net income tax expense of \$16.8 million for the year ended July 31, 2018.

As a result of the Tax Reform Act, the Company expects that it will repatriate certain historical and future foreign earnings periodically, which in certain jurisdictions may be subject to withholding and income taxes. These additional withholding and income taxes are recorded as a deferred tax liability associated with the basis difference in such jurisdictions. During the year ended July 31, 2018, the Company recorded a provisional income tax expense of \$1.0 million related to the recording of a deferred tax liability for future withholding and income taxes on the distribution of foreign earnings. The uncertainty related to the taxation of such withholding and income taxes on distributions under the Tax Reform Act and the finalization of future cash repatriation plans make the deferred tax liability a provisional amount.

Goodwill and Other Indefinite-lived Intangible Assets

The allocation of purchase price for business combinations requires management estimates and judgment as to expectations for future cash flows of the acquired business and the allocation of those cash flows to identifiable intangible assets in determining the estimated fair value for purchase price allocation purposes. If the actual results differ from the estimates and judgments used in these estimates, the amounts recorded in the financial statements could result in a possible impairment of the intangible assets and goodwill or require acceleration of the amortization expense of finite-lived intangible assets. In addition, accounting guidance requires that goodwill and other indefinite-lived intangible assets be tested at least annually for impairment. If circumstances or events prior to the date of the required annual assessment indicate that, in management's judgment, it is more likely than not that there has been a reduction of fair value of a reporting unit below its carrying value, the Company performs an impairment analysis at the time of such circumstance or event. Changes in management's estimates or judgments could result in an impairment charge, and such a charge could have an adverse effect on the Company's financial condition and results of operations.

The Company has identified six reporting units within its two reportable segments, IDS and WPS, with the following goodwill balances as of July 31, 2018: IDS Americas & Europe, \$292.2 million; People ID, \$93.3 million; and WPS Europe, \$34.3 million. The IDS APAC, WPS Americas, and WPS APAC reporting units each have a goodwill balance of zero. The Company continues to believe the discounted cash flow model and market multiples model provide a reasonable and meaningful fair value estimate based upon the reporting units' projections of future operating results and cash flows and replicates how market participants would value the Company's reporting units. The projections of future operating results, which are based on both past performance and the projections and assumptions used in the Company's current and long range operating plans, are subject to change as a result of changing economic and competitive conditions. Significant estimates used by management in the discounted cash flows methodology include estimates of future cash flows based on expected growth rates, price increases, fluctuations in gross profit margins and SG&A expense as a percentage of sales, capital expenditures, working capital levels, income tax rates, and a weighted-average cost of capital reflecting the specific risk profile of the reporting unit being tested. Significant negative industry or economic trends, disruptions to the Company's business, loss of significant customers, inability to effectively integrate acquired businesses, unexpected significant changes or planned changes in use of the assets or in entity structure, and divestitures may adversely impact the assumptions used in the valuations.

The Company completes its annual goodwill impairment analysis on May 1st of each fiscal year and evaluates its reporting units for potential triggering events on a quarterly basis in accordance with ASC 350, "Intangibles - Goodwill and Other." In addition to the metrics listed above, the Company considers multiple internal and external factors when evaluating its reporting units for potential impairment, including (a) U.S. GDP growth, (b) industry and market factors such as competition and changes in the market for the reporting unit's products, (c) new product development, (d) hospital admission rates, (e) competing technologies, (f) overall financial performance such as cash flows, actual and planned revenue and profitability, and (g) changes in the strategy of the reporting unit. In the event the fair value of a reporting unit is less than the carrying value, including goodwill, the Company would then perform an additional assessment that would compare the implied fair value of goodwill with the carrying amount of goodwill. The determination of the implied fair value of goodwill would require management to compare the fair value of the reporting unit to the estimated fair value of the assets and liabilities of the reporting unit. If necessary, the Company may consult valuation specialists to assist with the assessment of the estimated fair value of assets and liabilities for the reporting unit. If the implied fair value of the goodwill is less than the carrying value, an impairment charge would be recorded.

The Company considers a reporting unit's fair value to be substantially in excess of its carrying value at 20% or greater. The annual impairment testing performed on May 1, 2018, in accordance with ASC 350, "Intangibles - Goodwill and Other" ("Step One") indicated that all of the reporting units passed Step One of the goodwill impairment test, and each had a fair value substantially in excess of its carrying value.

Other Indefinite-Lived Intangible Assets

Other indefinite-lived intangible assets were analyzed in accordance with the Company's policy outlined above using the income approach. The valuation was based upon current sales projections and profitability for each asset group, and the relief from royalty method was applied. As a result of the analysis, all assets had a fair value in excess of carrying value.

New Accounting Standards

The information required by this Item is provided in Note 1 of the Notes to Consolidated Financial Statements contained in Item 8 — Financial Statements and Supplementary Data.

Forward-Looking Statements

In this annual report on Form 10-K, statements that are not reported financial results or other historic information are “forward-looking statements.” These forward-looking statements relate to, among other things, the Company’s future financial position, business strategy, targets, projected sales, costs, earnings, capital expenditures, debt levels and cash flows, and plans and objectives of management for future operations.

The use of words such as “may,” “will,” “expect,” “intend,” “estimate,” “anticipate,” “believe,” “should,” “project” or “plan” or similar terminology are generally intended to identify forward-looking statements. These forward-looking statements by their nature address matters that are, to different degrees, uncertain and are subject to risks, assumptions, and other factors, some of which are beyond Brady’s control, that could cause actual results to differ materially from those expressed or implied by such forward-looking statements. For Brady, uncertainties arise from:

- Brady’s ability to compete effectively or to successfully execute our strategy
- Brady’s ability to develop technologically advanced products that meet customer demands
- Difficulties in protecting our sites, networks, and systems against security breaches
- Decreased demand for the Company’s products
- Brady’s ability to retain large customers
- Extensive regulations by U.S. and non-U.S. governmental and self regulatory entities
- Risks associated with the loss of key employees
- Divestitures, contingent liabilities from divestitures and the failure to identify, integrate, and grow acquired companies
- Litigation, including product liability claims
- Brady’s ability to execute facility consolidations and maintain acceptable operational service metrics
- Foreign currency fluctuations
- Changes in tax legislation and tax rates
- Potential write-offs of Brady’s substantial intangible assets
- Differing interests of voting and non-voting shareholders
- Brady’s ability to meet certain financial covenants required by our debt agreements
- Numerous other matters of national, regional and global scale, including those of a political, economic, business, competitive, and regulatory nature contained from time to time in Brady’s U.S. Securities and Exchange Commission filings, including, but not limited to, those factors listed in the “Risk Factors” section within Item 1A of Part I of this Form 10-K.

These uncertainties may cause Brady’s actual future results to be materially different than those expressed in its forward-looking statements. Brady does not undertake to update its forward-looking statements except as required by law.

Risk Factors

Refer to the information contained in Item 1A - Risk Factors.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The Company's business operations give rise to market risk exposure due to changes in foreign exchange rates. To manage that risk effectively, the Company enters into hedging transactions according to established guidelines and policies that enable it to mitigate the adverse effects of this financial market risk.

The global nature of the Company's business requires active participation in the foreign exchange markets. As a result of investments, production facilities and other operations on a global scale, the Company has assets, liabilities and cash flows in currencies other than the U.S. dollar. The objective of the Company's foreign currency exchange risk management is to minimize the impact of currency movements on non-functional currency transactions. To achieve this objective, the Company hedges a portion of known exposures using forward contracts. Main exposures are related to transactions denominated in the British Pound, the Euro, Canadian dollar, Australian dollar, Mexican Peso, the Malaysian Ringgit, the Chinese Yuan, and Singapore dollar. As of July 31, 2018, the notional amount of outstanding forward foreign exchange contracts designated as cash flow hedges was \$27.2 million. The Company uses Euro-denominated debt of €45.0 million designated as a hedge instrument to hedge portions of the Company's net investment in its Euro-denominated businesses. The Company's revolving credit facility allows it to borrow up to \$150.0 million in currencies other than U.S. dollars under an alternative currency sub-limit. The Company has periodically borrowed funds in Euros and British Pounds under this sub-limit. Debt issued in currencies other than U.S. dollars acts as a natural hedge to the Company's exposure to the associated currency.

The Company also faces exchange rate risk from transactions with customers in countries outside the United States and from intercompany transactions between affiliates. Although the Company has a U.S. dollar functional currency for reporting purposes, it has manufacturing sites throughout the world and a significant portion of its sales are generated in foreign currencies. Costs incurred and sales recorded by subsidiaries operating outside of the United States are translated into U.S. dollars using exchange rates in effect during the respective period. As a result, the Company is exposed to movements in the exchange rates of various currencies against the U.S. dollar. In particular, the Company has more sales in European currencies than it has expenses in those currencies. Therefore, when European currencies strengthen or weaken against the U.S. dollar, operating profits are increased or decreased, respectively. Currency exchange rates increased fiscal 2018 sales by 3.0% compared to fiscal 2017 as the U.S. dollar depreciated, on average, against other major currencies throughout the year.

The Company is subject to the risk of change in foreign currency exchange rates due to its operations in foreign countries. The Company has manufacturing facilities and sells and distributes its products throughout the world. As a result, the Company's financial results could be significantly affected by factors such as changes in foreign currency exchange rates or weak economic conditions in the foreign markets in which the Company manufactures, distributes and sells its products. The Company's operating results are principally exposed to changes in exchange rates between the U.S. dollar and the Euro, the Australian dollar, the Canadian dollar, the Mexican Peso, the Singapore dollar, the British Pound, the Malaysian Ringgit, and the Chinese Yuan. Changes in foreign currency exchange rates for the Company's foreign subsidiaries reporting in local currencies are generally reported as a component of stockholders' investment. The Company's currency translation adjustment recorded in fiscal 2018, 2017, and 2016 as a separate component of stockholders' investment was unfavorable by \$11.2 million, favorable by \$8.6 million, and unfavorable by \$1.4 million, respectively. As of July 31, 2018 and 2017, the Company's foreign subsidiaries had net current assets (defined as current assets less current liabilities) subject to foreign currency translation risk of \$170.0 million and \$162.5 million, respectively. The potential decrease in net current assets as of July 31, 2018, from a hypothetical 10 percent adverse change in quoted foreign currency exchange rates would be approximately \$17.0 million. This sensitivity analysis assumes a parallel shift in all major foreign currency exchange rates versus the U.S. dollar. Exchange rates rarely move in the same direction relative to the U.S. dollar due to positive and negative correlations of the various global currencies. This assumption may overstate the impact of changing exchange rates on individual assets and liabilities denominated in a foreign currency.

The Company could be exposed to interest rate risk through its corporate borrowing activities. The objective of the Company's interest rate risk management activities is to manage the levels of the Company's fixed and floating interest rate exposure to be consistent with the Company's preferred mix. The interest rate risk management program allows the Company to enter into approved interest rate derivatives if there is a desire to modify the Company's exposure to interest rates. As of July 31, 2018, the Company had no interest rate derivatives and no variable rate debt outstanding.

Item 8. *Financial Statements and Supplementary Data*

BRADY CORPORATION & SUBSIDIARIES

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Brady Corporation
Milwaukee, Wisconsin

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Brady Corporation and subsidiaries (the "Company") as of July 31, 2018 and 2017, the related consolidated statements of earnings, comprehensive income, stockholders' investment, and cash flows for each of the three years in the period ended July 31, 2018, and the related notes and the schedule listed in the Index at Item 15 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of July 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended July 31, 2018, 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 July 31, 2018, 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 September 13, 2018, 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.

/s/ DELOITTE & TOUCHE LLP

Milwaukee, Wisconsin

September 13, 2018

We have served as the Company's auditor at least since 1981; however, an earlier year cannot be reliably determined.

BRADY CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
July 31, 2018 and 2017

	2018	2017
	(Dollars in thousands)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 181,427	\$ 133,944
Accounts receivable — net	161,282	149,638
Inventories:		
Finished products	73,133	69,760
Work-in-process	19,903	18,117
Raw materials and supplies	20,035	19,147
Total inventories	113,071	107,024
Prepaid expenses and other current assets	15,559	17,208
Total current assets	471,339	407,814
Other assets:		
Goodwill	419,815	437,697
Other intangible assets	42,588	53,076
Deferred income taxes	7,582	35,456
Other	17,662	18,077
Property, plant and equipment:		
Cost:		
Land	6,994	7,470
Buildings and improvements	96,245	98,228
Machinery and equipment	270,989	261,192
Construction in progress	4,495	4,109
	378,723	370,999
Less accumulated depreciation	280,778	272,896
Property, plant and equipment — net	97,945	98,103
Total	\$ 1,056,931	\$ 1,050,223
LIABILITIES AND STOCKHOLDERS' INVESTMENT		
Current liabilities:		
Notes payable	\$ —	\$ 3,228
Accounts payable	66,538	66,817
Wages and amounts withheld from employees	67,619	58,192
Taxes, other than income taxes	8,318	7,970
Accrued income taxes	3,885	7,373
Other current liabilities	44,567	43,618
Total current liabilities	190,927	187,198
Long-term obligations	52,618	104,536
Other liabilities	61,274	58,349
Total liabilities	304,819	350,083
Stockholders' investment:		
Class A nonvoting common stock — Issued 51,261,487 shares at July 31, 2018 and 2017, respectively (aggregate liquidation preference of \$42,803 at July 31, 2018 and 2017)	513	513
Class B voting common stock — Issued and outstanding 3,538,628 shares	35	35
Additional paid-in capital	325,631	322,608
Earnings retained in the business	553,454	507,136
Treasury stock — 2,867,870 and 3,446,669 shares at July 31, 2018 and 2017, respectively, of Class A nonvoting common stock, at cost	(71,120)	(85,470)
Accumulated other comprehensive loss	(56,401)	(44,682)
Total stockholders' investment	752,112	700,140
Total	\$ 1,056,931	\$ 1,050,223

See Notes to Consolidated Financial Statements.

BRADY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EARNINGS
Years Ended July 31, 2018, 2017 and 2016

	2018	2017	2016
	(In thousands, except per share amounts)		
Net sales	\$ 1,173,851	\$ 1,113,316	\$ 1,120,625
Cost of products sold	585,560	555,024	561,852
Gross margin	588,291	558,292	558,773
Operating expenses:			
Research and development	45,253	39,624	35,799
Selling, general and administrative	390,342	387,653	405,096
Total operating expenses	435,595	427,277	440,895
Operating income	152,696	131,015	117,878
Other income (expense):			
Investment and other income (expense)	2,487	1,121	(709)
Interest expense	(3,168)	(5,504)	(7,824)
Earnings before income taxes	152,015	126,632	109,345
Income tax expense	60,955	30,987	29,235
Net earnings	\$ 91,060	\$ 95,645	\$ 80,110
Net earnings per Class A Nonvoting Common Share:			
Basic	\$ 1.76	\$ 1.87	\$ 1.59
Diluted	\$ 1.73	\$ 1.84	\$ 1.58
Dividends	\$ 0.83	\$ 0.82	\$ 0.81
Net earnings per Class B Voting Common Share:			
Basic	\$ 1.75	\$ 1.86	\$ 1.57
Diluted	\$ 1.72	\$ 1.83	\$ 1.56
Dividends	\$ 0.81	\$ 0.80	\$ 0.79
Weighted average common shares outstanding:			
Basic	51,677	51,056	50,541
Diluted	52,524	51,956	50,769

See Notes to Consolidated Financial Statements.

BRADY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
Years Ended July 31, 2018, 2017 and 2016

	2018	2017	2016
	(Dollars in thousands)		
Net earnings	\$ 91,060	\$ 95,645	\$ 80,110
Other comprehensive (loss) income:			
Foreign currency translation adjustments:			
Net (loss) gain recognized in other comprehensive (loss) income	(11,195)	8,621	(1,405)
	(11,195)	8,621	(1,405)
Net investment hedge and long-term intercompany loan translation adjustments:			
Net loss recognized in other comprehensive (loss) income	(2,480)	(1,404)	(2,280)
	(2,480)	(1,404)	(2,280)
Cash flow hedges:			
Net gain (loss) recognized in other comprehensive (loss) income	966	(225)	(1,254)
Reclassification adjustment for losses included in net earnings	551	486	196
	1,517	261	(1,058)
Pension and other post-retirement benefits:			
Net gain (loss) recognized in other comprehensive (loss) income	446	647	(293)
Actuarial gain amortization	(576)	(483)	(612)
Prior service credit amortization	—	—	(1,035)
	(130)	164	(1,940)
Other comprehensive (loss) income, before tax	(12,288)	7,642	(6,683)
Income tax benefit (expense) related to items of other comprehensive (loss) income	569	2,421	(3,028)
Other comprehensive (loss) income, net of tax	(11,719)	10,063	(9,711)
Comprehensive income	<u>\$ 79,341</u>	<u>\$ 105,708</u>	<u>\$ 70,399</u>

See Notes to Consolidated Financial Statements.

BRADY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' INVESTMENT
Years Ended July 31, 2018, 2017 and 2016

	Common Stock	Additional Paid-In Capital	Earnings Retained in the Business	Treasury Stock	Accumulated Other Comprehensive (Loss) Income	Other
(In thousands, except per share amounts)						
Balances at July 31, 2015	\$ 548	\$ 314,403	\$ 414,069	\$ (93,234)	\$ (45,034)	\$ (3,064)
Net earnings	—	—	80,110	—	—	—
Other comprehensive loss, net of tax	—	—	—	—	(9,711)	—
Issuance of 308,059 shares of Class A Common Stock under stock plan	—	(3,830)	—	8,300	—	—
Other (Note 7)	—	(10)	—	(228)	—	(799)
Tax shortfall from exercise of stock options and deferred compensation distributions	—	(1,716)	—	—	—	—
Stock-based compensation expense (Note 7)	—	8,154	—	—	—	—
Purchase of 1,153,689 shares of Class A Common Stock	—	—	—	(23,552)	—	—
Cash dividends on Common Stock						
Class A — \$0.81 per share	—	—	(38,001)	—	—	—
Class B — \$0.79 per share	—	—	(2,807)	—	—	—
Balances at July 31, 2016	\$ 548	\$ 317,001	\$ 453,371	\$ (108,714)	\$ (54,745)	\$ (3,863)
Net earnings	—	—	95,645	—	—	—
Other comprehensive income, net of tax	—	—	—	—	10,063	—
Issuance of 1,061,660 shares of Class A Common Stock under stock plan	—	(5,868)	—	23,591	—	—
Other (Note 7)	—	1,943	—	(347)	—	3,863
Tax shortfall from exercise of stock options and deferred compensation distributions	—	37	—	—	—	—
Stock-based compensation expense (Note 7)	—	9,495	—	—	—	—
Cash dividends on Common Stock						
Class A — \$0.82 per share	—	—	(39,037)	—	—	—
Class B — \$0.80 per share	—	—	(2,843)	—	—	—
Balances at July 31, 2017	\$ 548	\$ 322,608	\$ 507,136	\$ (85,470)	\$ (44,682)	\$ —
Net earnings	—	—	91,060	—	—	—
Other comprehensive loss, net of tax	—	—	—	—	(11,719)	—
Issuance of 842,305 shares of Class A Common Stock under stock plan	—	(7,171)	—	16,234	—	—
Tax benefit and withholdings from deferred compensation distributions	—	214	—	(422)	—	—
Stock-based compensation expense (Note 7)	—	9,980	—	—	—	—
Purchase of 40,694 shares of Class A Common Stock	—	—	—	(1,462)	—	—
Adoption of ASU 2018-02 (Note 1)	—	—	(1,869)	—	—	—
Cash dividends on Common Stock						
Class A — \$0.83 per share	—	—	(39,998)	—	—	—
Class B — \$0.81 per share	—	—	(2,875)	—	—	—
Balances at July 31, 2018	\$ 548	\$ 325,631	\$ 553,454	\$ (71,120)	\$ (56,401)	\$ —

See Notes to Consolidated Financial Statements.

BRADY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
Years Ended July 31, 2018, 2017 and 2016

	2018	2017	2016
	(Dollars in thousands)		
Operating activities:			
Net earnings	\$ 91,060	\$ 95,645	\$ 80,110
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization	25,442	27,303	32,432
Non-cash portion of stock-based compensation expense	9,980	9,495	8,154
Gain on sale of business, net	(4,666)	—	—
Deferred income taxes	33,656	(8,618)	2,085
Changes in operating assets and liabilities (net of effects of business divestitures):			
Accounts receivable	(16,612)	766	8,159
Inventories	(7,563)	(5,687)	4,833
Prepaid expenses and other assets	1,747	1,812	475
Accounts payable and accrued liabilities	13,091	22,255	3,928
Income taxes	(3,093)	1,061	(1,200)
Net cash provided by operating activities	143,042	144,032	138,976
Investing activities:			
Purchases of property, plant and equipment	(21,777)	(15,167)	(17,140)
Sale of business, net of cash transferred with business	19,141	—	—
Other	(269)	(86)	1,724
Net cash used in investing activities	(2,905)	(15,253)	(15,416)
Financing activities:			
Payment of dividends	(42,873)	(41,880)	(40,808)
Proceeds from exercise of stock options	12,099	19,728	5,246
Purchase of treasury stock	(1,462)	—	(23,552)
Proceeds from borrowing on credit facilities	23,221	180,320	96,276
Repayment of borrowing on credit facilities	(78,419)	(244,268)	(91,759)
Principal payments on debt	—	(49,302)	(42,514)
Debt issuance costs	—	—	(803)
Income tax on equity-based compensation, and other	(3,246)	(839)	(1,662)
Net cash used in financing activities	(90,680)	(136,241)	(99,576)
Effect of exchange rate changes on cash and cash equivalents	(1,974)	178	2,752
Net increase (decrease) in cash and cash equivalents	47,483	(7,284)	26,736
Cash and cash equivalents, beginning of period	133,944	141,228	114,492
Cash and cash equivalents, end of period	\$ 181,427	\$ 133,944	\$ 141,228
Supplemental disclosures of cash flow information:			
Cash paid during the period for:			
Interest	\$ 2,976	\$ 5,766	\$ 8,528
Income taxes	33,267	31,885	28,497

See Notes to Consolidated Financial Statements.

BRADY CORPORATION AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended July 31, 2018, 2017 and 2016
(In thousands, except share and per share amounts)

1. Summary of Significant Accounting Policies

Nature of Operations — Brady Corporation is a global manufacturer and supplier of identification solutions and workplace safety products that identify and protect premises, products and people. The ability to provide customers with a broad range of proprietary, customized, and diverse products for use in various applications, along with a commitment to quality and service, a global footprint, and multiple sales channels, have made Brady a world leader in many of its markets.

Principles of Consolidation — The accompanying consolidated financial statements include the accounts of Brady Corporation and its subsidiaries, all of which are wholly-owned. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates — The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Fair Value of Financial Instruments — The Company believes the carrying amount of its financial instruments (cash and cash equivalents, accounts receivable, notes payable, accounts payable, accrued liabilities and short-term and long-term debt) is a reasonable estimate of the fair value of these instruments due to their short-term nature. See Note 6 for more information regarding the fair value of long-term debt and Note 11 for fair value measurements.

Cash Equivalents — The Company considers all highly-liquid investments with original maturities of three months or less when acquired to be cash equivalents, which are recorded at cost.

Accounts Receivables — Accounts receivables are stated net of allowances for doubtful accounts of \$4,471 and \$4,629 as of July 31, 2018 and 2017, respectively. No single customer comprised more than 10% of the Company's consolidated net sales in fiscal 2018, 2017, or 2016, or 10% of the Company's consolidated accounts receivable as of July 31, 2018 or 2017. Specific customer provisions are made during review of significant outstanding amounts, in which customer creditworthiness and current economic trends may indicate that collection is doubtful. In addition, provisions are made for the remainder of accounts receivable based upon the age of the accounts receivable and the Company's historical collection experience.

Inventories — Inventories are stated at the lower of cost or market. Cost has been determined using the last-in, first-out ("LIFO") method for certain inventories in the U.S. (15.0% of total inventories at July 31, 2018, and 13.5% of total inventories at July 31, 2017) and the first-in, first-out ("FIFO") or average cost methods for other inventories. Had all inventories been accounted for on a FIFO basis instead of on a LIFO basis, the carrying value of inventories would have increased by \$7,015 and \$6,807 as of July 31, 2018 and 2017, respectively.

Goodwill — Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired. The Company completes impairment reviews for its reporting units using a fair-value method based on management's judgments and assumptions. The fair value represents the amount at which a reporting unit could be bought or sold in a current transaction between market participants on an arms-length basis. In estimating the fair value, the Company utilizes a discounted cash flow model and market multiples approach. The estimated fair value is compared with the carrying amount of the reporting unit, including goodwill. The annual impairment testing performed on May 1, 2018, in accordance with ASC 350, "Intangibles - Goodwill and Other" ("Step One") indicated that all reporting units with remaining goodwill had a fair value substantially in excess of its carrying value. No goodwill impairment charges were recorded during the year ended July 31, 2018.

Long-Lived and Other Intangible Assets — The cost of intangible assets with determinable useful lives is amortized to reflect the pattern of economic benefits consumed on a straight-line basis, over the estimated periods benefited. Intangible assets with indefinite useful lives as well as goodwill are not subject to amortization. These assets are assessed for impairment annually or more frequently as deemed necessary.

The Company evaluates whether events and circumstances have occurred that indicate the remaining estimated useful life of long-lived and other finite-lived intangible assets may warrant revision or that the remaining balance of an asset may not be recoverable. If impairment is determined to exist, any related impairment loss is calculated by comparing the fair value of the asset to its carrying value. In fiscal 2018, long-lived and other intangible assets were analyzed for potential impairment. As a result

of the analysis, no material impairment charges were recorded. Refer to Note 2, "Goodwill and Other Intangible Assets" for further information.

Property, Plant, and Equipment — Property, plant, and equipment are recorded at cost. The cost of buildings and improvements, computer systems, and machinery and equipment are depreciated over their estimated useful lives using primarily the straight-line method for financial reporting purposes. The estimated useful lives range from 3 to 33 years as shown below.

Asset Category	Range of Useful Lives
Buildings & Improvements	10 to 33 Years
Computer Systems	5 Years
Machinery & Equipment	3 to 10 Years

Fully depreciated assets are retained in property and accumulated depreciation accounts until disposal. Upon disposal, assets and related accumulated depreciation are removed from the accounts and the net amount, less any proceeds from disposal, is charged to operations. Leasehold improvements are depreciated over the shorter of the lease term or the estimated useful life of the respective asset. Depreciation expense was \$19,009, \$20,190, and \$23,375 for the years ended July 31, 2018, 2017 and 2016, respectively.

Catalog Costs and Related Amortization — The Company accumulates all direct costs incurred, net of vendor cooperative advertising payments, in the development, production, and circulation of its catalogs on its balance sheet until such time as the related catalog is mailed. The catalog costs are subsequently amortized into selling, general, and administrative expense over the expected sales realization cycle, which is one year or less. Consequently, any difference between the estimated and actual revenue stream for a particular catalog and the related impact on amortization expense is realized within a period of one year or less. The estimate of the expected sales realization cycle for a particular catalog is based on the Company's historical sales experience with similar catalogs, and an assessment of prevailing economic conditions and various competitive factors. The Company tracks subsequent sales realization, reassesses the marketplace, and compares its findings to the previous estimate, and adjusts the amortization of future catalogs, if necessary. At July 31, 2018 and 2017, \$6,154 and \$7,299, respectively, of prepaid catalog costs were included in prepaid expenses and other current assets.

Revenue Recognition — Revenue is recognized when it is both earned and realized or realizable. The Company's policy is to recognize revenue when title to the product and risk of loss have transferred to the customer, persuasive evidence of an arrangement exists, and collection of the sales proceeds is reasonably assured, most of which occur upon shipment of goods to customers. The majority of the Company's revenue relates to the sale of inventory to customers, and revenue is recognized when title and the risks and rewards of ownership pass to the customer. Given the nature of the Company's business and the applicable rules guiding revenue recognition, the Company's revenue recognition practices do not contain estimates that materially affect the results of operations, with the exception of estimated returns and credit memos. The Company provides for an allowance for estimated product returns and credit memos which is recognized as a deduction from net sales at the time of the sale. As of July 31, 2018 and 2017, the Company had a reserve for estimated product returns and credit memos of \$4,546 and \$3,873, respectively.

Sales Incentives — The Company accounts for cash consideration (such as sales incentives and cash discounts) given to its customers or resellers as a reduction of revenue rather than an operating expense. Sales incentives for the years ended July 31, 2018, 2017, and 2016 were \$40,671, \$37,134, and \$36,084, respectively.

Shipping and Handling Fees and Costs — Amounts billed to a customer in a sale transaction related to shipping and handling fees are reported as net sales and the related costs incurred for shipping and handling are reported as cost of goods sold.

Advertising Costs — Advertising costs are expensed as incurred, except catalog and mailing costs as outlined previously. Advertising expense for the years ended July 31, 2018, 2017, and 2016 was \$67,429, \$68,268, and \$74,204, respectively.

Stock-Based Compensation — The Company has an incentive stock plan under which the Board of Directors may grant nonqualified stock options to purchase shares of Class A Nonvoting Common Stock, restricted stock units ("RSUs"), or restricted and unrestricted shares of Class A Nonvoting Common Stock to employees and non-employee directors. Certain awards may be subject to pre-established performance goals.

The options issued under the plan have an exercise price equal to the fair market value of the underlying stock at the date of grant and generally vest over a three-year service period, with one-third becoming exercisable one year after the grant date and one-third additional in each of the succeeding two years. Options issued under the plan, referred to herein as "time-based" stock options, generally expire 10 years from the date of grant.

Restricted and unrestricted shares and RSUs issued under the plan have a grant date fair value equal to the fair market value of the underlying stock at the date of grant. Shares issued under the plan are referred to herein as either "time-based" or "performance-

based" restricted shares and RSUs. The time-based RSUs granted under the plan generally vest over a three-year service period, with one-third becoming exercisable one year after the grant date and one-third additional in each of the succeeding two years. The performance-based RSUs granted under the plan vest at the end of a three-year service period provided specified Company financial performance metrics are met.

In accordance with ASC 718 "Compensation - Stock Compensation," the Company measures and recognizes the compensation expense for all share-based awards made to employees and directors based on estimated grant-date fair values. The Black-Scholes option valuation model is used to determine the fair value of stock option awards on the date of grant. The Company recognizes the compensation cost of all share-based awards at the time it is deemed probable the award will vest. This cost is recognized on a straight-line basis over the vesting period of the award. If it is determined that it is unlikely the award will vest, the expense recognized to date for the award is reversed in the period in which this is evident and the remaining expense is not recorded.

The Black-Scholes model requires the use of assumptions which determine the fair value of stock-based awards. The Company uses historical data regarding stock option exercise behaviors to estimate the expected term of options granted based on the period of time that options granted are expected to be outstanding. Expected volatilities are based on the historical volatility of the Company's stock. The expected dividend yield is based on the Company's historical dividend payments and historical yield. The risk-free interest rate is based on the U.S. Treasury yield curve in effect on the grant date for the length of time corresponding to the expected term of the option. The market value is calculated as the average of the high and the low stock price on the date of the grant.

The Company includes as part of cash flows from operating activities the benefits of tax deductions in excess of the tax-effected compensation of the related stock-based awards for options exercised and restricted shares and RSUs vested during the period. See Note 7 "Stockholders' Investment" for more information regarding the Company's incentive stock plans.

Research and Development — Amounts expended for R&D are expensed as incurred.

Other Comprehensive Income — Other comprehensive income consists of foreign currency translation adjustments, net investment hedge and long-term intercompany loan translation adjustments, net unrealized gains and losses from cash flow hedges, and the unamortized gain on defined-benefit pension plans net of their related tax effects.

Foreign Currency Translation — Foreign currency assets and liabilities are translated into United States dollars at end of period rates of exchange, and income and expense accounts are translated at the average rates of exchange for the period. Resulting translation adjustments are included in other comprehensive income.

Risk Management Activities — The Company does not hold or issue derivative financial instruments for trading purposes.

Income Taxes — The Company accounts for income taxes in accordance with ASC 740 "Income Taxes", which requires an asset and liability approach to financial accounting and reporting for income taxes. Deferred income tax assets and liabilities are computed for differences between the financial statement and tax basis of assets and liabilities that will result in taxable or deductible amounts in the future based on enacted tax laws and rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. Income tax expense is the tax payable or refundable for the period plus or minus the change during the period in deferred tax assets and liabilities. The Company recognizes the effect of income tax positions only if sustaining those positions is more likely than not. Changes in recognition or measurement are reflected in the period in which a change in judgment occurs.

Foreign Currency Hedging — The objective of the Company's foreign currency exchange risk management is to minimize the impact of currency movements on non-functional currency transactions and minimize the foreign currency translation impact on the Company's foreign operations. While the Company's risk management objectives and strategies are driven from an economic perspective, the Company attempts, where possible and practical, to ensure that the hedging strategies it engages in qualify for hedge accounting and result in accounting treatment where the earnings effect of the hedging instrument provides substantial offset (in the same period) to the earnings effect of the hedged item. Generally, these risk management transactions will involve the use of foreign currency derivatives to protect against exposure resulting from transactions in a currency differing from the respective functional currency.

The Company recognizes derivative instruments as either assets or liabilities in the accompanying Consolidated Balance Sheets at fair value. Changes in the fair value (i.e., gains or losses) of the derivatives are recorded in the accompanying Consolidated Statements of Earnings as "Investment and other income (expense)" or as a component of Accumulated Other Comprehensive Income ("AOCI") in the accompanying Consolidated Balance Sheets and in the Consolidated Statements of Comprehensive Income, as discussed below.

The Company utilizes forward foreign exchange currency contracts to reduce the exchange rate risk of specific foreign currency denominated transactions. These contracts typically require the exchange of a foreign currency for U.S. dollars at a fixed rate at a future date, with maturities of less than 18 months. These instruments may or may not qualify as hedges under the accounting guidance for derivative instruments and hedging activities based upon the intended objective of the contract. Hedge effectiveness is determined by how closely the changes in the fair value of the hedging instrument offset the changes in the fair value or cash flows of the hedged item. Hedge accounting is permitted only if the hedging relationship is expected to be highly effective at the inception of the hedge and on an on-going basis. Gains or losses on the derivative related to hedge ineffectiveness are recognized in current earnings. The amount of hedge ineffectiveness was not material for the fiscal years ended July 31, 2018, 2017, and 2016.

The Company has designated a portion of its foreign exchange contracts as cash flow hedges. For these instruments, the effective portion of the gain or loss on the derivative is reported as a component of AOCI and in the cash flow hedge section of the Consolidated Statements of Comprehensive Income, and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. The remaining portion of its foreign exchange contracts are not designated as hedge transactions, and accordingly, the mark-to-market impact of these derivative contracts is recorded each period in current earnings.

The Company also utilizes Euro-denominated debt designated as a hedge instrument to hedge portions of the Company's net investments in Euro-denominated foreign operations. For net investment hedges that meet the effectiveness requirements, the net gains or losses attributable to changes in spot exchange rates are recorded as cumulative translation within AOCI and are included in the net investment hedge section of the Consolidated Statements of Comprehensive Income. Any ineffective portions are to be recognized in earnings. Recognition in earnings of amounts previously recorded in cumulative translation is limited to circumstances such as complete or substantially complete liquidation of the net investment in the hedged foreign operation.

See Note 12 "Derivatives and Hedging Activities" for more information regarding the Company's derivative instruments and hedging activities.

New Accounting Standards — In February 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") 2018-02, "Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax effects from Accumulated Other Comprehensive Income," which allows for reclassification of stranded tax effects on items resulting from the Tax Reform Act from AOCI to retained earnings. The guidance is effective for interim periods in fiscal years beginning after December 15, 2018, with early adoption permitted. The Company elected to early adopt this standard and during the three months ended July 31, 2018, the Company recorded an increase in AOCI and a decrease in retained earnings of \$1,869, which was a result of reduced future tax benefits from the reduction in the U.S. federal corporate tax rate. Refer to Note 3 "Other Comprehensive (Loss) Income" for more information regarding the impact to the individual components of AOCI.

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities," which simplifies and reduces the complexity of the hedge accounting requirements and better aligns an entity's financial reporting for hedging relationships with its risk management activities. The guidance is effective for interim periods in fiscal years beginning after December 15, 2018, with early adoption permitted. This new guidance will require a modified retrospective adoption approach to existing hedging relationships as of the adoption date. The Company is currently evaluating the impact of this update on its consolidated financial statements and disclosures.

In March 2017, the FASB issued ASU 2017-07, "Compensation-Retirement Benefits (Topic 715): Improving the presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost," which requires entities to present the service cost component of net periodic pension cost and net periodic postretirement benefit cost in the income statement line items where they report compensation cost. Entities will present all other components of net benefit cost outside operating income, if this subtotal is presented. The amendment only impacts where those costs are reflected within the income statement. In addition, only the service cost component of net benefit cost is eligible for capitalization. This guidance is effective for annual periods beginning after December 15, 2017, including interim reporting periods within those annual reporting periods. The Company does not expect the adoption of this update to have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, "Goodwill and Other, Simplifying the Test for Goodwill Impairment," which simplifies the accounting for goodwill impairment. The new guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance will remain largely unchanged. This guidance is effective for annual periods beginning after December 15, 2019, and interim periods thereafter. However, early adoption is permitted for any impairment tests performed after January 1, 2017. This guidance will only impact the Company's consolidated financial statements if there is a future impairment of goodwill.

In February 2016, the FASB issued ASU 2016-02, "Leases," which replaces the current lease accounting standards. The update requires, among other items, lessees to recognize the assets and liabilities that arise from most leases on the balance sheet.

This guidance is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods. The ASU allows for either a full retrospective or a modified retrospective approach and early adoption is permitted. The Company expects the new lease standard to increase its total assets and liabilities; however, it is evaluating the magnitude of the impact on its consolidated financial statements. The Company has formed a team to implement the new lease standard and has selected a third-party software program to track and store its leases.

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers," which eliminates the transaction-and industry-specific revenue recognition guidance under current GAAP and replaces it with a principles-based approach for determining revenue recognition. The new guidance requires revenue recognition when control of the goods or services transfers to the customer, replacing the existing guidance which requires revenue recognition when the risks and rewards transfer to the customer. Under the new guidance, companies should recognize revenues in amounts reflecting the payment to which a company expects to be entitled in exchange for those goods or services.

The Company adopted the new revenue standard on August 1, 2018, and assessed all potential impacts of this standard. The Company determined key factors from the five-step process to recognize revenue as prescribed by the new standard that may be applicable to each of the Company's operating businesses that roll up into its two segments. Significant customers and contracts were identified and the Company completed the review of these contracts. The Company's assessment determined certain transactions with customers will require a change in the timing of when revenue and related expense is recognized. The standard allows for either a full retrospective or a modified retrospective adoption approach. The Company has elected the modified retrospective method which will require a cumulative adjustment to retained earnings instead of retrospectively adjusting prior periods. The impact of the cumulative adjustment is a reduction of \$2,850 to retained earnings in fiscal 2019.

2. Goodwill and Other Intangible Assets

Changes in the carrying amount of goodwill by reportable segment for the years ended July 31, 2018 and 2017, were as follows:

	IDS	WPS	Total
Balance as of July 31, 2016	\$ 384,529	\$ 45,342	\$ 429,871
Translation adjustments	4,845	2,981	7,826
Realignment of businesses between segments	2,490	(2,490)	—
Balance as of July 31, 2017	\$ 391,864	\$ 45,833	\$ 437,697
Translation adjustments	(6,340)	(1,487)	(7,827)
Current year divestiture	—	(10,055)	(10,055)
Balance as of July 31, 2018	\$ 385,524	\$ 34,291	\$ 419,815

Goodwill at July 31, 2018 and 2017, is net of \$118,637 and \$209,392 of accumulated impairment losses within the IDS and WPS segments, respectively, for a total of \$328,029. There were no impairment charges recorded during fiscal 2018. The decrease of \$17,882 in the carrying amount of goodwill as of July 31, 2018, compared to July 31, 2017, was primarily due to the sale of our Runelandhs business within the WPS segment in May 2018 and the effect of currency fluctuations during the fiscal year.

The annual impairment testing performed on May 1, 2018, in accordance with ASC 350, "Intangibles - Goodwill and Other" ("Step One") indicated that all of the reporting units with remaining goodwill (IDS Americas & Europe, People ID, and WPS Europe) passed Step One of the goodwill impairment test as each had a fair value substantially in excess of its carrying value.

Other Intangible Assets

Other intangible assets include patents, tradenames, customer relationships, non-compete agreements and other intangible assets with finite lives being amortized in accordance with the accounting guidance for other intangible assets. The net book value of these assets was as follows:

	July 31, 2018				July 31, 2017			
	Weighted Average Amortization Period (Years)	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Weighted Average Amortization Period (Years)	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Amortized other intangible assets:								
Patents	5	\$ 1,448	\$ (942)	\$ 506	5	\$ 1,358	\$ (471)	\$ 887
Tradenames and other	9	4,497	(4,395)	102	9	4,528	(4,229)	299
Customer relationships	9	55,999	(33,535)	22,464	8	60,759	(31,909)	28,850
Unamortized other intangible assets:								
Tradenames	N/A	19,516	—	19,516	N/A	23,040	—	23,040
Total		\$ 81,460	\$ (38,872)	\$ 42,588		\$ 89,685	\$ (36,609)	\$ 53,076

The decrease in the gross carrying amount of other intangible assets as of July 31, 2018, compared to July 31, 2017, was primarily due to the elimination of \$7,360 in certain intangible assets related to the sale of the Runelandhs business in the year ended July 31, 2018. The remaining decrease was due to the effect of currency translations during the fiscal year.

Amortization expense on intangible assets during the fiscal years ended July 31, 2018, 2017, and 2016 was \$6,433, \$7,113 and \$9,056, respectively. Amortization expense over each of the next five fiscal years is projected to be \$5,724, \$5,198, \$5,157, \$5,009 and \$2,025 for the fiscal years ending July 31, 2019, 2020, 2021, 2022 and 2023, respectively.

3. Other Comprehensive (Loss) Income

Other comprehensive (loss) income consists of foreign currency translation adjustments, net investment hedge and long-term intercompany loan translation adjustments, net unrealized gains and losses from cash flow hedges, and the unamortized gain on defined-benefit pension plans net of their related tax effects.

The following table illustrates the changes in the balances of each component of accumulated other comprehensive loss, net of tax, for the periods presented:

	Unrealized gain (loss) on cash flow hedges	Gain on postretirement plans	Foreign currency translation adjustments	Accumulated other comprehensive loss
Ending balance, July 31, 2016	\$ (857)	\$ 2,236	\$ (56,124)	\$ (54,745)
Other comprehensive income before reclassification	670	867	8,713	10,250
Amounts reclassified from accumulated other comprehensive loss	296	(483)	—	(187)
Ending balance, July 31, 2017	\$ 109	\$ 2,620	\$ (47,411)	\$ (44,682)
Other comprehensive income (loss) before reclassification	465	382	(14,242)	(13,395)
Amounts reclassified from accumulated other comprehensive loss	383	(576)	—	(193)
Adoption of accounting standard ASU 2018-02	\$ (94)	\$ 876	\$ 1,087	1,869
Ending balance, July 31, 2018	\$ 863	\$ 3,302	\$ (60,566)	\$ (56,401)

The increase in accumulated other comprehensive loss as of July 31, 2018, compared to July 31, 2017, was primarily due to the appreciation of the U.S. dollar against certain other currencies during the fiscal year. This was partially offset by the impact of early adopting ASU 2018-02 during the three months ended July 31, 2018, in which stranded tax effects from items related to the Tax Reform Act were reclassified from AOCI to retained earnings. The foreign currency translation adjustments column in the table above includes foreign currency translation, foreign currency translation on intercompany notes and the impact of settlements of net investment hedges, net of tax. Of the \$193 reclassified from AOCI, the \$383 loss on cash flow hedges was reclassified into cost of products sold, and the \$576 net gain on post-retirement plans was reclassified into selling, general, and administrative expense on the Consolidated Statement of Earnings in fiscal 2018.

The following table illustrates the income tax benefit (expense) on the components of other comprehensive (loss) income:

	2018	2017	2016
Income tax benefit (expense) related to items of other comprehensive (loss) income:			
Net investment hedge translation adjustments	\$ (55)	\$ 1,170	\$ (1,804)
Cash flow hedges	(669)	705	192
Pension and other post-retirement benefits	(64)	(4)	738
Other income tax adjustments	(512)	550	(2,154)
Adoption of accounting standard ASU 2018-02	1,869	—	—
Income tax benefit (expense) related to items of other comprehensive (loss) income	<u>\$ 569</u>	<u>\$ 2,421</u>	<u>\$ (3,028)</u>

4. Employee Benefit Plans

The Company provides postretirement medical benefits (the “Plan”) for eligible regular full and part-time domestic employees (including spouses) who retired prior to January 1, 2016, as outlined by the Plan.

The accounting guidance on defined benefit pension and other postretirement plans requires full recognition of the funded status of defined benefit and other postretirement plans on the balance sheet as an asset or a liability. The guidance also requires that unrecognized prior service costs/credits, gains/losses, and transition obligations/assets be recorded in AOCI, thus not changing the income statement recognition rules for such plans.

The Plan is unfunded and recorded as a liability in the accompanying Consolidated Balance Sheets as of July 31, 2018 and 2017. The following table provides a reconciliation of the changes in the Plan’s accumulated benefit obligation during the years ended July 31:

	2018	2017
Obligation at beginning of fiscal year	\$ 3,390	\$ 3,800
Interest cost	79	89
Benefit payments	(449)	(499)
Obligation at end of fiscal year	<u>\$ 3,020</u>	<u>\$ 3,390</u>

As of July 31, 2018 and 2017, amounts recognized as liabilities in the accompanying Consolidated Balance Sheets consist of:

	2018	2017
Current liability	\$ 377	\$ 449
Non-current liability	2,643	2,941
	<u>\$ 3,020</u>	<u>\$ 3,390</u>

As of July 31, 2018 and 2017, pre-tax amounts recognized in accumulated other comprehensive loss in the accompanying Consolidated Balance Sheets consist of net actuarial gains of \$4,984 and \$5,504, respectively.

Net periodic benefit gain for the Plan for fiscal years ended July 31, 2018, 2017, and 2016, includes the following components:

	Years Ended July 31,		
	2018	2017	2016
Net periodic postretirement benefit gain included the following components:			
Service cost	\$ —	\$ —	\$ 9
Interest cost	79	89	114
Amortization of prior service credit	—	—	(1,035)
Amortization of net actuarial gain	(520)	(544)	(646)
Periodic postretirement benefit gain	<u>\$ (441)</u>	<u>\$ (455)</u>	<u>\$ (1,558)</u>

The estimated net actuarial gain that will be amortized from accumulated other comprehensive income into net periodic postretirement benefit cost over the next fiscal year is \$497. No prior service credit remains due to the plan amendment to eliminate post-retirement benefits for employees retiring after January 1, 2016.

The following assumptions were used in accounting for the Plan:

	2018	2017	2016
Weighted average discount rate used in determining accumulated postretirement benefit obligation	2.50%	2.50%	2.50%
Weighted average discount rate used in determining net periodic benefit cost	2.50%	2.50%	3.00%
Assumed health care trend rate used to measure accumulated postretirement benefit obligation at July 31	7.00%	7.25%	7.50%
Rate to which cost trend rate is assumed to decline (the ultimate trend rate)	5.50%	5.50%	5.50%
Fiscal year the ultimate trend rate is reached	2024	2024	2018

A one-percentage point change in assumed health care cost trend rates would have the following effects on the Plan:

	One-Percentage Point Increase	One-Percentage Point Decrease
Effect on future service and interest cost	\$ 4	\$ (5)
Effect on accumulated postretirement benefit obligation at July 31, 2018	17	(18)

The following benefit payments are expected to be paid during the years ending July 31:

2019	\$ 377
2020	359
2021	339
2022	309
2023	289
2024 through 2028	1,140

The Company sponsors statutory defined benefit pension plans that are primarily unfunded and provide an income benefit upon termination or retirement for certain of its international employees. As of July 31, 2018 and 2017, the accumulated pension obligation related to these plans was \$5,383 and \$6,075, respectively. As of July 31, 2018 and 2017, pre-tax amounts recognized in accumulated other comprehensive loss in the accompanying Consolidated Balance Sheets were losses of \$194 and \$641, respectively. The net periodic benefit cost for these plans was \$341, \$665, and \$795 during the years ended July 31, 2018, 2017 and 2016, respectively.

The Company also has two deferred compensation plans, the Executive Deferred Compensation Plan and the Director Deferred Compensation Plan which allow for compensation to be deferred into either the Company's Class A Nonvoting Common Stock or in other investment funds. Neither plan allows funds to be transferred between the Company's Class A Nonvoting Common Stock and the other investment funds. Additionally, the Company has a non-qualified deferred compensation plan, the Brady Restoration Plan, which allows an equivalent benefit to the Matched 401(k) Plan and the Funded Retirement Plan for executives' income exceeding the IRS limits of participation in a qualified 401(k) plan. At July 31, 2018 and 2017, \$14,383 and \$14,121, respectively, of deferred compensation was included in other long-term liabilities in the accompanying Consolidated Balance Sheets.

The Company has retirement and profit-sharing plans covering substantially all full-time domestic employees and certain employees of its foreign subsidiaries. Contributions to the plans are determined annually or quarterly, according to the respective plans, based on earnings of the respective companies and employee contributions. Accrued retirement and profit-sharing contributions of \$3,844 and \$3,327 were included in other current liabilities on the accompanying Consolidated Balance Sheets as of July 31, 2018 and 2017, respectively. The amounts charged to expense for these retirement and profit sharing plans were \$14,395, \$13,750, and \$10,407 during the years ended July 31, 2018, 2017 and 2016, respectively.

5. Income Taxes

Earnings before income taxes consists of the following:

	Years Ended July 31,		
	2018	2017	2016
United States	\$ 48,903	\$ 43,561	\$ 61,349
Other Nations	103,112	83,071	47,996
Total	\$ 152,015	\$ 126,632	\$ 109,345

Earnings before income taxes in the United States increased to \$48,903 in fiscal 2018 from \$43,561 in fiscal 2017 primarily due to increased organic sales and expense management in the U.S. The increase in earnings before income taxes in Other Nations to \$103,112 in fiscal 2018 from \$83,071 in fiscal 2017 was primarily due to increased organic sales and improved profitability in fiscal 2018 in both the Company's European and Asian-based businesses.

The decrease in earnings before income taxes in the United States to \$43,561 in fiscal 2017 from \$61,349 in fiscal 2016 was primarily due to intercompany royalty transactions that occurred in fiscal 2016 which increased U.S. earnings before income taxes by \$21,003. The increase in earnings before income taxes in Other Nations to \$83,071 in fiscal 2017 from \$47,996 in fiscal 2016 was primarily due to intercompany royalty transactions that occurred in fiscal 2016 which decreased earnings before income taxes by \$21,003, as well as improved profitability in fiscal 2017 in both the Company's European and Asian-based businesses.

Income tax expense consists of the following:

	Years Ended July 31,		
	2018	2017	2016
Current income tax expense:			
United States	\$ 2,830	\$ 15,279	\$ 5,048
Other Nations	26,593	23,826	19,929
States (U.S.)	910	1,163	1,348
	\$ 30,333	\$ 40,268	\$ 26,325
Deferred income tax (benefit) expense:			
United States	\$ 30,267	\$ (8,173)	\$ 3,946
Other Nations	(1,462)	(1,329)	(1,387)
States (U.S.)	1,817	221	351
	\$ 30,622	\$ (9,281)	\$ 2,910
Total income tax expense	\$ 60,955	\$ 30,987	\$ 29,235

On December 22, 2017, the U.S. Tax Cuts and Jobs Act (the "Tax Reform Act") was enacted. Among the significant changes to the U.S. Internal Revenue Code, the Tax Reform Act reduces the U.S. federal corporate income tax rate from 35.0% to 21.0%, imposes a one-time tax on deemed repatriated earnings of foreign subsidiaries, eliminates the domestic manufacturing deduction and moves to a partial territorial system by providing a 100% dividend received deduction on certain qualified dividends from foreign subsidiaries. As the Company has a July 31 fiscal year end, the lower corporate income tax rate will be phased in, resulting in a U.S. statutory federal income tax rate of 26.9% for the fiscal year ended July 31, 2018, and 21.0% for subsequent fiscal years.

The tax effects of temporary differences are as follows as of July 31, 2018 and 2017:

	July 31, 2018		
	Assets	Liabilities	Total
Inventories	\$ 3,095	\$ (53)	\$ 3,042
Prepaid catalog costs	—	(978)	(978)
Employee benefits	3,772	(91)	3,681
Accounts receivable	828	(1)	827
Fixed assets	2,959	(4,911)	(1,952)
Intangible assets	1,073	(29,630)	(28,557)
Deferred and equity-based compensation	10,656	—	10,656
Postretirement benefits	3,280	—	3,280
Tax credit and net operating loss carry-forwards	64,348	—	64,348
Less valuation allowance	(56,866)	—	(56,866)
Other, net	8,548	(8,962)	(414)
Total	<u>\$ 41,693</u>	<u>\$ (44,626)</u>	<u>\$ (2,933)</u>

	July 31, 2017		
	Assets	Liabilities	Total
Inventories	\$ 4,516	\$ (1)	\$ 4,515
Prepaid catalog costs	—	(1,107)	(1,107)
Employee benefits	8,932	—	8,932
Accounts receivable	1,141	(11)	1,130
Fixed assets	2,819	(3,884)	(1,065)
Intangible assets	1,187	(37,681)	(36,494)
Deferred and equity-based compensation	16,743	—	16,743
Postretirement benefits	4,144	—	4,144
Tax credit and net operating loss carry-forwards	70,128	—	70,128
Less valuation allowance	(38,563)	—	(38,563)
Other, net	12,630	(10,798)	1,832
Total	<u>\$ 83,677</u>	<u>\$ (53,482)</u>	<u>\$ 30,195</u>

Tax carry-forwards at July 31, 2018 are comprised of:

- Foreign net operating loss carry-forwards of \$108,540, of which \$88,197 have no expiration date and the remainder of which expire within the next five years.
- State net operating loss carry-forwards of \$35,231, which expire from 2022 to 2038.
- Foreign tax credit carry-forwards of \$25,115, which expire from 2021 to 2027.
- State R&D credit carry-forwards of \$11,448, which expire from 2019 to 2033.

The reduction in the U.S. federal income tax rate as a result of the Tax Reform Act requires the Company to remeasure its U.S. deferred tax assets and liabilities to the income tax rate at which the deductible or taxable event is expected to be realized. The Tax Reform Act also changes the statutory U.S. federal tax rate from 35.0% to 26.9% for the entire year ended July 31, 2018. Additionally, the Company established a valuation allowance against its deferred tax assets related to foreign tax credit carryforwards, primarily related to the impact of the Tax Reform Act on the Company's ability to utilize these foreign tax credit carryforwards. The provisional impact of the Tax Reform Act related to the remeasurement of deferred tax assets and liabilities, the impact on the Company's fiscal 2018 earnings from the reduced tax rate, and the establishment of the valuation allowance discussed above resulted in net income tax expense of \$16,761 for the year ended July 31, 2018.

The valuation allowance increased by \$18,303 during the fiscal year ended July 31, 2018, primarily due to the establishment of a valuation allowance on a significant portion of foreign tax credit carryforwards as a result of the Tax Reform Act. The net increase was partially offset by valuation allowance decreases in China, India, Sweden, Brazil, and South Africa primarily due to the utilization of net operating loss carryforwards that had valuation allowances applied to them. If reversed in future periods, substantially all of the valuation allowance would impact the income tax rate.

Rate Reconciliation

A reconciliation of the tax computed by applying the statutory U.S. federal income tax rate to earnings from continuing operations before income taxes to the total income tax expense is as follows:

	Years Ended July 31,		
	2018	2017	2016
Tax at statutory rate	26.9 %	35.0 %	35.0 %
State income taxes, net of federal tax benefit	1.6 %	1.0 %	0.8 %
International rate differential	(1.1)%	(6.3)%	0.4 %
Rate variances arising from foreign subsidiary distributions ⁽¹⁾	0.8 %	(5.9)%	0.5 %
Foreign tax credit carryforward valuation allowance ⁽²⁾	14.1 %	—%	—%
Divestiture of business ⁽³⁾	(0.8)%	—%	—%
Adjustments to tax accruals and reserves ⁽⁴⁾	2.2 %	3.6 %	(3.7)%
Research and development tax credits and domestic manufacturer's deduction	(2.0)%	(1.8)%	(3.6)%
Deferred tax and other adjustments, net	(1.6)%	(1.1)%	(2.7)%
Effective tax rate	<u>40.1 %</u>	<u>24.5 %</u>	<u>26.7 %</u>

- (1) The year ended July 31, 2017, includes the generation of foreign tax credit carryforwards from cash repatriations that occurred during the fiscal year.
- (2) The year ended July 31, 2018, includes the establishment of a valuation allowance against foreign tax credit carryforwards as a result of the Tax Reform Act.
- (3) The year ended July 31, 2018, includes the divestiture of the Company's Runelandhs business based in Sweden. Refer to Note 13 - Divestitures for additional information.
- (4) The years ended July 31, 2018 and 2017, include increases in current year uncertain tax positions, while the year ended July 31, 2016, includes reductions of uncertain tax positions resulting from the closure of audits and lapses in statutes of limitations.

Uncertain Tax Positions

The Company follows the guidance in ASC 740, "Income Taxes" regarding uncertain tax positions. The guidance requires application of a more likely than not threshold to the recognition and de-recognition of income tax positions. A reconciliation of unrecognized tax benefits (excluding interest and penalties) is as follows:

Balance at July 31, 2015	\$ 21,133
Additions based on tax positions related to the current year	3,093
Additions for tax positions of prior years	1,290
Reductions for tax positions of prior years	(9,369)
Lapse of statute of limitations	(344)
Settlements with tax authorities	(456)
Cumulative Translation Adjustments and other	(53)
Balance as of July 31, 2016	\$ 15,294
Additions based on tax positions related to the current year	2,500
Additions for tax positions of prior years	1,124
Reductions for tax positions of prior years	(62)
Lapse of statute of limitations	(663)
Settlements with tax authorities	(118)
Cumulative Translation Adjustments and other	287
Balance as of July 31, 2017	\$ 18,362
Additions based on tax positions related to the current year	2,467
Additions for tax positions of prior years	1,586
Reductions for tax positions of prior years	(23)
Lapse of statute of limitations	(489)
Settlements with tax authorities	(1,277)
Cumulative Translation Adjustments and other	(196)
Balance as of July 31, 2018	\$ 20,430

The \$20,430 of unrecognized tax benefits, if recognized, would affect the Company's effective income tax rate. The Company has classified \$13,238 and \$11,725, excluding interest and penalties, of the reserve for uncertain tax positions in Other Liabilities on the Consolidated Balance Sheets as of July 31, 2018 and 2017, respectively. The Company has classified \$7,192 and \$6,637, excluding interest and penalties, as a reduction of long-term deferred income tax assets on the Consolidated Balance Sheets as of July 31, 2018 and 2017, respectively.

Interest expense is recognized on the amount of potentially underpaid taxes associated with the Company's tax positions, beginning in the first period in which interest starts accruing under the respective tax law and continuing until the tax positions are settled. The Company recognized an increase of \$556, an increase of \$674, and an increase of \$3 in interest expense during the years ended July 31, 2018, 2017, and 2016, respectively. There was an \$83 increase to the reserve for uncertain tax positions for penalties during the year ended July 31, 2018, an increase of \$218 during the year ended July 31, 2017, and an increase of \$66 during the year ended July 31, 2016. These amounts are net of reversals due to reductions for tax positions of prior years, statute of limitations, and settlements. At July 31, 2018 and 2017, the Company had \$2,762 and \$2,239, respectively, accrued for interest on unrecognized tax benefits. Penalties are accrued if the tax position does not meet the minimum statutory threshold to avoid the payment of a penalty. At July 31, 2018 and 2017, the Company had \$3,027 and \$2,948, respectively, accrued for penalties on unrecognized tax benefits. Interest expense and penalties are recorded as a component of income tax expense in the Consolidated Statements of Earnings.

The Company estimates that it is reasonably possible that the unrecognized tax benefits may be reduced by \$9,686 within 12 months as a result of the resolution of worldwide tax matters, tax audit settlements, amended tax filings, and/or statute expirations. The maximum amount that would be recognized in the Consolidated Statements of Earnings as an income tax benefit is \$9,686 during the next twelve months.

During the year ended July 31, 2018, the Company recognized \$675 of tax benefits (including interest and penalties) associated with the lapse of statutes of limitations. The Company also recognized \$1,742 of tax benefits (including interest and penalties) associated with the reduction of tax positions for prior years due to the closure of certain tax audits.

The Company and its subsidiaries file income tax returns in the U.S., various state, and foreign jurisdictions. The following table summarizes the open tax years for the Company's major jurisdictions:

Jurisdiction	Open Tax Years
United States — Federal	F'15 — F'18
France	F'15 — F'18

Unremitted Earnings

As part of the transition to the partial territorial tax system, the Tax Reform Act imposes a one-time tax on the mandatory deemed repatriation of historical earnings of foreign subsidiaries. Companies can claim certain credits for foreign taxes deemed paid on foreign earnings subject to the mandatory deemed repatriation. The Company's provisional calculations resulted in an income tax charge of \$3,327 related to the deemed repatriation of the historical earnings of foreign subsidiaries during the year ended July 31, 2018. Existing foreign tax credit carryforwards were used to fully offset this tax, resulting in no cash payments related to this charge.

As a result of the Tax Reform Act, the Company expects that it will repatriate certain historical and future foreign earnings periodically, which in certain jurisdictions may be subject to withholding and income taxes. These additional withholding and income taxes are recorded as a deferred tax liability associated with the basis difference in such jurisdictions. During the year ended July 31, 2018, the Company recorded a provisional income tax expense of \$984 related to the recording of a deferred tax liability for future withholding and income taxes on the distribution of foreign earnings. The uncertainty related to the taxation of such withholding and income taxes on distributions under the Tax Reform Act and the finalization of future cash repatriation plans make the deferred tax liability a provisional amount.

Provisional Disclosure

The Company continues to review the anticipated impacts of the global intangible low taxed income ("GILTI"), foreign derived intangible income ("FDII") and base erosion anti-abuse tax ("BEAT") enacted under the Tax Reform Act, which are not effective until fiscal year 2019. The consolidated financial statements for the year ended July 31, 2018, do not include a provisional estimate associated with either GILTI, FDII or BEAT.

The final enactment impacts of the Tax Reform Act may differ from the above estimates due to changes in interpretation, legislative action to address questions that arise, changes in accounting standards for income taxes or related interpretations in response to the Tax Reform Act, or any updates or changes to information the Company has utilized to develop the estimates, including impacts from changes to current year earnings estimates and foreign exchange rates of foreign subsidiaries. The U.S. Securities and Exchange Commission has issued rules that would allow for a measurement period of up to one year after the enactment date of the Tax Reform Act to finalize the recording of the related tax impacts.

6. Debt

On September 25, 2015, the Company and certain of its subsidiaries entered into an unsecured \$300,000 multi-currency revolving loan agreement with a group of six banks. Under this revolving loan agreement, which has a final maturity date of September 25, 2020, the Company has the option to select either a base interest rate (based upon the higher of the federal funds rate plus one-half of 1%, the prime rate of Bank of America plus a margin based on the Company's consolidated leverage ratio, or the one-month LIBOR rate plus 1%) or a Eurocurrency interest rate (at the LIBOR rate plus a margin based on the Company's consolidated leverage ratio). At the Company's option, and subject to certain conditions, the available amount under the revolving loan agreement may be increased from \$300,000 up to \$450,000. During fiscal 2018, the Company repaid \$51,941 of its revolving loan agreement and the maximum amount outstanding throughout the year was \$57,235. As of July 31, 2018, there were no borrowings outstanding on the credit facility. There was \$296,957 available for future borrowing under the credit facility, which can be increased to \$446,957 at the Company's option, subject to certain conditions. The revolving loan agreement has a final maturity date of September 25, 2020. As such, the borrowing is included in "Long-term obligations" on the Consolidated Balance Sheets.

The Company has a multi-currency line of credit in China with capacity of \$10,000. This line of credit supports USD-denominated or CNY-denominated borrowing to fund working capital and operations for the Company's Chinese entities and is due on demand. The borrowings under this facility may be made for a period up to one year from the date of borrowing with interest on the USD-denominated borrowings incurred equal to U.S. dollar LIBOR on the date of borrowing plus a margin based upon duration and on the CNY-denominated borrowings incurred equal to the local China rate based upon duration. There is no ultimate maturity on the facility and it is subject to periodic review and repricing. The Company is not required to comply with any financial covenants as part of this agreement. The maximum amount outstanding on this facility was \$3,228 and the Company repaid \$3,257 during fiscal 2018. As of July 31, 2018, there were no borrowings outstanding on this line of credit in China and

there was \$10,000 available for future borrowings. Due to the short-term nature of this credit facility, the borrowings are classified as "Notes payable" within current liabilities in the accompanying Consolidated Balance Sheets.

On May 13, 2010, the Company completed a private placement of €75.0 million aggregate principal amount of senior unsecured notes to accredited institutional investors. The €75.0 million of senior notes consisted of €30.0 million aggregate principal amount of 3.71% Series 2010-A Senior Notes, which were repaid during fiscal 2017, and €45.0 million aggregate principal amount of 4.24% Series 2010-A Senior Notes, due May 13, 2020, with interest payable on the notes semiannually. This private placement was exempt from the registration requirements of the Securities Act of 1933. The notes have been fully and unconditionally guaranteed on an unsecured basis by the Company's domestic subsidiaries.

During fiscal 2006 and 2007, the Company completed two private placement note issuances totaling \$350 million in ten-year fixed rate notes with varying maturity dates to institutional investors at interest rates varying from 5.30% to 5.33%. Under the terms of the notes, the notes were required to be repaid equally over seven years, with interest payable on the notes due semiannually on various dates throughout the year. The private placements were exempt from the registration requirements of the Securities Act of 1933. The notes were not registered for resale and may not be resold absent such registration or an applicable exemption from the registration requirements of the Securities Act of 1933 and applicable state securities laws. The notes had certain prepayment penalties for repaying them prior to the maturity date. Under the debt agreement, the Company made scheduled principal payments of \$16.4 million and \$42.5 million in fiscal years 2017 and 2016, respectively. The final principal payment for the 2006 series of notes was made during fiscal 2016, while the final principal payment for the 2007 series of notes was made during fiscal 2017.

The Company's debt agreements require it to maintain certain financial covenants, including a ratio of debt to the trailing twelve months EBITDA, as defined in the debt agreements, of not more than a 3.25 to 1.0 ratio (leverage ratio) and the trailing twelve months EBITDA to interest expense of not less than a 3.0 to 1.0 ratio (interest expense coverage). As of July 31, 2018, the Company was in compliance with these financial covenants, with the ratio of debt to EBITDA, as defined by the agreements, equal to 0.3 to 1.0 and the interest expense coverage ratio equal to 58.7 to 1.0.

Total debt consists of the following as of July 31:

	2018	2017
Euro-denominated notes payable in 2020 at a fixed rate of 4.24%	\$ 52,618	\$ 53,202
USD-denominated borrowing on revolving loan agreement at a weighted average rate of 0.00% and 1.94% as of July 31, 2018 and 2017, respectively	—	16,998
EUR-denominated borrowing on revolving loan agreement at a weighted average rate of 0.00% and 0.75% as of July 31, 2018 and 2017, respectively	—	34,336
CNY-denominated borrowing on China revolving loan agreement at a weighted average rate of 0.00% and 3.92% as of July 31, 2018 and 2017, respectively	—	2,228
USD-denominated borrowing on China revolving loan agreement at a weighted average rate of 0.00% and 2.63% as of July 31, 2018 and 2017, respectively	—	1,000
	\$ 52,618	\$ 107,764
Less notes payable	—	(3,228)
Total long-term debt	\$ 52,618	\$ 104,536

The Company had outstanding letters of credit of \$3,043 and \$4,067 at July 31, 2018 and 2017, respectively.

The estimated fair value of the Company's long-term obligations was \$55,707 and \$109,303 at July 31, 2018 and 2017, respectively, as compared to the carrying value of \$52,618 and \$104,536 at July 31, 2018 and 2017, respectively. The fair value of the long-term obligations, which was determined using the market approach based upon the interest rates available to the Company for borrowings with similar terms and maturities, was determined to be Level 2 under the fair value hierarchy. Due to the short-term nature and variable interest rate pricing of the Company's revolving debt in China, it is determined that the carrying value of the debt equals the fair value of the debt.

Maturities on long-term debt are as follows:

Years Ending July 31,	
2019	\$ —
2020	52,618
Total	\$ 52,618

7. Stockholders' Investment

Information as to the Company's capital stock at July 31, 2018 and 2017 is as follows:

	July 31, 2018			July 31, 2017		
	Shares Authorized	Shares Issued	(thousands) Amount	Shares Authorized	Shares Issued	(thousands) Amount
Preferred Stock, \$.01 par value	5,000,000			5,000,000		
Cumulative Preferred Stock:						
6% Cumulative	5,000			5,000		
1972 Series	10,000			10,000		
1979 Series	30,000			30,000		
Common Stock, \$.01 par value: Class A						
Nonvoting	100,000,000	51,261,487	\$ 513	100,000,000	51,261,487	\$ 513
Class B Voting	10,000,000	3,538,628	35	10,000,000	3,538,628	35
			\$ 548			\$ 548

Before any dividend may be paid on the Class B Common Stock, holders of the Class A Common Stock are entitled to receive an annual, noncumulative cash dividend of \$0.01665 per share. Thereafter, any further dividend in that fiscal year must be paid on each share of Class A Common Stock and Class B Common Stock on an equal basis.

Other than as required by law, holders of the Class A Common Stock are not entitled to any vote on corporate matters, unless, in each of the three preceding fiscal years, the \$0.01665 preferential dividend described above has not been paid in full. Holders of the Class A Common Stock are entitled to one vote per share for the entire fiscal year immediately following the third consecutive fiscal year in which the preferential dividend is not paid in full. Holders of Class B Common Stock are entitled to one vote per share for the election of directors and for all other purposes.

Upon liquidation, dissolution or winding up of the Company, and after distribution of any amounts due to holders of Preferred Stock, if any, holders of the Class A Common Stock are entitled to receive the sum of \$0.835 per share before any payment or distribution to holders of the Class B Common Stock. Thereafter, holders of the Class B Common Stock are entitled to receive a payment or distribution of \$0.835 per share. Thereafter, holders of the Class A Common Stock and Class B Common Stock share equally in all payments or distributions upon liquidation, dissolution or winding up of the Company.

The preferences in dividends and liquidation rights of the Class A Common Stock over the Class B Common Stock will terminate at any time that the voting rights of Class A Common Stock and Class B Common Stock become equal.

The following is a summary of other activity in stockholders' investment for the fiscal years ended July 31, 2018, 2017, and 2016:

	Deferred Compensation	Shares Held in Rabbi Trust, at cost		Total
Balances at July 31, 2015	\$ 5,684	\$ (8,748)	\$ (3,064)	
Shares at July 31, 2015	252,261	362,025		
Sale of shares at cost	\$ (1,238)	\$ 1,278	\$ 40	
Purchase of shares at cost	178	(1,017)	(839)	
Balances at July 31, 2016	\$ 4,624	\$ (8,487)	\$ (3,863)	
Shares at July 31, 2016	201,418	347,081		
Sale of shares at cost	\$ (1,247)	\$ 1,288	\$ 41	
Purchase of shares at cost	315	(925)	(610)	
Effect of plan amendment	4,432	—	4,432	
Balances at July 31, 2017	\$ 8,124	\$ (8,124)	\$ —	
Shares at July 31, 2017	314,082	314,082		
Sale of shares at cost	\$ (977)	\$ 977	\$ —	
Purchase of shares at cost	1,075	(1,075)	—	
Balances at July 31, 2018	\$ 8,222	\$ (8,222)	\$ —	
Shares at July 31, 2018	299,916	299,916		

Deferred Compensation Plans

The Company has two deferred compensation plans, the Executive Deferred Compensation Plan and the Director Deferred Compensation Plan that allow for compensation to be deferred into either the Company's Class A Nonvoting Common Stock or in other investment funds. Both the Director Deferred Compensation Plan and the Executive Deferred Compensation Plan disallow transfers from other investment funds into the Company's Class A Nonvoting Common Stock.

At July 31, 2018, the deferred compensation balance in stockholders' investment represents the investment at the original cost of shares held in the Company's Class A Nonvoting Common Stock for the deferred compensation plans. The balance of shares held in the Rabbi Trust represents the investment in the Company's Class A Nonvoting Common Stock at the original cost of all the Company's Class A Nonvoting Common Stock held in deferred compensation plans.

Incentive Stock Plans

The Company has an incentive stock plan under which the Board of Directors may grant nonqualified stock options to purchase shares of Class A Nonvoting Common Stock, restricted stock units ("RSUs"), or restricted and unrestricted shares of Class A Nonvoting Common Stock to employees and non-employee directors. Certain awards may be subject to pre-established performance goals.

As of July 31, 2018, the Company has reserved 2,955,586 shares of Class A Nonvoting Common Stock for outstanding stock options, RSUs and restricted shares and 4,049,563 shares of Class A Nonvoting Common Stock remain for future issuance of stock options, RSUs and restricted and unrestricted shares under the active plans. The Company uses treasury stock or will issue new Class A Nonvoting Common Stock to deliver shares under these plans.

Total stock-based compensation expense recognized by the Company during the years ended July 31, 2018, 2017, and 2016, was \$9,980 (\$7,485 net of taxes), \$9,495 (\$5,887 net of taxes), and \$8,154 (\$5,056 net of taxes), respectively. As of July 31, 2018, total unrecognized compensation cost related to share-based compensation awards that are expected to vest was \$10,898 pre-tax, net of estimated forfeitures, which the Company expects to recognize over a weighted-average period of 1.6 years.

Stock Options

The stock options issued under the plan have an exercise price equal to the fair market value of the underlying stock at the date of grant and generally vest ratably over a three-year period, with one-third becoming exercisable one year after the grant date and one-third additional in each of the succeeding two years. Options issued under the plan, referred to herein as "time-based" options, generally expire 10 years from the date of grant.

The Company has estimated the fair value of its time-based stock option awards granted during the years ended July 31, 2018, 2017, and 2016, using the Black-Scholes option valuation model. The weighted-average assumptions used in the Black-Scholes valuation model are reflected in the following table:

Black-Scholes Option Valuation Assumptions	2018	2017	2016
Expected term (in years)	6.07	6.11	6.11
Expected volatility	28.19%	29.55%	29.95%
Expected dividend yield	2.72%	2.70%	2.59%
Risk-free interest rate	1.96%	1.26%	1.64%
Weighted-average market value of underlying stock at grant date	\$ 36.85	\$ 35.14	\$ 20.02
Weighted-average exercise price	\$ 36.85	\$ 35.14	\$ 20.02
Weighted-average fair value of options granted during the period	\$ 7.96	\$ 7.56	\$ 4.58

The following is a summary of stock option activity for the fiscal year ended July 31, 2018:

	Option Price	Options Outstanding	Weighted Average Exercise Price
Balance as of July 31, 2017	\$ 19.96 — \$38.83	2,879,801	\$ 27.40
Options granted	36.85 — 36.85	364,046	36.85
Options exercised	19.96 — 38.31	(622,916)	28.84
Options cancelled	19.96 — 38.31	(116,298)	31.42
Balance as of July 31, 2018	\$ 19.96 — \$38.83	2,504,633	\$ 28.23

The total fair value of options vested during the fiscal years ended July 31, 2018, 2017, and 2016, was \$3,006, \$2,911, and \$3,203, respectively. The total intrinsic value of options exercised during the fiscal years ended July 31, 2018, 2017, and 2016, was \$6,208, \$7,901, and \$811, respectively.

There were 1,722,229, 1,859,959, and 2,488,527 options exercisable with a weighted average exercise price of \$26.82, \$28.20, and \$30.18 at July 31, 2018, 2017, and 2016, respectively. The cash received from the exercise of stock options during the fiscal years ended July 31, 2018, 2017, and 2016, was \$12,099, \$19,728, and \$5,246, respectively. The tax benefit on options exercised during the fiscal years ended July 31, 2018, 2017, and 2016, was \$1,893, \$3,002, and \$308, respectively.

The following table summarizes information about stock options outstanding at July 31, 2018:

Range of Exercise Prices	Options Outstanding			Options Outstanding and Exercisable		
	Number of Shares Outstanding at July 31, 2018	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price	Shares Exercisable at July 31, 2018	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price
\$19.96 - \$26.99	846,353	6.7	\$ 20.84	611,735	6.5	\$ 21.16
\$27.00 - \$32.99	978,233	3.3	29.24	977,506	3.3	29.24
\$33.00 - \$38.83	680,047	8.4	35.97	132,988	7.2	35.13
Total	2,504,633	5.8	\$ 28.23	1,722,229	4.7	\$ 26.82

As of July 31, 2018, the aggregate intrinsic value (defined as the amount by which the fair value of the underlying stock exceeds the exercise price of an option) of options outstanding and the options exercisable was \$24,033 and \$18,945, respectively.

Restricted Shares and RSUs

Restricted and unrestricted shares and RSUs issued under the plan have a grant date fair value equal to the fair market value of the underlying stock at the date of grant. Shares issued under the plan are referred to herein as either "time-based" or "performance-based" restricted shares and RSUs. The time-based RSUs issued under the plan generally vest ratably over a three-year period, with one-third becoming exercisable one year after the grant date and one-third additional in each of the succeeding two years. The performance-based RSUs granted under the plan vest at the end of a three-year service period provided specified Company financial performance metrics are met.

The following tables summarize the RSU and restricted share activity for the fiscal year ended July 31, 2018:

Time-Based RSUs and Restricted Shares	Shares	Weighted Average Grant Date Fair Value
Balance as of July 31, 2017	517,108	\$ 25.61
New grants	94,457	36.80
Vested	(219,389)	24.76
Forfeited	(49,320)	26.94
Balance as of July 31, 2018	342,856	\$ 29.05

The time-based RSUs granted during the fiscal year ended July 31, 2017, had a weighted-average grant-date fair value of \$35.15. The total fair value of time-based RSUs vested during the years ended July 31, 2018 and 2017, was \$8,237 and \$6,512, respectively.

Performance-Based RSUs	Shares	Weighted Average Grant Date Fair Value
Balance as of July 31, 2017	58,206	\$ 32.03
New grants	56,290	33.12
Vested	—	—
Forfeited	(6,399)	32.57
Balance as of July 31, 2018	108,097	\$ 32.57

The performance-based RSUs granted during the year ended July 31, 2017, had a weighted-average grant-date fair value of \$32.03. The aggregate intrinsic value of unvested time-based and performance-based RSUs outstanding at July 31, 2018 and 2017, and expected to vest, was \$17,249 and \$19,100, respectively.

8. Segment Information

The Company is organized and managed on a global basis within three operating segments, Identification Solutions ("IDS"), Workplace Safety ("WPS"), and People Identification ("People ID"), which aggregate into two reportable segments that are organized around businesses with consistent products and services: IDS and WPS. The Identification Solutions and People ID operating segments aggregate into the IDS reporting segment, while the WPS reporting segment is comprised solely of the Workplace Safety operating segment.

The Company's internal measure of segment profit and loss reported to the chief operating decision maker for purposes of allocating resources to the segments and assessing performance includes certain administrative costs, such as the cost of finance, information technology, human resources, and certain other administrative costs. However, interest expense, investment and other income (expense), income tax expense, and certain corporate administrative expenses are excluded when evaluating segment performance.

Following is a summary of segment information for the years ended July 31, 2018, 2017 and 2016:

	2018	2017	2016
Sales to External Customers:			
ID Solutions	\$ 846,087	\$ 800,392	\$ 795,511
WPS	327,764	312,924	325,114
Total Company	<u>\$ 1,173,851</u>	<u>\$ 1,113,316</u>	<u>\$ 1,120,625</u>
Depreciation & Amortization:			
ID Solutions	\$ 22,075	\$ 23,092	\$ 27,285
WPS	3,367	4,211	5,147
Total Company	<u>\$ 25,442</u>	<u>\$ 27,303</u>	<u>\$ 32,432</u>
Segment Profit:			
ID Solutions	\$ 143,411	\$ 130,572	\$ 112,276
WPS	31,712	25,554	30,792
Total Company	<u>\$ 175,123</u>	<u>\$ 156,126</u>	<u>\$ 143,068</u>
Assets:			
ID Solutions	\$ 737,174	\$ 761,448	\$ 748,408
WPS	138,329	154,827	154,321
Corporate	181,428	133,948	141,235
Total Company	<u>\$ 1,056,931</u>	<u>\$ 1,050,223</u>	<u>\$ 1,043,964</u>
Expenditures for property, plant & equipment:			
ID Solutions	\$ 17,283	\$ 12,347	\$ 11,640
WPS	4,494	2,820	5,500
Total Company	<u>\$ 21,777</u>	<u>\$ 15,167</u>	<u>\$ 17,140</u>

Following is a reconciliation of segment profit to earnings before income taxes for the years ended July 31, 2018, 2017 and 2016:

	Years Ended July 31,		
	2018	2017	2016
Total segment profit	\$ 175,123	\$ 156,126	\$ 143,068
Unallocated costs:			
Administrative costs	27,093	25,111	25,190
Gain on sale of business ⁽¹⁾	(4,666)	—	—
Investment and other (income) expense	(2,487)	(1,121)	709
Interest expense	3,168	5,504	7,824
Earnings before income taxes	<u>\$ 152,015</u>	<u>\$ 126,632</u>	<u>\$ 109,345</u>

(1) Gain on sale of business relates to the WPS segment during the year ended July 31, 2018.

	Revenues*			Long-Lived Assets**		
	Years Ended July 31,			As of July 31,		
	2018	2017	2016	2018	2017	2016
Geographic information:						
United States	\$ 663,935	\$ 651,294	\$ 663,511	\$ 366,638	\$ 367,418	\$ 376,045
Other	573,652	521,791	519,579	193,710	221,458	216,076
Eliminations	(63,736)	(59,769)	(62,465)	—	—	—
Consolidated total	<u>\$ 1,173,851</u>	<u>\$ 1,113,316</u>	<u>\$ 1,120,625</u>	<u>\$ 560,348</u>	<u>\$ 588,876</u>	<u>\$ 592,121</u>

* Revenues are attributed based on country of origin.

** Long-lived assets consist of property, plant, and equipment, other intangible assets and goodwill.

9. Net Earnings per Common Share

Basic net earnings per common share is computed by dividing net earnings (after deducting the applicable preferential Class A Common Stock dividends) by the weighted average Common Shares outstanding of 51,677 for fiscal 2018, 51,056 for fiscal 2017, and 50,541 for fiscal 2016. The Company utilizes the two-class method to calculate earnings per share.

Reconciliations of the numerator and denominator of the basic and diluted per share computations for the Company's Class A and Class B common stock are summarized as follows:

	Years ended July 31,		
	2018	2017	2016
Numerator (in thousands):			
Earnings (Numerator for basic and diluted earnings per Class A Nonvoting Common Share)	\$ 91,060	\$ 95,645	\$ 80,110
Less:			
Preferential dividends	(799)	(788)	(783)
Preferential dividends on dilutive stock options	(14)	(14)	(1)
Numerator for basic and diluted earnings per Class B Voting Common Share	<u>\$ 90,247</u>	<u>\$ 94,843</u>	<u>\$ 79,326</u>
Denominator (in thousands):			
Denominator for basic earnings per share for both Class A and Class B	51,677	51,056	50,541
Plus: Effect of dilutive equity awards	847	900	228
Denominator for diluted earnings per share for both Class A and Class B	<u>52,524</u>	<u>51,956</u>	<u>50,769</u>
Net earnings per Class A Nonvoting Common Share:			
Basic	\$ 1.76	\$ 1.87	\$ 1.59
Diluted	\$ 1.73	\$ 1.84	\$ 1.58
Net earnings per Class B Voting Common Share:			
Basic	\$ 1.75	\$ 1.86	\$ 1.57
Diluted	\$ 1.72	\$ 1.83	\$ 1.56

Options to purchase 751,200, 669,036, and 3,172,755 shares of Class A Nonvoting Common Stock for the fiscal years ended July 31, 2018, 2017, and 2016, respectively, were not included in the computation of diluted net earnings per share as the impact of the inclusion of the options would have been anti-dilutive.

10. Commitments and Contingencies

The Company has entered into various non-cancellable operating lease agreements. Rental expense charged to operating expenses on a straight-line basis was \$15,938, \$17,495, and \$17,253 for the years ended July 31, 2018, 2017, and 2016, respectively. Future minimum lease payments required under such leases in effect at July 31, 2018, were as follows:

Years ending July 31,	
2019	\$ 14,826
2020	10,270
2021	8,456
2022	7,419
2023	6,192
Thereafter	4,047
	<u>\$ 51,210</u>

In the normal course of business, the Company is named as a defendant in various lawsuits in which claims are asserted against the Company. In the opinion of management, the liabilities, if any, which may ultimately result from lawsuits are not expected to have a material effect on the consolidated financial statements of the Company.

11. Fair Value Measurements

The Company follows the guidance in ASC 820, "Fair Value Measurements and Disclosures" as it relates to its financial and non-financial assets and liabilities. The accounting guidance applies to other accounting pronouncements that require or permit fair value measurements, defines fair value based upon an exit price model, establishes a framework for measuring fair value, and expands the applicable disclosure requirements. The accounting guidance indicates, among other things, that a fair value measurement assumes that a transaction to sell an asset or transfer a liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability.

The accounting guidance on fair value measurements establishes a fair market value hierarchy for the pricing inputs used to measure fair market value. The Company's assets and liabilities measured at fair market value are classified in one of the following categories:

Level 1 — Assets or liabilities for which fair value is based on unadjusted quoted prices in active markets for identical instruments that are accessible as of the measurement date.

Level 2 — Assets or liabilities for which fair value is based on other significant pricing inputs that are either directly or indirectly observable.

Level 3 — Assets or liabilities for which fair value is based on significant unobservable pricing inputs to the extent little or no market data is available, which result in the use of management's own assumptions.

The following table sets forth by level within the fair value hierarchy, the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis at July 31, 2018 and July 31, 2017, according to the valuation techniques the Company used to determine their fair values.

	Inputs Considered As		Fair Values	Balance Sheet Classifications
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)		
July 31, 2017				
Trading securities	\$ 13,994	\$ —	\$ 13,994	Other assets
Foreign exchange contracts	—	1,354	1,354	Prepaid expenses and other current assets
Total Assets	\$ 13,994	\$ 1,354	\$ 15,348	
Foreign exchange contracts	\$ —	\$ 1,577	\$ 1,577	Other current liabilities
Total Liabilities	\$ —	\$ 1,577	\$ 1,577	
July 31, 2018				
Trading securities	\$ 14,383	\$ —	\$ 14,383	Other assets
Foreign exchange contracts	—	1,077	1,077	Prepaid expenses and other current assets
Total Assets	\$ 14,383	\$ 1,077	\$ 15,460	
Foreign exchange contracts	\$ —	\$ 3	\$ 3	Other current liabilities
Total Liabilities	\$ —	\$ 3	\$ 3	

The following methods and assumptions were used to estimate the fair value of each class of financial instrument:

Trading securities: The Company's deferred compensation investments consist of investments in mutual funds. These investments were classified as Level 1 as the shares of these investments trade with sufficient frequency and volume to enable the Company to obtain pricing information on an ongoing basis.

Foreign exchange contracts: The Company's foreign exchange contracts were classified as Level 2, as the fair value was based on the present value of the future cash flows using external models that use observable inputs, such as interest rates, yield curves and foreign exchange rates. See Note 12, "Derivatives and Hedging Activities" for additional information.

There have been no transfers of assets or liabilities between the fair value hierarchy levels, outlined above, during the fiscal years ended July 31, 2018 and July 31, 2017.

The Company's financial instruments, other than those presented in the disclosures above, include cash and cash equivalents, accounts receivable, notes payable, accounts payable, accrued liabilities and short-term and long-term debt. The fair values of cash and cash equivalents, accounts receivable, notes payable, accounts payable, and accrued liabilities approximated carrying values because of the short-term nature of these instruments. See Note 6 for information regarding the fair value of the Company's short-term and long-term debt.

12. Derivatives and Hedging Activities

The Company utilizes forward foreign exchange contracts to reduce the exchange rate risk of specific foreign currency denominated transactions. These contracts typically require the exchange of a foreign currency for U.S. dollars at a fixed rate at a future date, with maturities of less than 18 months, which qualify as cash flow hedges or net investment hedges under the accounting guidance for derivative instruments and hedging activities. The primary objective of the Company's foreign currency exchange risk management program is to minimize the impact of currency movements due to transactions in other than the respective subsidiaries' functional currency and to minimize the impact of currency movements on the Company's net investment denominated in a currency other than the U.S. dollar. To achieve this objective, the Company hedges a portion of known exposures using forward foreign exchange contracts. As of July 31, 2018 and 2017, the notional amount of outstanding forward foreign exchange contracts was \$32,667 and \$81,195, respectively.

The Company hedges a portion of known exposures using forward foreign exchange contracts. Main exposures are related to transactions denominated in the British Pound, the Euro, Canadian dollar, Australian dollar, Mexican Peso, Chinese Yuan, Malaysian Ringgit and Singapore dollar. Generally, these risk management transactions will involve the use of foreign currency derivatives to minimize the impact of currency movements on non-functional currency transactions.

Hedge effectiveness is determined by how closely the changes in fair value of the hedging instrument offset the changes in the fair value or cash flows of the hedged item. Hedge accounting is permitted only if the hedging relationship is expected to be highly effective at the inception of the hedge and on an on-going basis. Gains or losses on the derivative related to hedge ineffectiveness are recognized in current earnings.

Cash Flow Hedges

The Company has designated a portion of its forward foreign exchange contracts as cash flow hedges and recorded these contracts at fair value in the accompanying Consolidated Balance Sheets. For these instruments, the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income ("OCI") and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. At July 31, 2018 and July 31, 2017, unrealized gain of \$1,017 and loss of \$500 have been included in OCI, respectively. These balances are expected to be reclassified from OCI to earnings during the next twelve months when the hedged transactions impact earnings. For the years ended July 31, 2018, 2017, and 2016, the Company reclassified losses of \$551, \$486, and \$199 from OCI into cost of goods sold, respectively.

As of July 31, 2018 and 2017, the notional amount of outstanding forward foreign exchange contracts designated as cash flow hedges was \$27,150 and \$30,016, respectively.

Net Investment Hedges

The Company has also designated certain third party-foreign currency denominated debt instruments as net investment hedges. On May 13, 2010, the Company completed the private placement of €75.0 million aggregate principal amount of senior unsecured notes to accredited institutional investors. The €75.0 million of senior notes consisted of €30.0 million aggregate principal amount of 3.71% Series 2010-A Senior Notes, which were repaid during fiscal 2017, and €45.0 million aggregate principal amount of 4.24% Series 2010-A Senior Notes, due May 13, 2020. This Euro-denominated debt obligation was designated as a net investment hedge to selectively hedge portions of the Company's net investment in European foreign operations. As of July 31, 2018 and 2017, the cumulative balance recognized in accumulated other comprehensive income were gains of \$9,961 and \$9,348, respectively, on the Euro-denominated debt obligations. The changes recognized in other comprehensive income during the years ended July 31, 2018, 2017 and 2016, were gains of \$612, losses of \$1,792, and \$1,372, respectively, on the Euro-denominated debt obligations. The Company's foreign denominated debt obligations are valued under a market approach using publicized spot prices.

Non-Designated Hedges

During the fiscal years ended July 31, 2018, 2017, and 2016, the Company recognized gains of \$24, losses of \$2,508, and gains of \$2,162, respectively, in "Investment and other income (expense)" in the accompanying Consolidated Statements of Earnings related to non-designated hedges.

Fair values of derivative and hedging instruments in the accompanying Consolidated Balance Sheets were as follows:

	Asset Derivatives				Liability Derivatives			
	July 31, 2018		July 31, 2017		July 31, 2018		July 31, 2017	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives designated as hedging instruments:								
Cash flow hedges								
Foreign exchange contracts	Prepaid expenses and other current assets	\$ 1,076	Prepaid expenses and other current assets	\$ 1,067	Other current liabilities	\$ —	Other current liabilities	\$ 1,569
Net investment hedges								
Foreign currency denominated debt	Prepaid expenses and other current assets	\$ —	Prepaid expenses and other current assets	\$ —	Long term obligations, less current maturities	\$ 52,668	Long term obligations, less current maturities	\$ 53,280
Total derivatives designated as hedging instruments		\$ 1,076	\$ 1,067	\$ 52,668	\$ 54,849			
Derivatives not designated as hedging instruments:								
Foreign exchange contracts	Prepaid expenses and other current assets	\$ 1	Prepaid expenses and other current assets	\$ 287	Other current liabilities	\$ 3	Other current liabilities	\$ 7
Total derivatives not designated as hedging instruments		\$ 1	\$ 287	\$ 3	\$ 7			

13. Divestiture

On May 31, 2018, the Company sold Runelandhs Försäljnings AB (“Runelandhs”), a business based in Kalmar, Sweden. Runelandhs is a direct marketer of industrial and office equipment. Its products include lifting, transporting, and warehouse equipment; workbenches and material handling supplies; products for environmental protection; and entrance, reception, and office furnishings. The Runelandhs business was part of the Company’s WPS segment and its earnings were not material. The Company received proceeds of \$19,141, net of cash transferred with the business. The transaction resulted in a pre-tax and after-tax gain of \$4,666, which was included in SG&A expenses on the Consolidated Statements of Earnings for the year ended July 31, 2018. The divestiture of the Runelandhs business was part of the Company’s continued long-term growth strategy to focus the Company’s energies and resources on growth of the Company’s core businesses.

14. Unaudited Quarterly Financial Information

	Quarters				
	First	Second	Third	Fourth	Total
Fiscal 2017					
Net sales	\$ 280,176	\$ 268,001	\$ 275,927	\$ 289,212	\$ 1,113,316
Gross margin	140,358	134,158	139,909	143,867	558,292
Operating income	33,208	29,962	31,550	36,295	131,015
Net earnings	22,553	25,297	22,553	25,242	95,645
Net earnings per Class A Nonvoting Common Share:					
Basic *	\$ 0.45	\$ 0.50	\$ 0.44	\$ 0.49	\$ 1.87
Diluted	\$ 0.44	\$ 0.49	\$ 0.43	\$ 0.48	\$ 1.84
Fiscal 2018					
Net sales	\$ 290,151	\$ 287,780	\$ 298,421	\$ 297,499	\$ 1,173,851
Gross margin	146,065	143,692	151,082	147,452	588,291
Operating income	35,411	34,796	37,709	44,780	152,696
Net earnings	25,836	4,273	26,000	34,951	91,060
Net earnings per Class A Nonvoting Common Share:					
Basic *	\$ 0.50	\$ 0.08	\$ 0.50	\$ 0.67	\$ 1.76
Diluted *	\$ 0.49	\$ 0.08	\$ 0.49	\$ 0.66	\$ 1.73

* The sum of the quarters does not equal the year-to-date total for fiscal 2017 or 2018 due to the quarterly changes in weighted-average shares outstanding.

15. Subsequent Events

On September 12, 2018, the Company announced an increase in the annual dividend to shareholders of the Company's Class A Common Stock, from \$0.83 to \$0.85 per share. A quarterly dividend of \$0.2125 will be paid on October 31, 2018, to shareholders of record at the close of business on October 10, 2018. This dividend represents an increase of 2.4% and is the 33rd consecutive annual increase in dividends.

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures:

Brady Corporation maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed by the Company in the reports filed by the Company under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports the Company files under the Exchange Act is accumulated and communicated to the Company’s management, including the Company’s principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. The Company carried out an evaluation, under the supervision and with the participation of its management, including its President and Chief Executive Officer and its Chief Financial Officer and Treasurer, of the effectiveness of the design and operation of the Company’s disclosure controls and procedures pursuant to Rule 13a-15 of the Exchange Act. Based on that evaluation, the Company’s President and Chief Executive Officer and Chief Financial Officer and Treasurer concluded that the Company’s disclosure controls and procedures are effective as of the end of the period covered by this report.

Management’s Report on Internal Control Over Financial Reporting:

The management of Brady Corporation and its subsidiaries is responsible for establishing and maintaining adequate internal control over financial reporting for the Company, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. The Company’s internal control over financial reporting is 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.

With the participation of the President and Chief Executive Officer and Chief Financial Officer and Treasurer, management conducted an evaluation of the effectiveness of our internal control over financial reporting as of July 31, 2018, based on the framework and criteria established in *Internal Control — Integrated Framework (2013)*, issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on the assessment, management concluded that, as of July 31, 2018, the Company’s internal control over financial reporting is effective based on those criteria.

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

The Company’s internal control over financial reporting, as of July 31, 2018, has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

Changes in Internal Control Over Financial Reporting:

There were no changes in the Company’s internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) that occurred during the Company’s most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Brady Corporation
Milwaukee, Wisconsin

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Brady Corporation and subsidiaries (the “Company”) as of July 31, 2018, 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 July 31, 2018, 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 July 31, 2018, of the Company and our report dated September 13, 2018, expressed an unqualified opinion on those financial statements.

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 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

Milwaukee, Wisconsin

September 13, 2018

Item 9B. Other Information

None.

PART III**Item 10. Directors, Executive Officers and Corporate Governance**

Name	Age	Title
J. Michael Nauman	56	President, CEO and Director
Aaron J. Pearce	47	Chief Financial Officer and Treasurer
Louis T. Bolognini	62	Senior V.P., General Counsel and Secretary
Bentley N. Curran	56	V.P. - Digital Business and Chief Information Officer
Thomas J. Felmer	56	Senior V.P., President - Workplace Safety
Helena R. Nelligan	52	Senior V.P. - Human Resources
Russell R. Shaller	55	Senior V.P., President - Identification Solutions
Ann E. Thomson	36	Chief Accounting Officer and Corporate Controller
Patrick W. Allender	71	Director
Gary S. Balkema	63	Director
Elizabeth P. Bruno	51	Director
Nancy L. Gioia	58	Director
Conrad G. Goodkind	74	Director
Frank W. Harris	76	Director
Bradley C. Richardson	60	Director

J. Michael Nauman - Mr. Nauman has served on the Company's Board of Directors and as the Company's President and CEO since August 2014. Prior to joining the Company, Mr. Nauman spent 20 years at Molex Incorporated, where he led global businesses in the automotive, data communications, industrial, medical, military/aerospace and mobile sectors. In 2007, he became Molex's Senior Vice President leading its Global Integrated Products Division and was named Executive Vice President in 2009. Before joining Molex in 1994, Mr. Nauman was a tax accountant and auditor for Arthur Andersen and Company and Controller and then President of Ohio Associated Enterprises, Inc. Mr. Nauman's broad operational and financial experience and perspective as the Company's CEO, as well as his leadership and strategic perspective, provide the Board with insight and expertise to drive the Company's growth and performance. Mr. Nauman holds a bachelor's of science degree in management from Case Western Reserve University. He is a certified public accountant and chartered global management accountant. He is a board member of the Arkansas Science, Technology, Engineering and Math Coalition, and Museum of Discovery.

Aaron J. Pearce - Mr. Pearce joined the Company in 2004 as Director of Internal Audit and currently serves as Chief Financial Officer and Treasurer. Mr. Pearce was appointed Senior Vice President and Chief Financial Officer in September 2014, and Chief Accounting Officer in July 2015. From 2006 to 2008, he served as Finance Director for the Company's Asia Pacific region, and from 2008 to 2010, served as Global Tax Director. In January 2010, Mr. Pearce was appointed Vice President, Treasurer, and Director of Investor Relations, and in April 2013, was named Vice President - Finance, with responsibility for finance support to the Company's Workplace Safety and Identification Solutions businesses, financial planning and analysis, and investor relations. Prior to joining the Company, Mr. Pearce was an auditor with Deloitte & Touche LLP. He holds a bachelor's degree in business administration from the University of Wisconsin-Milwaukee and is a certified public accountant.

Louis T. Bolognini - Mr. Bolognini joined the Company as Senior Vice President, General Counsel and Secretary in January 2013. Prior to joining the Company, he served as Senior Vice President, General Counsel and Secretary of Imperial Sugar Company from June 2008 through September 2012 and was Vice President and General Counsel of BioLab, Inc., a pool and spa manufacturing and marketing company from 1999 to 2008. Mr. Bolognini served as an officer of BioLab, Inc. within a two-year period prior to the March 18, 2009 Chapter 11 bankruptcy petition filed by BioLab's parent company, Chemtura Corporation, on behalf of itself and 26 U.S. affiliates, including BioLab. He holds a bachelor's degree in political science from Miami University and a Juris Doctor degree from the University of Toledo.

Bentley N. Curran - Mr. Curran joined the Company in 1999 and has served as Vice President of Digital Business and Chief Information Officer since 2012. He has also served as Chief Information Officer and Vice President of Information Technology. Prior to joining Brady, Mr. Curran served in a variety of technology leadership roles for Compucom and the Speed Queen Company. He holds a bachelor's degree in business administration from Marian University and an associate of science degree in electronics and engineering systems.

Thomas J. Felmer - Mr. Felmer joined the Company in 1989 and has served as Senior Vice President and President - Workplace Safety since 2014. He held several sales and marketing positions until being named Vice President and General Manager of Brady's U.S. Signmark Division in 1994. In 1999, Mr. Felmer assumed responsibility for the European Signmark business and then led the European direct marketing business. In 2003, Mr. Felmer assumed responsibility for Brady's global sales and marketing processes, Brady Software businesses, and integration leader of the Emedco acquisition. In June 2004, he was appointed President - Direct Marketing Americas, and was named Chief Financial Officer in January 2008. In October 2013, Mr. Felmer was appointed Interim President and CEO, and served in these positions until August 2014. Mr. Felmer received a bachelor's degree in business administration from the University of Wisconsin - Green Bay.

Helena R. Nelligan - Ms. Nelligan joined the Company as Senior Vice President - Human Resources in November 2013. Prior to joining the Company, she was employed by Eaton Corporation beginning in 2005. At Eaton, she served as Vice President of Human Resources - Electrical Products Group, Vice President - Human Resources, Electrical Sector and Director Human Resources - Electrical Components Division. From 1997 to 2005, Ms. Nelligan served in human resources leadership roles with Merisant Worldwide, Inc. and British Petroleum. She holds a bachelor's degree in criminal justice and a master's degree in human resources and labor relations from Michigan State University.

Russell R. Shaller - Mr. Shaller joined the Company in June 2015 as Senior Vice President and President - Identification Solutions. From 2008 to 2015, he served as President, Teledyne Microwave Solutions. Before joining Teledyne, Mr. Shaller held a number of positions of increasing responsibility at W.L. Gore & Associates, including Division Leader, Electronic Products Division from 2003 to 2008 and General Manager of Gore Photonics from 2001 to 2003. Prior to joining W.L. Gore in 1993, Mr. Shaller worked in engineering and program management positions at Westinghouse Corporation. He holds a bachelor's degree in electrical engineering from the University of Michigan, a master's degree in electrical engineering from Johns Hopkins University and a master's degree in business administration from the University of Delaware.

Ann E. Thornton - Ms. Thornton joined the Company in 2009 and has served as Chief Accounting Officer since 2016 and as Corporate Controller and Director of Investor Relations since 2015. She held the positions of Corporate Accounting Supervisor, Corporate Accounting Manager, External Reporting Manager, Corporate Finance Manager and Director of Global Accounting from 2009 to 2014. Prior to joining the Company, Ms. Thornton was an auditor with PricewaterhouseCoopers from 2005 to 2009. She has a bachelor's degree in business administration and a master of accountancy degree from the University of Wisconsin-Madison and is a certified public accountant.

Patrick W. Allender - Mr. Allender was elected to the Board of Directors in 2007. He serves as the Chair of the Finance Committee and as a member of the Audit and Corporate Governance Committees. He served as Executive Vice President and CFO of Danaher Corporation from 1998 to 2005 and Executive Vice President from 2005 to 2007. He has served as a director of Colfax Corporation since 2008 and Diebold Nixdorf, Inc. since 2011. Mr. Allender's strong background in finance and accounting, as well as his past experience as the CFO of a public company, provides the Board with financial expertise and insight.

Gary S. Balkema - Mr. Balkema was elected to the Board of Directors in 2010. He serves as the Chair of the Management Development and Compensation Committee and is a member of the Audit Committee. From 2000 to 2011, he served as the President of Bayer Healthcare LLC and Worldwide Consumer Care Division. He was also responsible for overseeing Bayer LLC USA's compliance program. He has over 20 years of general management experience. Mr. Balkema has served as a director of PLx Pharma, Inc. since 2016. Mr. Balkema brings strong experience in consumer marketing skills and mergers, acquisitions and integrations. His broad operating and functional experience are valuable to the Company given the diverse nature of the Company's portfolio.

Elizabeth P. Bruno, Ph.D. - Dr. Bruno was elected to the Board of Directors in 2003. She serves as a member of the Corporate Governance and Technology Committees. Dr. Bruno is the President of the Brady Education Foundation in Chapel Hill, North

Carolina and a Research Associate Professor in the Developmental Psychology Program at the University of North Carolina at Chapel Hill. She is the granddaughter of William H. Brady, Jr., the founder of Brady Corporation. As a result of her substantial ownership stake in the Company, as well as her family's history with the Company, she is well positioned to understand, articulate and advocate for the rights and interests of the Company's shareholders.

Nancy L. Gioia - Ms. Gioia was elected to the Board of Directors in 2013. She serves as the Chair of the Technology Committee and is a member of the Management Development and Compensation Committee. She was the Director, Global Electrical Connectivity and User Experience for Ford Motor Company until her retirement in 2014, where she also held a variety of engineering and technology roles including, Director, Global Electrification; Director, Sustainable Mobility Technologies and Hybrid Vehicle Programs; Director, North America Current Vehicle Model Quality; Engineering Director, Visteon/Ford Due Diligence; Engineering Director, Small Front Wheel Drive/Rear Wheel Drive Car Platforms-North America; and Vehicle Programs Director, Lifestyle Vehicles. She has served as a director of Meggit PLC since 2017 and previously served as director of Exelon Corporation. Ms. Gioia's extensive experience in strategy, technology and engineering solutions, as well as her general business experience, provides the Board with important expertise in product development and operations.

Conrad G. Goodkind - Mr. Goodkind was elected to the Board of Directors in 2007. He serves as the Chair of the Board of Directors, Chair of the Corporate Governance Committee and as a member of the Finance and Audit Committees. He previously served as Secretary of the Company from 1999 to 2007. Mr. Goodkind was a partner in the law firm of Quarles & Brady, LLP, where his practice concentrated in corporate and securities law from 1979 to 2009. Mr. Goodkind previously served as a director of Cade Industries, Inc. and Able Distributing, Inc. His extensive experience in advising companies on a broad range of transactional matters, including mergers and acquisitions and securities offerings, and historical knowledge of the Company provide the Board with expertise and insight into governance, business and compliance issues that the Company encounters.

Frank W. Harris, Ph.D. - Dr. Harris was elected to the Board of Directors in 1991. He serves as a member of the Technology and Management Development and Compensation Committees. He is the founder of several technology-based companies including Akron Polymer Systems, where he serves as Chair of the Board of Directors. Dr. Harris is the inventor of several commercialized products. He is an Emeritus Distinguished Professor of Polymer Science and Biomedical Engineering at The University of Akron, where he previously served as Director of the Maurice Morton Institute of Polymer Science. Dr. Harris' extensive experience in technology and engineering solutions provides the Board with important expertise in new product development.

Bradley C. Richardson - Mr. Richardson was elected to the Board of Directors in 2007. He serves as the Chair of the Audit Committee and is a member of the Finance and Management Development and Compensation Committees. He is the Executive Vice President and CFO of PolyOne Corporation. He previously served as the Executive Vice President and CFO of Diebold, Inc. and as Executive Vice President Corporate Strategy and CFO of Modine Manufacturing. Prior to Modine, he spent 21 years with BP Amoco serving in various financial and operational roles. Mr. Richardson has served on the boards of Modine Manufacturing and Tronox, Inc. He brings to the Company extensive knowledge and global experience in the areas of operations, strategy, accounting, tax accounting and finance, which are areas of critical importance to the Company as a global company.

All Directors serve until their respective successors are elected at the next annual meeting of shareholders. Officers serve at the discretion of the Board of Directors. None of the Company's Directors or executive officers has any family relationship with any other Director or executive officer.

Board Leadership Structure - The Board does not have a formal policy regarding the separation of the roles of Chief Executive Officer and Chair of the Board, as the Board believes it is in the best interest of the Company to make that determination based on the position and direction of the Company and the membership of the Board. In September 2015, upon the recommendation of the Corporate Governance Committee, the Board appointed a non-executive Chair in order to harmonize the Board's leadership structure to prevailing governance practices. Prior to the appointment of the non-executive Chair, in the period beginning in fiscal 2010, the Board had formalized the position of Lead Independent Director. The duties of the non-executive Chair include, among others: chairing meetings of the Board and executive sessions of the non-management Directors; meeting periodically with the Chief Executive Officer and consulting as necessary with management on current significant issues facing the Company; facilitating effective communication among the Chief Executive Officer and all members of the Board; and overseeing the Board's shareholder communication policies and procedures. Mr. Goodkind has served as Chair of the Board since September 2015.

The Board believes that its current leadership structure has enhanced the Board's oversight of, and independence from, Company management; the ability of the Board to carry out its roles and responsibilities on behalf of the Company's shareholders; and the Company's overall corporate governance.

Risk Oversight - The Board oversees the Company's risk management processes directly and through its committees. In general, the Board oversees the management of risks inherent in the operation of the Company's businesses, the implementation of its strategic plan, its acquisition and capital allocation program and its organizational structure. Each of the Board's committees also oversees the management of Company risks that fall within the committee's areas of responsibility. The Company's management

is responsible for reporting significant risks to executive management as a part of the disclosure process. The significance of the risk is assessed by executive management and escalation to the respective board committee and Board of Directors is determined. The Company reviews its risk assessment with the Audit Committee annually.

Audit Committee Financial Expert - The Company's Board of Directors has determined that at least one Audit Committee financial expert is serving on its Audit Committee. Messrs. Richardson, Chair of the Audit Committee, and Allender and Balkema, members of the Audit Committee, are financial experts and are independent under the rules of the SEC and the New York Stock Exchange ("NYSE").

Director Independence - A majority of the Directors must meet the criteria for independence established by the Board in accordance with the rules of the NYSE. In determining the independence of a Director, the Board must find that a Director has no relationship that may interfere with the exercise of his or her independence from management and the Company. In undertaking this determination with respect to the Company's Directors other than Mr. Nauman, the Board considered the commercial relationships of the Company, if any, with those entities that have employed the Company's Directors. The commercial relationships, which involved the purchase and sale of products on customary terms, did not exceed the maximum amounts proscribed by the director independence rules of the NYSE. Furthermore, the compensation paid to the Company's Directors by their employers was not linked in any way to the commercial relationships their employers had with the Company in fiscal 2018. After consideration of these factors, the Board concluded that the commercial relationships were not material and did not prevent the Company's Directors from being considered independent. Based on application of the NYSE independence criteria, all Directors, with the exception of Mr. Nauman, President and CEO, are deemed independent. Additionally, Harold L. Sirkin, who resigned as director on November 6, 2017, was previously determined to be an independent director. All members of the Audit, Management Development and Compensation, and Corporate Governance Committees are deemed independent.

Meetings of Non-management Directors - The non-management Directors of the Board regularly meet alone without any members of management present. As Chair of the Board, Mr. Goodkind is the presiding Director at these sessions. In fiscal 2018, there were five executive sessions. Interested parties can raise concerns to be addressed at these meetings by calling the confidential Brady hotline at 1-800-368-3613.

Audit Committee Members - The Audit Committee, which is a separately-designated standing committee of the Board of Directors, is composed of Messrs. Richardson (Chair), Allender, Balkema, and Goodkind. Each member of the Audit Committee has been determined by the Board to be independent under the rules of the SEC and NYSE.

Code of Ethics - For a number of years, the Company has had a code of ethics for its employees. This code of ethics applies to all of the Company's employees, officers and Directors. The code of ethics can be viewed at the Company's corporate website, www.bradycorp.com, or may be obtained in print by any person, without charge, by contacting Brady Corporation, Investor Relations, P.O. Box 571, Milwaukee, WI 53201. The Company intends to satisfy the disclosure requirements under Item 5.05 of Form 8-K regarding an amendment to, or a waiver from, a provision of its code of ethics by placing such information on its Internet website.

Corporate Governance Guidelines - Brady's Corporate Governance Principles, as well as the charters of the Audit, Corporate Governance and Management Development and Compensation Committees, are available on the Company's Corporate website, www.bradycorp.com. Shareholders may request printed copies of these documents from Brady Corporation, Investor Relations, P.O. Box 571, Milwaukee, WI 53201.

Director Qualifications - Brady's Corporate Governance Committee reviews the individual skills and characteristics of the Directors, as well as the composition of the Board as a whole. This assessment includes a consideration of independence, diversity, age, skills, expertise, and industry backgrounds in the context of the needs of the Board and the Company. Although the Company has no policy regarding diversity, the Corporate Governance Committee seeks a broad range of perspectives and considers both the personal characteristics and experience of Directors and prospective nominees to the Board so that, as a group, the Board will possess the appropriate talent, skills and expertise to oversee the Company's businesses. The Board does not discriminate on the basis of race, national origin, gender, religion, disability, or sexual orientation in selecting director candidates.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires the Company's Directors and executive officers, and persons who own more than ten percent of a registered class of the Company's equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of Common Stock and other equity securities of the Company. Executive officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms they file. To the Company's knowledge, based solely on a review of the copies of such reports furnished to the Company and written representations that no other reports were required, during the fiscal year ended July 31, 2018, all Section 16(a) filing requirements were complied with applicable to its officers, directors and greater than 10 percent beneficial owners.

Item 11. Executive Compensation

Compensation Discussion and Analysis

Overview

Our Compensation Discussion and Analysis focuses on the Company's total compensation philosophy, the role of the Management Development and Compensation Committee (for purposes of the Compensation Discussion and Analysis section, the "Committee"), total compensation components inclusive of base salary, short-term incentives, long-term incentives, benefits, perquisites, severance amounts and change-in-control agreements for our executive officers, market and peer group data and the approach used by the Committee when determining each element of the total compensation package.

For fiscal 2018, the following executive officers' compensation is disclosed and discussed in this section (the "named executive officers" or "NEOs"):

- J. Michael Nauman, President, Chief Executive Officer and Director;
- Aaron J. Pearce, Chief Financial Officer and Treasurer;
- Louis T. Bolognini, Senior Vice President, General Counsel and Secretary;
- Thomas J. Felmer, Senior Vice President and President - Workplace Safety; and
- Russell R. Shaller, Senior Vice President and President - Identification Solutions.

Executive Summary

Fiscal 2018 Business Highlights

Refer to Item 1(a) "General Development of Business" for a business overview and key initiatives during fiscal 2018. Highlights for fiscal 2018 include:

- Our fiscal 2018 earnings before income taxes were \$152.0 million, an increase of \$25.4 million over fiscal 2017. Excluding the gain on the sale of Runelandhs, our fiscal 2018 earnings before income taxes were \$147.3 million, an increase of \$20.7 million over fiscal 2017;
- Brady continues to demonstrate cash generation capabilities that meet ongoing business needs as we generated \$143.0 million of cash flow from operating activities during the year ended July 31, 2018;
- Our sales for the full year ended July 31, 2018 were \$1,173.9 million, up \$60.5 million from fiscal 2017. Organic sales increased 2.6% and foreign currency translation increased sales by 3.0% while the divestiture of the Runelandhs business decreased sales by 0.2%; and
- Brady continues to focus on enhancing our innovation development process and the speed to deliver high-value, innovative products that align with our target markets in support of future growth as we invested \$45.3 million in R&D expenses during the year ended July 31, 2018, an increase of \$5.6 million over fiscal 2017.

Fiscal 2018 Compensation Matters

For fiscal 2018, the Board of Directors approved a 5.4% increase in base salary for Mr. Nauman. In addition, Mr. Nauman recommended and the Committee approved increases in base salary for Messrs. Pearce, Shaller, Felmer and Bolognini. All increases were made to recognize the performance, current scope of responsibilities and peer company data for each executive and, with regard to Messrs. Nauman and Pearce, to better align their base salary with individuals holding comparable positions at peer companies.

We had significant improvements in the profitability of the Company, exceeding our total Company fiscal 2018 pre-established goals. In addition, we completed the majority of the fiscal year objectives deemed critical to the execution of the Company's strategy. Therefore, all of our NEOs earned cash incentive awards for fiscal 2018. Overall, our NEOs received annual equity incentive awards greater than the median award sizes of those individuals holding comparable positions at our peer companies. In general, the grant date fair value of equity awards granted to our NEOs was consistent with the equity awards in fiscal 2017. Because performance exceeded target in fiscal 2017, actual total compensation for our named executive officers in fiscal 2018 was above the targeted median of our peer group companies.

As a group, 76% of the compensation that we paid to our NEOs was in the form of incentive awards, and 56% of the total incentive awards were paid in the form of equity. Fiscal 2018 equity grants were made in the form of time-based stock options, time-based restricted stock units ("RSUs") and performance-based RSUs. One-third of the award granted was in the form of stock options, which are inherently performance-based and have value only to the extent that the price of our stock increases. Another one-third of the award granted was in the form of performance-based RSUs, which reinforce the Company's "pay for performance" philosophy where the level of rewards are aligned to Company performance. The performance-based RSU awards have a three-year performance period with the number of shares issued at vesting determined by the Company's achievement of organic revenue and operating income growth goals over the three-year performance period. Payout opportunities will range from 0% to 200% of

the target award. The remaining one-third of the equity award granted was in the form of RSUs that vest equally over three years and are intended to facilitate retention and align with the creation of long-term shareholder value.

Executive Compensation Practices

As part of the Company's pay for performance philosophy, the Company's compensation program includes several features that maintain alignment with shareholders:

Emphasis on Variable Compensation	A significant portion of the named executive officers' possible compensation is tied to Company performance, which is intended to drive shareholder value.
Ownership Requirements	Mr. Nauman is required to own shares in the Company at a value equal to five times his base salary. Messrs. Pearce, Felmer and Shaller are required to own shares in the Company at a value equal to three times their base salaries. Mr. Bolognini is required to own shares in the Company at a value equal to two times his base salary. Our NEOs are expected to obtain the required ownership levels within five years and may not sell shares, other than to cover tax withholding requirements associated with the vesting or exercise of the equity award, until such time as they meet the requirements.
Clawback Provisions	Following a review and analysis of relevant governance and incentive compensation practices and policies across our compensation peer group and other public companies, the Committee instituted a recoupment policy, effective August 2013, under which incentive compensation payments and/or awards may be recouped by the Company if such payments and/or awards were based on erroneous results. If the Committee determines that an executive officer or other key executive of the Company who participates in any of the Company's incentive plans has engaged in intentional misconduct that results in a material inaccuracy in the Company's financial statements or fraudulent or other willful and deliberate conduct that is detrimental to the Company or there is a material, negative revision of a performance measure for which incentive compensation was paid or awarded, the Committee may take a variety of actions including, among others, seeking repayment of incentive compensation (cash and/or equity) that is greater than what would have been awarded if the payments/awards had been based on accurate results and the forfeiture of incentive compensation. As this policy suggests, the Committee believes that any incentive compensation should be based only on accurate and reliable financial and operational information, and, thus, any inappropriately paid incentive compensation should be returned to the Company for the benefit of shareholders. The Committee believes that this policy enhances the Company's compensation risk mitigation efforts. While the policy affords the Committee discretion regarding the application and enforcement of the policy, the Company and the Committee will conform the policy to any requirements that may be promulgated by the national stock exchanges in the future, as mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act.
Performance Thresholds and Caps	<p>Our cash incentive awards are determined based on financial results for organic revenue, earnings before income taxes, division organic revenue, division operating income, and achievement of fiscal year objectives, which aggregate to a maximum payout of 185% of target. Executive officers then receive a performance rating that results in a multiplier ranging from 0% to 150%, resulting in a maximum cash incentive award payout of 278% of target opportunities.</p> <p>We grant equity compensation to executive officers that promotes long-term financial and operating performance by delivering incremental value to the extent our stock price increases over time. In fiscal 2017, we incorporated an annual grant of performance-based RSUs to executive officers with the number of shares issued at vesting determined by the achievement of certain financial performance goals achieved over a three-year period.</p>
Securities Trading Policy	Our Insider Trading Policy prohibits executive officers from trading during certain periods at the end of each quarter until after we disclose our financial and operating results. We may impose additional restricted trading periods at any time if we believe trading by executives would not be appropriate because of developments that are, or could be, material and which have not been publicly disclosed. The Insider Trading Policy also prohibits the pledging of Company stock as collateral for loans, holding Company securities in a margin account by officers, directors or employees, and the hedging of Company securities.
Annual Risk Reviews	The Company conducts an annual compensation-related risk review and presents findings and suggested risk mitigation actions to both the Audit and Management Development and Compensation Committees.

The Company's compensation programs also maintain alignment with shareholders by not including certain features:

No Excessive Change of Control Payments	Mr. Nauman's maximum cash benefit is equal to two times salary and two times target bonus plus a prorated target bonus in the year in which the termination occurs. For all other NEOs, the maximum cash benefit is equal to two times salary and two times the average bonus payment received in the three years immediately prior to the date the change of control occurs. In the event of a change of control, unexercised stock options become fully exercisable or, if canceled, each named executive officer shall be given cash or stock equal to the in-the-money value of the canceled stock options. In the event of a change of control, performance-based (at target) and time-based RSUs become unrestricted and fully vested.
No Employment Agreements	The Company does not maintain any employment agreements with its executives. Both Mr. Nauman's offer letter and Mr. Shaller's offer letter provide that each is deemed an at-will employee, but will receive a severance benefit in the event his employment is terminated by the Company without cause or for good reason as described in the respective offer letter.
No Reloads, Repricing, or Options Issued at a Discount	Stock options issued are not repriced, replaced, or regranted through cancellation or by lowering the option price of a previously granted option.

Compensation Philosophy and Objectives

We seek to align the interests of our executives with those of our shareholders by evaluating performance on the basis of key financial measurements that we believe closely correlate to long-term shareholder value. To this end, we have structured our compensation program to accomplish the following:

- Allow the Company to compete for, retain and motivate talented executives;
- Deliver compensation plans that are both internally equitable when comparing similar roles and levels within the Company and externally competitive when comparing to the external marketplace and the Company's designated peer group;
- Maintain an appropriate balance between base salary and short- and long-term incentive opportunities;
- Provide integrated compensation programs aligned to the Company's annual and long-term financial goals and realized performance;
- Recognize and reward individual initiative and achievement with the amount of compensation each executive receives reflective of the executive's level of proficiency within his or her role and their level of sustained performance; and
- Institute a "pay for performance" philosophy where level of rewards are aligned to Company performance.

Determining Compensation

Management Development & Compensation Committee's Role

The Committee is responsible for monitoring and approving the compensation of the Company's named executive officers. The Committee approves compensation and benefit policies and strategies, approves corporate goals and objectives relative to the chief executive officer and other executive officer compensation, oversees the development process and reviews development plans of key executives, reviews compensation-related risk, administers our equity incentive plans, and consults with management regarding employee compensation generally. With respect to executive officers, at the beginning of each year, the Committee sets base salaries, approves the cash bonuses paid for the prior fiscal year, approves equity incentive awards and establishes performance targets to be achieved for the new fiscal year. When a new executive officer is hired, the Committee is involved in reviewing and approving base salary, annual incentive opportunity, sign-on incentives, annual equity awards, and other aspects of the executive's compensation.

Consultants' Role

The Committee has historically utilized the services of an executive compensation consulting firm and legal counsel to assist with the review and evaluation of compensation levels and policies on a periodic basis, as well as to provide advice with respect to new or modified compensation arrangements. In fiscal 2018, the Committee utilized the services of Meridian Compensation Partners as compensation consultants and Quarles & Brady LLP, as legal counsel, both of which were determined to be independent by the Corporate Governance Committee.

Management's Role

To aid in determining compensation for fiscal 2018, management obtained market data regarding comparable executive officer compensation through a standard data subscription with Equilar, Inc. and from other third parties. For fiscal 2018, Mr. Nauman used this data to make recommendations to the Committee concerning compensation for each named executive officer other than himself. In setting compensation for our named executive officers, the Committee takes into consideration these recommendations, along with the results of the Company during the previous fiscal year, the level of responsibility, demonstrated leadership capability, the compensation levels of executives in comparable roles from within our peer group and the results of annual performance reviews which, for our chief executive officer, included a self-assessment and feedback from his direct reports and each member of the Board of Directors. In addition, during fiscal 2018, the Committee took into consideration the recommendations of its independent compensation consultant, particularly with respect to compensation elements for the chief executive officer. Mr. Nauman did not attend the portion of any committee meeting during which the Committee discussed matters related specifically to his compensation.

Tally Sheets

The Committee reviews executive officer compensation tally sheets each year. These summaries set forth the dollar amount of all components of each named executive officer's annual compensation, which includes the following: base salary, target and actual cash incentive compensation, equity incentive compensation, the value of outstanding equity, the value of Brady's contribution to retirement plans, the value of Company-provided health and welfare benefits and social security taxes paid on the executive's behalf. Reviewing this information allows the Committee to determine an executive officer's total compensation, and how a potential change to an element of our compensation program would affect the officer's overall compensation.

Components of Compensation

Our total compensation program includes five components: base salary, annual cash incentives, long-term equity incentives, employee benefits and perquisites. Each component serves a particular purpose and, therefore, each is considered independent of the other components, although all five components combine into our total compensation approach. We use these components of compensation to attract, retain, motivate, develop and reward our executives.

The total of base salary, annual cash and long-term equity incentive components, in general, is targeted at market median for the achievement of performance goals, with an opportunity for upper quartile pay when upper quartile performance is achieved. Our compensation structure is balanced by the payment of below market median compensation to our NEOs when actual fiscal results do not meet or exceed expected financial results. The following table describes the purpose of each performance-based component and how that component is related to our pay-for-performance approach:

Compensation Component	Purpose of Compensation Component	Compensation Component in Relation to Performance
Base salary	A fixed level of income security used to attract and retain employees by compensating them for the primary functions and responsibilities of the position.	The base salary increase an employee receives depends upon the employee's individual performance, the employee's displayed skills and competencies and market competitiveness.
Annual cash incentive award	To attract, retain, motivate and reward employees for achieving or exceeding annual performance goals at total Company and division levels.	Financial performance as well as the achievement of fiscal year objectives and the individual performance of each executive determines the actual amount of the executive's annual cash incentive award.
Annual equity incentive award: Time-based stock options, time-based RSUs and performance-based RSUs	To attract, retain, motivate and reward top talent for the successful creation of long-term shareholder value.	<p>An assessment of executive leadership, experience and expected future contribution, combined with market competitive grant information, are used to determine the amount of equity granted to each executive.</p> <p>Stock options are inherently performance-based in that the value is dependent upon the increase in the stock price.</p> <p>Time-based RSUs are intended to facilitate retention and to align executives with the creation of long-term shareholder value.</p> <p>Performance-based RSUs are intended to align executives with long-term financial goals and the creation of long-term shareholder value.</p>

Establishing Our Total Compensation Component Levels

The Committee uses peer group data to test the reasonableness and competitiveness of several components of compensation, including base salaries, annual cash incentives, and long-term equity incentives of positions similar to those of our NEOs. The following 19 companies were included in the fiscal 2018 total compensation analysis conducted using publicly available data sourced through Equilar, Inc:

Actuant Corporation	Graco Inc.	Myers Industries Inc.
Apogee Enterprises, Inc.	HB Fuller Company	Nordson Corporation
Barnes Group Inc.	Hexcel Corporation	Powell Industries, Inc.
EnPro Industries, Inc.	IDEX Corporation	Watts Water Technologies, Inc.
Entegris, Inc.	II-VI Incorporated	Zebra Technologies Corporation
ESCO Technologies Inc.	Modine Manufacturing Company	
Federal Signal Corp.	Mine Safety Appliances Company	

Based on our analysis of the fiscal 2018 peer group used for determining fiscal 2018 target compensation, performed in May 2017, the base salaries of our named executive officers was slightly below our peers. Total compensation of our NEOs, inclusive of base salary, cash incentives and equity awards, was above the median of our peer companies.

Fiscal 2018 Named Executive Officer Compensation

Base Salaries

The table below reflects the base salary for each NEO in effect at the end of each fiscal year.

Named Executive Officer	Fiscal 2018	Fiscal 2017	Percentage Increase
J. Michael Nauman	\$ 775,000	\$ 735,000	5.4%
Aaron J. Pearce	374,000	340,000	10.0%
Louis T. Bolognini	341,734	338,350	1.0%
Thomas J. Felmer	390,807	386,937	1.0%
Russell R. Shaller	360,887	347,006	4.0%

Annual Cash Incentive Awards

The Company is managed on a global basis with three business divisions, ID Solutions, Workplace Safety and People ID, which aggregate into two reportable segments: ID Solutions and Workplace Safety. All named executive officers participate in an annual cash incentive plan, which is based on fiscal year financial results of the Company or a division. Set forth below is a description of the fiscal 2018 financial measures for the annual cash incentive plan.

Performance Metric	Definition	Weighting	NEO
Total Company organic revenue	Total Company organic revenue is measured as total company sales, at budgeted exchange rates, excluding all acquired and divested sales. Total Company organic revenue is reported quarterly and annually in the Company's forms 10-Q and 10-K filed with the SEC.	30%	Messrs. Nauman, Pearce and Bolognini
Earnings before income taxes	Earnings before income taxes is defined as total Company revenues at budgeted exchange rates minus total Company expenses for the cost of doing business before deducting income tax expense. Earnings before income taxes excludes certain non-routine expenses such as income or loss from acquisitions or divestitures completed in fiscal 2018.	50%	Messrs. Nauman, Pearce and Bolognini
Division organic revenue	Division organic revenue is measured as division customer sales, at budgeted exchange rates, excluding all acquired and divested sales.	30%	Messrs. Felmer and Shaller
Division operating income	Division operating income is measured as division sales less cost of goods sold, selling expenses, research and development expenses, and administrative expenses, at budgeted exchange rates. Division operating income excludes certain non-routine expenses such as income or loss from acquisitions or divestitures completed in fiscal 2018.	50%	Messrs. Felmer and Shaller
Fiscal year objectives	In fiscal 2018, the Company had seven fiscal year objectives that were established at the beginning of the fiscal year and viewed as critical to the execution of the Company's strategy. The amount funded depends on the number of fiscal year objectives achieved in fiscal 2018.	20%	All NEOs

The funding of the fiscal 2018 annual cash incentive plan was determined by the achievement of certain revenue and profit metrics compared to stated thresholds, as well as the achievement of seven fiscal year objectives that were established at the beginning of the fiscal year. Once the funding was determined, the individual contribution of our named executive officers was assessed in order to conclude upon the amount of the annual cash incentive earned by each executive in the fiscal year. The annual cash incentive plan was structured to include a minimum profit threshold that must be exceeded in order for any cash incentive amount to be funded, regardless of the achievement of revenue or fiscal year objectives.

Individual contribution is determined by assessing the level of achievement of each NEO's individual annual goals combined with their ability to deliver on the competencies needed to achieve those goals. The competencies include items such as building strong customer relationships, creating innovative new product solutions, optimizing work processes through continuous improvement initiatives, and developing our people. Individual annual goals and competencies are included in each NEO's assessment to ensure they are focused on initiatives within their area of responsibility that will improve the Company's overall performance.

While our objective is to set goals that are quantitative and measurable, certain elements of the performance assessment may be subjective. Assessments and a rating recommendation for all NEOs, except the CEO, is delivered to the Committee by the CEO in July. The CEO provides the Committee with a self-assessment of his own performance without a rating recommendation and the Committee determines the rating of the CEO.

Our rating system consists of five performance levels, each with a predetermined maximum multiplier that is applied to the available bonus that is earned and payable to the NEO based upon their contribution to the fiscal year objectives and their individual annual goals: Needs Improvement - 0%; Meets Most Objectives - 50%; Fully Meets Objectives - 100%; Exceeds Objectives - 125%; and Outstanding - 150%.

The target annual cash incentive award that would be payable to each named executive officer is calculated as a percentage of the officer's eligible compensation defined as base salary paid during the fiscal year.

Messrs. Nauman, Pearce and Bolognini

The cash incentive payable to Messrs. Nauman, Pearce and Bolognini for fiscal 2018 was based on total Company organic revenue, earnings before income taxes and achievement of the fiscal year objectives. We use organic revenue because we believe that the long-term value of our enterprise depends on our ability to grow revenue without regard for acquisitions. We use earnings before income taxes to focus on effectively managing our costs while growing our revenue and we use fiscal year objectives because the achievement of these objectives is critical to the execution of the Company's strategy.

For fiscal 2018, a bonus was funded for these named executive officers for the achievement of our total Company organic revenue, earnings before income taxes and fiscal year objective goals. The multiplier for individual performance is applied to the achievement of organic revenue, earnings before income taxes and fiscal year objective goals to arrive at the final weighted average payout. The threshold, target, maximum and actual payout amounts for Messrs. Nauman, Pearce and Bolognini were as follows:

Performance Measure (weighting)	Threshold	Target	Maximum	Fiscal 2018 Actual Results		
				Achievement (\$)	Achievement (%)	
Organic Revenue (30%)(millions)	\$1,108.9	\$1,128.0	\$1,142.2 or more	\$1,139.1	188%	
Earnings before income taxes (50%) (millions)	\$126.7	\$136.3	\$139.4 or more	\$142.5	200%	
Fiscal Year Objectives (20%)	0%	100%	125%		120%	
Individual Performance Multiplier	0%	100%	150%			Varies
Fiscal 2018 Bonus Award:	Threshold	Target	Maximum (% of Base Salary)	Actual Payout (% of Target)	Actual Payout (% of Base Salary)	Actual Payout (\$)
J.M. Nauman	0%	100%	278%	226%	226%	\$1,712,933
A.J. Pearce	0%	60%	167%	226%	135%	\$488,329
L.T. Bolognini	0%	60%	167%	180%	108%	\$368,484

Mr. Nauman's individual performance multiplier was the result of his contribution to several fiscal year objectives and individual annual goals as follows:

- Strategy - Objective focused on further aligning the Company's personnel around the Company's corporate and divisional strategies to drive implementation and ensure accountability of the key elements of the respective strategies. The implementation of the respective strategies is focused on delivering long-term sustainable improvements in organic sales, operating income, and cash generation.
- Organic sales growth - Objective focused on accelerating the Company's organic sales growth. The Company's organic sales growth rate accelerated from 0.5% in fiscal 2017 to 2.6% in fiscal 2018.
- Earnings before income taxes - Objective focused on improving earnings before income taxes while making the investments necessary to sustainably increase the Company's organic sales growth in future years. Excluding the \$4.7 million gain on the sale of Runelandhs, earnings before income taxes improved from \$126.6 million in fiscal 2017 to \$147.3 million in fiscal 2018 and from 11.4% of net sales in fiscal 2017 to 12.6% of net sales in fiscal 2018, while investments in research and development increased by 14.2%.

After a review of Mr. Nauman's performance, the Committee determined that Mr. Nauman's resulting performance level was 125% for his individual performance multiplier.

Mr. Pearce's individual performance multiplier was the result of his contribution to several fiscal year objectives and individual annual goals as follows:

- Cash flow - Objective focused on driving strong cash flow in relation to net earnings. The Company's cash flow from operating activities was \$143.0 million in fiscal 2018, which equates to 157.1% of net earnings.
- Selling, general and administrative expenses - Objective focused on reducing selling, general and administrative expenses throughout the Company, with a specific focus on general and administrative expenses. Excluding the impact of foreign currency exchange and the gain on sale of a business, selling, general and administrative expenses were reduced by 1.1% from fiscal 2017 to fiscal 2018 through ongoing efficiency gains and sustainable process improvement initiatives.
- Earnings before income taxes - Objective focused on improving earnings before income taxes while making the investments necessary to sustainably increase the Company's organic sales growth in future years. Excluding the \$4.7 million gain on the sale of Runelandhs, earnings before income taxes improved from \$126.6 million in fiscal 2017 to \$147.3 million in fiscal 2018 and from 11.4% of net sales in fiscal 2017 to 12.6% of net sales in fiscal 2018, while investments in research and development increased by 14.2%.

After a review of Mr. Pearce's performance, the Committee determined that Mr. Pearce's resulting performance level was 125% for his individual performance multiplier.

Mr. Bolognini's individual performance multiplier was the result of his contribution to several fiscal year objectives and individual annual goals as follows:

- Sale of subsidiary - Objective focused on the successful completion of the sale of the Company's Runelandhs business in Sweden. On May 31, 2018, the Company completed the sale of its Runelandhs business.
- Compliance - Objective focused on ensuring continued compliance with domestic and international laws and regulations, as well as maintaining internal compliance programs.

After a review of Mr. Bolognini's performance, the Committee determined that Mr. Bolognini's resulting performance level was 100% for his individual performance multiplier.

Messrs. Felmer and Shaller

The cash incentive payable to Mr. Felmer for fiscal 2018 was based on achievement of WPS division organic revenue, WPS division operating income, and achievement of fiscal year objectives. The cash incentive payable to Mr. Shaller for fiscal 2018 was based on achievement of IDS division organic revenue, IDS division operating income, and achievement of fiscal year objectives. We use division organic revenue and division operating income goals because we believe they align Messrs. Felmer and Shaller to the management of sales and expenses directly within their control as the President-Workplace Safety, and President-Identification Solutions, respectively.

For fiscal 2018, the threshold, target, maximum and actual payout amounts for Mr. Felmer were as follows:

Performance Measure (weighting)	Threshold	Target	Maximum	Fiscal 2018 Actual Results		
				Achievement (\$)	Achievement (%)	
WPS Division Organic Revenue (30%) (millions)	\$306.7	\$309.7	\$312.0 or more	\$311.7	176%	
WPS Division Operating Income (50%) (millions)	\$36.1	\$37.0	\$37.5 or more	\$39.9	200%	
Fiscal Year Objectives (20%)	0%	100%	125%		120%	
Individual Performance Multiplier	0%	100%	150%		125%	
Fiscal 2018 Bonus Award:			Maximum (% of Base Salary)	Actual Payout (% of Target)	Actual Payout (% of Base Salary)	Actual Payout (\$)
T.J. Felmer	0%	80%	222%	221%	177%	\$688,315

Mr. Felmer's individual performance multiplier was the result of his contribution to several fiscal year objectives and individual annual goals as follows:

- WPS strategic alignment - Objective focused on aligning the team around the key WPS objectives that are meant to improve the long-term financial results of the WPS division. The key WPS activities related to improving our customers' buying experience included, among other activities, increasing our customer interactions by providing extensive safety and compliance expertise, improving our ability to quickly customize products, and improving our portfolio of customized and proprietary products.
- WPS organic sales growth - Objective focused on returning the WPS business to organic sales growth in fiscal 2018. Organic sales grew 0.7% in fiscal 2018 compared to a 2.0% decline in fiscal 2017.
- WPS operating income - Objective focused on improving operating income while making the investments to necessary sustainably increase WPS's organic sales growth in future years. Operating income in the WPS segment increased from \$25.6 million in fiscal 2017 to \$31.7 million in fiscal 2018 and from 8.2% of sales in fiscal 2017 to 9.7% of sales in fiscal 2018, while making the necessary investments to complete the strategic realignment of this business to deliver sustainable profit improvements.

After a review of Mr. Felmer's performance, the Committee determined that Mr. Felmer's resulting performance level was 125% for his individual performance multiplier.

For fiscal 2018, the threshold, target, maximum and actual payout amounts for Mr. Shaller were as follows:

Performance Measure (weighting)	Threshold	Target	Maximum	Fiscal 2018 Actual Results		
				Achievement (\$)	Achievement (%)	
IDS Division Organic Revenue (30%) (millions)	\$572.5	\$588.5	\$600.5 or more	\$606.9	200%	
IDS Division Operating Income (50%) (millions)	\$120.5	\$127.6	\$131.5 or more	\$134.1	200%	
Fiscal Year Objectives (20%)	0%	100%	125%		120%	
Individual Performance Multiplier	0%	100%	150%		150%	
Fiscal 2018 Bonus Award:	Threshold	Target	Maximum (% of Base Salary)	Actual Payout (% of Target)	Actual Payout (% of Base Salary)	Actual Payout (\$)
R.R. Shaller	0%	55%	153%	276%	152%	\$539,722

Mr. Shaller's individual performance multiplier was the result of his contribution to several fiscal year objectives and individual annual goals as follows:

- Innovation development process - Objective focused on designing and implementing processes to grow the Company's pipeline of new products and deliver to market in a timely manner. Several new products were launched during fiscal 2018, including several printers. The new product pipeline was streamlined and improved which has reduced the time frame from new product idea to product launch.
- IDS organic sales growth - Objective focused on accelerating organic sales growth in the IDS segment. Organic sales within the IDS segment increased by 1.6% in fiscal 2017 and organic growth accelerated to 3.4% in fiscal 2018.
- Operational excellence - Objective focused on improving our manufacturing facilities to deliver gross margin improvements while improving customer service levels. Improvements in the manufacturing and fulfillment process resulted in an improved gross profit margin and a 9.8% increase in segment profit in the IDS segment when compared to fiscal 2017.

After a review of Mr. Shaller's performance, the Committee determined that Mr. Shaller's resulting performance level was 150% for his individual performance multiplier.

For fiscal 2018, the Committee reviewed the impact of unusual and unforeseen events on the payout of bonuses and determined that none would be considered in the calculation of bonus payouts other than removing the impact of the \$4.7 million gain on the sale of the Company's Runelandhs business in Sweden. In general, the Committee regularly reviews and makes decisions on the impact of unusual events on a case-by-case basis and continually evaluates compensation policies and practices in light of ongoing developments and best practices in the area of incentive compensation.

Long-Term Equity Incentive Awards

The Company utilizes a variety of incentive vehicles including time-based stock options, time-based RSUs and performance-based RSUs to attract, retain and motivate key employees who directly impact the long-term performance of the Company. The size and type of equity awards for executives other than the chief executive officer are determined annually by the Committee with input from the chief executive officer. With regard to the award size granted to the chief executive officer, the Committee uses its discretion in combination with market competitive information obtained from Equilar, Inc. and advice from its independent compensation consultant.

For fiscal 2018, the Committee reviewed historical award sizes, median levels of equity awarded to similar positions at our peer companies and the estimated value of all proposed grants. The Committee then authorized fiscal 2018 awards consisting of a combination of time-based stock options, time-based RSUs and performance-based RSUs.

Time-based Stock Options: Stock options generally vest one-third annually for three years and have a ten-year term. The Committee has the ability to vary both the term and vesting schedule for new stock option grants in accordance with the terms of the plan. All stock options are granted following the Committee's authorization, with an exercise price equal to the average of the high and low stock price on the date of grant.

Performance-based RSUs: Performance-based RSUs vest based upon the achievement of average organic revenue growth and average operating income growth performance over a three-year performance period. The organic revenue and operating income growth metrics are based on consideration of the Company's annual operating plan, overall strategy and stretch goals in order to emphasize the importance of long-term decision-making to both the financial success of the Company and to improve shareholder

value. The performance-based RSUs have a fair value equal to the average of the high and low stock price on the date of grant, and will vest between 40% and 200% of target if the combination of average organic sales growth and average operating income growth over the three-year performance period are met. If the minimum vesting threshold of 40% is not achieved, then the performance-based RSUs will be forfeited.

Time-based RSUs: RSUs generally vest one-third annually for three years. The Committee has the ability to vary both the term and vesting schedule for new RSU grants in accordance with the terms of the plan. All RSUs are granted following the Committee's authorization, with a fair value equal to the average of the high and low stock price on the date of grant.

No dividends are paid or accrued on the performance-based or time-based RSUs prior to the issuance of shares.

The following is a summary of grants made to our NEOs of performance-based RSUs on August 1, 2017, and time-based stock options and RSUs on September 22, 2017:

Fiscal 2018 Annual Equity Awards				
Named Officers	Total Grant Date Fair Value	Time-Based Stock Options Grant Date Fair Value	Performance-based RSUs (at target) Grant Date Fair Value	Time-Based RSUs Grant Date Fair Value
J.M. Nauman	\$ 2,500,068	\$ 833,340	\$ 833,365	\$ 833,363
A.J. Pearce	880,045	293,338	293,344	293,363
L.T. Bolognini	325,010	108,335	108,336	108,339
T.J. Felmer	550,059	183,341	183,352	183,366
R.R. Shaller	550,059	183,341	183,352	183,366

Other Elements of Compensation

Health and Welfare Benefits: We provide subsidized health and welfare benefits which include medical, dental, life and accidental death or dismemberment insurance, disability insurance and paid time off. Executive officers are entitled to participate in our health and welfare plans on generally the same terms and conditions as other employees, subject to limitations under applicable law. In addition, the Company maintains a supplemental disability policy for executives. The supplemental disability policy provides for an additional 15% of compensation, up to a maximum additional benefit of \$5,000 per month. Brady Corporation pays the premiums for these benefits; therefore, these benefits are taxable to the executive.

Retirement Benefits: Brady employees (including named executive officers) in the United States and certain expatriate employees working for its international subsidiaries are eligible to participate in the Brady Corporation Matched 401(k) Plan (the "Matched 401(k) Plan"). In addition, named executive officers in the United States and employees at many of our United States locations are also eligible to participate in the Brady Corporation Funded Retirement Plan ("Funded Retirement Plan").

Under the Funded Retirement Plan, the Company contributes 4% of the annual eligible earnings of each employee covered by the Funded Retirement Plan. In addition, participants may elect to defer up to 5% of their annual pay into the Matched 401(k) Plan, which is matched up to an additional 4% contribution from the Company. Participants may elect to contribute an additional 45% of their eligible earnings to their Matched 401(k) Plan account (without an additional matching contribution from the Company and subject to the maximum allowed by the Internal Revenue Service ("IRS")). The assets of the Matched 401(k) Plan and Funded Retirement Plan credited to each participant are invested by the trustee of the Plans as directed by each plan participant in a variety of investment funds as permitted by the Plans.

Benefits are generally payable upon the death, disability, or retirement of the participant, or upon termination of employment before retirement, although benefits may be withdrawn from the Matched 401(k) Plan and paid to the participant for certain emergencies. Under certain specified circumstances, the Matched 401(k) Plan allows a participant to draw loans on their account. The participant is immediately fully vested with respect to employee contributions; all other contributions become fully vested at the end of a two-year period of continuous service for the Matched 401(k) Plan and over six years of continuous service for the Funded Retirement Plan.

Deferred Compensation Arrangements: During fiscal 2002, the Company adopted the Brady Corporation Executive Deferred Compensation Plan ("Executive Deferred Compensation Plan"), under which executives are permitted to defer portions of their salary and bonus into a plan account, the value of which is measured by the fair value of the underlying investments. The assets of the Executive Deferred Compensation Plan are held in a Rabbi Trust and are invested by the trustee as directed by the participant in several investment funds as permitted by the Executive Deferred Compensation Plan. The investment funds available in the Executive Deferred Compensation Plan include Brady Corporation Class A Nonvoting Common Stock and various mutual funds

that are provided in the Matched 401(k) Plan. On May 1, 2006, the plan was amended to require that deferrals into the Company's Class A Nonvoting Common Stock must remain in the Company's Class A Nonvoting Common Stock, and must be distributed in shares of the Company's Class A Nonvoting Common Stock. Executives may elect whether to receive their account balance following termination of employment in a single lump sum payment or by means of distribution under an annual installment method. Distributions of the Company Class A Nonvoting Common Stock are made in-kind; distributions of mutual funds are in cash.

In addition to the Executive Deferred Compensation Plan, the company also has a Director Deferred Compensation Plan. Both plans allow for compensation to be deferred into either the Company's Class A Nonvoting Common Stock or in other investment funds. On February 21, 2017, the Director Deferred Compensation Plan was amended to disallow the transfer of other investment funds into the Company's Class A Nonvoting Common Stock. The Executive Deferred Compensation Plan also disallows transfers from other investment funds into the Company's Class A Nonvoting Common Stock.

Due to the IRS income limitations for participation in the Matched 401(k) Plan and the Funded Retirement Plan, executives are eligible to participate in the Brady Restoration Plan. The Brady Restoration Plan is a non-qualified deferred compensation plan that allows an equivalent benefit to the Matched 401(k) Plan and the Funded Retirement Plan for executives' income exceeding the IRS limits of participation in a qualified 401(k) plan. On July 17, 2018, the Brady Restoration Plan was amended to allow additional unmatched employee contributions of up to 50% of compensation in excess of the IRS limit for participation in a qualified 401(k) plan.

Perquisites: Brady provides the named executive officers with the following perquisites:

- Financial planning and tax preparation;
- Car allowance;
- Physical examination;
- Long-term care insurance; and
- Personal liability insurance.

Stock Ownership Requirements

We believe that the interests of shareholders and executives become aligned when executives become shareholders in possession of a meaningful amount of Company stock. Furthermore, this stock ownership encourages positive performance behaviors and discourages executive officers from taking undue risk. In order to encourage our executive officers and directors to acquire and retain ownership of a significant number of shares of the Company's stock, stock ownership requirements have been established.

The Board of Directors has established the following stock ownership requirements for our named executive officers:

J.M. Nauman	5 times base salary
A.J. Pearce	3 times base salary
L.T. Bolognini	2 times base salary
T.J. Felmer	3 times base salary
R.R. Shaller	3 times base salary

The stock ownership requirement for each director is five times the annual Board cash retainer.

Our NEOs are expected to obtain the required ownership levels within five years and may not sell shares, other than to cover tax withholding requirements associated with the vesting or exercise of the equity award, until such time as they meet the requirements. All NEOs have achieved their respective ownership levels as of July 31, 2018. If an executive does not meet the above ownership level within five years of becoming subject to the requirements, the Committee may direct that the executive's after-tax payout on any incentive plans will be in Class A Nonvoting Common Stock to bring the executive up to the required ownership level. The executive may not sell any shares of Class A Nonvoting Common Stock, other than to cover tax withholding requirements associated with the exercise or vesting of time-based stock options, time-based RSUs or performance-based RSUs, until such time as they meet the requirements.

Actual stock ownership levels of each of the named executive officers are reviewed on an annual basis to ensure the guidelines are met. The following equity balances are included for purposes of determining whether an executive meets the required ownership level: the values of Company stock owned, Company stock held in the Executive Deferred Compensation Plan, Company stock held in the Matched 401(k) Plan, time-based RSUs, and the spread value of vested stock options that are "in the money." The value of performance-based RSUs are excluded from the determination of executive ownership levels.

Insider Trading Policy

The Company's Insider Trading Policy prohibits hedging and other monetization transactions in Company securities by officers, directors and employees. The prohibition of hedging transactions includes financial instruments such as prepaid variable forwards, equity swaps, collars and exchange funds. The Insider Trading Policy also prohibits the pledging of Company stock as collateral for loans or holding Company securities in a margin account by officers, directors or employees.

Employment and Change of Control Agreements

In fiscal 2018, the Company did not have employment agreements with our executives. The offer letter entered into with Mr. Nauman on August 1, 2014, provides that he is deemed an at-will employee, but will receive a severance benefit equal to two times the sum of his base salary and target bonus in the event his employment is terminated without cause or he resigns for good reason as described therein. The offer letter also contains 24 month non-competition and non-solicitation provisions, as well as standard confidentiality, waiver and non-disparagement provisions. The offer letter entered into with Mr. Shaller on June 22, 2015, provides that he is deemed an at-will employee, but will receive a severance benefit equal to his base salary plus target bonus in the event his employment is terminated without cause or he resigns for good reason as described therein.

The Board of Directors of Brady Corporation approved change of control agreements for all of the NEOs of the Company. The agreements applicable to the named executive officers, other than Mr. Nauman, provide a payment of an amount equal to two times their annual base salary and two times the average bonus payment received in the three years immediately prior to the date the change of control occurs in the event of termination or resignation for good cause (as defined in the change of control agreement) upon a change of control. Under the terms of the change of control agreement with Mr. Nauman, in the event of a qualifying termination within 24 months following a change of control (as such events are defined in the change of control agreement), Mr. Nauman will receive two times his annual base salary, two times his target bonus, and the amount of his target bonus prorated based on when the termination occurs. The agreement for Mr. Felner also provides for reimbursement of any excise taxes imposed. All of the NEO's agreements provide for up to \$25,000 of attorney fees to enforce the executive's rights under the agreement. Payments under the agreement will be spread over two years.

Under the terms of the 2012 and 2017 Omnibus Incentive Stock Plans, in the event of (a) the merger or consolidation of the Company with or into another corporation or corporations in which the Company is not the surviving corporation, (b) the adoption of any plan for the dissolution of the Company, or (c) the sale or exchange of all or substantially all the assets of the Company for cash or for shares of stock or other securities of another corporation, all then-unexercised stock options become fully exercisable and all restrictions placed on restricted stock, and performance-based and time-based restricted stock units will lapse. If any stock option is canceled subsequent to the events described above, the Company or the corporation assuming the obligations of the Company, shall pay an amount of cash or stock equal to the in-the-money value of the canceled stock options. The awards granted under the 2017 Omnibus Incentive Plan provide for accelerated vesting of stock options and RSUs upon termination due to retirement, for which the eligibility criteria is 60 years of age and 5 years of service.

Non-Compete/Non-Solicitation/Confidentiality

Agreements memorializing equity awards under the Company's 2012 Omnibus Incentive Stock and 2017 Omnibus Incentive Plans contain non-competition, non-solicitation and confidential information covenants applicable to the award recipients. The confidential information covenant prohibits the use, disclosure, copying or duplication of the Company's confidential information other than in the course of authorized activities conducted in the course of the recipient's employment with the Company. The other covenants prohibit the NEOs for 12 months after termination of employment with the Company, from (i) performing duties for or as a competitor of the Company which are the same or similar to those performed by the recipient in the 24 months prior to termination of employment with the Company or (ii) inducing or encouraging employees, vendors or clients of the Company to breach, modify or terminate relationships or agreements they had with the Company during the 24-month period prior to the recipient's termination of employment.

Compliance with Tax Regulations Regarding Executive Compensation

Section 162(m) of the Internal Revenue Code generally disallows a federal income tax deduction to publicly traded companies for compensation in excess of \$1 million per year paid to certain executive officers (and, beginning in 2018, certain former executive officers). Historically, the \$1 million deduction limit generally has not applied to compensation that satisfies IRS requirements for qualified performance-based compensation. Effective for tax years beginning after July 31, 2018, the exemption for qualified performance-based compensation from the deduction limitation of Code Section 162(m) has been repealed, unless transition relief for certain compensation arrangements in place as of November 2, 2017 is available.

The Committee's intent is to preserve the deductibility of executive compensation to the extent reasonably practicable and to the extent consistent with its other compensation objectives. However, the Committee believes Section 162(m) is only one of several relevant considerations in setting compensation and believes Section 162(m) implications should not compromise its ability to

design and maintain executive compensation arrangements intended to, among other things, attract, motivate and help retain a highly qualified and successful management team to lead the Company. As a result, the Committee retains the flexibility to provide compensation it determines to be in the best interests of the Company and its shareholders even if that compensation ultimately is not deductible for tax purposes. Moreover, even if we have in the past intended to grant qualifying performance-based compensation for purposes of Section 162(m), we cannot guarantee that such compensation will so qualify or ultimately will be deductible by us.

Management Development and Compensation Committee Interlocks and Insider Participation

During fiscal 2018, the Board's Management Development and Compensation Committee was composed of Messrs. Balkema, Harris and Richardson, and Ms. Gioia. None of these persons has at any time been an employee of the Company or any of its subsidiaries. There are no relationships among the Company's executive officers, members of the Committee or entities whose executives serve on the Board that require disclosure under applicable SEC regulations.

Management Development and Compensation Committee Report

The Committee has reviewed and discussed the Compensation Discussion and Analysis with management; and based on the review and discussions, the Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in the Company's annual report on Form 10-K.

Gary Balkema, Chairman
Nancy Gioia
Frank Harris
Bradley Richardson

Compensation Policies and Practices

The Company's compensation policies for executive officers and all other employees are designed to avoid incentives that create undue risks to the Company. The Company's compensation programs are weighted towards offering long-term incentives that reward sustainable performance; do not offer significant short-term incentives that might drive high-risk investments at the expense of long-term Company value; and are set at reasonable and sustainable levels, as determined by a review of the Company's economic position, as well as the compensation offered by comparable companies. Under the oversight of its Audit and Management Development and Compensation Committees, the Company reviewed its compensation policies, practices and procedures for all employees to evaluate and ensure that they do not foster risk-taking beyond that deemed acceptable within the Company's business model. The Company believes that its compensation policies, practices and procedures do not encourage employees to take unnecessary or excessive risks that are reasonably likely to have a material adverse effect on the Company.

Summary Compensation Table

The following table sets forth compensation awarded to, earned by, or paid to the named executive officers, who served as executive officers during the fiscal year ended July 31, 2018, for services rendered to the Company and its subsidiaries during the fiscal years ended July 31, 2018, July 31, 2017 and July 31, 2016.

Name and Principal Position	Fiscal Year	Salary (\$)	Bonus (\$)	Time-based and Performance-based RSUs (\$)(1)	Option Awards (\$)(2)	Non-Equity Incentive Plan Compensation (\$)(3)	All Other Compensation (\$)(4)	Total (\$)
J.M. Nauman, President, CEO & Director	2018	\$ 759,616	\$ —	\$ 1,666,728	\$ 833,340	\$ 1,712,933	\$ 202,808	\$ 5,175,425
	2017	721,538	—	1,666,702	833,338	1,259,987	143,598	4,625,163
	2016	693,750	—	733,350	1,466,668	528,984	89,017	3,511,769
A.J. Pearce, CFO & Treasurer	2018	\$ 360,923	\$ —	\$ 586,707	\$ 293,338	\$ 488,329	\$ 97,767	\$ 1,827,064
	2017	332,308	—	586,712	293,337	417,811	74,651	1,704,819
	2016	315,000	—	250,019	250,001	144,113	49,920	1,009,053
L.T. Bolognini, Senior VP, General Counsel and Secretary	2018	\$ 340,432	\$ —	\$ 216,675	\$ 108,335	\$ 368,484	\$ 90,113	\$ 1,124,039
	2017	337,062	—	216,694	108,334	282,525	77,981	1,022,596
	2016	333,725	—	162,514	162,502	122,143	52,220	833,104
T.J. Felmer, Senior VP, President-Workplace Safety	2018	\$ 389,319	\$ —	\$ 366,718	\$ 183,341	\$ 688,315	\$ 69,355	\$ 1,697,048
	2017	386,937	—	366,701	183,338	—	78,155	1,015,131
	2016	386,937	—	275,009	275,004	111,438	62,934	1,111,322
R.R. Shaller, Senior VP & President - Identification Solutions	2018	\$ 355,548	\$ —	\$ 366,718	\$ 183,341	\$ 539,722	\$ 113,141	\$ 1,558,470
	2017	344,312	—	366,701	183,338	425,140	125,664	1,445,155
	2016	340,000	—	225,009	225,003	171,806	188,467	1,150,285

- (1) Represents the grant date fair value computed in accordance with accounting guidance for equity grants made or modified in the applicable year for time-based RSUs and performance-based RSUs. The grant date fair value is calculated based on the number of shares of Class A Common Stock underlying the time-based RSUs and performance-based RSUs (at target), times the average of the high and low stock price of Class A Common Stock on the date of grant. The actual value of a restricted stock award or RSU will depend on the market value of the Class A Common Stock on the date the stock is sold. The table reflects the grant date fair value at target level of performance-based RSUs (100%). The grant date fair value of these awards in fiscal 2018 assuming that the highest level of performance conditions will be achieved is as follows: Mr. Nauman, \$1,666,731; Mr. Pearce, \$586,688; Mr. Bolognini, \$216,671; Mr. Felmer, \$366,705; and Mr. Shaller, \$366,705.
- (2) Represents the grant date fair value computed in accordance with accounting guidance for equity grants made or modified in the applicable year for time-based stock options. The assumptions used to determine the value of the awards, including the use of the Black-Scholes method of valuation by the Company, are discussed in Note 1 of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K, for the fiscal year ended July 31, 2018. The actual value, if any, which an option holder will realize upon the exercise of an option will depend on the excess of the market value of the Class A Common Stock over the exercise price on the date the option is exercised.
- (3) Represents incentive plan compensation earned during the listed fiscal years, which was paid during the next fiscal year.
- (4) The amounts in this column include: matching contributions to the Company's Matched 401(k) Plan, Funded Retirement Plan and Restoration Plan, the costs of group term life insurance for each named executive officer, use of a Company car or car allowance, and associated expenses, the cost of long-term care insurance, the cost of personal liability insurance, the cost of disability insurance and other perquisites. The perquisites may include relocation assistance and annual allowances for financial and tax planning. Refer to the table below.

Name	Fiscal Year	Retirement Plan Contributions (\$)	Company Car (\$)	Group Term Life Insurance (\$)	Long-term Care Insurance (\$)	Long-Term Disability Insurance (\$)	Relocation (\$)	Other (\$)	Total (\$)
J.M. Nauman	2018	\$ 159,522	\$ 18,000	\$ 1,728	\$ 4,860	\$ 5,212	\$ —	\$ 13,486	\$ 202,808
	2017	99,097	18,000	1,629	4,860	5,606	—	14,406	143,598
	2016	54,808	18,000	1,087	4,860	4,311	—	5,951	89,017
A.J. Pearce	2018	\$ 61,988	\$ 18,000	\$ 810	\$ 2,893	\$ 3,618	\$ —	\$ 10,458	\$ 97,767
	2017	36,517	18,000	783	2,893	3,775	—	12,683	74,651
	2016	24,606	13,468	505	2,893	2,800	—	5,648	49,920
L.T. Bolognini	2018	\$ 49,748	\$ 18,000	\$ 747	\$ 3,946	\$ 5,343	\$ —	\$ 12,329	\$ 90,113
	2017	36,646	18,000	779	3,946	5,557	—	13,053	77,981
	2016	26,557	11,799	528	3,946	4,097	—	5,293	52,220
T.J. Felmer	2018	\$ 31,044	\$ 18,000	\$ 847	\$ 3,737	\$ 3,387	\$ —	\$ 12,340	\$ 69,355
	2017	39,870	18,000	900	3,737	3,648	—	12,000	78,155
	2016	30,955	18,000	610	3,737	3,221	—	6,411	62,934
R.R. Shaller	2018	\$ 62,092	\$ 18,000	\$ 813	\$ 3,427	\$ 5,363	\$ 7,257	\$ 16,189	\$ 113,141
	2017	41,106	18,000	792	3,427	5,527	44,812	12,000	125,664
	2016	29,600	18,000	537	3,427	4,103	127,244	5,556	188,467

Grants of Plan-Based Awards for 2018

The following table summarizes grants of plan-based awards made during fiscal 2018 to the named executive officers.

Name	Grant Date	Compensation Committee Approval Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards (1)			Estimated Future Payouts Under Equity Incentive Plan Awards (2)			All Other Stock Awards: Number of Shares of Stock or Units (#) (3)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Stock or Option Awards (\$) (4)	Grant Date Fair Value of Stock and Option Awards (\$)
			Threshold (\$)	Target (\$)	Maximum (\$)	Threshold (#)	Target (#)	Maximum (#)				
J.M. Nauman			\$ —	\$ 759,616	\$ 2,107,933							
	8/1/2017	7/10/2017				10,065	25,162	50,324		\$ 33.12	\$ 833,365	
	9/22/2017	7/10/2017							22,615	36.85	833,363	
	9/22/2017	7/10/2017								96,792	833,340	
A.J. Pearce			—	216,554	600,938							
	8/1/2017	7/10/2017				3,543	8,857	17,714		33.12	293,344	
	9/22/2017	7/10/2017							7,961	36.85	293,363	
	9/22/2017	7/10/2017								34,071	293,338	
L.T. Bolognini			—	204,259	566,820							
	8/1/2017	7/10/2017				1,308	3,271	6,542		33.12	108,336	
	9/22/2017	7/10/2017							2,940	36.85	108,339	
	9/22/2017	7/10/2017								12,583	108,335	
T.J. Felmer			—	311,455	864,287							
	8/1/2017	7/10/2017				2,214	5,536	11,072		33.12	183,352	
	9/22/2017	7/10/2017							4,976	36.85	183,366	
	9/22/2017	7/10/2017								21,295	183,341	
R.R. Shaller			—	195,551	542,655							
	8/1/2017	7/10/2017				2,214	5,536	11,072		33.12	183,352	
	9/22/2017	7/10/2017							4,976	36.85	183,366	
	9/22/2017	7/10/2017								21,295	183,341	

- (1) At its May 2017 meeting, the Management Development and Compensation Committee approved the values of the annual cash incentive award under the Company's annual cash incentive plan. The structure of the plan is described in the Compensation Discussion and Analysis above and was set prior to the beginning of the fiscal year.
- (2) This award represents performance-based restricted stock units awarded on August 1, 2017, as part of the annual fiscal 2018 equity grant. These performance-based RSUs have a three-year performance period with the number of shares issued at vesting determined by the Company's achievement of organic revenue and operating income growth goals over the three-year performance period. Payout opportunities will range from 0% to 200% of the target award. Target payout is set at 100% of award value, with threshold and maximum payouts set at 40% and 200% of target award value, respectively. The target number of performance stock units is used to determine the grant date fair value for this award.
- (3) The time-based RSU awards vest equally over three years.
- (4) The exercise price and base price is the average of the high and low prices of the Company's Class A Common Stock as reported by the New York Stock Exchange on the date of the grant.

Outstanding Equity Awards at July 31, 2018

Name	Option Awards				Stock Awards			
	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Units of Stock That Have Not Vested (#)	Market Value of Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units Or Other Rights That Have Not Vested (\$)
J.M. Nauman	60,943	—	\$ 22.66	9/25/2024				
	140,653	100,466 (1)	19.96	9/25/2025				
	28,577	71,440 (2)	35.14	9/23/2026				
	—	96,792 (3)	36.85	9/22/2027				
					35,778 (4)	\$ 1,368,509		
					12,247 (5)	468,448		
					15,810 (6)	604,733		
					22,615 (7)	865,024		
							26,018 (8)	\$ 995,189
							25,162 (9)	962,447
A.J. Pearce	9,000	—	\$ 30.21	9/21/2022				
	4,523	—	31.07	9/20/2023				
	34,825	—	22.66	9/25/2024				
	34,250	17,125 (1)	19.96	9/25/2025				
	12,574	25,147 (2)	35.14	9/23/2026				
	—	34,071 (3)	36.85	9/22/2027				
					4,868 (10)	\$ 186,201		
					4,175 (5)	159,694		
					5,565 (6)	212,861		
					7,961 (7)	304,508		
						9,159 (8)	\$ 350,332	
						8,857 (9)	338,780	
L.T. Bolognini	25,000	—	\$ 34.64	1/7/2023				
	14,848	—	31.07	9/20/2023				
	6,892	—	22.66	9/25/2024				
	—	11,131 (1)	19.96	9/25/2025				
	4,644	9,287 (2)	35.14	9/23/2026				
	—	12,583 (3)	36.85	9/22/2027				
					2,714 (5)	\$ 103,811		
					2,055 (6)	78,604		
					2,940 (7)	112,455		
							3,383 (8)	\$ 129,400
						3,271 (9)	125,116	

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T.J. Felner	11,667	—	\$ 29.78	8/3/2019				
	35,000	—	28.73	9/25/2019				
	11,667	—	28.35	8/2/2020				
	40,000	—	29.10	9/24/2020				
	35,000	—	27.00	9/30/2021				
	45,500	—	30.21	9/21/2022				
	33,862	—	31.07	9/20/2023				
	47,159	—	22.66	9/25/2024				
	37,676	18,837 (1)	19.96	9/25/2025				
	7,859	15,717 (2)	35.14	9/23/2026				
	—	21,295 (3)	36.85	9/22/2027				
					6,666 (11)	\$	254,975	
					4,592 (5)		175,644	
					3,478 (6)		133,034	
					4,976 (7)		190,332	
								5,724 (8)
						\$		190,037
								5,536 (9)
								211,752
R.R. Shaller	30,826	15,412 (1)	\$ 19.96	9/25/2025				
	7,859	15,717 (2)	35.14	9/23/2026				
	—	21,295 (3)	36.85	9/22/2027				
					8,396 (12)	\$	321,147	
					3,757 (5)		143,705	
					3,478 (6)		133,034	
					4,976 (7)		190,332	
								5,724 (8)
						\$		218,943
								5,536 (9)
								211,752

- (1) The remaining options vest on September 25, 2018.
- (2) One-half of the options vest on September 23, 2018, and the remaining options vest on September 23, 2019.
- (3) One-third of the options vest on September 22, 2018, one-third of the options vest on September 22, 2019, and one-third of the options vest on September 22, 2020.
- (4) Mr. Nauman was awarded 53,668 shares of time-based restricted stock units effective August 4, 2014, the date of his appointment as Chief Executive Officer and Director of the Company. One-half of the units vested on August 4, 2018, and the remaining units vest on August 4, 2019.
- (5) This award represents time-based restricted stock units awarded on September 25, 2015, as part of the annual fiscal 2016 equity grant. The remaining units vest on September 25, 2018.
- (6) This award represents time-based restricted stock units awarded on September 23, 2016, as part of the annual fiscal 2017 equity grant. One-half of the units vest on September 23, 2018, and the remaining units vest on September 23, 2019.
- (7) This award represents time-based restricted stock units awarded on September 22, 2017, as part of the annual fiscal 2018 equity grant. One-third of the units vest on September 22, 2018, one-third of the units vest on September 22, 2019, and one-third of the units vest on September 22, 2020.
- (8) This award represents performance-based RSUs awarded on August 1, 2016, as part of the annual fiscal 2017 equity grant. These performance-based RSUs have a three-year performance period with the number of shares issued at vesting determined by the Company's achievement of organic revenue and operating income growth goals over the three-year performance period. Payout opportunities will range from 0% to 200% of the target award. The amounts listed above are based on the target value of each award (100%).
- (9) This award represents performance-based RSUs awarded on August 1, 2017, as part of the annual fiscal 2018 equity grant. These performance-based RSUs have a three-year performance period with the number of shares issued at vesting determined by the Company's achievement of organic revenue and operating income growth goals over the three-year performance period. Payout opportunities will range from 0% to 200% of the target award. The amounts listed above are based on the target value of each award (100%).
- (10) Mr. Pearce was awarded 12,171 shares of time-based restricted stock units on July 15, 2015, for retention purposes. Forty percent of the units vest on July 15, 2019.

- (11) Effective November 28, 2014, Mr. Felmer was awarded 10,000 shares of time-based restricted stock units for retention purposes. One-half of the units vest on November 28, 2018, and one-half of the units vest on November 28, 2019.
- (12) Mr. Shaller was awarded 20,992 shares of time-based restricted stock units on June 22, 2015, the date he joined the Company as an officer. One-half of the units vest on the fourth and fifth anniversaries of the award date, respectively.

Option Exercises and Stock Vested for Fiscal 2018

The following table summarizes option exercises and the vesting of restricted stock during fiscal 2018 to the named executive officers.

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)
J.M. Nauman	93,542	\$ 1,613,768	51,334	\$ 1,822,399
A.J. Pearce	—	—	14,153	530,280
L.T. Bolognini	11,131	225,570	5,846	215,184
T.J. Felmer	21,667	131,970	16,133	603,949
R.R. Shaller	—	—	9,697	370,583

Non-Qualified Deferred Compensation for Fiscal 2018

The following table summarizes the activity within the Executive Deferred Compensation Plan and the Brady Restoration Plan during fiscal 2018 for the named executive officers.

Name	Executive Contribution in Fiscal 2018 (\$)	Company Contributions in Fiscal 2018 (\$)	Aggregate Earnings in Fiscal 2018 (\$)	Aggregate Withdrawals/Distributions (\$)	Aggregate Balance at July 31, 2018 (\$)
J.M. Nauman	\$ 69,784	\$ 137,722	\$ 5,320	\$ —	\$ 389,054
A.J. Pearce	88,219	39,130	102,470	—	968,112
L.T. Bolognini	14,040	28,080	2,131	—	100,811
T.J. Felmer	4,683	9,367	610,761	—	4,227,887
R.R. Shaller	20,107	40,214	626	—	96,764

The executive contribution amounts included in this table are derived from the Salary and Non-Equity Incentive Plan Compensation columns of the Summary Compensation Table. The registrant contribution amounts included in this table are reported in the All Other Compensation columns of the Summary Compensation Table. See discussion of the Company's nonqualified deferred compensation plan in the Compensation Discussion and Analysis.

Potential Payments Upon Termination or Change in Control

As described in the Employment and Change of Control Agreements section of the Compensation Discussion and Analysis above, the Company has entered into separate severance agreements and change of control agreements with certain named executive officers.

The terms of severance arrangements are triggered if (i) the executive's employment with the Company is involuntarily terminated by the Company without cause or (ii) the executive's employment with the Company is voluntarily terminated by the executive subsequent to (a) any reduction in the total of the executive's annual base salary and target bonus without the prior written agreement of the executive, (b) a significant diminution in the authority, duties or responsibilities of the executive without the executive's prior written agreement, or (c) the relocation of the executive's position to a principal work location more than 50 miles from Milwaukee, Wisconsin or from the executive's principal place of residence, without the executive's prior written agreement. Should Messrs. Nauman's or Shaller's employment be terminated under the circumstances described above, the Company would pay Mr. Nauman a severance benefit equal to two times the sum of his base salary and target bonus and would pay Mr. Shaller a severance benefit equal to his base salary plus target bonus. The other named executive officers are not covered by severance arrangements.

The terms of the change of control agreement are triggered if, within a 24 month period beginning with the date a change of control occurs, (i) the executive's employment with the Company is involuntarily terminated other than by reason of death, disability or cause or (ii) the executive's employment with the Company is voluntarily terminated by the executive subsequent to (a) any reduction in the total of the executive's annual base salary, exclusive of fringe benefits, and the executive's target bonus in comparison with the executive's annual base salary and target bonus immediately prior to the date the change of control occurs, (b) a significant diminution in the responsibilities or authority of the executive in comparison with the executive's responsibility and authority immediately prior to the date the change of control occurs, or (c) the imposition of a requirement by the Company that the executive relocate to a principal work location more than 50 miles from the executive's principal work location immediately prior to the date the change of control occurs.

Following termination due to a change in control, executives shall be paid a multiplier of their annual base salary in effect immediately prior to the date the change of control occurs, plus a multiplier of their average bonus payment received over a three-year period prior to the date the change of control occurs. For Mr. Nauman, a multiplier of the target bonus amount in effect immediately prior to the date the change of control applies instead of the average bonus payment received over the prior three-year period. For Mr. Felmer, the Company will also reimburse the executive for any excise tax incurred by the executive as a result of Section 280(g) of the Internal Revenue Code. If the payments upon termination due to change of control result in any excise tax incurred by Messrs. Nauman, Pearce, Bolognini and Shaller as a result of Section 280(g) of the Internal Revenue Code, the officer will be solely responsible for such excise tax. The Company will also reimburse a maximum of \$25,000 of legal fees incurred by the executives in order to enforce the change of control agreement, in which the executive prevails.

The following information and tables set forth the amount of payments to each named executive officer in the event of termination of employment as a result of a change of control. No other employment agreements have been entered into between the Company and any of the named executive officers in fiscal year 2018.

Assumptions and General Principles

The following assumptions and general principles apply with respect to the tables that follow in this section.

- The amounts detailed in the tables assume that each named executive officer terminated employment on July 31, 2018. Accordingly, the tables reflect amounts earned as of July 31, 2018, and include estimates of amounts that would be paid to the named executive officer upon the termination or occurrence of a change in control. The actual amounts that would be paid to a named executive officer can only be determined at the time of termination.
- The tables below include amounts the Company is obligated to pay the named executive officer as a result of the severance agreement and executed change in control agreement. The tables do not include benefits that are paid generally to all salaried employees or a broad group of salaried employees. Therefore, the named executive officers would receive benefits in addition to those set forth in the tables.
- A named executive officer is entitled to receive base salary earned during his term of employment regardless of the manner in which the named executive officer's employment is terminated. As such, this amount is not shown in the tables.

J. Michael Nauman

The following table details the amount payable assuming that the terms of the change of control agreement were triggered on July 31, 2018, and the named executive officer was required to legally enforce the terms of the agreement.

Base Salary (\$) (1)	Bonus (\$) (2)	Restricted Stock Unit Acceleration Gain (\$) (3)	Stock Option Acceleration Gain (\$) (4)	Legal Fee Reimbursement (\$) (5)	Total (\$)
\$ 1,550,000	\$ 1,550,000	\$ 5,264,348	\$ 2,195,210	\$ 25,000	\$ 10,584,558

- (1) Represents two times the base salary in effect at July 31, 2018.
- (2) Represents two times the target bonus amount in effect at July 31, 2018.
- (3) Represents the closing market price of \$38.25 on 137,630 unvested time-based and performance-based RSUs that would vest due to the change in control.
- (4) Represents the difference between the closing market price of \$38.25 and the exercise price on 268,698 unvested, in-the-money stock options that would vest due to change in control.
- (5) Represents the maximum reimbursement of legal fees allowed.

The following table details the amount payable assuming that the severance terms of Mr. Nauman's offer letter were triggered on July 31, 2018, and the named executive officer was required to legally enforce the severance terms of the agreement.

Base Salary (\$) (1)	Bonus (\$) (2)	Restricted Stock Unit Acceleration Gain (\$) (3)	Total (\$)
\$ 1,550,000	\$ 1,550,000	\$ 1,368,508.5	\$ 4,468,509

- (1) Represents two times the base salary in effect at July 31, 2018.
- (2) Represents two times the target bonus amount in effect at July 31, 2018.
- (3) Represents the closing market price of \$38.25 on 35,778 unvested time-based RSUs that would vest due to termination without cause.

Aaron J. Pearce

The following table details the amount payable assuming that the terms of the change of control agreement were triggered on July 31, 2018, and the named executive officer was required to legally enforce the terms of the agreement.

Base Salary (\$) (1)	Bonus (\$) (2)	Restricted Stock Unit Acceleration Gain (\$) (3)	Stock Option Acceleration Gain (\$) (4)	Legal Fee Reimbursement (\$) (5)	Total (\$)
\$ 748,000	\$ 374,616	\$ 1,552,376	\$ 439,123	\$ 25,000	\$ 3,139,115

- (1) Represents two times the base salary in effect at July 31, 2018.
- (2) Represents two times the average bonus payment received in the last three fiscal years ended July 31, 2018, 2017 and 2016.
- (3) Represents the closing market price of \$38.25 on 40,585 unvested time-based and performance-based RSUs that would vest due to the change in control.
- (4) Represents the difference between the closing market price of \$38.25 and the exercise price on 76,343 unvested, in-the-money stock options that would vest due to change in control.
- (5) Represents the maximum reimbursement of legal fees allowed.

Louis T. Bolognini

The following table details the amount payable assuming that the terms of the change of control agreement were triggered on July 31, 2018, and the named executive officer was required to legally enforce the terms of the agreement.

Base Salary (\$) (1)	Bonus (\$) (2)	Restricted Stock Unit Acceleration Gain (\$) (3)	Stock Option Acceleration Gain (\$) (4)	Legal Fee Reimbursement (\$) (5)	Total (\$)
\$ 683,468	\$ 269,779	\$ 549,385	\$ 250,085	\$ 25,000	\$ 1,777,717

- (1) Represents two times the base salary in effect at July 31, 2018.
- (2) Represents two times the average bonus payment received in the last three fiscal years ended July 31, 2018, 2017 and 2016.
- (3) Represents the closing market price of \$38.25 on 14,363 unvested time-based and performance-based RSUs that would vest due to the change in control.
- (4) Represents the difference between the closing market price of \$38.25 and the exercise price on 33,001 unvested, in-the-money stock options that would vest due to change in control.
- (5) Represents the maximum reimbursement of legal fees allowed.

Thomas J. Felmer

The following table details the amount payable assuming that the terms of the change of control agreement were triggered on July 31, 2018, and the named executive officer was required to legally enforce the terms of the agreement.

Base Salary (\$) (1)	Bonus (\$) (2)	Restricted Stock Unit Acceleration Gain (\$) (3)	Stock Option Acceleration Gain (\$) (4)	Excise Tax Reimbursement (\$)	Legal Fee Reimbursement (\$) (5)	Total (\$)
\$ 781,614	\$ 74,292	\$ 1,184,679	\$ 423,222	\$ —	\$ 25,000	\$ 2,488,807

- (1) Represents two times the base salary in effect at July 31, 2018.
- (2) Represents two times the average bonus payment received in the last three fiscal years ended July 31, 2018, 2017 and 2016.
- (3) Represents the closing market price of \$38.25 on 30,972 unvested time-based and performance-based RSUs that would vest due to the change in control.

- (4) Represents the difference between the closing market price of \$38.25 and the exercise price on 55,849 unvested, in-the-money stock options that would vest due to change in control.
- (5) Represents the maximum reimbursement of legal fees allowed.

Russell R. Shaller

The following table details the amount payable assuming that the terms of the change of control agreement were triggered on July 31, 2018, and the named executive officer was required to legally enforce the terms of the agreement.

Base Salary (\$) (1)	Bonus (\$) (2)	Restricted Stock Unit Acceleration Gain (\$) (3)	Stock Option Acceleration Gain (\$) (4)	Legal Fee Reimbursement (\$) (5)	Total (\$)
\$ 721,774	\$ 596,946	\$ 1,218,913	\$ 360,578	\$ 25,000	\$ 2,923,211

- (1) Represents two times the base salary in effect at July 31, 2018.
- (2) Represents two times the average bonus payment received in the last three fiscal years ended July 31, 2018, 2017 and 2016.
- (3) Represents the closing market price of \$38.25 on 31,867 unvested time-based and performance-based RSUs that would vest due to the change in control.
- (4) Represents the difference between the closing market price of \$38.25 and the exercise price on 54,424 unvested, in-the-money stock options that would vest due to change in control.
- (5) Represents the maximum reimbursement of legal fees allowed.

The following table details the amount payable assuming that the severance terms of Mr. Shaller's offer letter were triggered on July 31, 2018, and the named executive officer was required to legally enforce the severance terms of the agreement.

Base Salary (\$) (1)	Bonus (\$) (2)	Total (\$)
\$ 360,887	\$ 195,551	\$ 556,438

- (1) Represents one times the base salary in effect at July 31, 2018.
- (2) Represents one times the target bonus amount in effect at July 31, 2018.

Potential Payments Upon Termination Due to Death or Disability

In the event of termination due to death or disability, all unexercised, unexpired stock options would immediately vest and all restricted stock unit awards would immediately become unrestricted and fully vested. The following table shows the amount payable to the named executive officers should this event occur on July 31, 2018.

Name	Unvested Restricted Stock Units as of July 31, 2018	Restricted Stock Unit Acceleration Gain \$ (1)	Unvested, In-the-Money Stock Options as of July 31, 2018	Stock Option Acceleration Gain \$ (2)
J. Michael Nauman	137,630	\$ 5,264,348	268,698	\$ 2,195,210
A.J. Pearce	40,585	1,552,376	76,343	439,123
L.T. Bolognini	14,363	549,385	33,001	250,085
T.J. Felner	30,972	1,184,679	55,849	423,222
R.R. Shaller	31,867	1,218,913	52,424	360,578

- (1) Represents the closing market price of \$38.25 on unvested awards that would vest due to death or disability.
- (2) Represents the difference between the closing market price of \$38.25 and the exercise price on unvested, in-the-money stock options that would vest due to death or disability.

Potential Payments Upon Termination Without Cause

In the event of termination without cause, as defined in the officer's offer letter or in the officer's equity agreements, as applicable, certain restricted stock awards would immediately become unrestricted and fully vested. The following table shows the amount payable to the named executive officers should this event occur on July 31, 2018.

Name	Unvested Restricted Stock Units as of July 31, 2018	Restricted Stock Unit Acceleration Gain \$ (1)
J. Michael Nauman	35,778	\$ 1,368,509
A.J. Pearce	—	—
L.T. Bolognini	—	—
T.J. Felmer	—	—
R.R. Shaller	—	—

(1) Represents the closing market price of \$38.25 on unvested awards that would vest due to termination without cause.

CEO Pay Ratio Disclosure

As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(u) of Regulation S-K, the Company is providing the following information about the ratio of the annual total compensation of its CEO to the annual total compensation of its median employee. The Company used the following methodology and material assumptions to identify the median employee of its workforce:

- A measurement date of May 31, 2018, which is within three months of the Company's fiscal year end, to identify the median employee. On this date, the Company's employee population consisted of 6,212 individuals (1,778 in the U.S. and 4,434 internationally)
- The Company selected annual total compensation (base salary/wages and overtime pay, commissions, bonuses paid and allowance/fixed payments) as of May 31, 2018 as the compensation measure.
- The Company annualized the compensation of employees to cover the full fiscal year.

Under the de minimis exemption to the pay ratio rule, the Company may exclude non-United States employees up to a 5% threshold when identifying the median employee. The Company excluded 308 employees from the following jurisdictions, together comprising less than 5% of the Company's 6,212 global employee population (with number of employees): Brazil (126), Malaysia (167), Philippines (4), and Turkey (11).

After identifying the median employee, the Company calculated annual total compensation for such employee consistent with the same methodology it used for NEOs as set forth in the fiscal 2018 Summary Compensation Table, with the addition of Company paid contributions to health and welfare plans. The annual total compensation, including Company paid contributions to health and welfare plans, of the CEO is \$5,185,513. The median of the annual total compensation of all employees, except the CEO, is \$34,985. Accordingly, the CEO pay ratio is 148:1. The pay ratio reported by other companies may not be comparable to the pay ratio reported above due to variances in business mix, proportion of seasonal and part-time employees and distribution of employees across geographies.

Compensation of Directors

To ensure competitive compensation for the Directors, surveys prepared by various consulting firms and the National Association of Corporate Directors are reviewed by the Corporate Governance Committee and the Management Development and Compensation Committee, and they confer with the Board's independent compensation consultant, Meridian Compensation Partners, in making recommendations to the Board of Directors regarding Director compensation. Directors who are employees of the Company receive no additional compensation for service on the Board or on any committee of the Board.

In fiscal 2018, the annual cash retainer paid to non-management Directors was \$60,000. Each member of the Audit Committee received an annual retainer of \$15,000, and an additional annual retainer of \$15,000 was paid to the Chair; each member of the Management Development and Compensation Committee received an annual retainer of \$12,000, and an additional annual retainer of \$12,000 was paid to the Chair; and each member of the Corporate Governance, Finance and Technology Committees received an annual retainer of \$10,000, and an additional annual retainer of \$10,000 was paid to each committee Chair. Non-management Directors do not receive meeting fees. Non-management Directors are eligible to receive compensation of up to \$1,000 per day for special assignments required by management or the Board of Directors, so long as the compensation does not impair independence and is approved as required by the Board. No such special assignment fees were paid in fiscal year 2018.

In fiscal 2018, the Chair of the Board was paid an annual fee of \$50,000, consistent with the evolving role of independent board leadership and the enhanced responsibilities of the position. Mr. Goodkind served as Chair of the Board in fiscal 2018. On September 12, 2018, based on the recommendation of Meridian Compensation Partners, the Board approved an increase of \$10,000 in the annual fee paid to the Chair of the Board, to \$60,000, effective following the 2018 Annual Meeting of Shareholders.

The Board has established stock ownership requirements for Directors. The ownership requirement for each director is five times the annual Board retainer. All directors have achieved their stock ownership requirements.

Under the terms of the Brady Corporation 2017 Omnibus Incentive Stock Plan, 5,000,000 shares of the Company's Class A Common Stock have been authorized for issuance to Directors and employees. The Board has full and final authority to designate the non-management Directors to whom awards will be granted, the date on which awards will be granted and the number of shares of stock covered by each grant.

On September 12, 2017, the Board approved an annual stock-based compensation award of \$95,000 in unrestricted shares of Class A Common Stock (having a grant date fair value of \$36.85 per share), for each non-management Director, effective September 22, 2017. On September 11, 2018, based on the recommendation of Meridian Compensation Partners, the Board approved an increase of \$14,000 in the annual stock-based compensation award in unrestricted shares of Class A Common Stock to non-management Directors, to \$109,000, effective September 25, 2018.

Directors are also eligible to defer portions of their fees into the Brady Corporation Director Deferred Compensation Plan ("Director Deferred Compensation Plan"), the value of which is measured by the fair value of the underlying investments. The assets of the Director Deferred Compensation Plan are held in a Rabbi Trust and are invested by the trustee as directed by the participant in several investment funds as permitted by the Director Deferred Compensation Plan. The investment funds available in the Director Deferred Compensation Plan include Brady Corporation Class A Nonvoting Common Stock and various mutual funds that are provided in the employee Matched 401(k) Plan. A Director may elect whether to receive his/her account balance following termination in a single lump sum payment or by means of distribution under an annual installment method. Distributions of the Company Class A Nonvoting Common Stock are made in-kind; distributions of mutual funds are in cash.

Director Compensation Table — Fiscal 2018

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$) (1)	Stock Awards (\$) (2)	Total (\$)
Patrick W. Allender	\$ 105,000	\$ —	\$ 95,036	\$ 200,036
Gary S. Balkema	101,500	—	95,036	196,536
Elizabeth P. Bruno	83,000	—	95,036	178,036
Nancy L. Gioia	92,000	—	95,036	187,036
Conrad G. Goodkind	155,000	—	95,036	250,036
Frank W. Harris	84,500	—	95,036	179,536
Bradley C. Richardson	111,500	—	95,036	206,536
Harold L. Sirkin ⁽³⁾	20,500	—	95,036	115,536

- (1) No stock options were awarded to non-management Directors in fiscal 2018. Outstanding option awards at July 31, 2018, for each individual who served as Director in fiscal 2018 include the following: Mr. Allender, 39,800; Mr. Balkema, 35,400; Ms. Bruno, 33,800; Ms. Gioia, 8,500; Mr. Goodkind, 39,800; Mr. Harris, 33,800; and Mr. Richardson, 12,750 shares. The actual value, if any, which an option holder will realize upon the exercise of an option will depend on the excess of the market value of the Company's common stock over the exercise price on the date the option is exercised.
- (2) Represents the fair value of shares of Brady Corporation Class A Non-Voting Common Stock granted in fiscal 2018 as compensation for their services. The shares of unrestricted stock and RSUs granted to the non-management directors were valued at the average of the high and low market price of \$36.85 on September 22, 2017.
- (3) Mr. Sirkin resigned as a director on November 6, 2017.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

(a) Security Ownership of Certain Beneficial Owners

The following table sets forth the current beneficial ownership of shareholders who are known by the Company to own more than five percent (5%) of any class of the Company's voting shares on August 1, 2018. As of that date, nearly all of the voting stock of the Company was held by two trusts controlled by direct descendants of the Company's founder, William H. Brady, as follows:

Title of Class	Name and Address of Beneficial Owner	Amount of Beneficial Ownership	Percent of Ownership(2)
Class B Common Stock	EBL GST Non-Exempt Stock B Trust(1) c/o Elizabeth P. Bruno 2002 S. Hawick Ct. Chapel Hill, NC 27516	1,769,304	50%
	William H. Brady III Living Trust dated November 1, 2013 (3) c/o William H. Brady III 249 Rosemont Ave. Pasadena, CA 91103	1,769,304	50%

- (1) The trustee is Elizabeth P. Bruno, who has sole voting and dispositive power and who is the remainder beneficiary. Elizabeth Bruno is the great-granddaughter of William H. Brady and currently serves on the Company's Board of Directors.
- (2) An additional 20 shares are owned by a third trust with different trustees.
- (3) William H. Brady III is grantor of this revocable trust and shares voting and dispositive powers with respect to these shares with his co-trustee. William H. Brady III is the grandson of William H. Brady.

(b) Security Ownership of Management

The following table sets forth the current beneficial ownership of each class of equity securities of the Company by each Director and Named Executive Officer individually and by all Directors and Officers of the Company as a group as of August 1, 2018. Unless otherwise noted, the address for each of the listed persons is c/o Brady Corporation, 6555 West Good Hope Road, Milwaukee, Wisconsin 53223. Except as otherwise indicated, all shares are owned directly.

Title of Class	Name of Beneficial Owner & Nature of Beneficial Ownership	Amount of Beneficial Ownership(3)(4)(5)	Percent of Ownership	
Class A Common Stock	Elizabeth P. Bruno (1)	1,242,867	2.6%	
	J. Michael Nauman	494,743	1.0%	
	Thomas J. Felmer	398,132	0.8%	
	Aaron J. Pearce	177,318	0.4%	
	Conrad G. Goodkind	164,092	0.3%	
	Patrick W. Allender (2)	117,699	0.2%	
	Louis T. Bognini	94,961	0.2%	
	Russell R. Shaller	90,852	0.2%	
	Bradley C. Richardson	63,718	0.1%	
	Frank W. Harris	60,490	0.1%	
	Gary S. Balkema	53,709	0.1%	
	Nancy L. Gioia	21,537	*	
	All Officers and Directors as a Group (15 persons)	3,204,758	6.6%	
	Class B Common Stock	Elizabeth P. Bruno (1)	1,769,304	50.0%

* Indicates less than one-tenth of one percent.

- (1) Ms. Bruno's holdings of Class A Common Stock include 806,296 shares owned by a trust for which she is a trustee and has sole dispositive and voting authority and 34,530 shares owned by trusts in which she is a co-trustee. Ms. Bruno's holdings of Class B Common Stock include 1,769,304 shares owned by a trust over which she has sole dispositive and voting authority.
- (2) Mr. Allender's holdings of Class A Common Stock include 20,000 shares owned by the Patrick and Deborah Allender Irrevocable Trust.

- (3) The amount shown for all officers and directors individually and as a group (15 persons) includes options to acquire a total of 1,394,233 shares of Class A Common Stock, which are currently exercisable or will be exercisable within 60 days of July 31, 2018, including the following: Ms. Bruno, 33,800 shares; Mr. Nauman, 398,623 shares; Mr. Felmer, 339,185 shares; Mr. Pearce, 136,228 shares; Mr. Goodkind, 39,800 shares; Mr. Allender, 39,800 shares; Mr. Bolognini, 71,354 shares; Mr. Shaller, 69,055 shares; Mr. Richardson, 12,750 shares; Mr. Harris, 33,800 shares; Mr. Balkema, 35,400 shares; and Ms. Gioia, 8,500 shares. It does not include other options for Class A Common Stock which have been granted at later dates and are not exercisable within 60 days of July 31, 2018.
- (4) The amount shown for all officers and directors individually and as a group (15 persons) includes unvested restricted stock units to acquire 82,874 shares of Class A Common stock, which will vest within 60 days of July 31, 2018, including the following: Mr. Nauman, 45,580 units; Mr. Felmer, 7,990 units; Mr. Pearce, 9,612 units; Mr. Bolognini, 4,722 units; and Mr. Shaller, 7,155 units. No unvested restricted stock units were held by directors which will vest within 60 days of July 31, 2018. It does not include unvested restricted stock awards or restricted stock units to acquire Class A Common Stock which have been granted at later dates and will not vest within 60 days of July 31, 2018.
- (5) The amount shown for all officers and directors individually and as a group (15 persons) includes Class A Common Stock owned in deferred compensation plans totalling 207,424 shares of Class A Common Stock, including the following: Ms. Bruno, 2,588 shares; Mr. Nauman 0 shares; Mr. Felmer, 12,702 shares; Mr. Pearce, 3,628 shares; Mr. Goodkind, 67,596 shares; Mr. Allender, 57,506 shares; Mr. Bolognini, 0 shares; Mr. Shaller 0 shares; Mr. Richardson, 45,798 shares; Mr. Harris, 0 shares; Mr. Balkema, 14,859 shares; and Ms. Gioia, 2,622 shares.

(c) Changes in Control

No arrangements are known to the Company, which may, at a subsequent date, result in a change in control of the Company.

(d) Equity Compensation Plan Information

Plan Category	As of July 31, 2018		
	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	2,955,586	\$ 28.23	4,049,563
Equity compensation plans not approved by security holders	None	None	None
Total	2,955,586	\$ 28.23	4,049,563

The Company's equity compensation plan allows the granting of stock options, restricted stock, RSUs, and unrestricted stock to various officers, directors and other employees of the Company at prices equal to fair market value at the date of grant. The Company has reserved 5,000,000 shares of Class A Nonvoting Common Stock for issuance under the Brady Corporation 2017 Omnibus Incentive Stock Plan. Generally, options will not be exercisable until one year after the date of grant, and will be exercisable thereafter, to the extent of one-third per year and have a maximum term of ten years. Generally, RSUs vest one-third per year for the first three years.

Item 13. Certain Relationships, Related Transactions, and Director Independence

The Company annually solicits information from its Directors in order to ensure there are no conflicts of interest. The information gathered annually is reviewed by the Company and if any transactions are not in accordance with the rules of the New York Stock Exchange or are potentially in violation of the Company's Corporate Governance Principles, the transactions are referred to the Corporate Governance Committee for approval, ratification, or other action. Further, potential affiliated party transactions would be reported as a part of the Company's quarterly disclosure process. In addition, pursuant to its charter, the Company's Audit Committee periodically reviews reports and disclosures of insider and affiliated party transaction with the Company, if any. Furthermore, the Company's Directors are expected to be mindful of their fiduciary obligations to the Company and to report any potential conflicts to the Corporate Governance Committee for review. Based on the Company's consideration of all relevant facts and circumstances, the Corporate Governance Committee will decide whether or not to approve such transactions and will approve only those transactions that are in the best interest of the Company. Additionally, the Company has processes in place to educate executives and employees about affiliated transactions. The Company maintains an anonymous hotline by which employees may report potential conflicts of interest such as affiliated party transactions.

In undertaking its review of potential related party transactions, the Board considered the commercial relationships of the Company, if any, with those entities that have employed the Company's Directors. The commercial relationships, which involved the purchase and sale of products on customary terms, did not exceed the maximum amounts proscribed by the director independence rules of the NYSE. Furthermore, the compensation paid to the Company's Directors by their employers, was not linked in any way to the commercial relationships their employers had with the Company in fiscal 2018. After consideration of these factors, the Board concluded that none of the Directors whose employers had a commercial relationship with the Company had a material interest in the transactions and the commercial relationships were not material to the Company. Based on these factors, the Company has determined that it does not have material related party transactions that affect the results of operations, cash flow or financial condition. The Company has also determined that no transactions occurred in fiscal 2018, or are currently proposed, that would require disclosure under Item 404 (a) of Regulation S-K.

See Item 10 above for a discussion of Director independence.

Item 14. Principal Accountant Fees and Services

The following table presents the aggregate fees incurred for professional services by Deloitte & Touche LLP and Deloitte Tax LLP during the years ended July 31, 2018 and 2017. Other than as set forth below, no professional services were rendered or fees billed by Deloitte & Touche LLP or Deloitte Tax LLP during the years ended July 31, 2018 and 2017.

	2018	2017
	(Dollars in thousands)	
<i>Audit, audit-related and tax compliance</i>		
Audit fees ⁽¹⁾	\$ 1,235	\$ 1,200
Tax fees — compliance	609	492
<i>Subtotal audit, audit-related and tax compliance fees</i>	1,844	1,692
<i>Non-audit related</i>		
Tax fees — planning and advice	320	189
<i>Subtotal non-audit related fees</i>	320	189
Total fees	\$ 2,164	\$ 1,881

- (1) Audit fees consist of professional services rendered for the audit of the Company's annual financial statements, attestation of management's assessment of internal control, reviews of the quarterly financial statements and statutory reporting compliance.

	2018	2017
Ratio of Tax Planning and Advice Fees to Audit Fees, Audit-Related Fees and Tax Compliance Fees	0.2 to 1	0.1 to 1

Pre-Approval Policy — The services performed by the Independent Registered Public Accounting Firm ("Independent Auditors") in fiscal 2018 were pre-approved in accordance with the pre-approval policy and procedures adopted by the Audit Committee. The policy requires the Audit Committee to pre-approve the audit and non-audit services performed by the Independent Auditors in order to assure that the provision of such services does not impair the auditor's independence. All services performed for the Company by the Independent Auditor must be approved in advance by the Audit Committee. Any proposed services exceeding pre-approved cost levels will require specific pre-approval by the Audit Committee.

PART IV

Item 15. Exhibits and Financial Statement Schedules

Item 15 (a) — The following documents are filed as part of this report:

1) & 2) Consolidated Financial Statement Schedule -

Schedule II Valuation and Qualifying Accounts

All other schedules are omitted as they are not required, or the required information is shown in the consolidated financial statements or notes thereto.

3) Exhibits — See Exhibit Index at page 92 of this Form 10-K.

EXHIBIT INDEX

Exhibit Number	Description
2.1	Agreement and Plan of Merger, dated as of December 28, 2012, by and among Brady Corporation, BC I Merger Sub Corporation, Precision Dynamics Corporation, and Precision Dynamics Holding LLC (29)
2.2	Share and Asset Purchase Agreement, dated as of February 24, 2014, by and among Brady Corporation and LTI Flexible Products, Inc. (d/b/a Boyd Corporation) (6)
3.1	Restated Articles of Incorporation of Brady Corporation (1)
3.2	By-laws of Brady Corporation, as amended (23)
*10.1	Form of Change of Control Agreement, amended as of December 23, 2008, entered into with Thomas J. Felmer (12)
*10.2	Brady Corporation BradyGold Plan, as amended (2)
*10.3	Executive Additional Compensation Plan, as amended (2)
*10.4	Executive Deferred Compensation Plan, as amended
*10.5	Directors' Deferred Compensation Plan, as amended
*10.6	Forms of Nonqualified Employee Stock Option Agreement, Director Nonqualified Stock Option Agreement, and Employee Performance Stock Option Agreement under the Brady Corporation 2006 Omnibus Incentive Stock Plan (10)
*10.7	Brady Corporation 2017 Omnibus Incentive Plan (27)
*10.8	Form of Nonqualified Stock Option Agreement under the Brady Corporation 2017 Omnibus Incentive Plan for awards granted prior to Fiscal 2019 (33)
10.9	Brady Corporation Automatic Dividend Reinvestment Plan (4)
*10.10	Brady Corporation 2005 Nonqualified Stock Option Plan for Non-Employee Directors, as amended (3)
*10.11	Form of Director Nonqualified Stock Option Agreement under the Brady Corporation 2005 Nonqualified Stock Option Plan for Non-Employee Directors, as amended (8)
*10.12	Form of Restricted Stock Unit Agreement under the Brady Corporation 2017 Omnibus Incentive Plan for awards granted prior to Fiscal 2019 (33)
*10.13	Restricted Stock Unit Agreement, dated as of October 1, 2014, with Thomas J. Felmer (11)
*10.14	Form of Fiscal 2019 Performance-Based Restricted Stock Unit Agreement under the Brady Corporation 2017 Omnibus Incentive Plan
*10.15	Brady Corporation 2006 Omnibus Incentive Stock Plan, as amended (10)
*10.16	Restricted Stock Unit Agreement, dated as of November 28, 2014, with Thomas J. Felmer (20)
*10.17	Change of Control Agreement, dated as of August 28, 2015, with Russell R. Shaller (21)
*10.18	Change of Control Agreement, dated as of September 11, 2015, with Aaron J. Pearce (21)
*10.19	Form of Performance-Based Restricted Stock Agreement under the Brady Corporation 2006 Omnibus Incentive Stock Plan (7)
*10.20	Form of Fiscal 2015 Employee Restricted Stock Unit Agreement under the Brady Corporation 2012 Omnibus Incentive Plan (21)
*10.21	Restated Brady Corporation Restoration Plan, as amended
*10.22	Change of Control Agreement, dated as of February 28, 2013, with Louis T. Bolognini (30)
*10.23	Form of Performance-Based Restricted Stock Unit Agreement under the Brady Corporation 2017 Omnibus Incentive Plan (33)

*10.24	Employment Offer Letter, dated as of June 2, 2015, with Russell Shaller (28)
*10.25	Restricted Stock Unit Agreement, dated as of July 15, 2015, with Aaron J. Pearce (34)
10.26	Note Purchase Agreement, dated May 13, 2010, by and among Brady Corporation, Brady Worldwide, Inc., Tricor Direct, Inc., and certain Purchasers (19)
*10.27	Form of Amendment to 2005 Nonqualified Stock Option Agreement under the Brady Corporation 2004 Omnibus Incentive Stock Plan, dated February 17, 2010 (18)
*10.28	Brady Corporation 2010 Omnibus Incentive Stock Plan, as amended (22)
*10.29	Brady Corporation 2010 Nonqualified Stock Option Plan for Non-Employee Directors (17)
*10.30	Form of Employee Nonqualified Stock Option Agreement and Employee Performance Stock Option Agreement under the Brady Corporation 2010 Omnibus Incentive Stock Plan (17)
*10.31	Form of Director Nonqualified Stock Option Agreement under the Brady Corporation 2010 Nonqualified Stock Option Plan for Non-Employee Directors (17)
*10.32	Brady Corporation Incentive Compensation Plan for Senior Executives (15)
*10.33	Restricted Stock Agreement, dated as of October 7, 2013, with Thomas J. Felmer (36)
*10.34	Change of Control Agreement, dated as of March 3, 2014, with Bentley N. Curran (13)
*10.35	Restricted Stock Unit Agreement, dated as of August 4, 2014, with Thomas J. Felmer (9)
*10.36	Change of Control Agreement, dated as of March 3, 2014, with Helena R. Nelligan (13)
*10.37	Form of Fiscal 2012 Performance Stock Option under the Brady Corporation 2010 Omnibus Incentive Stock Plan (26)
*10.38	Brady Corporation 2012 Omnibus Incentive Stock Plan (26)
*10.39	Form of Nonqualified Employee Stock Option Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (26)
*10.40	Form of Nonqualified Employee Performance Stock Option Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (26)
*10.41	Form of Director Stock Option Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (26)
*10.42	Form of Fiscal 2013 Nonqualified Employee Stock Option Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (31)
*10.43	Form of Fiscal 2013 Director Nonqualified Stock Option Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (31)
10.44	Credit Agreement, dated as of September 25, 2015, by and among Brady Corporation and certain of its subsidiaries, the Guarantors and Lenders listed therein and Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer (24)
*10.45	Employment Offer Letter, dated as of August 1, 2014, with J. Michael Nauman (35)
*10.46	Restricted Stock Unit Agreement, dated as of August 4, 2014, with J. Michael Nauman (35)
*10.47	Change of Control Agreement, dated as of August 4, 2014, with J. Michael Nauman (35)
*10.48	Form of Fiscal 2014 Nonqualified Employee Stock Option Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (32)
*10.49	Form of Fiscal 2014 Director Stock Option Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (32)
*10.50	Form of Fiscal 2014 Restricted Stock Unit Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (32)
*10.51	Form of Fiscal 2016 Nonqualified Employee Stock Option Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (21)
*10.52	Form of Fiscal 2016 Restricted Stock Unit Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (21)

*10.53	Form of Fiscal 2015 Nonqualified Employee Stock Option Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (9)
*10.54	Form of Fiscal 2015 Director Nonqualified Stock Option Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (9)
*10.55	Form of Fiscal 2015 Restricted Stock Unit Agreement under the Brady Corporation 2012 Omnibus Incentive Stock Plan (9)
*10.56	Restricted Stock Unit Agreement, dated as of June 22, 2015, with Russell R. Shaller (21)
*10.57	Form of Fiscal 2015 Employee Retention Restricted Stock Unit Agreement under 2012 Omnibus Incentive Plan (21)
*10.58	Form of Fiscal 2019 Nonqualified Employee Stock Option Agreement under the Brady Corporation 2017 Omnibus Incentive Plan
*10.59	Form of Fiscal 2019 Restricted Stock Unit Agreement under the Brady Corporation 2017 Omnibus Incentive Plan
21	Subsidiaries of Brady Corporation
23	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm
31.1	Rule 13a-14(a)/15d-14(a) Certification of J. Michael Nauman
31.2	Rule 13a-14(a)/15d-14(a) Certification of Aaron J. Pearce
32.1	Section 1350 Certification of J. Michael Nauman
32.2	Section 1350 Certification of Aaron J. Pearce
101	Interactive Data File

* Management contract or compensatory plan or arrangement

- (1) Incorporated by reference to Registrant's Registration Statement No. 333-04155 on Form S-3
- (2) Incorporated by reference to Registrant's Annual Report on Form 10-K for the fiscal year ended July 31, 1989
- (3) Incorporated by reference to Registrant's Current Report on Form 8-K filed November 25, 2008
- (4) Incorporated by reference to Registrant's Annual Report on Form 10-K for the fiscal year ended July 31, 1992
- (5) Incorporated by reference to Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended January 31, 2008
- (6) Incorporated by reference to Registrant's Current Report on Form 8-K filed February 25, 2014
- (7) Incorporated by reference to Registrant's Current Report on Form 8-K filed January 9, 2008
- (8) Incorporated by reference to Registrant's Current Report on Form 8-K filed December 4, 2006
- (9) Incorporated by reference to Registrant's Annual Report on Form 10-K for the fiscal year ended July 31, 2014
- (10) Incorporated by reference to Registrant's Annual Report on Form 10-K for the fiscal year ended July 31, 2008
- (11) Incorporated by reference to Registrant's Current Report on Form 8-K filed October 2, 2014
- (12) Incorporated by reference to Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended January 31, 2009
- (13) Incorporated by reference to Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended January 31, 2014
- (14) Reserved
- (15) Incorporated by reference to Registrant's Current Report on Form 8-K filed September 2, 2011
- (16) Incorporated by reference to Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2011
- (17) Incorporated by reference to Registrant's Annual Report on Form 10-K for the fiscal year ended July 31, 2009
- (18) Incorporated by reference to Registrant's Current Report on Form 8-K filed February 23, 2010
- (19) Incorporated by reference to Registrant's Current Report on Form 8-K filed May 14, 2010
- (20) Incorporated by reference to Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended October 31, 2014
- (21) Incorporated by reference to Registrant's Annual Report on Form 10-K for the fiscal year ended July 31, 2015
- (22) Incorporated by reference to Registrant's Current Report on Form 8-K filed September 27, 2010
- (23) Incorporated by reference to Registrant's Current Report on Form 8-K filed July 18, 2014
- (24) Incorporated by reference to Registrant's Current Report on Form 8-K filed September 25, 2015
- (25) Incorporated by reference to Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended January 31, 2017
- (26) Incorporated by reference to Registrant's Annual Report on Form 10-K for the fiscal year ended July 31, 2011
- (27) Incorporated by reference to Registrant's Current Report on Form 8-K filed May 27, 2016
- (28) Incorporated by reference to Registrant's Current Report on Form 8-K filed June 5, 2015
- (29) Incorporated by reference to Registrant's Current Report on Form 8-K filed December 31, 2012

- (30) Incorporated by reference to Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2013
- (31) Incorporated by reference to Registrant's Annual Report on Form 10-K for the fiscal year ended July 31, 2012
- (32) Incorporated by reference to Registrant's Annual Report on Form 10-K for the fiscal year ended July 31, 2013
- (33) Incorporated by reference to Registrant's Current Report on Form 8-K filed July 14, 2016
- (34) Incorporated by reference to Registrant's Current Report on Form 8-K filed July 16, 2015
- (35) Incorporated by reference to Registrant's Current Report on Form 8-K filed August 4, 2014
- (36) Incorporated by reference to Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended October 31, 2013

Item 16. Form 10-K Summary

None.

**BRADY CORPORATION AND SUBSIDIARIES
SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS**

Description	Year ended July 31,		
	2018	2017	2016
(Dollars in thousands)			
Valuation accounts deducted in balance sheet from assets to which they apply — Accounts receivable — allowance for doubtful accounts:			
Balances at beginning of period	\$ 4,629	\$ 5,144	\$ 3,585
Additions — Charged to expense	752	732	1,904
Deductions — Bad debts written off, net of recoveries	(910)	(1,247)	(345)
Balances at end of period	\$ 4,471	\$ 4,629	\$ 5,144
Inventory — Reserve for slow-moving inventory:			
Balances at beginning of period	\$ 14,322	\$ 15,083	\$ 13,269
Additions — Charged to expense	2,797	4,608	4,950
Deductions — Inventory write-offs	(4,537)	(5,369)	(3,136)
Balances at end of period	\$ 12,582	\$ 14,322	\$ 15,083
Valuation allowances against deferred tax assets:			
Balances at beginning of period	\$ 38,563	\$ 37,992	\$ 39,922
Additions during year	24,184	2,004	2,614
Deductions — Valuation allowances reversed/utilized	(5,881)	(1,433)	(4,544)
Balances at end of period	\$ 56,866	\$ 38,563	\$ 37,992

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized this 13th day of September 2018.

BRADY CORPORATION

By: /s/ AARON J. PEARCE
Aaron J. Pearce
Chief Financial Officer and Treasurer
(Principal Financial 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 Registrant and in the capacities and on the dates indicated.*

Signature	Title
<u>/s/ J. MICHAEL NAUMAN</u> J. Michael Nauman	President and Chief Executive Officer; Director <i>(Principal Executive Officer)</i>
<u>/s/ ANN E. THORNTON</u> Ann E. Thornton	Chief Accounting Officer and Corporate Controller <i>(Principal Accounting Officer)</i>
<u>/s/ PATRICK W. ALLENDER</u> Patrick W. Allender	Director
<u>/s/ GARY S. BALKEMA</u> Gary S. Balkema	Director
<u>/s/ NANCYL. GIOIA</u> Nancy L. Gioia	Director
<u>/s/ CONRAD G. GOODKIND</u> Conrad G. Goodkind	Director
<u>/s/ FRANK W. HARRIS</u> Frank W. Harris	Director
<u>/s/ ELIZABETH P. BRUNO</u> Elizabeth P. Bruno	Director
<u>/s/ BRADLEY C. RICHARDSON</u> Bradley C. Richardson	Director

* Each of the above signatures is affixed as of September 13, 2018.