BRADY CORP

Form 10-K

September 13, 2018

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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended July 31, 2018

"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)

39-0178960 Wisconsin (State or other jurisdiction of (IRS Employer incorporation or organization) Identification No.)

6555 West Good Hope Road,

53223

Milwaukee, WI

(Address of principal executive offices) (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 ý 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 ý

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 ý 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 ý 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. \circ 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 ý Accelerated filer "Emerging growth company"

Non-accelerated filer "Smaller reporting company"

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or

revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the

Act). Yes "No ý

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 191 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").

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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:

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2018 2017 2016

IDS 72.1 % 71.9 % 71.0 %

WPS 27.9 % 28.1 % 29.0 %

Total 100.0 % 100.0 % 100.0 %
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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 Identicard, PromoVision, and Brady People ID brands. Wire identification products are marketed under the Modernotecnica 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.

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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.

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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.

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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.

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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

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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

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

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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.

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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.

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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:

				Total	Maximum
				Number of	Number of
		Total	Average	Shares	Shares
	Period	Number of	Price	Purchased	That May
		Shares	paid per	As Part of	Yet Be
		Purchased	share	Publicly	Purchased
				Announced	Under the
				Plans	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) Dividende				

(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.

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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 2014 2018 2016 2015 2017 (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 35,048 39,624 35,799 45,253 36,734 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 440,895 650,775 435,595 427,277 523,126 Operating income (loss) 117,878 35,306 (41,211 152,696 131,015) Other income (expense): Investment and other income (expense) (709 2,487 1,121) 845 2,402 Interest expense) (5,504) (14,300 (3,168)) (7,824) (11,156 Net other expense) (4,383) (8,533 (681) (10,311) (11,898) Earnings (loss) from continuing operations before 152,015 126,632 109,345 24,995 (53,109) income taxes 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 (1,915)) 2,178 of income taxes⁽⁶⁾ Net earnings (loss) \$91,060 \$95,645 \$80,110 \$2,987 \$(45,968 Earnings (loss) from continuing operations per Common Share— (Diluted): \$1.84 \$1.58 Class A nonvoting \$1.73 \$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 \$0.80 \$0.79 \$0.78 \$0.76 Class B common stock \$0.81 Balance Sheet at July 31: Total assets \$1,056,931 \$1,043,964 \$1,253,665 \$1,050,223 \$1,062,897 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 39,458 44,598 25,442 27,303 32,432 Capital expenditures) (43,398 (21,777)) (15,167) (17,140) (26,673) (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.

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- During fiscal 2018, the Company recognized a gain of \$4.7 million on the sale of its Runelandhs Försäljnings AB business.
- 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 (3) resulted in restrictiving sharpes during fiscal 2014 and fine 12015. Fine 12015 in 1
- 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.
- 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.
 - 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
- (5) 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.
 - 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
- (6) 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%

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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.

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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		\$131,015		\$117.878	10.5 %
Other income and (expense):	Ψ122,070	15.0 %	φ151,015	11.0 %	Ψ117,070	10.2 70
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.

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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 \$1,173,851 \$1,113,316 \$1,120,62	5
SALES GROWTH INFORMATION	
ID Solutions	
Organic 3.4 % 1.6 % (0.7)%
Currency 2.3 % (1.0)% (3.1)%
Total 5.7 % 0.6 % (3.8)%
Workplace Safety	
Organic 0.7 % (2.0)% (0.7)%
Currency 4.6 % (1.7)% (5.0)%
Divestitures $(0.6)\%$ — $\%$ —	%
Total 4.7 % (3.7)% (5.7)%
Total Company	
Organic 2.6 % 0.5 % (0.7)%
Currency 3.0 % (1.2)% (3.7)%
Divestitures $(0.2)\%$ — $\%$ —	%
Total 5.4 % (0.7)% (4.4)%
SEGMENT PROFIT	
ID Solutions \$143,411 \$130,572 \$112,276	
Workplace Safety 31,712 25,554 30,792	
Total \$175,123 \$156,126 \$143,068	
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 14.9 % 14.0 % 12.8	%
NET EARNINGS RECONCILIATION Years ended:	
(Dollars in thousands) July 31, July 31, July 31, 2016	
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 \$152,015 \$126,632 \$109,345	

⁽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.

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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 \$47,483 \$(7,284) \$26,736 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.

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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):

T	D	1	D . 1
Payments	1)110	hv	Period

Contractual Obligations Total Less than than 1-3 3-5 than Uncert Years Years 5 Timefrequency Years	
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	1
Other Obligations ⁽²⁾ 2,813 377 698 598 1,140 —	
Total \$180,170 \$66,043 \$74,287 \$14,210 \$5,200 \$ 20,43	30

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

Other obligations represent expected payments under the Company's U.S. postretirement medical plan and (2) 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.

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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" of 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.

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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

July 31, 2018 and 2017		
	2018	2017
	(Dollars in t	housands)
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:	501,017	220,003
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
Ciass D voting common stock — issued and outstanding 3,336,026 shales	33	33

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 (71,120) (85,470)
Class A nonvoting common stock, at cost 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 thousand	s, except per s	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.						

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BRADY CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Years Ended July 31, 2018, 2017 and 2016

	2018	2017	2016	
	(Dollars	s)		
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	\$79,341	\$105,708	\$70,399)
See Notes to Consolidated Financial Statements.				

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

Tears Ended July 31, 2018, 2017 and 2010	Comi	Additiona mon Paid-In Capital	Earnings Retained in the Business	Treasury Stock	Accumulated Other Comprehensiv (Loss)	e Other
	(In th	ousands ex	cent per sha	re amounts)	Income	
Balances at July 31, 2015		\$314,403		\$(93,234)	\$ (45,034	\$(3,064)
Net earnings		_	80,110	_	<u> </u>	_
Other comprehensive loss, net of tax	_		_	_	(9,711	—
Issuance of 308,059 shares of Class A Common		(3,830		8,300		
Stock under stock plan	_	(3,030	· —	8,300		
Other (Note 7)		(10)	—	(228)	_	(799)
Tax shortfall from exercise of stock options and	_	(1,716	·	_		
deferred compensation distributions		(1,710	, _			
Stock-based compensation expense (Note 7)		8,154	_		_	_
Purchase of 1,153,689 shares of Class A Common			_	(23,552)		
Stock				(23,332)		
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	_	(5,868) —	23,591	_	
Stock under stock plan						2.062
Other (Note 7)	_	1,943		(347)	_	3,863
Tax shortfall from exercise of stock options and		37	_			
deferred compensation distributions		0.405				
Stock-based compensation expense (Note 7)	_	9,495	_			_
Class A			(20.027)			
Class A — \$0.82 per share			(39,037)	_	_	_
Class B — \$0.80 per share Balances at July 31, 2017	 \$518		(2,843)	**************************************	<u> </u>	—) \$—
Net earnings	φ <i>9</i> 40	\$322,000	91,060	\$(65,470)	\$ (44,062	у —
Other comprehensive loss, net of tax	_	_	91,000		(11,719)	
Issuance of 842,305 shares of Class A Common	_				(11,/19	, —
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.

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BRADY CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

Years Ended July 31, 2018, 2017 and 2016

Teals Effect July 31, 2016, 2017 and 2010	• • • •		
	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	•	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	•	(86)	1,724
Net cash used in investing activities	,		(15,416)
Financing activities:	(=,> 00)	(10,200)	(10,110)
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	•		(23,552)
Proceeds from borrowing on credit facilities	23,221	180,320	96,276
Repayment of borrowing on credit facilities		(244,268)	
Principal payments on debt	(70,11)) —	(49,302)	
Debt issuance costs		(12,302)	(803)
Income tax on equity-based compensation, and other	(3,246)	(839)	(1,662)
Net cash used in financing activities		(136,241)	
Effect of exchange rate changes on cash and cash equivalents		178	2,752
Net increase (decrease) in cash and cash equivalents	47,483		26,736
Cash and cash equivalents, beginning of period	-	141,228	
Cash and cash equivalents, beginning of period Cash and cash equivalents, end of period		\$133,944	
Supplemental disclosures of cash flow information:	\$101,427	\$133,944	\$141,220
Cash paid during the period for: Interest	\$2.076	¢5766	¢ 0 5 2 0
	\$2,976	\$5,766	\$8,528
Income taxes	33,267	31,885	28,497
See Notes to Consolidated Financial Statements.			

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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

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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				Weighted			
	Average	Gross	Accumula	ted Net	Average	Gross	Accumula	ted Net
	Amortization	Carrying	Amortizat	Book	Amortization	Carrying	Amortizat	
	Period	Amount	11110111200	Value	Period	Amount	11111011124	Value
	(Years)				(Years)			
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		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 Ending balance, July 31, 2018	\$ (94) \$ 863	\$ 876 \$ 3,302	\$ 1,087 \$ (60,566)	1,869 \$ (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.

2010 2017

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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	\$569	\$2,421	\$(3,028)

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	\$3,020	\$3,390

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
	\$3,020	\$3,390

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

	rears 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	\$(441)	\$(455)	\$(1,558)

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.

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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-	-Percentag	e One	e-Perc	entage	
	Poin	t Increase	Poi	nt Dec	rease	
Effect on future service and interest cost	\$	4	\$	(5)	
Effect on accumulated postretirement benefit obligation at July 31, 2018	17		(18)	
		* 1 01				

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.

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

	July 31, 2	018	
	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	\$41,693	\$(44,626)	\$(2,933)
	July 31, 2	017	
	July 31, 2 Assets	017 Liabilities	s Total
Inventories	•	Liabilities	Total) \$4,515
Inventories Prepaid catalog costs	Assets	Liabilities \$(1	
	Assets	Liabilities \$(1	\$4,515
Prepaid catalog costs	Assets \$4,516	Liabilities \$(1) (1,107)) \$4,515) (1,107)
Prepaid catalog costs Employee benefits	Assets \$4,516 — 8,932	Liabilities \$(1) (1,107) — (11)	\$4,515 (1,107) 8,932
Prepaid catalog costs Employee benefits Accounts receivable	Assets \$4,516 — 8,932 1,141	Liabilities \$(1) (1,107) — (11) (3,884)	\$4,515 (1,107) 8,932 1,130
Prepaid catalog costs Employee benefits Accounts receivable Fixed assets	Assets \$4,516 — 8,932 1,141 2,819	Liabilities \$(1) (1,107) — (11) (3,884)	\$4,515 (1,107) 8,932 (1,130) (1,065)
Prepaid catalog costs Employee benefits Accounts receivable Fixed assets Intangible assets	Assets \$4,516 — 8,932 1,141 2,819 1,187	Liabilities \$(1) (1,107) — (11) (3,884)	(1,107) 8,932 (1,130) (1,065) (36,494)
Prepaid catalog costs Employee benefits Accounts receivable Fixed assets Intangible assets Deferred and equity-based compensation	Assets \$4,516 — 8,932 1,141 2,819 1,187 16,743	Liabilities \$(1 (1,107 — (11 (3,884 (37,681 —	\$4,515 \$(1,107) \$,932 \$1,130 \$(1,065) \$(36,494) \$16,743
Prepaid catalog costs Employee benefits Accounts receivable Fixed assets Intangible assets Deferred and equity-based compensation Postretirement benefits	Assets \$4,516 — 8,932 1,141 2,819 1,187 16,743 4,144	Liabilities \$(1) (1,107) — (11) (3,884) (37,681) — —	(1,107) 8,932 (1,130) (1,065) (36,494) 16,743 4,144
Prepaid catalog costs Employee benefits Accounts receivable Fixed assets Intangible assets Deferred and equity-based compensation Postretirement benefits Tax credit and net operating loss carry-forwards	Assets \$4,516 — 8,932 1,141 2,819 1,187 16,743 4,144 70,128	Liabilities \$(1) (1,107) — (11) (3,884) (37,681) — —) \$4,515) (1,107) 8,932) 1,130) (1,065)) (36,494) 16,743 4,144 70,128 (38,563)

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.

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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		y 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	40.1 %	24.5 %	26.7 %

- The year ended July 31, 2017, includes the generation of foreign tax credit carryforwards from cash repatriations that occurred during the fiscal year.
- 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.
- The years ended July 31, 2018 and 2017, include increases in current year uncertain tax positions, while the year (4)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	3
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	4
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	2
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	\mathbf{C}

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 end 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.

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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 — FederaF'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
Less notes payable Total long-term debt	_	\$107,764 (3,228) \$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 Total	52,618 \$52,618		
47			

7. Stockholders' Investment

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

	July 31, 2013	8		July 31, 201	7	
	Shares	Shares	(thousand	s)Shares	Shares	(thousands)
	Authorized	Issued	Amount	Authorized	Issued	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 \$ 548	10,000,000	3,538,628	35 \$ 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 \$.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	Total
\$ 5,684	\$ (8,748)	\$(3,064)
•	•	
\$ (1,238)	\$ 1,278	\$40
178	(1,017)	(839)
\$ 4,624	\$ (8,487)	\$(3,863)
201,418	347,081	
\$ (1,247)	\$ 1,288	\$41
315	(925)	(610)
4,432	_	4,432
\$ 8,124	\$ (8,124)	\$ —
314,082	314,082	
\$ (977)	\$ 977	\$ —
1,075	(1,075)	_
\$ 8,222	\$ (8,222)	\$ —
	Compensation \$ 5,684 252,261 \$ (1,238) 178 \$ 4,624 201,418 \$ (1,247) 315 4,432 \$ 8,124 314,082 \$ (977) 1,075	Deferred Compensation in Rabbi Trust, at cost \$ 5,684 \$ (8,748) 252,261 \$ 362,025 \$ (1,238) \$ 1,278 178 \$ (1,017) \$ 4,624 \$ (8,487) 201,418 \$ 347,081 \$ (1,247) \$ 1,288 315 \$ (925) 4,432 \$ (8,124) 314,082 \$ 8,124 \$ 314,082 \$ (977) \$ 977 1,075 \$ (1,075)

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	5	\$35.14	1	\$20.02	2
Weighted-average exercise price	\$36.85	5	\$35.14	1	\$20.02	2
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:

			Weighted
	Option Price	Options	Average
	Option Price	Outstanding	Exercise
			Price
Balance as of July 31, 2017	\$19.96 \$3 8.83	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 \$3 8.83 2,504,633	\$ 28.23

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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:

	(Intions (Interanding			Options Outstanding and			
				Exercisable			
	Number of			Weighted			
	Shares	Weighted Average	Weighted	Shares	Average	Weighted	
Danga of Evansias Driess	OutstandingRemaining Avera		Average	ExercisableRemaining Aver		Average	
Range of Exercise Prices	at	Contractual Life	Exercise	at July 31,	Contractual	Exercise	
	July 31,	(in years)	Price	2018	Life	Price	
	2018				(in years)		
\$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:

	Weighted
	Average
Charas	Grant
Shares	Date
	Fair
	Value
517,108	\$ 25.61
94,457	36.80
(219,389)	24.76
(49,320)	26.94
342,856	\$ 29.05
	94,457 (219,389) (49,320)

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 RSU's vested during the years ended July 31, 2018 and 2017, was \$8,237 and \$6,512, respectively.

		Weighted
		Average
Performance-Based RSUs	Shares	Grant
	Shares	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 RSU's 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	\$1,173,851	\$1,113,316	\$1,120,625
Depreciation & Amortization:			
ID Solutions	\$22,075	\$23,092	\$27,285
WPS	3,367	4,211	5,147
Total Company	\$25,442	\$27,303	\$32,432
Segment Profit:			
ID Solutions	\$143,411	\$130,572	\$112,276
WPS	31,712	25,554	30,792
Total Company	\$175,123	\$156,126	\$143,068
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	\$1,056,931	\$1,050,223	\$1,043,964
Expenditures for property, plant & equipment:			
ID Solutions	\$17,283	\$12,347	\$11,640
WPS	4,494	2,820	5,500
Total Company	\$21,777	\$15,167	\$17,140

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	\$152,015	\$126,632	\$109,345		

(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	\$1,173,851	\$1,113,316	\$1,120,625	\$560,348	\$588,876	\$592,121

^{*} Revenues are attributed based on country of origin.

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

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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: