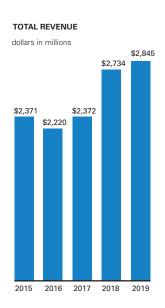
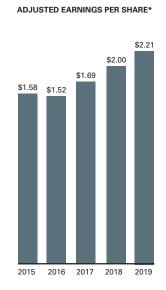


WHY DONALDSON?

Donaldson is a technology-led filtration company with a diversified portfolio of global businesses. We partner with our customers, including some of the world's largest original equipment manufacturers, to solve complex filtration challenges. With our reach, capabilities and diversity, we are able to provide the extensive resources of an international company and the personalized service of a local firm.





^{*} Reflects diluted adjusted earnings per share, a non-GAAP measure which excludes the impact from certain non-recurring items. One-time items benefited fiscal year 2017 GAAP earnings per share by approximately 5 cents, while results in fiscal years 2015, 2016, 2018, and 2019 were negatively impacted by approximately 9 cents, 10 cents, 64 cents, and 16 cents, respectively. More information is provided in the annual report on Form 10-K for these fiscal years.

FISCAL 2019 SELECT REVENUE METRICS

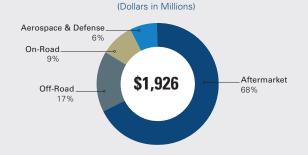
TOTAL SALES BY GEOGRAPHIC REGION



TOTAL SALES BY SEGMENT



TOTAL SALES BY ENGINE PRODUCTS



TOTAL SALES BY INDUSTRIAL PRODUCTS



DEAR SHAREHOLDERS,

It was another record year for our company: record sales, record profit and a record level of investment to drive long-term, profitable growth. These records reflect progress on our strategic priorities, which include expanding our technologies and solutions, extending our market access and executing thoughtful acquisitions.

During the year, we refreshed our purpose and principles to align with <u>how</u> we deliver our strategic priorities. Our purpose is Advancing Filtration for a Cleaner World, and we accomplish that through a core set of principles:

- Act with integrity
- Engage and empower our people
- Deliver for our customers
- Cultivate innovation
- Operate sustainably and safely
- · Enrich our communities

These principles are not new in our company. In fact, they represent who we have been for decades. As the needs of our stakeholders evolve and the next generation of employees joins our family, we felt it was important to renew the connection to our operating principles.

Acting with integrity is at the core of every decision. We have a "say what we do, and do what we say" culture, and great results only matter when we achieve them with integrity. Our employees demonstrate incredible accountability to this principle, and we strive to be accountable to them.

By engaging and empowering our people, we foster an environment of mutual respect where they have opportunities to grow, build successful careers and make meaningful contributions. There is rich diversity across our global team of 14,000 people, and we are making investments to promote and leverage that diversity. We recently launched a global HR system that will modernize our talent management capabilities, and we have also upgraded our learning and development program. We know that great leaders are what makes these tools valuable, so we facilitate annual leadership summits to create alignment across our global team.

Solving complex problems is another way we meet our customers' needs, which is why cultivating innovation remains critical to our success. This commitment to innovation started with Frank Donaldson 104 years ago, and it's been the core of our company ever since.

Tod Carpenter, Chairman, President and CEO

One principle that we naturally align around is supporting our customers. During the recent demand spike, and subsequent volatility in 2019, we invested to meet their needs. While our profit margins faced short-term pressure, we validated our position as a top-tier partner. As we look at 2020, the unprecedented level of investment last year gives us the opportunity to reset our operations, improve margin and better serve our customers.

Solving complex problems is another way we meet our customers' needs, which is why cultivating innovation remains critical to our success. This commitment to innovation started with Frank Donaldson 104 years ago, and it's been the core of our company ever since.

Our innovative products were the fastest growing last year, and we expect that trend will continue. Our plans this year see foundational products for engines being complemented by new offerings, like Connected Solutions, and further expansion into markets like Food and Beverage. We are targeting markets with consistent growth, higher margin profiles and higher technical requirements, which is why we are dedicating more R&D investment to breakthrough innovation.

One of our significant investments is a new R&D facility at our global headquarters. We broke ground in June 2019 on the Material Research Center, and we plan for it to be operational in 2020. This facility will accelerate the development of new materials, diversification with new technologies and penetration into new markets for profitable growth.

As we expand our capabilities, we also need to operate safely and sustainably. We are amplifying our efforts around safety: we have added more safety experts to our facilities to help drive the safety-first culture; we have continued the implementation of Environmental, Health and Safety (EHS) standards across our U.S. plants; and we have incorporated global safety performance metrics into our company priorities.

We are also sharpening our focus on operating sustainably. We recently added a new position to lead our global sustainability efforts. We are evaluating a variety of opportunities, including greenhouse gas emissions and consumption of energy and water; however, pursuing these improvements is not new to us. For example, we installed solar panels on large facilities in Australia and Belgium, which are excellent examples of how our sustainability program balances doing the right thing for the business and the environment.

Supporting the communities where we operate is a distinguishing trait of Donaldson Company. Our philanthropic legacy includes employees sharing their time, resources and talent to enrich their communities, and the level of passion they have is impressive. I am proud to work alongside employees who strive to make a positive impact in the world.

Since 1915, our company has been making a difference with our communities, customers, investors, suppliers and employees. By Advancing Filtration for a Cleaner World, we are demonstrating our commitment to the future generations of Donaldson stakeholders. I am confident that alignment around our purpose and principles will create long-term value for you, our shareholder.

Thank you for the support as we continue our journey.

Tal & Camanter

Tod E. Carpenter Chairman, President, and CEO



UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

Annual Report Pursuant to So for the fiscal year ended July	ection 13 or 15(d) of the 31, 2019 or	e Securities Exchange Act of 1934				
☐ Transition Report Pursuant to for the transition period from	Section 13 or 15(d) of to	the Securities Exchange Act of 1934				
Comr	nission File Number: 1-7	7891				
	Donaldso FILTRATION SOLUTION	ons				
	SON COMPA					
Delaware		41-0222640				
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)					
1400 West 94th Street, Minneapolis, Minneso	55431					
(Address of principal executive offices)	(Zip Code)					
Registrant's telephone	number, including area	code: (952) 887-3131				
Securities registe	ered pursuant to Section	12(b) of the Act:				
Title of each class	Trading Symbol(s)	Name of each exchange on which registered				
Common Stock, \$5.00 par value	DCI	New York Stock Exchange				
Securities registered production Indicate by check mark if the registrant is a well-known season Indicate by check mark if the registrant is not required to file Indicate by check mark whether the registrant (1) has filed a 1934 during the preceding 12 months (or for such shorter per filing requirements for the past 90 days. ▶ Yes □ No	reports pursuant to Section	Aule 405 of the Securities Act. ■ Yes □ No in 13 or Section 15(d) of the Act. □ Yes ■ No ed by Section 13 or 15(d) of the Securities Exchange Act of				
Indicate by check mark whether the registrant has submitted of Regulation S-T during the preceding 12 months (or for suc						
Indicate by check mark whether the registrant is a large accel an emerging growth company. See the definitions of "large ac company" in Rule 12b-2 of the Exchange Act.						
Large accelerated filer ⊠	A	accelerated filer				
Non-accelerated filer □	S	maller reporting company				
Emerging growth company □						
If an emerging growth company, indicate by check mark if the new or revised financial accounting standards provided pursu						
Indicate by check mark whether the registrant is a shell comp	pany (as defined in Rule 12	b-2 of the Exchange Act).□ Yes 🗷 No				
As of January 31, 2019, the last business day of the registran and non-voting common stock held by non-affiliates of the registran New York Stock Exchange as of that date).						

As of September 13, 2019, there were approximately 126,161,252 shares of the registrant's common stock outstanding.

Documents Incorporated by Reference

Portions of the registrant's Proxy Statement for its 2019 annual meeting of stockholders (the "2019 Proxy Statement") are incorporated by reference in Part III, as specifically set forth in Part III.

DONALDSON COMPANY, INC. ANNUAL REPORT ON FORM 10-K TABLE OF CONTENTS

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Item 1. Business

General

Donaldson Company, Inc. (Donaldson or the Company) was founded in 1915 and organized in its present corporate form under the laws of the State of Delaware in 1936.

The Company is a worldwide manufacturer of filtration systems and replacement parts. The Company's core strengths are leading filtration technology, strong customer relationships and its global presence. Products are manufactured around the world and through three joint ventures.

The Company has two operating segments: Engine Products and Industrial Products. Products in the Engine Products segment consist of replacement filters for both air and liquid filtration applications, air filtration systems, liquid filtration systems for fuel, lube and hydraulic applications, and exhaust and emissions systems and sensors, indicators and monitoring systems. The Engine Products segment sells to original equipment manufacturers (OEMs) in the construction, mining, agriculture, aerospace, defense and truck end markets and to independent distributors, OEM dealer networks, private label accounts and large equipment fleets. Products in the Industrial Products segment consist of dust, fume and mist collectors, compressed air purification systems, gas and liquid filtration for food, beverage and industrial processes, air filtration systems for gas turbines, polytetrafluoroethylene (PTFE) membrane-based products and specialized air and gas filtration systems for applications including hard disk drives and semi-conductor manufacturing and sensors, indicators and monitoring systems. The Industrial Products segment sells to various dealers, distributors, OEMs for specific markets and replacement filters.

As a worldwide business, the Company's results of operations are affected by conditions in the global economic environment. Under most economic conditions, the Company's market diversification between its diesel engine end markets, its global end markets, its diversification through technology and its OEM and replacement parts customers has helped to limit the impact of weakness in any one product line, market or geography on the consolidated operating results of the Company.

Available Information

The Company makes its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and other information (including amendments to those reports) available free of charge through its website at *ir.donaldson.com*, as soon as reasonably practicable after it electronically files such material with (or furnishes such material to) the Securities and Exchange Commission (SEC). These filings are available on the SEC's website at www.sec.gov. Also available on the Company's website are corporate governance documents, including the Company's Code of Business Conduct and Business Conduct Help Line, Corporate Governance Guidelines, Director Independence Standards, Audit Committee Charter, Human Resources Committee Charter and Corporate Governance Committee Charter. These documents are also available in print, free of charge, to any person who requests them in writing to the attention of Investor Relations, MS 102, Donaldson Company, Inc., 1400 West 94th Street, Bloomington, Minnesota 55431. The information contained on the Company's website is not incorporated by reference into this Annual Report and should not be considered to be part of this report.

Seasonality

A number of the Company's end markets are dependent on the construction, agricultural and power generation industries, which are generally stronger in the second half of the Company's fiscal year. The first two quarters of the fiscal year also contain more holiday periods, which typically include more customer plant closures.

Competition

Principal methods of competition in both the Engine and Industrial Products segments are technology, innovation, price, geographic coverage, service and product performance. The Company participates in a number of highly competitive filtration markets in both segments. The Company believes it is a market leader within many of its product lines, specifically within its Off-Road and On-Road product lines for OEMs, and has a significant business in the aftermarket for replacement filters. The Engine Products segment's principal competitors include several large global competitors and many regional competitors, especially in the Aftermarket business. The Industrial Products segment's principal competitors vary from country to country and include several large regional and global competitors and a significant number of smaller competitors who compete in a specific geographical region or in a limited number of product applications.

Raw Materials

The principal raw materials that the Company uses are steel, filter media, and petrochemical based products including plastic, rubber and adhesives products. Purchased raw materials represent approximately 60% to 65% of the Company's cost of goods sold. Of that amount, steel, including fabricated parts, represents approximately 21%. Filter media represents approximately 17% and the remainder is primarily made up of petroleum-based products and other raw material components.

On an ongoing basis, the Company enters into selective supply arrangements with certain of its suppliers that allow the Company to reduce volatility in its costs. The Company strives to recover or offset all material cost increases through selective price increases to its customers and the Company's cost reduction initiatives, which include material substitution, process improvement and product redesigns.

Intellectual Property

The Company owns a broad range of intellectual property rights relating to its products and services, which it considers in the aggregate to constitute a valuable asset. These include patents, trade secrets, trademarks, copyrights and other forms of intellectual property rights in the U.S. and a number of foreign countries. The Company protects its innovations arising from research and development through patent filings and owns a portfolio of issued patents, including utility and design patents. The Company also owns various trademarks relating to its products and services including Donaldson® and the turbo D logo, Ultra-Web®, PowerCore®, Torit®, and SynteqTM XP, among others. No single intellectual property right is solely responsible for protecting the Company's products.

Major Customers

The Company had no customers that accounted for over 10% of net sales in the years ended July 31, 2019, 2018 or 2017, nor of gross accounts receivable at July 31, 2019 and 2018.

Backlog

Backlog is one of many indicators of business conditions in the Company's markets. However, it is not always indicative of future results for a number of reasons, including the timing of the receipt of orders in many of the Company's engine OEM and industrial markets and the mix and types of orders in backlog. The backlog of orders expected to be delivered within 90 days was \$410.3 million and \$450.2 million, at July 31, 2019 and 2018, respectively. The backlog decreased 6.8% for the Engine Products segment and decreased 13.1% for the Industrial Products segment.

Research and Development

During the years ended July 31, 2019, 2018 and 2017, the Company spent \$62.3 million, \$59.9 million and \$54.7 million, respectively, on research and development activities, which was 2.2%, 2.2% and 2.3% of net sales, respectively. Research and development expenses include scientific research costs such as salaries, building costs, utilities, testing, technical IT and administrative and allocation of corporate costs for the application of scientific advances to the development of new and improved products and their uses. Substantially all commercial research and development is performed in-house.

Environmental Matters

The Company does not anticipate any material effect on its capital expenditures, earnings or competitive position during fiscal 2020 due to compliance with government regulations regulating the discharge of materials into the environment or otherwise relating to the protection of the environment.

Employees

The Company employed approximately 14,100 people as of July 31, 2019.

Geographic Areas

Both of the Company's operating segments serve customers in all geographic regions. The United States (U.S.) represents the largest individual market for the Company's products. Financial information by geographic region appears in Note 18 in the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report.

Item 1A. Risk Factors

Our business is subject to various risks and uncertainties. Any of the risks described below could materially, adversely affect our business, financial condition and results of operations. The following discussion, along with discussions elsewhere in this report, outlines the risks and uncertainties that we believe are the most material to our business at this time. We undertake no obligation to revise any forward-looking statements, whether as a result of new information, future events, or otherwise unless required by law. The Company's audit committee reviews the Company's strategies, processes, and controls with respect to risk assessment and risk management, including risks related to technology systems and cybersecurity, and assists the Board in its oversight of risk management.

Economic Environment - the demand for our products is impacted by economic, industrial and political conditions worldwide.

We operate a global business and our results and financial condition may be impacted by changes in industrial, economic or political conditions in the geographies and markets we serve.

Products - maintaining a competitive advantage requires consistent investment with uncertain returns.

We operate in highly competitive markets and have numerous competitors that may already be well-established in those markets. We expect our competitors to continue improving the design and performance of their products and to introduce new products that could be competitive in both price and performance. We believe that we have certain technological advantages over our competitors, but maintaining these advantages requires us to consistently invest in research and development, sales and marketing and customer service and support. There is no guarantee that we will be successful in maintaining these advantages and we could encounter the commoditization of our key products. We make investments in new technologies that address increased performance and regulatory requirements around the globe. There is no guarantee that we will be successful in completing development or achieving sales of these products or that the margins on such products will be acceptable. A competitor's successful product innovation could reach the market before ours or gain broader market acceptance.

Evolving Customer Needs - disruptive technologies may threaten our growth in certain industries.

Our growth in certain industries guides the decisions we make in operating the Company, but this growth could be threatened by disruptive technologies. We may be adversely impacted by changes in technology that could reduce or eliminate the demand for our products. These risks include wider adoption of technologies providing alternatives to diesel engines such as electrification of equipment. Such disruptive innovation could create new markets and displace existing companies and products, resulting in significantly negative consequences for the Company. If we do not properly address future customer needs, we may be slower to adapt to such disruption.

Competition - we participate in highly competitive markets with pricing pressure.

The businesses and product lines in which we participate are very competitive and we risk losing business based on a wide range of factors, including price, technology, performance, reliability and availability, geographic coverage and customer service. Our customers continue to seek technological innovation, productivity gains and competitive prices from us and their other suppliers. We may not be able to compete effectively.

Intellectual Property - demand for our products may be affected by new entrants that copy our products and/or infringe on our intellectual property.

The ability to protect and enforce intellectual property rights varies across jurisdictions.

Where possible, we seek to preserve our intellectual property rights through patents. These patents have a limited life and, in some cases, have expired or will expire in the near future. Competitors and others may also initiate litigation to challenge the validity of our intellectual property or allege that we infringe their intellectual property. We may be required to pay substantial damages if it is determined our products infringe on their intellectual property. We may also be required to develop an alternative, non-infringing product that could be costly and time-consuming, or acquire a license on terms that are not favorable to us.

Protecting or defending against such claims could significantly increase our costs, divert management's time and attention away from other business matters.

Global Operations - we have a broad footprint and global operations may present challenges.

We have operations throughout the world. Our stability, growth and profitability are subject to a number of risks of doing business globally that could harm our business, including:

- political and military events, including the rise of nationalism and support for protectionist policies,
- tariffs, trade barriers and other trade restrictions,
- legal and regulatory requirements, including import, export, defense regulations, anti-corruption laws, and foreign
 exchange controls,
- potential difficulties in staffing and managing local operations,
- credit risk of local customers and distributors,
- difficulties in protecting our intellectual property, and
- local economic, political and social conditions.

Due to the global reach of our operations, our business is subject to a complex system of commercial and trade laws, regulations and policies, including those related to data privacy, trade compliance, anti-corruption and anti-bribery. Our global subsidiaries, joint venture partners and affiliates are governed by laws, rules and business practices that differ from those of the U.S. Violations of such laws and regulations may result in an adverse effect on our reputation, business and results of operations.

The continued geographic expansion of our business increases our exposure to, and cost of complying with, these laws and regulations. If our compliance programs do not adequately prevent or deter our employees, agents, distributors, suppliers and other third parties with whom we do business from violating anti-corruption laws, we may incur defense costs, fines, penalties, reputational damage and business disruptions.

Customer Concentration and Retention - a number of our customers operate in similar cyclical industries. Economic conditions in these industries could impact our sales.

No customer accounted for ten percent or more of our net sales in fiscal 2019, 2018 or 2017. However, a number of our customers are concentrated in similar cyclical industries (e.g. construction, agriculture, mining, power generation and disk drives), resulting in additional risk based on industrial conditions in those sectors. A decline in the economic conditions of these industries could result in reduced demand for our products and difficulty in collecting amounts due from our customers. Our success is also dependent on retaining key customers, which requires us to successfully manage relationships and anticipate the needs of our customers in the channels in which we sell our products.

Supply Chain - unavailable raw materials or significant demand fluctuations or material cost inflation.

We obtain raw materials, including steel, filter media, petroleum-based products and other components, from third-party suppliers and tend to carry limited raw material inventories. We concentrate our sourcing of some materials from one supplier or a few suppliers. We rely on our suppliers to ensure they meet required quality standards. Our success is dependent on our ability to effectively manage our supplier relationships. Additionally, global supplier production capacity is limited and could be disrupted. We may experience significant disruption of the supply of raw materials, parts, components or final assemblies. An unanticipated delay in delivery by our suppliers could result in the inability to deliver our products on-time and meet the expectations of our customers. We could experience an increase in the costs of doing business, including increasing raw material commodity prices and transportation costs.

Operations - inability to meet demand could result in the loss of customers.

Our ability to fulfill customer orders is dependent on our manufacturing and distribution operations. Although we forecast demand, additional plant capacity takes months or even years to bring online, and thus changes in demand could result in longer lead times. We cannot guarantee that we will be able to increase manufacturing capacity to meet higher product demand, which could prevent us from meeting increased customer demand. However, if we overestimate our demand and overbuild our capacity, we may have underutilized assets. Efficient operations also require streamlining processes to maintain or reduce lead times, which we may not be capable of achieving. Unacceptable levels of service for key customers may result if we are not able to fulfill orders on a timely basis or if product quality or warranty or safety issues result from compromised production. We may not be able to adjust our production schedules to reflect changes in customer demand on a timely basis. Due to the complexity of our manufacturing operations, we may be unable to timely respond to fluctuations in demand.

Technology Investments and Security Risks - vulnerability with our information technology systems and security.

We have many information technology systems that are important to the operation of our business, some of which are managed by third parties. These systems are used to process, transmit and store electronic information and to manage or support a variety of business processes and activities. We could encounter difficulties in developing new systems, maintaining and upgrading our existing systems, managing access to these systems and preventing information security breaches. Vulnerabilities could lead to significant additional expenses and/or disruption in business operations.

Additionally, information technology security threats are increasing in frequency and sophistication. We have found and addressed these threats from time to time; however, to date none of them have been material. These threats pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data. Should such an attack succeed, it could lead to the compromising of confidential information, manipulation and destruction of data, defective products, production downtimes and operations disruptions. The occurrence of any of these events could adversely affect our reputation and could result in litigation, regulatory action, potential liability and increased costs and operational consequences of implementing further data protection matters.

Although the Company maintains insurance coverage for various cybersecurity and business continuity risks, there can be no guarantee that all costs or losses incurred will be fully insured.

Currency - an unfavorable fluctuation in foreign currency exchange rates.

We have operations in many countries, with a substantial portion of our annual revenue earned in currencies other than the U.S. dollar. We face transactional and translational risks associated with the fluctuations in foreign currency exchange rates. Transactional risk arises from changes in the value of cash flows denominated in different currencies. This can be caused by supply chains that cross borders resulting in revenues and costs being in different currencies. Translational risk arises from the remeasurement of our financial statements. In addition, decreased value of local currency may make it difficult for some of our customers, distributors and end users to purchase our products. Each of our subsidiaries reports its results of operations and financial position in its relevant functional currency, which is then translated into U.S. dollars. This translated financial information is included in our consolidated financial statements. Significant fluctuations of the U.S. dollar in comparison to the foreign currencies of our subsidiaries during discrete periods may have a negative impact on our results and financial position.

Legal and Regulatory - costs associated with lawsuits, investigations or complying with laws and regulations.

We are subject to many laws and regulations in the jurisdictions in which we operate. We routinely incur costs in order to comply with these laws and regulations. We may be adversely impacted by new or changing laws and regulations that affect both our operations and our ability to develop and sell products that meet our customers' requirements. We are involved in various product liability, product warranty, intellectual property, environmental claims and other legal proceedings that arise in and outside of the ordinary course of our business. We are subject to increasingly stringent laws and regulations in the countries in which we operate, including those governing the environment (e.g. emissions to air; discharges to water; and the generation, handling, storage, transportation, treatment and disposal of waste materials) and data protection and privacy. It is not possible to predict the outcome of investigations and lawsuits, and we could incur judgments, fines, or penalties or enter into settlements of lawsuits and claims that could have an adverse effect on our business, results of operations and financial condition in any particular period. In addition, we may not be able to maintain our insurance at a reasonable cost or in sufficient amounts to protect us against any losses.

Income Tax - changes in our effective tax rate in various jurisdictions.

We are subject to income taxes in various jurisdictions in which we operate. Our tax liabilities are dependent upon the location of earnings among these different jurisdictions. Our provision for income taxes could be adversely affected by numerous factors, including income before taxes being lower than anticipated in countries with lower statutory tax rates and higher than anticipated in countries with higher statutory tax rates, changes in the valuation of deferred tax assets and liabilities and changes in tax laws and regulations. We are also subject to the prevailing tax laws and the continuous examination of our income tax returns by tax authorities.

Personnel - our success may be affected if we are not able to attract, engage and retain qualified personnel.

Our success depends in large part on our ability to identify, recruit, engage, train and retain highly skilled qualified and diverse personnel worldwide and successfully execute management transitions at leadership levels of the Company. There is competition for talent with market-leading skills and capabilities in new technologies. Additionally, in some locations we have experienced significant wage inflation due to a shortage of labor amid low levels of unemployment in these markets. We may not be able to attract and retain qualified personnel and it may be difficult for us to compete effectively.

Liquidity - changes in the capital and credit markets may negatively affect our ability to access financing to support strategic initiatives.

Disruption of the global financial and credit markets may have an effect on our long-term liquidity and financial condition. There can be no assurance that the cost or availability of future borrowings will not be impacted by future capital market disruptions. Some of our existing borrowings contain covenants to maintain certain financial ratios that, under certain circumstances, could restrict our ability to incur additional indebtedness, make investments and other restricted payments, create liens and sell assets.

In July 2017, the Financial Conduct Authority in the United Kingdom (UK), the governing body responsible for regulating the London Interbank Offered Rate (LIBOR), announced that it no longer will compel or persuade financial institutions and panel banks to make LIBOR submissions after 2021. This decision is expected to result in the end of the use of LIBOR as a reference rate for commercial loans and other indebtedness. We have both LIBOR-denominated and Euro Interbank Offer Rate (EURIBOR)-denominated indebtedness or derivative instruments. The transition to alternatives to LIBOR could be modestly disruptive to the credit markets, and while we do not believe that the impact would be material to us, we do not yet have insight into what the impacts might be.

Acquisitions - the execution of our acquisition strategy may not provide the desired return on investment.

We have made and continue to pursue acquisitions. These acquisitions could negatively impact our profitability due to operating and integration inefficiencies, the incurrence of debt, contingent liabilities and amortization of expenses related to intangible assets. There are also a number of other risks involved in acquisitions, including the potential loss of key customers, difficulties in assimilating the acquired operations, the loss of key employees and the diversion of management's time and attention away from other business matters, that may prevent us from realizing the anticipated return on our investment.

Impairment - if our operating units do not meet performance expectations, intangible assets could be subject to impairment.

Our total assets include goodwill and other intangible assets from acquisitions. We review annually whether goodwill and other intangible assets have been impaired, or more frequently if there have been unexpected events or changes in circumstances. If future operating performance at one or more of our operating units were to fall significantly below forecast levels or if market conditions for one or more of our acquired businesses were to decline, we could be required to incur a non-cash charge to operating income for impairment. Any impairment charge would have an adverse non-cash impact on our results of operations and shareholders' equity.

Productivity Improvements - if we do not successfully manage productivity improvements, we may not realize the expected benefits.

Our financial projections assume certain ongoing productivity improvements as a key component of our business strategy to, among other things, contain operating expenses, increase operating efficiencies and align manufacturing capacity to demand. We may not be able to realize the expected benefits and cost savings if we do not successfully execute these plans while continuing to invest in business growth. Difficulties could be encountered or such cost savings may not otherwise be realized.

Business Disruption - unexpected events, including natural disasters, may increase our cost of doing business or disrupt our operations.

The occurrence of one or more unexpected events, including a terrorist attack, war or civil unrest, a weather event, an earthquake, pandemic or other catastrophe in the U.S. or in other countries in which we operate or in which our suppliers are located could adversely affect our operations and financial performance. Such event could result in physical damage to and complete or partial closure of one or more of our headquarters, manufacturing facilities or distribution centers, temporary or long-term disruption in the supply of component products from some local and international suppliers, disruption in the transport of our products to customers and disruption of information systems. This could result in a prolonged disruption to our operations. Existing insurance coverage may not provide protection for all costs that may arise from such events. Any disruption in our manufacturing capacity could have an adverse impact on our ability to meet our customer needs or may require us to incur additional expenses in order to produce sufficient inventory.

Internal Controls - if we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results and prevent material fraud, which could adversely affect the value of our common stock.

Effective internal control over financial reporting, including controls within the information technology environment, is necessary for us to provide reliable financial reports and effectively prevent and detect material fraud. If we cannot provide reliable financial reports or prevent or detect material fraud, our operating results could be misstated. There can be no assurances that we will be able to prevent future control deficiencies from occurring, which could cause us to incur unforeseen costs, negatively impact our results of operations, cause the market price of our common stock to decline or have other potential adverse consequences.

BREXIT - the United Kingdom's decision to end its membership in the European Union could materially and adversely impact our results of operations, financial condition and cash flows.

In June 2016, a majority of voters in the UK elected to withdraw from the European Union (EU) in a national referendum (BREXIT). Additionally, the results of the United Kingdom's BREXIT has caused, and may continue to cause, volatility in global stock markets, currency exchange rate fluctuations and global economic uncertainty. Although it is unknown what the terms of the United Kingdom's future relationship with the EU will be, it is possible that there will be higher tariffs or greater restrictions on imports and exports between the United Kingdom and the EU and increased regulatory complexities. The effects of BREXIT will depend on any agreements the United Kingdom makes to retain access to EU markets either during a transitional period or on a permanent basis. These measures could potentially disrupt our supply chain, access to human capital and some of our target markets and jurisdictions in which we operate, and adversely change tax benefits or liabilities in these or other jurisdictions. In addition, BREXIT could lead to legal uncertainty and potentially divergent national laws and regulations, including with respect to emissions and similar certifications granted to us by the EU, as the United Kingdom determines which EU laws to replace or replicate.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The Company's principal administrative office and research facilities are located in Bloomington, Minnesota. The Company also has administrative and engineering offices in Europe, and the Asia Pacific and Latin America regions.

The Company's principal manufacturing and distribution activities are located throughout the world. The following is a summary of the principal plants and properties owned or leased by the Company as of July 31, 2019.

Americas	Europe, Middle East, Africa
Auburn, Alabama	Kadan, Czech Republic
Stockton, California	Klasterec, Czech Republic
Valencia, California	Domjean, France
Dixon, Illinois	Paris, France
Staunton, Illinois	Dulmen, Germany
Anderson, Indiana	Haan, Germany
Frankfort, Indiana	Ostiglia, Italy
Cresco, Iowa	Skarbimierz, Poland
Waterloo, Iowa	Cape Town, South Africa
Nicholasville, Kentucky	Abu Dhabi, United Arab Emirates
Bloomington, Minnesota	Hull, United Kingdom
Chesterfield, Missouri	Poole, United Kingdom
Chillicothe, Missouri	Leicester, United Kingdom
Harrisonville, Missouri	Asia Pacific
Philadelphia, Pennsylvania	Wyong, Australia
Greeneville, Tennessee	Wuxi, China
Vancouver, Washington	New Delhi, India
Baldwin, Wisconsin	Gunma, Japan
Stevens Point, Wisconsin	Rayong, Thailand
Sao Paulo, Brazil	Third-Party Logistics Providers
Bucaramanga, Colombia	Santiago, Chile
Aguascalientes, Mexico	Wuxi, China
Monterrey, Mexico	Bogotá, Colombia
Distribution Centers	Kadan, Czech Republic
Wyong, Australia	Chennai, India
Brugge, Belgium	Mumbai, India
Sao Paulo, Brazil	Waterloo, Iowa
Rensselaer, Indiana	Gunma, Japan
Jakarta, Indonesia	Auckland, New Zealand
Aguascalientes, Mexico	Lima, Peru
Johannesburg, South Africa	Singapore
Seoul, South Korea	Greeneville, Tennessee
Hull, United Kingdom	Laredo, Texas
Joint Venture Facilities	Stevens Point, Wisconsin
Most Czech Republic	

Most, Czech Republic Champaign, Illinois Jakarta, Indonesia Dammam, Saudi Arabia

The Company considers its properties to be suitable for their present purposes, well-maintained and in good operating condition.

Item 3. Legal Proceedings

The Company believes the recorded estimated liability in its Consolidated Financial Statements for claims or litigation is adequate and appropriate for the probable and estimable outcomes. Any recorded liabilities were not material to the Company's financial position, results of operations or liquidity, and the Company believes it is remote that the settlement of any of the currently identified claims or litigation will be materially in excess of what is accrued. The Company records provisions when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Claims and litigation are reviewed quarterly and provisions are taken or adjusted to reflect the status of a particular matter.

Item 4. Mine Safety Disclosures

Not applicable.

Information about our Executive Officers

The list below identifies those persons designated by our Board of Directors as executive officers of the Company as of August 31, 2019. All officers hold office until their successors are elected and qualify, or their earlier death, resignation or removal. There are no arrangements or understandings between individual officers and any other person pursuant to which the officer was selected as an executive officer.

Name	Age	Positions and Offices Held	First Year Appointed as an Executive Officer
Amy C. Becker	54	Vice President, General Counsel and Secretary	2014
Tod E. Carpenter	60	Chairman, President and Chief Executive Officer	2008
Sheila G. Kramer	60	Vice President, Human Resources	2015
Richard B. Lewis	48	Senior Vice President, Global Operations	2017
Scott J. Robinson	52	Senior Vice President and Chief Financial Officer	2015
Thomas R. Scalf	53	Senior Vice President, Engine Products	2014
Jeffrey E. Spethmann	54	Senior Vice President, Industrial Products	2016
Wim Vermeersch	53	Vice President, Europe, Middle East and Africa	2012

Ms. Becker was appointed to Vice President, General Counsel and Secretary in August 2014. Ms. Becker joined the Company in 1998 and held positions as Senior Counsel and Assistant Corporate Secretary and Assistant General Counsel. Prior to joining the Company, Ms. Becker was an attorney for Dorsey and Whitney, LLP from 1991 to 1995 and was a Project Manager and Corporate Counsel for Harmon, Ltd. from 1995 to 1998.

Mr. Carpenter was appointed Chairman, President and Chief Executive Officer in November 2017. Mr. Carpenter joined the Company in 1996 and has held various positions, including Director of Operations, Gas Turbine Systems; General Manager, Gas Turbine Systems; General Manager, Industrial Filtration Systems; Vice President, Global Industrial Filtration Systems; Vice President, Europe and Middle East; Senior Vice President, Engine Products. Mr. Carpenter was appointed Chief Operating Officer in April 2014 and President and Chief Executive Officer in April 2015.

Ms. Kramer was appointed Vice President, Human Resources in October 2015. Prior to joining the Company, Ms. Kramer was Vice President, Human Resources for Taylor Corporation, a print and graphics media company, from 2013 until September 2015. During her 22 years at Lifetouch, Inc., Ms. Kramer held various human resources roles including Corporate Vice President, Human Resources from 2009 to 2013.

Mr. Lewis was appointed Senior Vice President, Global Operations in October 2018. Mr. Lewis joined the Company in 2002 and has held various positions, including Plant Manager; Director of Operations; General Manager, Liquid Filtration; General Manager, Operations; and Vice President, Global Operations. Prior to joining the Company, Mr. Lewis held positions of Operations Manager, Seleco Inc. from 1998 to 2002, and Operations Manager, Ventra Corporation from 1997 to 1998.

Mr. Robinson was appointed Senior Vice President and Chief Financial Officer in September 2017. Mr. Robinson joined the Company in 2015 as Vice President and Chief Financial Officer. Prior to joining the Company, Mr. Robinson was the Chief Financial Officer for Imation Corp., a global data storage and information security company, from 2014 to 2015. During his 11 years with Imation, he also served as the Investor Relations Officer, Corporate Controller and Chief Accounting Officer. Prior to that, he held positions at Deluxe Corporation and Pricewaterhouse Coopers LLP.

Mr. Scalf was appointed Senior Vice President, Engine Products in April 2014. Mr. Scalf joined the Company in 1989 and has held various positions, including Plant Manager, Director of Global Operations; General Manager of Exhaust & Emissions; General Manager of Industrial Filtration Solutions; and Vice President of Global Industrial Air Filtration.

Mr. Spethmann was appointed Senior Vice President of Industrial Products in April 2016. Mr. Spethmann joined the Company in 2013 and has held various positions, including Vice President, Exhaust & Emissions and Vice President, Global Industrial Air Filtration. Prior to joining the Company, Mr. Spethmann held positions of General Manager and President of Blow Molded Specialties, Inc., from 1999 to 2012.

Mr. Vermeersch was appointed Vice President, Europe, Middle East and Africa in January 2012. Mr. Vermeersch joined the Company in 1992 and has held various positions, including Director, Gas Turbine Systems, Asia Pacific; Manager, Aftermarket and Service Industrial Filtration Solutions, Belgium; Manager, Industrial Filtration Solutions, Belgium; Director, Gas Turbine Systems, Europe, Middle East and North Africa; and Director, Engine, Europe, Middle East and North Africa.

PART II

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

The Company's common stock, par value \$5.00 per share, is traded on the New York Stock Exchange under the symbol "DCI." As of September 13, 2019, there were 1,398 registered shareholders of common stock.

To determine the appropriate level of dividend payouts, the Company considers recent and projected performance across key financial metrics, including earnings, cash flow from operations and total debt.

The following table summarizes information in connection with purchases made by, or on behalf of, the Company or any affiliated purchaser of the Company, of shares of the Company's common stock during the three months ended July 31, 2019.

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
May 1 - May 31, 2019	250,000	\$ 49.44	250,000	13,000,000
June 1 - June 30, 2019	250,000	49.45	250,000	12,750,000
July 1 - July 31, 2019		_	<u> </u>	12,750,000
Total	500,000	49.45	500,000	12,750,000

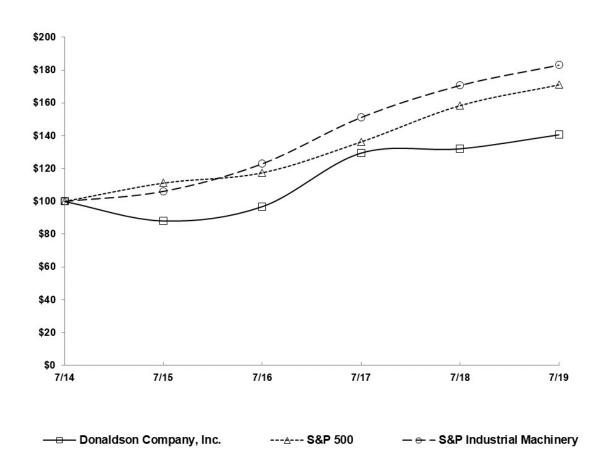
⁽¹⁾ The Board of Directors authorized the repurchase of up to 13.0 million shares of common stock under the Company's stock repurchase plan dated May 31, 2019, replacing the Company's previous stock repurchase plan dated May 29, 2015. This repurchase authorization is effective until terminated by the Board of Directors. In May 2019, 250,000 shares were purchased under the prior program that expired May 31, 2019. As of July 31, 2019, the Company had remaining authorization to repurchase 12.750 million shares under this plan. There were no repurchases of common stock made outside of the Company's current repurchase authorization during the three months ended July 31, 2019.

The table set forth in Part III, Item 12, "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" of this Annual Report is also incorporated herein by reference.

The graph below compares the cumulative total shareholder return on the Company's common stock for the last five fiscal years with the cumulative total return of the Standard & Poor's 500 Stock Index and the Standard & Poor's Industrial Machinery Index. The graph and table assume the investment of \$100 in each of the Company's common stock and the specified indexes at the beginning of the applicable period and assume the reinvestment of all dividends.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among Donaldson Company, Inc., the S&P 500 Index and the S&P Industrial Machinery Index



	Year Ended July 31,								
		2014		2015		2016	2017	2018	2019
Donaldson Company, Inc.	\$	100.00	\$	88.15	\$	96.86	\$ 129.47	\$ 132.05	\$ 140.54
S&P 500		100.00		111.21		117.45	136.29	158.43	171.08
S&P Industrial Machinery		100.00		106.18		122.96	151.20	170.68	183.11

Item 6. Selected Financial Data

The following table summarizes selected financial data for each of the fiscal years in the five-year period ended July 31, 2019 (in millions, except per share data):

		Year Ended July 31,				
	2019	2018	2017	2016	2015	
Net sales	\$ 2,844.9	\$ 2,734.2	\$ 2,371.9	\$ 2,220.3	\$ 2,371.2	
Net earnings	267.2	180.3	232.8	190.8	208.1	
Net earnings per share – basic	2.08	1.38	1.76	1.43	1.51	
Net earnings per share – diluted	2.05	1.36	1.74	1.42	1.49	
Total assets	2,142.6	1,976.6	1,979.7	1,787.0	1,807.5	
Long-term debt	584.4	499.6	537.3	350.2	387.2	
Dividends declared per share	0.800	0.740	0.705	0.690	0.670	
Dividends paid per share	0.780	0.730	0.700	0.685	0.665	

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) provides a comparison of the Company's results of operations and liquidity and capital resources for the years ended July 31, 2019 and 2018. A discussion of changes in the Company's results of operations and liquidity and capital resources from the year ended July 31, 2017 to July 31, 2018 can be found in Part II, "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations of our Annual Report on Form 10-K for the fiscal year 2018 (the "2018 Annual Report"), which was filed with the Securities and Exchange Commission on October 1, 2018.

The MD&A should be read in conjunction with the Company's Consolidated Financial Statements and Notes included in Item 8 of this Annual Report. This discussion contains forward-looking statements that involve risks and uncertainties. The Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed elsewhere in this Annual Report, particularly Item 1A, "Risk Factors" and in the Safe Harbor Statement under the Securities Reform Act of 1995 below.

Throughout this MD&A, the Company refers to measures used by management to evaluate performance, including a number of financial measures that are not defined under accounting principles generally accepted in the United States of America (GAAP). Excluding foreign currency translation from net sales and net earnings (i.e. constant currency) and excluding the impact of one-time transactions are not measures of financial performance under GAAP; however, the Company believes they are useful in understanding its financial results and provide comparable measures for understanding the operating results of the Company between different fiscal periods. Reconciliations within this MD&A provide more details on the use and derivation of these measures.

Overview

Net sales for the year ended July 31, 2019 were \$2,844.9 million, as compared with \$2,734.2 million for the year ended July 31, 2018, an increase of \$110.7 million, or 4.0%. Net sales were negatively impacted by foreign currency translation, which decreased sales by \$74.0 million. On a constant currency basis, net sales for the year ended July 31, 2019 increased 6.8% from the prior fiscal year.

Net earnings for the year ended July 31, 2019 were \$267.2 million, as compared with \$180.3 million for the year ended July 31, 2018, an increase of \$86.9 million, or 48.2%. Diluted earnings per share were \$2.05 for the year ended July 31, 2019, as compared with \$1.36 for the year ended July 31, 2018, an increase of 50.7%. Net earnings for the year ended July 31, 2019 include a net discrete tax expense of \$18.7 million related to one-time adjustments for the enactment of the Tax Cuts and Jobs Act (TCJA). Net earnings for the year ended July 31, 2018 include a provisional estimate for tax charges of \$84.1 million related to the TCJA. See further discussion below, Income Taxes. Also, see Note 12 in the Notes to Consolidated Financial Statements included in Item 8 of this report for further discussion of TCJA.

Consolidated Results of Operations

The following table summarizes consolidated results of operations for each of the fiscal years ended July 31, 2019 and 2018 (in millions, except per share data):

	_	Year Ended July 31,			Percent of Net Sales		
		2019		2018	2019	2018	
Net sales	\$	5 2,844.9	\$	2,734.2	100.0%	100.0%	
Cost of sales		1,896.6		1,798.4	66.7	65.8	
Gross profit		948.3		935.8	33.3	34.2	
Selling, general and administrative		497.8		498.9	17.5	18.2	
Research and development		62.3		59.9	2.2	2.2	
Operating income		388.2		377.0	13.6	13.8	
Interest expense		19.9		21.3	0.7	0.8	
Other income, net		(6.9)	(7.9)	(0.2)	(0.3)	
Earnings before income taxes		375.2		363.6	13.2	13.3	
Income taxes		108.0		183.3	3.8	6.7	
Net earnings	\$	267.2	\$	180.3	9.4%	6.6%	
	_						
Net earnings per share – diluted	9	3 2.05	\$	1.36			

Net Sales

Net sales by operating segment are as follows (in millions):

	Year Endo	ed July 31,	Percent of Net Sales		
	2019	2018	2019	2018	
Engine Products	\$ 1,926.0	\$ 1,849.0	67.7%	67.6%	
Industrial Products	918.9	885.2	32.3	32.4	
Net sales	\$ 2,844.9	\$ 2,734.2	100.0%	100.0%	

Net Sales by Origination

Net sales by origination for the years ended July 31, 2019 and 2018 are as follows (in millions):

	Year End	ed July 31,	Percent of Net Sales		
	2019	2018	2019	2018	
United States	\$ 1,192.6	\$ 1,120.8	41.9%	41.0%	
Europe, Middle East and Africa	826.8	791.5	29.1	29.0	
Asia Pacific	597.9	599.2	21.0	21.9	
Latin America	227.6	222.7	8.0	8.1	
Net sales	\$ 2,844.9	\$ 2,734.2	100.0%	100.0%	

Net sales by origination is based on the country of the Company's legal entity where the customer's order was placed.

Impact of Foreign Currency Translation on Net Sales

The Company's net sales are impacted by fluctuations in foreign currency exchange rates. The following table reflects the impact of these fluctuations on net sales for the years ended July 31, 2019 and 2018 (in millions):

	 Year Ended July 31,				
	 2019		2018		
Prior year net sales	\$ 2,734.2	\$	2,371.9		
Change in net sales excluding translation	184.7		284.0		
Impact of foreign currency translation (1)	 (74.0)		78.3		
Current year net sales	\$ 2,844.9	\$	2,734.2		

(1) The impact of foreign currency translation is calculated by translating current period foreign currency revenue into U.S. dollars using the average foreign currency exchange rates for the prior fiscal year period rather than actual current period foreign currency exchange rates.

The fiscal 2019 net sales increase of \$110.7 million, or 4.0% from fiscal 2018, was primarily driven by the Engine Products segment which increased \$77.0 million, or 4.2%, due to strong growth in the Aftermarket, On-Road and Aerospace and Defense product groups, partially offset by declining sales of Off-Road and slowed orders as customers appear to be destocking. The Company's primary engine-related markets, including global construction, agriculture, mining and transportation are in various stages of their respective economic cycles. The Industrial Products segment increased \$33.7 million, or 3.8%, primarily driven by strength in the Industrial Filtration Solutions product group (which includes incremental revenue of \$30.1 million from the acquisition of BOFA International LTD (BOFA)), partially offset by sales declines in Gas Turbine Systems and Special Applications. Foreign currency translation decreased total sales by \$74.0 million as compared to the prior year, reflecting decreases in the Engine and Industrial Products segments of \$50.2 million and \$23.8 million, respectively.

Gross Margin

Cost of sales for the year ended July 31, 2019 was \$1,896.6 million, compared with \$1,798.4 million, for the year ended July 31, 2018, an increase of \$98.2 million, or 5.5%. Gross margin for the year ended July 31, 2019 was 33.3% compared to 34.2% for the year ended July 31, 2018, or a decrease of 0.9%. The decrease in gross margin is mostly due to the negative impact of higher raw materials and supply chain costs, partially offset by pricing benefits.

Operating Expenses

Operating expenses for the year ended July 31, 2019 were \$560.1 million, or 19.7% of net sales, compared with \$558.8 million, or 20.4% of net sales, for the year ended July 31, 2018, an increase of \$1.3 million, or 0.2%. The decrease in operating expenses as a percentage of net sales reflects lower incentive compensation expense.

Non-Operating Items

Interest expense for the year ended July 31, 2019 was \$19.9 million, compared with \$21.3 million, for the year ended July 31, 2018, a decrease of \$1.4 million, or 6.7%. The decrease in interest expense was primarily due to lower interest rates of certain variable rate long-term debt in the current year compared with the prior year. Other income, net for the year ended July 31, 2019 was \$6.9 million, compared with \$7.9 million, for the year ended July 31, 2018, a decrease of \$1.0 million, or 13.0%. The decrease in other income, net was primarily due to joint venture performance in the current year compared with the prior year, partially offset by the impact for foreign currency transaction losses.

Income Taxes

The effective tax rates were 28.8% and 50.4% for the years ended July 31, 2019 and 2018, respectively. Adjusted effective tax rates were 23.7% and 27.3% for the years ended July 31, 2019 and 2018, respectively. Income taxes for the current year includes a net discrete tax expense of \$18.7 million related to one-time adjustments for the enactment of the TCJA. Income taxes for the year ended July 31, 2018 include a provisional estimate for tax charges of \$84.1 million related to the TCJA. The decrease in the adjusted effective tax rates, excluding the impact of the TCJA adjustments in both years, of 3.6 percentage points was primarily due to a reduced U.S. corporate tax rate and foreign-derived intangible income (FDII) as provided by the TCJA, an increase in tax benefits from the favorable settlement of tax audits, and higher excess tax benefits on stock-based compensation. These decreases were partially offset by the Global Intangible Low-Taxed Income (GILTI) provision and the elimination of the manufacturing deduction. Refer to Note 12 in the Notes to Consolidated Financial Statements included in Item 8 of this report for further discussion of TCJA.

The effective tax rate is reconciled to the adjusted effective tax rate as follows:

	July	31,
	2019	2018
Effective tax rate	28.8 %	50.4 %
Impact of TCJA (1)	(5.1)%	(23.1)%
Adjusted effective tax rate	23.7 %	27.3 %

(1) TCJA-related matters resulted in charges of \$18.7 million and \$84.1 million, for the years ended July 31, 2019 and 2018, respectively.

Net Earnings

Net Earnings for the year ended July 31, 2019 was \$267.2 million, compared with \$180.3 million, for the year ended July 31, 2018, an increase of \$86.9 million, or 48.2%. Net earnings for the current year includes a net discrete tax expense of \$18.7 million related to one-time adjustments for the enactment of the TCJA. Net earnings for the year ended July 31, 2018 include a provisional estimate for tax charges of \$84.1 million related to the TCJA. Refer to Note 12 in the Notes to Consolidated Financial Statements included in Item 8 of this report for further discussion of TCJA. Diluted earnings per share were \$2.05 for the year ended July 31, 2019 as compared with \$1.36 for the year ended July 31, 2018.

The Company's net earnings are impacted by fluctuations in foreign currency exchange rates. The following table reflects the impact of these fluctuations on net earnings for the years ended July 31, 2019 and 2018 (in millions):

	Year Ended July 31,					
	2019		2018			
Prior year net earnings	\$ 180.3	\$	232.8			
Change in net earnings excluding translation	94.9		(62.9)			
Impact of foreign currency translation (1)	 (8.0)		10.4			
Current year net earnings	\$ 267.2	\$	180.3			

⁽¹⁾ The impact of foreign currency translation is calculated by translating current period foreign currency net earnings into U.S. dollars using the average foreign currency exchange rates for the prior fiscal year period rather than actual current period foreign currency exchange rates.

Segment Results of Operation

Net sales and earnings before income taxes by operating segment for each of the years ended July 31, 2019 and 2018 are summarized as follows (in millions):

	Year Ende	ed Ju	uly 31,		
	2019		2018	\$ Change	% Change
Net sales					
Engine Products segment	\$ 1,926.0	\$	1,849.0	\$ 77.0	4.2 %
Industrial Products segment	918.9		885.2	33.7	3.8
Total	\$ 2,844.9	\$	2,734.2	\$ 110.7	4.0 %
Earnings before income taxes					
Engine Products segment	\$ 254.6	\$	258.8	\$ (4.2)	(1.6)%
Industrial Products segment	140.1		135.5	4.6	3.4
Corporate and Unallocated (1)	(19.5)		(30.7)	11.2	(36.5)
Total	\$ 375.2	\$	363.6	\$ 11.6	3.2 %

⁽¹⁾ Corporate and Unallocated includes corporate expenses determined to be non-allocable to the segments, such as interest expense.

Engine Products Segment

The following is a summary of net sales by product group within the Company's Engine Products segment for the years ended July 31, 2019 and 2018 (in millions):

	Year Ende	ed Ju	ly 31,		
	 2019		2018	\$ Change	% Change
Engine Products segment					
Off-Road	\$ 315.1	\$	327.4	\$ (12.3)	(3.7)%
On-Road	179.8		154.2	25.6	16.6
Aftermarket	1,315.3		1,261.9	53.4	4.2
Aerospace and Defense	115.8		105.5	10.3	9.8
Engine Products segment net sales	\$ 1,926.0	\$	1,849.0	\$ 77.0	4.2 %
Engine Products segment earnings before income taxes	\$ 254.6	\$	258.8	\$ (4.2)	(1.6)%

Net sales for the Engine Products segment for the year ended July 31, 2019 were \$1,926.0 million, as compared with \$1,849.0 million for the year ended July 31, 2018, an increase of \$77.0 million, or 4.2%. Excluding the \$50.2 million decrease from foreign currency translation, fiscal 2019 sales increased 6.9%.

Worldwide sales from Off-Road were \$315.1 million, a decrease of 3.7% from fiscal 2018. In constant currency, sales decreased \$2.8 million, or 0.8%. The decrease in Off-Road sales reflects increasingly uncertain end-market conditions over the course of the fiscal year, particularly related to the construction and agriculture markets, that resulted in slowing production of heavy-duty off-road equipment and slowed orders as customers appeared to be destocking. Additionally, the decline in Off-Road was partially offset by new program wins and continued strength in sales of the Company's innovative products.

Worldwide sales of On-Road were \$179.8 million, an increase of 16.6% from fiscal 2018. In constant currency, sales increased \$28.4 million, or 18.4%. The increase in On-Road sales reflects higher levels of heavy-duty truck production in the U.S. market.

Worldwide sales of Aftermarket were \$1,315.3 million, an increase of 4.2% from fiscal 2018. In constant currency, sales increased \$89.3 million, or 7.1%. The increase in Aftermarket sales reflects favorable market conditions during the first half of the fiscal year, reflecting end-user demand and growth in innovative product categories, including both air and liquid filtration products. However, this sales increase moderated in the third and fourth quarters as demand softened and large customers slowed orders as they appeared to be destocking.

Worldwide sales of Aerospace and Defense were \$115.8 million, an increase of 9.8% from fiscal 2018. In constant currency, sales increased \$12.4 million, or 11.7%. The increase in Aerospace and Defense sales reflects significant growth in sales of new equipment for ground defense vehicles, due in part to order volatility inherent in the business, combined with some new program wins for defense projects and increasing sales of replacement parts for fixed- and rotary-wing aircraft.

Earnings before income taxes for the Engine Products segment for the year ended July 31, 2019 were \$254.6 million, or 13.2% of Engine Products' sales, a decrease from 14.0% of sales for the year ended July 31, 2018. This decline was due to higher raw materials and supply chain costs, partially offset by benefits from price realization and lower incentive compensation than the prior year.

Industrial Products Segment

The following is a summary of net sales by product group within the Company's Industrial Products segment for the years ended July 31, 2019 and 2018 (in millions):

		Year End	ed July	y 31 ,		
	,	2019		2018	\$ Change	% Change
Industrial Products segment:						
Industrial Filtration Solutions	\$	641.8	\$	594.3	\$ 47.5	8.0%
Gas Turbine Systems		106.3		115.5	(9.2)	(8.0)
Special Applications		170.8		175.4	(4.6)	(2.6)
Industrial Products segment net sales	\$	918.9	\$	885.2	\$ 33.7	3.8%
Industrial Products segment earnings before income taxes	\$	140.1	\$	135.5	\$ 4.6	3.4%

Net sales for the Industrial Products segment for the year ended July 31, 2019 were \$918.9 million, as compared with \$885.2 million for the year ended July 31, 2018, an increase of \$33.7 million, or 3.8%. Excluding the \$23.8 million decrease from foreign currency translation, fiscal 2019 sales increased 6.5%.

Worldwide sales of Industrial Filtration Solutions were \$641.8 million, an 8.0% increase from fiscal 2018. In constant currency, sales increased \$66.2 million, or 11.1%. The increase in Industrial Filtration Solutions sales reflects incremental sales of \$30.1 million related to the Company's acquisition of BOFA. In addition, the Company experienced strong year-over-year increases in Process Filtration as the Company executes on its strategy to expand further into under-penetrated and new markets. Further, growth in sales of dust collection replacement parts related to the Company's efforts to proactively manage the replacement cycle for its large customer base.

Worldwide sales of Gas Turbine Systems were \$106.3 million, a 8.0% decrease from fiscal 2018. In constant currency, sales declined \$7.5 million, or 6.5%. The decrease in Gas Turbine Systems sales reflects the impact from the Company's previous decision to be more selective in bidding large turbine projects.

Worldwide sales of Special Applications were \$170.8 million, a 2.6% decrease from fiscal 2018. In constant currency, sales decreased \$1.2 million, or 0.7%. The decrease in Special Applications sales reflects lower sales of disk drive filters, reflecting the secular declining hard disk drive market, partially offset by increased growth in sales of membrane products, venting solutions and filters for the semiconductor industry.

Earnings before income taxes for the Industrial Products segment for the year ended July 31, 2019 were \$140.1 million, or 15.2% of Industrial Products' sales, a decrease from 15.3% of sales for the year ended July 31, 2018. The decrease reflects incremental investments related to the Company's strategic growth priorities, partially offset by benefits from price increases and lower incentive compensation.

Liquidity and Capital Resources

Liquidity Analysis

Liquidity is assessed in terms of the Company's ability to generate cash to fund its operating, investing and financing activities. Significant factors affecting liquidity are: cash flows generated from operating activities, capital expenditures, acquisitions, dividends, repurchases of outstanding shares, adequacy of available bank lines of credit and the ability to attract long-term capital with satisfactory terms. The Company generates substantial cash from the operation of its businesses as its primary source of liquidity, with sufficient liquidity available to fund growth through reinvestment in existing businesses and strategic acquisitions.

Secondary sources of liquidity are existing cash and available credit facilities. At July 31, 2019, cash and cash equivalents were \$177.8 million. The Company's cash and cash equivalents are held by subsidiaries throughout the world as over half of the Company's earnings occur outside the U.S.

Short-term borrowing capacity at July 31, 2019 includes the following (in millions):

		Credit	Con I	ropean nmercial Paper rogram	Op (ropean erations Credit acilities	Worl	st of the ld Credit cilities		Total
Available credit facilities	\$	90.0	\$	111.5	\$	74.4	\$	63.6	\$	339.5
Reductions to borrowing capacity:										
Outstanding borrowings		2.1		_		_		_		2.1
Other non-borrowing reductions						34.7		23.0		57.7
Total reductions		2.1				34.7		23.0		59.8
Remaining borrowing capacity	\$	87.9	\$	111.5	\$	39.7	\$	40.6	\$	279.7
Weighted average interest rate at year end		3.33%		N/A		N/A		N/A		
The long-term credit facility at July 31, 2019, the largest of these facilities, is a multi-currency revolving credit facility. Key items are as follows (in millions):										
Revolving credit facility							\$	S		500.0
Reductions to borrowing capacity:										
Outstanding borrowings										286.5
Contingent liability for standby letters of	credit						_			11.0

Weighted average interest rate at year end

Remaining borrowing capacity

Total reductions

2.55%

297.5

202.5

\$

- The revolving credit facility matures on July 21, 2022.
- The revolving credit facility has an accordion feature in which the Company can request to increase the credit facility by up to \$250.0 million, subject to terms of agreement including written notification and lender acceptance.

For further discussion on short-term borrowings and long-term debt, refer to Notes 7 and 8 in the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report.

The \$500.0 million revolving credit facility and outstanding borrowings, contain financial covenants related to interest coverage and leverage ratios, as well as other non-financial covenants. As of July 31, 2019, the Company was in compliance with all such covenants.

The Company believes that the liquidity available from the combination of the expected cash generated by operating activities, existing cash and available credit under existing credit facilities will be adequate to meet cash requirements for the next twelve months, including working capital needs, debt service obligations, capital expenditures, payment of anticipated dividends, share repurchase activity, and potential acquisitions.

Cash Flow Summary

Cash flows for the years ended July 31, 2019, 2018 and 2017 are summarized as follows (in millions):

	July 31,								
	 2019		2018		2017				
Net cash provided by (used in):									
Operating activities	\$ 345.8	\$	262.9	\$	317.8				
Investing activities	(246.4)		(95.4)		(95.7)				
Financing activities	(123.3)		(268.8)		(165.2)				
Effect of exchange rate changes on cash	(3.0)		(2.4)		8.3				
Increase (decrease) in cash and cash equivalents	\$ (26.9)	\$	(103.7)	\$	65.2				

Operating Activities

Cash provided by operating activities for the year ended July 31, 2019 was \$345.8 million, as compared with \$262.9 million for the year ended July 31, 2018, an increase of \$82.9 million. This increase was mainly driven by higher net earnings before the non-cash impact of the TCJA of \$18.7 million and \$84.1 million in fiscal years 2019 and 2018, respectively, changes in working capital primarily due to improvements to the timing of collections of customer receipts, flat inventory levels in fiscal year 2019, and decreased discretionary pension plan contributions in 2019, partially offset by cash paid for taxes of \$99.3 million compared to \$82.6 million in 2018.

Investing Activities

Cash used in investing activities for the year ended July 31, 2019 was \$246.4 million, as compared with \$95.4 million for the year ended July 31, 2018, an increase of \$151.0 million. The increase includes the acquisition of BOFA for \$96.0 million in fiscal 2019 and higher capital expenditures of \$53.2 million which were primarily related to investments to expand production capacity.

Financing Activities

Cash flows used in financing activities generally relate to the use of cash for payment of dividends and repurchases of the Company's common stock, net borrowing activity and proceeds from the exercise of stock options. To determine the appropriate level of payouts, the Company considers recent and projected performance across key financial metrics, including earnings, cash flow from operations, and total debt. Dividends paid for the years ended July 31, 2019 and 2018 were \$99.7 million and \$94.7 million, respectively. Share repurchases for the years ended July 31, 2019 and 2018 were \$129.2 million and \$122.0 million, respectively.

Cash used in financing activities for the year ended July 31, 2019 was \$123.3 million, as compared with \$268.8 million for the year ended July 31, 2018, a decrease of \$145.5 million. The change in cash used for financing activities is primarily due higher repayments of long-term debt in 2018.

Financial Condition

The Company's total capitalization components and debt-to-capitalization ratio at July 31, 2019 and 2018 was as follows (in millions):

		July	31	,	
	 2019	%		2018	%
Short-term borrowings	\$ 2.1	0.1%	\$	28.2	2.0%
Current maturities of long-term debt	50.2	3.3		15.3	1.1
Long-term debt	 584.4	38.2		499.6	35.7
Total short-term borrowings and debt	\$ 636.7	41.6%	\$	543.1	38.8%
Shareholders' equity	 892.7	58.4%		857.8	61.2%
Total capitalization	\$ 1,529.4	100.0%	\$	1,400.9	100.0%
			_		

As of July 31, 2019, total debt, including short-term borrowings and long-term debt, represented 41.6% of total capitalization, defined as total debt plus total shareholders' equity, compared with 38.8% at July 31, 2018.

Long-term debt outstanding at July 31, 2019 was \$584.4 million compared with \$499.6 million at the prior year end, an increase of \$84.8 million, driven primarily by the funding needs for the acquisition of BOFA.

Accounts receivable, net at July 31, 2019 was \$529.5 million, as compared with \$534.6 million at July 31, 2018, a decrease of \$5.1 million. Accounts receivable, net decreased due to the impact of foreign exchange rates as well as improvements to timing of collections. Days sales outstanding were at 65 days as of July 31, 2019, down from 66 days as of July 31, 2018. Days sales outstanding is calculated using the count back method, which calculates the number of days of most recent revenue that is reflected in the net accounts receivable balance.

Inventories, net at July 31, 2019 was \$332.8 million, as compared with \$334.1 million at July 31, 2018, a decrease of \$1.3 million. Inventory turns were 5.6 times per year as of July 31, 2019 and 2018. Inventory turns are calculated by taking the annualized cost of sales based on the trailing three-month period divided by the average of the beginning and ending net inventory values of the three-month period.

Accounts payable at July 31, 2019 was \$237.5 million, as compared with \$201.3 million at July 31, 2018, an increase of \$36.2 million. Accounts payable increased primarily due to higher capital expenditures outstanding as of July 31, 2019.

Off-Balance Sheet Arrangements

The Company does not have any off-balance sheet arrangements, with the exception of the guarantee of 50% of certain debt of its joint venture with Caterpillar Inc., Advanced Filtration Systems Inc. (AFSI). As of July 31, 2019, the joint venture had \$38.8 million of outstanding debt, of which the Company guarantees half. The Company does not believe that this guarantee will have a current or future effect on its financial condition, results of operations, liquidity or capital resources.

Contractual Obligations

The following table summarizes the Company's contractual obligations as of July 31, 2019, for the years indicated (in millions):

	Payments Due by Period										
	Total		Less than 1 year		1 - 3 years		-			ore than years	
Long-term debt obligations	\$	634.4	\$	50.0	\$	294.9	\$	140.0	\$	149.5	
Capital lease obligations		0.2		0.2		_		_		_	
Interest on long-term debt obligations		72.4		10.0		18.9		18.8		24.7	
Operating lease obligations		82.8		24.0		28.8		11.0		19.0	
Purchase obligations (1)		173.2		161.5		9.3		2.4		_	
Pension and deferred compensation (2)		49.3		7.9		7.0		6.7		27.7	
Total (3)	\$	1,012.3	\$	253.6	\$	358.9	\$	178.9	\$	220.9	

- (1) Purchase obligations consist primarily of inventory, tooling and capital expenditures. The Company's purchase orders for inventory are based on expected customer demand and, as a result, quantities and dollar volumes are subject to change.
- (2) Pension and deferred compensation consist of long-term pension liabilities and salary and bonus deferrals elected by certain executives under the Company's deferred compensation plan. Deferred compensation balances earn interest based on a treasury bond rate as defined by the plan (10-year treasury bond STRIP rate plus two percent for deferrals prior to January 1, 2011 and 10-year treasury bond rates for deferrals after December 31, 2010), are approved by the Human Resources Committee of the Board of Directors and are payable at the election of the participants.
- (3) In addition to the above contractual obligations, the Company may be obligated for additional cash outflows of \$17.1 million for potential tax obligations, including accrued interest and penalties. The payment and timing of any such payments is affected by the ultimate resolution of the tax years that are under audit or remain subject to examination by the relevant taxing authorities. Therefore, quantification of an estimated range and timing of future payments cannot be made at this time. Additionally, the transition tax on deemed repatriated earnings of non-U.S. subsidiaries resulting from the TCJA is not included in contractual obligations. See Note 12 to the Consolidated Financial Statements for further information.

Critical Accounting Policies

The Company's Consolidated Financial Statements are prepared in conformity with GAAP. The preparation of these financial statements requires the use of estimates and judgments that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the periods presented. Management bases estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about recorded amounts. The Company believes its use of estimates and underlying accounting assumptions adheres to GAAP and are reasonable and consistently applied. The Company's Critical Accounting Policies are those that require more significant estimates and judgments used in the preparation of its Consolidated Financial Statements and that are the most important to aid in fully understanding its financial results. The Company's Critical Accounting Policies are the following:

Revenue recognition - variable consideration The transaction price of a contract could be reduced by variable consideration including product refunds, returns, volume purchase rebates and discounts in the determination of net sales. The Company primarily relies on historical experience and anticipated future performance to estimate the variable consideration. Revenue is recognized to the extent that it is probable that a significant reversal of revenue will not occur when the contingency is resolved.

At the time of sale to a customer, the Company records an estimate for product refunds and returns, sales promotion and incentive costs that are classified as a reduction from gross sales.

- Refunds and returns Estimates for product refunds and returns are based primarily on the estimated number of products sold, the trend in the historical ratio of returns to sales, and the historical length of time between the sale and resulting return. Actual refunds and returns could be higher or lower than amounts estimated due to such factors as performance of new products, or significant manufacturing or design defects not discovered until after the product is delivered to customers.
- Promotion and incentive costs Estimates for sales promotion and incentive costs are based on the terms of the arrangements with customers, historical payment experience, field inventory levels, volume in quantity or mix of purchases of product during a specified time period and expectations for changes in relevant trends in the future. Actual results may differ from estimates if competitive factors create the need to enhance or reduce sales promotion and incentive accruals or if customer usage and field inventory levels vary from historical trends. Adjustments to sales promotions and incentive accruals are made from time to time as actual usage becomes known in order to properly estimate the amounts necessary to generate consumer demand based on market conditions as of the balance sheet date.

Goodwill Goodwill represents the excess of the purchase price over the fair value of net assets acquired in business combinations under the purchase method of accounting. The Company performed its annual impairment assessment during the third quarter of fiscal 2019 and determined that there were no indicators of impairment for any of the reporting units evaluated. The goodwill impairment assessment is conducted at a reporting unit level, which is one level below the operating segment level, and utilizes either a qualitative or quantitative assessment.

The optional qualitative assessment evaluates general economic, industry and entity-specific factors that could impact the reporting units' fair values. For reporting units evaluated using a qualitative assessment, if it is determined that the fair value more likely than not exceeds the carrying value, no further assessment is necessary. The Company has elected this option for certain reporting units. For reporting units evaluated using a quantitative assessment, the fair values are determined using an income approach, a market approach or a weighting of the two. The income approach determines fair value based on discounted cash flow models derived from the reporting units' long-term forecasts. The market approach determines fair value based on earnings multiples derived from prices investors paid for the stocks of comparable, publicly traded companies. An impairment loss would be recognized when the carrying amount of a reporting unit's net assets exceeds the estimated fair value of the reporting unit. Estimates and assumptions are utilized in the valuations, including discounted projected cash flows, terminal value growth rates, revenue growth rates, discount rates and the determination of comparable, publicly traded companies. Changes in these estimates and assumptions could materially affect the determination of fair value and goodwill impairment.

Income taxes Management is required to estimate income taxes in each of the jurisdictions in which the Company operates. This process involves estimating current tax exposure and assessing future tax consequences attributable to temporary differences between the financial statement carrying amount of existing assets and liabilities and their respective tax basis. These deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are anticipated to reverse based on future taxable income projections and the impact of tax planning strategies. The Company intends to indefinitely reinvest undistributed earnings for certain of its non-U.S. subsidiaries and thus has not provided for income taxes on these earnings.

Additionally, benefits of tax return positions are recognized in the financial statements when the position is "more-likely-than-not" to be sustained by the taxing authorities based solely on the technical merits of the position. If the recognition threshold is met, the tax benefit is measured and recognized as the largest amount of tax benefit that in the Company's judgment is greater than 50% likely to be realized. The Company maintains a reserve for uncertain tax benefits that are currently unresolved and routinely monitors the potential impact of such situations. The liability for unrecognized tax benefits, accrued interest and penalties was \$17.1 million and \$20.2 million as of July 31, 2019 and 2018, respectively.

The Company believes that it is remote that any adjustment necessary to the reserve for income taxes for the next 12-month period will be material. However, it is possible the ultimate resolution of audits or disputes may result in a material change to our reserve for income taxes, although the quantification of such potential adjustments cannot be made at this time.

Defined benefit pension plans The Company incurs expenses for employee benefits provided through defined benefit pension plans. In accounting for these defined benefit pension plans, management must make a variety of estimates and assumptions including mortality rates, discount rates, overall Company compensation increases and expected return on plan assets. The Company considers historical data as well as current facts and circumstances and uses a third-party specialist to assist management in determining these estimates.

To develop the assumption for the expected long-term rate of return on assets for its U.S. pension plans, the Company considered historical returns and future expected returns for each asset class, as well as the target asset allocation of the pension portfolio. The expected return on plan assets assumption for the plans outside the U.S. reflects the investment allocation and expected total portfolio returns specific to each plan and country. The Company utilized a 6.08% and 6.25% asset-based weighted average expected return on plan assets for its U.S. plans as of the measurement dates July 31, 2019 and 2018, respectively. The Company utilized a 3.76% and 4.08% asset-based weighted average expected return on plan assets for its non-U.S. plans for the years ended July 31, 2019 and 2018, respectively. The expected returns on plan assets are used to develop the following years' expense for the plans.

The Company's objective in selecting a discount rate for its pension plans is to select the best estimate of the rate at which the benefit obligations could be effectively settled on the measurement date, taking into account the nature and duration of the benefit obligations of the plan. In making this best estimate, the Company looks at the rates of return on high-quality, fixed-income investments currently available, and expected to be available, during the period to maturity of the benefits. This process includes assessing the universe of bonds available on the measurement date with a quality rating of Aa or better. Similar appropriate benchmarks are used to determine the discount rate for the non-U.S. plans. The Company utilized a 3.54% and 4.43% weighted average discount rate for its U.S. plans for the years ended July 31, 2019 and 2018, respectively. The Company utilized a 1.79% and 2.43% weighted average discount rate for its non-U.S. plans for the years ended July 31, 2019 and 2018, respectively.

The Company utilizes a full yield curve approach to estimate service and interest costs for pension benefits by applying specific spot rates along the yield curve used to determine the benefit obligation of relevant projected cash outflows. This method provides a precise measurement of service and interest costs by aligning the timing of the plans' liability cash flows to the corresponding spot rate on the yield curve.

If the Company were to use alternative assumptions for its U.S. plans at July 31, 2019, a 1% change would result in the following impact on 2019 pension costs:

		Pension	n Costs	
	_	+1%		(1)%
Rate of return	\$	4.8	\$	(4.8)
Discount rate	\$	(30.4)	\$	36.8

The Company's net periodic benefit cost recognized in the Consolidated Statements of Earnings was \$3.8 million, \$5.1 million and \$3.3 million for the years ended July 31, 2019, 2018 and 2017, respectively. While changes to the Company's pension plan assumptions would not be expected to impact its net periodic benefit cost by a material amount, such changes could significantly impact the Company's projected benefit obligation.

Business Combinations The Company allocates the purchase price of acquired businesses to the estimated fair values of the assets acquired and liabilities assumed as of the date of acquisition. The fair values of the long-lived assets acquired, primarily intangible assets, are determined using calculations which can be complex and require significant judgment. Estimates include many factors such as the nature of the acquired company's business, its historical financial position and results, customer retention rates, discount rates, and future performance. Independent valuation specialists are used to assist in determining certain fair value calculations.

The Company estimates the fair value of acquired customer relationships using the multi-period excess earnings method. This approach is typically applied when cash flows are not directly generated by the asset, but rather, by an operating group which includes the particular asset. Value is estimated as the present value of the benefits anticipated from ownership of the asset, in excess of the returns required on the investment in contributory assets which are necessary to realize those benefits. The intangible asset's estimated earnings are determined as the residual earnings after quantifying estimated earnings from contributory assets. Assumptions used in these calculations include same-customer revenue growth rates, estimated earnings and customer attrition rates.

The Company estimates the fair value of trade names and/or trademarks using the relief from royalty method, which calculates the cost savings associated with owning rather than licensing the assets. Assumed royalty rates are applied to projected revenue for the remaining useful lives of the assets to estimate the royalty savings. Royalty rates are selected based on the attributes of the asset, including reputation and recognition within the industry.

While the Company uses its best estimates and assumptions, fair value estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Any adjustments required after the measurement period are recorded in the consolidated statement of earnings. The judgments required in determining the estimated fair values and expected useful lives assigned to each class of assets and liabilities acquired can significantly affect net income.

New Accounting Standards Not Yet Adopted

For new accounting standards not yet adopted, refer to Note 1 in the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report.

Safe Harbor Statement under the Securities Reform Act of 1995

The Company, through its management, may make forward-looking statements reflecting the Company's current views with respect to future events and expectations, such as forecasts, plans, trends and projections relating to the Company's business and financial performance. These forward-looking statements, which may be included in reports filed under the Securities Exchange Act of 1934, as amended (the Exchange Act), in press releases and in other documents and materials as well as in written or oral statements made by or on behalf of the Company, are subject to certain risks and uncertainties, including those discussed in Part I, Item 1A, "Risk Factors" of this Annual Report, which could cause actual results to differ materially from historical results or those anticipated. The words or phrases "will likely result," "are expected to," "will continue," "will allow," "estimate," "project," "believe," "expect," "anticipate," "forecast," "plan" and similar expressions are intended to identify forward-looking statements within the meaning of Section 21e of the Exchange Act and Section 27A of the Securities Act of 1933, as amended, as enacted by the Private Securities Litigation Reform Act of 1995 (PSLRA). In particular, the Company desires to take advantage of the protections of the PSLRA in connection with the forward-looking statements made in this Annual Report. All statements other than statements of historical fact are forward-looking statements. These statements do not guarantee future performance.

Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date such statements are made. In addition, the Company wishes to advise readers that the factors listed in Part I, Item 1A, "Risk Factors" of this Annual Report, as well as other factors, could affect the Company's performance and could cause the Company's actual results for future periods to differ materially from any opinions or statements expressed. These factors include, but are not limited to, economic and industrial conditions worldwide; the Company's ability to maintain competitive advantages; threats from disruptive innovation; highly competitive markets with pricing pressure; the Company's ability to protect and enforce its intellectual property; the difficulties in operating globally; customer concentration in certain cyclical industries; significant demand fluctuations; unavailable raw materials or material cost inflation; inability of operations to meet customer demand; difficulties with information technology systems and security; foreign currency fluctuations; governmental laws and regulations; litigation; changes in tax laws and tax rates, regulations and results of examinations; the Company's ability to attract and retain qualified personnel; changes in capital and credit markets; execution of the Company's acquisition strategy; the possibility of intangible asset impairment; the Company's ability to manage productivity improvements; unexpected events and the disruption on operations; the Company's ability to maintain an effective system of internal control over financial reporting; the United Kingdom's decision to end its membership in the European Union and other factors included in Part I, Item 1A, "Risk Factors" of this Annual Report. The Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

The Company's market risk includes the potential loss arising from adverse changes in foreign currency exchange rates, interest rates and commodity prices. In an attempt to manage these risks, the Company employs certain strategies to mitigate the effect of these fluctuations. The Company does not enter into any of these instruments for speculative trading purposes.

The Company maintains significant assets and operations outside the U.S., resulting in exposure to foreign currency gains and losses. A portion of the Company's foreign currency exposure is naturally hedged by incurring liabilities, including bank debt, denominated in the local currency in which the Company's foreign subsidiaries are located.

During fiscal 2019, the U.S. dollar was generally stronger than in fiscal 2018 compared with many of the currencies of the foreign countries in which the Company operates. The overall stronger dollar had a negative impact on the Company's international net sales results because the foreign denominated revenues translated into less U.S. dollars. Foreign currency translation had a negative impact to net sales and net earnings in many regions around the world. The estimated impact of foreign currency translation for the year ended July 31, 2019, resulted in an overall decrease in reported net sales of \$74.0 million and a decrease in reported net earnings of approximately \$8.0 million.

Forward Foreign Currency Exchange Contracts The Company uses forward currency exchange contracts to manage exposure to fluctuations in foreign currency. The Company enters into certain purchase commitments with foreign suppliers based on the value of its purchasing subsidiaries' local currency relative to the currency requirement of the supplier on the date of the commitment. The Company also sells into foreign countries based on the value of purchaser's local currency. The Company mitigates risk through using forward currency contracts that generally mature in 12 months or less, which is consistent with the related purchases and sales. Contracts that qualify for hedge accounting are designated as cash flow hedges.

Net investment hedges The Company uses fixed-to-fixed cross currency swap agreements to hedge its exposure to adverse foreign currency exchange rate movements for its operations in Europe. In July 2019, the Company executed a fixed-to-fixed cross-currency swap in which the Company will pay Euros and receive U.S. Dollars on a notional amount of €50.0 million which matures in July 2029. The Company has elected the spot method of designating this contract.

Based on the net investment hedge outstanding as of July 31, 2019 a 10% appreciation or devaluation of the U.S. Dollar compared to the Euro, would result in a net increase or decrease of approximately \$5.7 million in the fair value of these contracts.

Interest rates The Company's exposure to market risk for changes in interest rates relates primarily to debt obligations that are at variable rates, as well as the potential increase in fair value of long-term debt resulting from a potential decrease in interest rates. As of July 31, 2019, the Company's financial liabilities with exposure to changes in interest rates consisted mainly of \$336.5 million outstanding on the Company's revolving credit facility and term loan, \(\frac{1}{2}\).65 billion, or \(\frac{1}{2}\).4 million, of variable rate long-term debt. Assuming a hypothetical increase of one-half percent in short-term interest rates, with all other variables remaining constant, interest expense would have increased \(\frac{1}{2}\).1 million and interest income would have increased \(\frac{1}{2}\).0 million in fiscal 2019. Interest rate changes would also affect the fair market value of fixed-rate debt. As of July 31, 2019, the estimated fair value of long-term debt with fixed interest rates was \(\frac{1}{2}\).5 million compared to its carrying value of \(\frac{1}{2}\).75.0 million. The fair value is estimated by discounting the projected cash flows using the rate that similar amounts of debt could currently be borrowed.

In addition, the Company is exposed to market risk for changes in interest rates for the impact to its qualified defined benefit pension plans. The plans' projected benefit obligation is inversely related to changes in interest rates. Consistent with published bond indices, in fiscal 2019 the Company decreased its discount rate from 4.43% to 3.54% on its U.S. plans and decreased its rates from 2.43% to 1.79% for its non-U.S. plans. To protect against declines in interest rates, the pension plans hold high-quality, long-duration bonds. The plans were underfunded by \$18.2 million at July 31, 2019, since the projected benefit obligation exceeded the fair value of the plan assets.

Commodity prices The Company is exposed to market risk from fluctuating market prices of certain purchased commodity raw materials, including steel, filter media and petrochemical-based products including plastics, rubber and adhesives. On an ongoing basis, the Company enters into selective supply arrangements with certain of its suppliers that allow the Company to reduce volatility in its costs. The Company strives to recover or offset all material cost increases through selective price increases to its customers and the Company's cost reduction initiatives, which include material substitution, process improvement and product redesigns. However, an increase in commodity prices could result in lower operating margins.

Chinese notes Consistent with common business practice in China, the Company's Chinese subsidiaries accept bankers' acceptance notes from Chinese customers in settlement of certain customer billed accounts receivable. Bankers' acceptance notes represent a commitment by the issuing financial institution to pay a certain amount of money at a specified future maturity date to the legal owner of the bankers' acceptance note as of the maturity date. The maturity date of bankers' acceptance notes varies, but it is the Company's policy to only accept bankers' acceptance notes with maturity dates no more than 270 days from the date of the Company's receipt of such draft. As of July 31, 2019, the Company owned \$16.7 million of these bankers' acceptance notes, and includes them in Accounts Receivable on the Consolidated Balance Sheets.

Item 8. Financial Statements and Supplementary Data

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Management of the Company has assessed the effectiveness of the Company's internal control over financial reporting as of July 31, 2019. In making its assessment of internal control over financial reporting, management used the criteria described in *Internal Control - Integrated Framework - version 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management concluded that the Company's internal control over financial reporting was effective as of July 31, 2019 based on criteria in Internal Control-Integrated Framework issued by the COSO. The Company's independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of the Company's internal control over financial reporting as of July 31, 2019, as stated in its report, which appears herein.

/s/ Tod E. Carpenter	/s/ Scott J. Robinson
Tod E. Carpenter	Scott J. Robinson
Chairman, President and Chief Executive Officer	Senior Vice President and Chief Financial Officer
September 27, 2019	September 27, 2019

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Donaldson Company, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Donaldson Company, Inc. and its subsidiaries (the "Company") as of July 31, 2019 and 2018, and the related consolidated statements of earnings, comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended July 31, 2019, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of July 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of July 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended July 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of July 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

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

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

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Acquisition of BOFA International LTD (BOFA) - Valuation of customer relationships intangible asset

As described in Note 2 to the consolidated financial statements, the Company acquired 88% of the shares of BOFA for net consideration of \$96.0 million on October 18, 2018, which resulted in the recording of a \$39.8 million customer relationships intangible asset. Management estimates the fair value of acquired customer relationships using the multi-period excess earnings method. The value is estimated as the present value of the benefits anticipated from ownership of the asset, in excess of returns required on the investment in contributory assets which are necessary to realize those benefits. Assumptions used in these calculations include same-customer revenue growth rates, estimated earnings and customer attrition rates.

The principal considerations for our determination that performing procedures relating to the valuation of the customer relationships intangible asset as a result of the acquisition of BOFA is a critical audit matter are (i) there was a high degree of auditor judgment and subjectivity in applying procedures relating to the fair value measurement of the acquired customer relationships intangible asset due to the significant amount of judgment by management when developing the estimate; (ii) significant audit effort was necessary to perform procedures and evaluate audit evidence related to the customer attrition rate assumption; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge to assist in evaluating the audit evidence obtained from these procedures.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the acquisition accounting, including controls over management's valuation of the acquired customer relationships intangible asset and controls over development of the significant assumption, the customer attrition rate. These procedures also included, among others, reading the purchase agreement and testing management's process for estimating the fair value of the acquired customer relationships intangible asset. Testing management's process included evaluating the appropriateness of the valuation method, testing the completeness, accuracy, and relevance of underlying data used in the model, and evaluating the reasonableness of the significant assumption, the customer attrition rate. Evaluating the reasonableness of the customer attrition rate involved considering the current and past performance of the acquired business. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's model and significant assumption, the customer attrition rate.

Goodwill Impairment Assessment - Reporting Unit within the Industrial Products Segment

As described in Note 5 to the consolidated financial statements, the Company's consolidated goodwill balance and goodwill balance for the Industrial Products segment was \$303.1 million and \$218.6 million, respectively, as of July 31, 2019. Management conducts a goodwill impairment test during the third quarter of each fiscal year. For reporting units evaluated using a quantitative assessment, the fair values are determined using an income approach, a market approach or a weighting of the two. The income approach determines fair value based on discounted cash flow models derived from the reporting units' long-term forecasts. The market approach determines fair value based on earnings multiples derived from prices investors paid for the stocks of comparable, publicly traded companies. An impairment loss would be recognized when the carrying amount of a reporting unit's net assets exceeds the estimated fair value of the reporting unit. Estimates and assumptions are utilized in the valuations, including discounted projected cash flows, terminal value growth rates, revenue growth rates, discount rates, and the determination of comparable, publicly traded companies.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment of one reporting unit within the Industrial Products segment is a critical audit matter are (i) there was a high degree of auditor judgment and subjectivity in applying procedures relating to the goodwill impairment assessment due to the significant amount of judgment by management when developing the fair value measurement of the reporting unit; (ii) significant audit effort was necessary to perform procedures and evaluate audit evidence related to the revenue growth rates and discount rate assumptions; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge to assist in evaluating the audit evidence obtained from these procedures.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the valuation of the Company's reporting units and controls over development of the significant assumptions including the revenue growth rates and discount rate. These procedures also included, among others, testing management's process for developing the fair value estimate; evaluating the appropriateness of the valuation models used in management's estimate; testing the completeness, accuracy, and relevance of underlying data used in the models; and evaluating the reasonableness of significant assumptions used by management, including the revenue growth rates and discount rate. Evaluating management's assumptions related to the revenue growth rates involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting unit, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. The discount rate was evaluated by considering the cost of capital of comparable businesses and other industry factors. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's models and certain significant assumptions, including the discount rate.

/s/ PricewaterhouseCoopers LLP Minneapolis, Minnesota September 27, 2019

We have served as the Company's auditor since 2002.

DONALDSON COMPANY, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF EARNINGS

(In millions, except per share amounts)

	Ye	Year ended July 31,						
	2019		2018		2017			
Net sales	\$ 2,844.9	\$	2,734.2	\$	2,371.9			
Cost of sales	1,896.6		1,798.4		1,551.0			
Gross profit	948.3		935.8		820.9			
Selling, general and administrative	497.8		498.9		442.6			
Research and development	62.3		59.9		54.7			
Operating income	388.2		377.0		323.6			
Interest expense	19.9		21.3		19.5			
Other income, net	(6.9))	(7.9)		(17.9)			
Earnings before income taxes	375.2		363.6		322.0			
Income taxes	108.0		183.3		89.2			
Net earnings	\$ 267.2	\$	180.3	\$	232.8			
Weighted average shares – basic	128.3		130.3		132.6			
Weighted average shares – diluted	130.3		132.2		134.1			
Net earnings per share – basic	\$ 2.08	\$	1.38	\$	1.76			
Net earnings per share – diluted	\$ 2.05	\$	1.36	\$	1.74			

See Notes to Consolidated Financial Statements.

DONALDSON COMPANY, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In millions)

		2019	2018		2017
Net earnings	\$	267.2	\$ 180.3	\$	232.8
Other comprehensive income (loss):					
Foreign currency translation (loss) income		(26.6)	(7.3)		30.5
Pension liability adjustment, net of deferred taxes of \$5.0, \$(4.7) and \$(11.2), respectively		(16.1)	12.2		20.7
Derivatives:					
(Losses) gains on hedging derivatives, net of deferred taxes of \$0.1, \$(1.1) and \$1.2, respectively		(0.5)	2.3		(2.6)
Reclassification of losses (gains) on hedging derivatives to net income, net of taxes of \$0, \$0 and \$0, respectively		0.1			_
Total derivatives		(0.4)	2.3		(2.6)
Net other comprehensive (loss) income		(43.1)	7.2		48.6
Comprehensive income	\$	224.1	\$ 187.5	\$	281.4

See Notes to Consolidated Financial Statements.

DONALDSON COMPANY, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

(In millions, except share amounts)

	As of July 31,			
		2019	_	2018
Assets				
Current assets:				
Cash and cash equivalents	\$	177.8	\$	204.7
Accounts receivable, less allowance of \$4.8 and \$8.3, respectively		529.5		534.6
Inventories, net		332.8		334.1
Prepaid expenses and other current assets		82.5	_	52.3
Total current assets		1,122.6		1,125.7
Property, plant and equipment, net		588.9		509.3
Goodwill		303.1		238.4
Intangible assets, net		70.9		35.6
Deferred income taxes		14.2		19.2
Other long-term assets		42.9		48.4
Total assets	\$	2,142.6	\$	1,976.6
Liabilities and shareholders' equity				
Current liabilities:				
Short-term borrowings	\$	2.1	\$	28.2
Current maturities of long-term debt	Ф	50.2	Ф	15.3
Trade accounts payable		237.5		201.3
Accrued employee compensation and related taxes		87.8		103.5
Accrued liabilities		32.2		34.5
Other current liabilities		73.1		86.6
		482.9	_	469.4
Total current liabilities		584.4		469.4
Long-term debt				
Non-current income taxes payable		110.9		105.3
Deferred income taxes		13.2		4.2
Other long-term liabilities		48.5		40.3
Total liabilities		1,239.9	_	1,118.8
Committee and a series are in Olympia 17)				
Commitments and contingencies (Note 17)		10.0		
Redeemable non-controlling interest		10.0		_
Shareholders' equity:				
Preferred stock, \$1.00 par value, 1,000,000 shares authorized, none issued		_		_
Common stock, \$5.00 par value, 240,000,000 shares authorized, 151,643,194 shares issued		758.2		758.2
Retained earnings		1,281.5		1,122.1
Non-controlling interest		5.4		4.8
Stock compensation plans		21.7		21.3
Accumulated other comprehensive loss		(192.9)		(149.8)
Treasury stock, 24,324,483 and 22,871,145 shares, respectively, at cost		(981.2)		(898.8)
Total shareholders' equity	_	892.7		857.8
Total liabilities and shareholders' equity	\$	2,142.6	\$	1,976.6
Total national and shareholders equity	Φ	۷,174.0	Ψ	1,970.0

See Notes to Consolidated Financial Statements.

DONALDSON COMPANY, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (In millions)

		2019	2018		2017
Operating Activities					
Net earnings	\$	267.2	\$ 180.3	\$	232.8
Adjustments to reconcile net earnings to net cash provided by operating activities:					
Depreciation and amortization		81.1	76.7		75.2
Equity in earnings of affiliates, net of distributions		(1.2)	(2.7)		(0.5)
Deferred income taxes		10.2	7.0		(10.6)
Stock-based compensation plan expense		15.0	16.7		9.1
Other, net		(7.6)	(27.6)		5.1
Changes in operating assets and liabilities, excluding effect of acquired businesses:					
Accounts receivable		1.4	(41.7)		(31.8)
Inventories		(5.5)	(43.8)		(42.4)
Prepaid expenses and other current assets		(9.7)	3.6		12.8
Income taxes payable		(2.0)	87.9		8.5
Trade accounts payable and other accrued expenses		(3.1)	6.5		59.6
Net cash provided by operating activities		345.8	262.9		317.8
Investing Activities					
Purchases of property, plant and equipment		(150.7)	(97.5)		(65.9)
Proceeds from sale of property, plant and equipment		0.3	1.6		2.4
Acquisitions, net of cash acquired		(96.0)	0.5		(32.2)
Net cash used in investing activities		(246.4)	(95.4)		(95.7)
Financing Activities					
Proceeds from long-term debt		155.0	197.7		_
Repayments of long-term debt		(45.9)	(272.4)		(81.7)
Change in short-term borrowings		(25.3)	6.0		129.2
Purchase of treasury stock		(129.2)	(122.0)		(140.4)
Dividends paid		(99.7)	(94.7)		(92.4)
Tax withholding for stock compensation transactions		(4.1)	(2.6)		(2.6)
Exercise of stock options		25.9	19.2		22.7
Net cash used in financing activities		(123.3)	(268.8)		(165.2)
Effect of exchange rate changes on cash		(3.0)	(2.4)		8.3
(Decrease) increase in cash and cash equivalents		(26.9)	(103.7)		65.2
Cash and cash equivalents, beginning of year		204.7	308.4		243.2
Cash and cash equivalents, end of year	\$	177.8	\$ 204.7	\$	308.4
1 / 3					
Supplemental Cash Flow Information					
Cash paid during the year for:					
Income taxes	\$	99.3	\$ 82.6	\$	88.0
Interest	\$	19.1	\$ 21.9	\$	19.9
Supplemental disclosure of non-cash investing transactions					
Accrued property, plant and equipment additions	\$	16.5	\$ 9.0	\$	6.1

See Notes to Consolidated Financial Statements.

DONALDSON COMPANY, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(In millions, except per share amounts)

	nmon ock	Additio Paid- Capi	-in		tained rnings	Cont	on- rolling erest	C	Stock ompensation Plans	Accumulated Other Comprehensive Loss	Treasury Stock	,	Total
Balance July 31, 2016	\$ 758.2	\$	_	\$	905.1	\$	4.0	\$	16.7	\$ (205.6)	\$ (707.0)	\$	771.4
Comprehensive income						•							
Net earnings					232.8								232.8
Foreign currency translation										30.5			30.5
Pension liability adjustment, net of deferred taxes										20.7			20.7
Loss on hedging derivatives, net of deferred taxes										(2.6)		_	(2.6)
Comprehensive income													281.4
Treasury stock acquired											(140.4)		(140.4)
Stock options exercised			(3.4)		(10.2)						35.8		22.2
Stock compensation expense					7.7				0.9		0.5		9.1
Deferred stock and other activity			3.4		(1.6)		0.4		(1.9)		3.1		3.4
Dividends (\$0.71 per share)					(92.6)								(92.6)
Balance July 31, 2017	 758.2			1	,041.2		4.4		15.7	(157.0)	(808.0)		854.5
Comprehensive income													
Net earnings					180.3								180.3
Foreign currency translation										(7.3)			(7.3)
Pension liability adjustment, net of deferred taxes										12.2			12.2
Gain on hedging derivatives, net of deferred taxes										2.3			2.3
Comprehensive income													187.5
Treasury stock acquired											(122.0)		(122.0)
Stock options exercised					(9.3)						28.2		18.9
Stock compensation expense					8.7				7.5		0.5		16.7
Deferred stock and other activity					(3.1)		0.4		(1.9)		2.5		(2.1)
Dividends (\$0.74 per share)					(95.7)								(95.7)
Balance July 31, 2018	758.2		_	1	,122.1		4.8		21.3	(149.8)	(898.8)		857.8
Comprehensive income								_					
Net earnings					267.2								267.2
Foreign currency translation										(26.6)			(26.6)
Pension liability adjustment, net of deferred taxes										(16.1)			(16.1)
Loss on hedging derivatives, net of deferred taxes										(0.5)			(0.5)
Reclassification of loss on hedging derivatives to net income										0.1			0.1
Comprehensive income													224.1
Treasury stock acquired											(129.2)		(129.2)
Stock options exercised					(17.2)						42.2		25.0
Stock compensation expense					10.9				3.8		0.3		15.0
Deferred stock and other activity					0.5		0.6		(3.4)		4.3		2.0
Dividends (\$0.80 per share)					(102.0)				(=. 1)				(102.0)
Balance July 31, 2019	\$ 758.2	\$	=		<u> </u>	\$	5.4	\$	21.7	\$ (192.9)	\$ (981.2)	\$	892.7

See Notes to Consolidated Financial Statements.

DONALDSON COMPANY, INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. Summary of Significant Accounting Policies

Description of Business Donaldson is a worldwide manufacturer of filtration systems and replacement parts. The Company's core strengths are leading filtration technology, strong customer relationships and its global presence. Products are manufactured at 50 plants around the world and through three joint ventures. Products are sold to original equipment manufacturers (OEMs), distributors, dealers and directly to end users.

Principles of Consolidation The Consolidated Financial Statements include the accounts of Donaldson Company, Inc. and all of its majority-owned subsidiaries. All intercompany accounts and transactions have been eliminated. The Company's three joint ventures are not majority-owned and are accounted for under the equity method. Certain reclassifications to previously reported financial information have been made to conform to the current period presentation.

Use of Estimates The preparation of the Consolidated Financial Statements in conformity with generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Foreign Currency Translation For most foreign operations, local currencies are considered the functional currency. Assets and liabilities of non-U.S. dollar functional currency entities are translated to U.S. dollars at year-end exchange rates and the resulting gains and losses arising from the translation of net assets located outside the U.S. are recorded as a cumulative translation adjustment, a component of accumulated other comprehensive loss in the Consolidated Balance Sheets. Elements of the Consolidated Statements of Earnings are translated at average exchange rates in effect during the year. Foreign currency transaction losses are included in other income, net in the Consolidated Statements of Earnings and were \$4.9 million, \$7.4 million and \$4.0 million in the years ended July 31, 2019, 2018 and 2017, respectively.

Cash Equivalents The Company considers all highly liquid temporary investments with an original maturity of three months or less to be cash equivalents. Cash equivalents are carried at cost that approximates market value.

Accounts Receivable and Allowance for Doubtful Accounts Trade accounts receivables are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the Company's best estimate of the amount of credit losses in its existing accounts receivable. The Company determines the allowance based on historical write-off experience, regional economic data and evaluation of specific customer accounts for risk of loss. The Company reviews its allowance for doubtful accounts monthly. Past due balances over 90 days and over a specified amount are reviewed individually for collectability. All other balances are reviewed on a pooled basis by reporting unit and geographic region. Account balances are reserved when the Company determines it is probable the receivable will not be recovered.

Inventories Inventories are stated at the lower of cost and net realizable value. U.S. inventories are valued using the last-in, first-out (LIFO) method while the non-U.S. inventories are valued using the first-in, first-out (FIFO) method. Inventories valued at LIFO were approximately 31.3% and 28.0% of total inventories at July 31, 2019 and 2018, respectively. For inventories valued under the LIFO method, the FIFO cost exceeded the LIFO carrying values by \$39.8 million and \$38.2 million at July 31, 2019 and 2018, respectively. Results of operations for all periods presented were not materially affected by the liquidation of LIFO inventory.

Property, Plant and Equipment Property, plant and equipment are stated at cost. Additions, improvements or major renewals are capitalized while expenditures that do not enhance or extend the asset's useful life are charged to expense as incurred. Depreciation is computed using the straight-line method. Depreciation expense was \$73.5 million, \$71.1 million and \$68.8 million in the years ended July 31, 2019, 2018 and 2017, respectively. The estimated useful lives of property, plant and equipment are ten to forty years for buildings, including building improvements, and three to ten years for machinery and equipment.

Internal-Use Software The Company capitalizes direct costs of materials and services used in the development and purchase of internal-use software. Amounts capitalized are amortized on a straight-line basis over a period of five to seven years and are reported as a component of property, plant and equipment.

Cloud Computing Arrangements The Company capitalizes certain costs incurred during the application development stage of implementation of internal use software in cloud computing arrangements. Amounts capitalized are on a straight-line basis over a period of ten years and are reported as a component of other long-term assets.

Goodwill and Intangible Assets Goodwill represents the excess of the purchase price over the fair value of net assets acquired in business combinations under the purchase method of accounting. Intangible assets, comprised of customer relationships, patents, trademarks and technology, are amortized on a straight-line basis over their estimated useful lives of five to twenty years. Goodwill is assessed for impairment annually or if an event occurs or circumstances change that would indicate the carrying amount may be impaired. The impairment assessment for goodwill is done at a reporting unit level. Reporting units are one level below the operating segment level but can be combined when reporting units within the same operating segment have similar economic

characteristics. An impairment loss would be recognized when the carrying amount of the reporting unit's net assets exceeds the estimated fair value of the reporting unit.

Recoverability of Long-Lived Assets The Company reviews its long-lived assets, including identifiable intangibles, for impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If impairment indicators are present and the estimated future undiscounted cash flows are less than the carrying value of the assets, the carrying value is reduced to the fair market value. There were no impairment charges recorded for the years ended July 31, 2019, 2018 and 2017.

Income Taxes The provision for income taxes is computed based on the pretax income reported for financial statement purposes. Deferred tax assets and liabilities are recognized for the expected future tax consequences attributed to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are anticipated to reverse. Valuation allowances are recorded to reduce deferred tax assets when it is more-likely-than-not that a tax benefit will not be realized.

The Company maintains a reserve for uncertain tax benefits. Benefits of tax return positions are recognized in the financial statements when the position is "more-likely-than-not" to be sustained by the taxing authorities based solely on the technical merits of the position. If the recognition threshold is met, the tax benefit is measured and recognized as the largest amount of tax benefit that in the Company's judgment is greater than 50% likely to be realized.

Treasury Stock Repurchased common stock is stated at cost (determined on an average cost basis) and is presented as a reduction of shareholders' equity.

Research and Development Expense Research and development expenses include basic scientific research and the application of scientific advances to the development of new and improved products and their uses and are charged against earnings in the year incurred.

Shipping and Handling Shipping and handling costs of \$76.7 million, \$73.5 million and \$61.4 million are classified as a component of selling, general and administrative expenses for the years ended July 31, 2019, 2018 and 2017, respectively.

Stock-Based Compensation The Company offers stock-based employee compensation plans, which are more fully described in Note 10. Stock-based employee compensation expense is recognized using the fair-value method for all awards.

Revenue Recognition Revenue is measured as the amount of consideration the Company expects to receive in exchange for the fulfillment of performance obligations. The transaction price of a contract could be reduced by variable consideration including product refunds, returns, volume rebates and discounts in the determination of net sales. The Company primarily relies on historical experience and anticipated future performance to estimate the variable consideration. Revenue is recognized to the extent that it is probable that a significant reversal of revenue will not occur when outstanding contingencies are resolved. The Company also accounts for amounts billed to customers for reimbursement of shipping and handling as fulfillment costs by recording these amounts as revenue and accruing the costs when the related revenue is recognized.

For most customer contracts, the Company recognizes revenue at a point in time when control of the goods or services is transferred to the customer. For product sales, control is typically deemed to have transferred in accordance with the shipping terms, either at the time of shipment from the plants or distribution centers or the time of delivery to the customers. Revenue is recognized for services upon completion of those services.

Due to the customized nature of some of the Company's products, together with contractual provisions in certain customer contracts that provide the Company with an enforceable right to payment of the transaction price for performance completed to date, revenue is recognized for these contracts over time. For these contracts, the Company recognizes revenue on products by an output measure of production, which fairly depicts the amount of revenue the Company is entitled to. The timing of revenue recognized from these products is slightly accelerated compared to revenue recognized at the point in time of shipment or delivery.

Incremental costs of obtaining a contract with a customer and other costs to fulfill a contract are required to be capitalized unless the Company elects to expense contract costs with periods less than a year. The Company has elected to expense these costs of obtaining a contract as incurred when the related contract period is less than one year. The Company does not pay upfront sales commissions on contracts when the related contract period is greater than one year, thus has not capitalized any amounts as of July 31, 2019, see Note 6.

Product Warranties The Company provides for estimated warranty expense at the time of sale and accrues for specific items at the time their existence is known and the amounts are determinable. The Company estimates warranty expense using quantitative measures based on historical warranty claim experience and evaluation of specific customer warranty issues. For a reconciliation of warranty reserves, see Note 9.

Forward Foreign Currency Contracts The Company uses forward currency exchange contracts to manage exposure to fluctuations in foreign currency. The Company enters into certain purchase commitments with foreign suppliers based on the value of its purchasing subsidiaries' local currency relative to the currency requirement of the supplier on the date of the commitment. The Company also sells into foreign countries based on the value of the purchaser's local currency. The Company mitigates risk through using forward currency contracts that generally mature in 12 months or less, which is consistent with the related purchases and sales. Contracts that qualify for hedge accounting are designated as cash flow hedges. See Note 13.

Net Investment Hedges The Company uses fixed-to-fixed cross currency swap agreements to hedge its exposure to adverse foreign currency exchange rate movements for its operations in Europe. In July 2019, the Company executed a fixed-to-fixed cross-currency swap in which the Company will pay Euros and receive U.S. Dollars on a notional amount of €50.0 million which matures in July 2029. The Company has elected the spot method of designating this contracts. See Note 13.

New Accounting Standards Recently Adopted In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (ASC 606), which amended revenue recognition guidance to clarify the principles for recognizing revenue from contracts with customers. The guidance requires an entity to recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which an entity expects to be entitled in exchange for those goods or services. The guidance also requires expanded disclosures relating to the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. Additionally, qualitative and quantitative disclosures are required about customer contracts, significant judgments and changes in judgments and assets recognized from the costs to obtain or fulfill a contract. In 2016, the FASB issued ASU 2016-08, ASU 2016-10, ASU 2016-11, ASU 2016-12 and ASU 2016-20 to clarify, among other things, the implementation guidance related to principal versus agent considerations, identifying performance obligations and accounting for licenses of intellectual property. This accounting guidance was effective for the Company beginning in the first quarter of fiscal 2019. The standard was adopted using the modified retrospective method, applying the guidance to those contracts which were not completed as of July 31, 2018, with the cumulative effect of adoption recognized during the first quarter. Refer to Note 6 for the impact of the adoption of this new standard.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations: Clarifying the Definition of a Business* (ASU 2017-01). The new guidance provides a more robust framework to use in determining when a set of assets and activities is a business. The amendments provide more consistency in applying the guidance, reduce the costs of application and make the definition of a business more operable. ASU 2017-01 was effective for the Company beginning in the first quarter of fiscal 2019. The Company adopted ASU 2017-01 in the first quarter of fiscal 2019 and it did not have a material impact on its Consolidated Financial Statements.

In March 2017, the FASB issued ASU 2017-07, *Compensation - Retirement Benefits (Topic 715)* (ASU 2017-07). The new guidance requires employers to disaggregate and present separately the current service cost component from the other components of net benefit cost within the consolidated statement of earnings. ASU 2017-07 was effective for the Company beginning in the first quarter of fiscal 2019. The Company adopted ASU 2017-07 in the first quarter of fiscal 2019 using the retrospective method. This resulted in a reclassification of net benefit costs in the Consolidated Statements of Earnings, with a decrease in other income, net of \$3.0 million and \$5.0 million for the years ended July 31, 2018 and 2017, respectively, offset in selling, general and administrative and cost of goods sold.

In August 2017, the FASB issued ASU 2017-12, *Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities* (ASU 2017-12), which improves the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements and make certain targeted improvements to simplify the application of the hedge accounting guidance. The guidance expands the ability to hedge non-financial and financial risk components, reduces complexity in fair value hedges of interest rate risk, eliminates the requirement to separately measure and report hedge ineffectiveness and eases certain hedge effectiveness assessment requirements. ASU 2017-12 is effective for the Company beginning in the first quarter of fiscal 2020, and early adoption is permitted. The Company adopted ASU 2017-12 in the first quarter of fiscal 2019 and it did not have a material impact on its Consolidated Financial Statements.

In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* (ASU 2018-15). The amendments in this update align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments in this update. The amendments in this update are effective for interim and annual periods for the Company beginning in the first quarter of fiscal 2021, with early adoption permitted. The amendments in this update should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The Company adopted ASU 2018-15, on a prospective basis, in the third quarter of fiscal 2019 and it did not have a material impact on its Consolidated Financial Statements.

New Accounting Standards Not Yet Adopted In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842) (ASU 2016-02), which requires lessees to recognize right-of-use assets and lease liabilities for substantially all leases. This accounting

guidance is effective for the Company beginning in the first quarter of fiscal 2020 on a modified retrospective basis. The Company will prospectively adopt ASU 2016-02 in the first quarter of fiscal 2020, recognizing new right of use assets and lease liabilities for all operating leases on its Consolidated Balance Sheets, with the exception of leases with a noncancelable term of 12 months or less. Upon adoption, the Company estimates both assets and liabilities on its Consolidated Balance Sheets will increase by approximately \$65 million to \$75 million, which includes the effect of discounting. Changes in the Company's lease population may impact this estimate. The Company will expand its consolidated financial statement disclosures upon adoption of this standard.

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments* (ASU 2016-13). In November 2018, the FASB issued update ASU 2018-19 that clarifies the scope of the standard in the amendments in ASU 2016-13. This guidance introduces a new model for recognizing credit losses on financial instruments based on an estimate of current expected credit losses. Financial instruments impacted include accounts receivable, trade receivables, other financial assets measured at amortized cost and other off-balance sheet credit exposures. The new guidance is effective for the Company beginning in the first quarter of fiscal 2021, with early adoption permitted. The Company is evaluating the impact of the adoption of ASU 2016-13 on its Consolidated Financial Statements.

In February 2018, the FASB issued ASU 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* (ASU 2018-02). The guidance allows a company to elect to reclassify from accumulated other comprehensive income (AOCI) to retained earnings the stranded tax effects from the adoption of the newly enacted federal corporate tax rate as a result of the U.S. Tax Cuts and Jobs Act. The amount of the reclassification is calculated as the difference between the amount initially charged to other comprehensive income (OCI) at the previously enacted tax rate that remains in AOCI and the amount that would have been charged using the newly enacted tax rate, excluding any valuation allowance previously charged to income. The new guidance is effective for the Company beginning in the first quarter of fiscal 2020, and early adoption is permitted. The Company is evaluating the impact of the adoption of ASU 2018-02 on its Consolidated Financial Statements.

In April 2019, the FASB issues ASU 2019-04, Codification Improvements to Topics 326, Financial Instruments - Credit Losses, Topic 815 Derivatives and Hedging and Topic 825, Financial Instruments (ASU 2019-04). This guidance clarifies areas of guidance related to the recently issued standards on credit losses (Topic 326), derivatives and hedging (Topic 815), and recognition and measurement of financial instruments (Topic 825). The new guidance is effective for the Company beginning in the first quarter of fiscal 2021. The Company is evaluating the impact of the adoption of ASU 2019-04 on its Consolidated Financial Statements.

NOTE 2. Acquisitions

On October 18, 2018, the Company acquired 88% of the shares of BOFA International LTD (BOFA), headquartered in the United Kingdom, for cash consideration of \$98.2 million less cash acquired of \$2.2 million. In the fourth quarter of 2019, the Company acquired an additional 3% of the shares, increasing its ownership to 91%. BOFA designs, develops and manufactures fume extraction systems across a wide range of industrial air filtration applications. The acquisition allowed Donaldson to accelerate its global growth in the fume collection business and add additional filtration technology to the Company's existing product lines.

The fair values assigned to the acquired assets and liabilities assumed of BOFA were as follows (in millions):

\$ 12.2
39.8
6.8
72.9
131.7
8.2
14.4
22.6
 109.1
96.0
\$ 13.1
\$

The Company's acquisition of an additional 3% of the shares in the fourth quarter of 2019, had the following impact (in millions):

Company's initial non-controlling interest	\$ 13.1
Purchase of additional 3% of fair value	 3.1
Company's non-controlling interest as of July 31, 2019	\$ 10.0

The assumed debt was repaid in October 2018. The identifiable intangible assets were related to customer relationships, trademarks and technology and have estimated useful lives ranging from 5 to 15 years. The acquired intangible assets including goodwill are not deductible for tax purposes. The Company is reporting BOFA's results of operations within the Industrial Products segment. Transaction costs were expensed as incurred and were not significant for the year ended July 31, 2019.

The acquisition also provides call and put options that, if exercised by either the Company or the non-controlling interest holders after three years, would obligate the Company to purchase the remaining 9% (12% at the time of acquisition) of the shares of BOFA at a price indexed to the performance of the acquired entity. Due to the redemption features, the minority interest holders' value is classified as a redeemable non-controlling interest in the Company's Consolidated Balance Sheets. The redeemable non-controlling interest was recorded at fair value at the date of acquisition and there were no significant changes to the fair value during the year ended July 31, 2019.

Pro forma financial information for this acquisition has not been presented because it is not material to the Company's consolidated results of operations.

NOTE 3. Supplemental Balance Sheet Information

The components of net inventories are as follows (in millions):

	July	31,	31,		
	2019		2018		
Raw materials	\$ 114.7	\$	128.7		
Work in process	33.0		27.4		
Finished products	185.1		178.0		
Inventories, net	\$ 332.8	\$	334.1		

The components of net property, plant and equipment are as follows (in millions):

	 July	31,		
	2019		2018	
Land	\$ 24.2	\$	22.8	
Buildings	325.3		310.8	
Machinery and equipment	813.5		769.1	
Computer software	142.8		132.6	
Construction in progress	114.3		64.4	
Less: accumulated depreciation	(831.2)		(790.4)	
Net property, plant and equipment	\$ 588.9	\$	509.3	

NOTE 4. Earnings Per Share

The Company's basic net earnings per share is computed by dividing net earnings by the weighted average number of outstanding common shares. The Company's diluted net earnings per share is computed by dividing net earnings by the weighted average number of outstanding common shares and common share equivalents related to stock options and stock incentive plans. Certain outstanding options are excluded from the diluted net earnings per share calculations because their exercise prices are greater than the average market price of the Company's common stock during those periods. Options excluded from the diluted net earnings per share calculation were 0.8 million, 0.1 million and 1.0 million for the years ended July 31, 2019, 2018 and 2017, respectively.

The following table presents the information necessary to calculate basic and diluted earnings per share (in millions, except per share amounts):

		2019	2018		2017
Net earnings for basic and diluted earnings per share computation	\$	267.2	\$ 180.3	\$	232.8
Weighted average common shares outstanding:					
Weighted average common shares – basic		128.3	130.3		132.6
Dilutive impact of share-based awards		2.0	1.9		1.5
Weighted average common shares – diluted		130.3	132.2		134.1
Net earnings per share – basic	\$	2.08	\$ 1.38	\$	1.76
Net earnings per share – diluted	\$	2.05	\$ 1.36	\$	1.74

NOTE 5. Goodwill and Other Intangible Assets

The Company has allocated goodwill to reporting units within its Engine Products and Industrial Products segments. On October 18, 2018, the Company acquired BOFA and recorded goodwill for this transaction. See Note 2 for additional discussion of the acquisition. There was no disposition activity or impairment charges recorded during the years ended July 31, 2019 and 2018.

The following is a reconciliation of goodwill for the years ended July 31, 2019 and 2018 (in millions):

	ngine oducts	dustrial roducts	Total
July 31, 2017	\$ 84.3	\$ 153.8	\$ 238.1
Goodwill acquired	0.6	_	0.6
Currency translation	 	(0.3)	(0.3)
July 31, 2018	84.9	153.5	238.4
Goodwill acquired	_	72.9	72.9
Currency translation	(0.4)	(7.8)	(8.2)
July 31, 2019	\$ 84.5	\$ 218.6	\$ 303.1

The following table summarizes the net intangible assets for the years ended July 31, 2019 and 2018 (in millions):

			July 3	1, 20	19		July 3	31, 2018			
	Weighted Average Useful Life	Gross Carrying Amount			Accumulated Amortization		Gross Carrying Amount		cumulated nortization		
Customer relationships	10.0	\$	101.5	\$	(43.3)	\$	63.0	\$	(35.7)		
Patents, trademarks and	6.2		22.3		(0.6)		43.7		(25.4)		
technology	0.2		22.3		(9.6)	_	43.7		(35.4)		
Total other intangible assets, net		\$	123.8	\$	(52.9)	\$	106.7	\$	(71.1)		

Expected amortization expense relating to existing intangible assets is as follows (in millions):

Year Ending July 31,	Ar	nount
2020	\$	8.0
2021		7.8
2022		7.0
2023		5.9
2024		5.5
Thereafter		36.7
Total expected amortization expense	\$	70.9

Note 6. Revenue

The Company recognizes revenue on a wide range of filtration solutions sold to customers in many industries around the globe. The vast majority of the Company's performance obligations within customer sales contracts are for manufactured filtration systems and replacement parts. The Company does perform limited services, such as installation. Customer contracts may include multiple performance obligations and the transaction price is allocated to each distinct performance obligation based on its relative standalone selling price.

Revenue Disaggregation

Net sales disaggregated by geography based on the location where the customer's order was placed (in millions):

	Yea:	y 31 ,	
	2019	2018	2017
United States	\$ 1,192.6	\$ 1,120.8	\$ 990.4
Europe, Middle East and Africa	826.8	791.5	679.1
Asia Pacific	597.9	599.2	500.5
Latin America	227.6	222.7	201.9
Total net sales	\$ 2,844.9	\$ 2,734.2	\$ 2,371.9

Net sales disaggregated by product group (in millions):

	Year Ended July 31,						
		2019		2018		2017	
Engine Products segment							
Off-Road	\$	315.1	\$	327.4	\$	252.1	
On-Road		179.8		154.2		110.7	
Aftermarket		1,315.3		1,261.9		1,086.2	
Aerospace and Defense		115.8		105.5		104.3	
Engine Products segment net sales		1,926.0		1,849.0		1,553.3	
Industrial Products segment							
Industrial Filtration Solutions		641.8		594.3		533.2	
Gas Turbine Systems		106.3		115.5		122.9	
Special Applications		170.8		175.4		162.5	
Industrial Products segment net sales		918.9		885.2		818.6	
Total net sales	\$	2,844.9	\$	2,734.2	\$	2,371.9	

Contract Assets and Liabilities

The satisfaction of performance obligations and the resulting recognition of revenue typically corresponds with billing of the customer. In limited circumstances, the customer may be billed at a time later than when revenue is recognized, resulting in contract assets, which are reported in prepaid expenses and other current assets on the Consolidated Balance Sheets. Contract assets were \$12.4 million as of July 31, 2019. In other limited circumstances, the Company will require a down payment from the customer prior to the satisfaction of performance obligations. This results in contract liabilities, or deferred revenue, which is reported in other current liabilities and other long-term liabilities on the Consolidated Balance Sheets, depending on when revenue is expected to be recognized. Contract liabilities were \$10.4 million and \$10.5 million as of July 31, 2019 and 2018, respectively.

The Company will recognize revenue in future periods related to remaining performance obligations for certain open contracts. Generally, these contracts have terms of one year or less. The amount of revenue related to unsatisfied performance obligations in which the original duration of the contract is greater than one year is not significant.

Adoption of ASC 606

Note 1 describes the requirements of the new revenue recognition standard, ASC 606. The cumulative effect of the adoption on the Company's August 1, 2018 opening balance sheet is as follows (in millions):

	lance at 31, 2018	Adjustments for ASC 606		Balance at August 1, 2018
Assets				
Inventories, net	\$ 334.1	\$ (7	.3) \$	326.8
Prepaid expense and other current assets	52.3	14	.0	66.3
Liabilities				
Other current liabilities	86.6	0	.3	86.9
Deferred income taxes	4.2	1	.1	5.3
Equity				
Retained earnings	1,122.1	5	.3	1,127.4

These adjustments primarily related to certain contracts that qualify for revenue recognition over time under the new standard. This change does not have a material impact on revenue recognized during the year ended July 31, 2019.

In addition, the adoption of ASC 606 impacted one set of contracts within the Engine Products segment in which Donaldson is now deemed to be the principal under the new standard because the Company has control through the manufacturing of products prior to the sale of those products to the customer. For these contracts, the previous practice of recognizing revenue on a net basis, in which the amount of net sales recorded is the net amount retained after paying product costs to suppliers, has changed under ASC 606 to recognizing revenue on a gross basis, in which the amount of net sales recorded is the gross amount received from the customer, with corresponding product costs recorded as cost of sales. This change did not result in a cumulative effect adjustment under the modified retrospective method of adoption since there is no impact to the timing of revenue recognition but it has increased net sales and cost of sales on a prospective basis. The increase in net sales and cost of sales for this change was \$16.1 million for the year ended July 31, 2019.

NOTE 7. Short-Term Borrowings

Short-term borrowings consist of the following (in millions, except interest rates):

		Credit lities	Euro Comn Paper P		Opera	pean ations acilities	World	Rest of the World Credit Facilities		tal
					Year Ende	ed July 31,	,			
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Available credit facilities	\$ 90.0	\$ 80.0	\$ 111.5	\$117.4	\$ 74.4	\$ 81.5	\$ 63.6	\$ 64.3	\$339.5	\$343.2
Reductions to borrowing capacity:										
Outstanding borrowings	2.1	_	_	28.2	_	_	_	_	2.1	28.2
Other non- borrowing reductions	_	_	_	_	34.7	34.7	23.0	21.5	57.7	56.2
Total reductions	2.1			28.2	34.7	34.7	23.0	21.5	59.8	84.4
Remaining borrowing capacity	\$ 87.9	\$ 80.0	\$ 111.5	\$ 89.2	\$ 39.7	\$ 46.8	\$ 40.6	\$ 42.8	\$279.7	\$258.8
Weighted average interest rate at end of period	3.33%	N/A	N/A	0.26%	N/A	N/A	N/A	N/A		

NOTE 8. Long-Term Debt

Long-term debt consists of the following (in millions):

	Jul	y 31,
	2019	2018
3.72% Unsecured senior notes, interest payable semi-annually, principal payment of \$125.0 million due March 27, 2024	\$ 125.0	\$ 125.0
2.93% Unsecured senior notes, interest payable semi-annually, principal payment of \$25.0 million due April 16, 2025	25.0	25.0
3.18% Unsecured senior notes, interest payable semi-annually, principal payment of \$125.0 million due June 17, 2030	125.0	125.0
Variable rate committed, unsecured \$500.0 million revolving credit facility due July 21, 2022 and an interest rate of 2.55% as of July 31, 2019	286.5	167.4
Variable rate committed, unsecured \$50.0 million term loan due July 21, 2020 and an interest rate of 3.55% as of July 31, 2019	50.0	50.0
Variable rate guaranteed senior note, interest payable quarterly, principal payment of \(\frac{\pmathbf{1}}{1.65} \) billion due May 20, 2024 and an interest rate of 0.41% as of July 31, 2019	15.2	14.8
Variable rate guaranteed senior note, interest payable quarterly, principal payment of $\$1.00$ billion due July 15, 2021 and an interest rate of 0.26% as of July 31, 2019	9.2	9.0
Capitalized lease obligations, with various maturity dates and interest rates	0.2	0.6
Debt issuance costs, net	(1.5)	(1.9)
Subtotal	634.6	514.9
Less: current maturities	50.2	15.3
Total long-term debt	\$ 584.4	\$ 499.6

The estimated future maturities of the Company's long-term debt as of July 31, 2019, are as follows (in millions):

Year Ended July 31,	A	mount
2020	\$	50.2
2021		8.8
2022		286.1
2023		_
2024		140.0
Thereafter		149.5
Total estimated future maturities	\$	634.6

The Company has a \$500 million revolving credit facility (included in the tables above) with a group of lenders, in which it can borrow in multiple currencies, that matures July 21, 2022. Key provisions are as follows:

- The credit facility has an accordion feature in which the Company can request to increase the credit facility by up to \$250.0 million, subject to terms of agreement including written notification and lender acceptance.
- Remaining borrowing capacity reflects the issued standby letters of credit, as discussed in Note 16, as issued standby letters of credit reduce the amounts available for borrowing.

Certain debt agreements contain financial covenants related to interest coverage and leverage ratios. As of July 31, 2019, the Company was in compliance with all such covenants.

NOTE 9. Warranty

The Company estimates warranty expense on certain products at the time of sale. The following is a reconciliation of warranty reserves for the years ended July 31, 2019 and 2018 (in millions):

Year Ended July 31,			
	2019		2018
\$	18.9	\$	14.6
	2.5		8.3
	(2.3)		0.1
	(7.9)		(4.1)
\$	11.2	\$	18.9
	\$	\$ 18.9 2.5 (2.3)	2019 \$ 18.9 \$ 2.5 (2.3)

There were no material specific warranty matters accrued for or significant settlements made during the years ended July 31, 2019 and 2018. The Company's warranty matters are not expected to have a material impact on the Company's results of operations, liquidity or financial position.

NOTE 10. Stock-Based Compensation

The 2010 Master Stock Incentive Plan (the Plan) allows for the granting of nonqualified stock options, incentive stock options, restricted stock, restricted stock units, stock appreciation rights, dividend equivalents and other stock-based awards.

Stock Options

Options under the Plan are granted to key employees whereby the option exercise price is equivalent to the market price of the Company's common stock at the date of grant. Options are generally exercisable for up to 10 years from the date of grant and vest in equal increments over three years. For the years ended July 31, 2019, 2018 and 2017, the Company recorded pretax stock-based compensation expense associated with stock options of \$9.8 million, \$8.1 million and \$7.5 million, respectively. Compensation costs for stock-based payments are included in selling, general and administrative expenses. The Company issues treasury shares upon option exercise. The Company also recorded tax benefits associated with this compensation expense of \$2.0 million, \$1.9 million and \$2.2 million for the years ended July 31, 2019, 2018 and 2017, respectively.

Stock-based employee compensation expense is recognized using the fair-value method for all stock option awards. The Company determined the fair value of these awards using the Black-Scholes option pricing model with the following assumptions:

	Yes	Year Ended July 31,			
	2019	2018	2017		
Risk-free interest rate	2.1 - 3.1%	2.0 - 2.9%	2.5 - 2.6%		
Expected volatility	16.0 - 21.5%	18.2 - 20.6%	20.8 - 24.1%		
Expected dividend yield	1.6%	1.6%	1.7%		
Expected life:					
Director and officer grants	8 years	8 years	8 years		
Non-officer original grants	7 years	7 years	7 years		

The weighted average fair value for options granted during the years ended July 31, 2019, 2018 and 2017 was \$12.27, \$9.29 and \$10.09 per share, respectively, using the Black-Scholes pricing model.

The following table summarizes stock option activity for the years ended July 31, 2019, 2018 and 2017:

	Options Outstanding	Weighted Average Exercise Price ⁽¹⁾
Outstanding at July 31, 2016	6,822,390	\$ 30.09
Granted	888,500	42.65
Exercised	(978,193)	24.04
Canceled	(47,146)	36.51
Outstanding at July 31, 2017	6,685,551	32.60
Granted	881,050	45.70
Exercised	(738,635)	26.47
Canceled	(42,154)	39.52
Outstanding at July 31, 2018	6,785,812	34.93
Granted	908,925	58.02
Exercised	(1,103,054)	25.07
Canceled	(60,433)	50.57
Outstanding at July 31, 2019	6,531,250	39.66

⁽¹⁾ Weighted average shares are calculated using the Black-Scholes model.

The total intrinsic value of options exercised during the years ended July 31, 2019, 2018 and 2017 was \$30.3 million, \$16.0 million and \$18.3 million, respectively.

The number of shares reserved at July 31, 2019 for outstanding options and future grants was 7,738,519. Shares reserved consist of shares available for grant plus all outstanding options.

The following table summarizes information concerning outstanding and exercisable options as of July 31, 2019:

Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	A	Veighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$16.91 to \$32.49	1,493,111	3.9	\$	27.46	1,493,111	\$ 27.46
\$32.50 to \$37.49	1,211,064	3.0		34.41	1,211,064	34.41
\$37.50 to \$42.49	1,283,417	5.2		40.30	1,239,817	40.23
\$42.50 to \$47.49	1,653,643	7.6		44.00	840,920	43.56
\$47.50 and above	890,015	9.0		58.27	34,900	52.08
	6,531,250	5.6		39.66	4,819,812	35.48

At July 31, 2019, the aggregate intrinsic value of shares outstanding and exercisable was \$74.7 million and \$69.9 million, respectively.

The following table summarizes the status of options that contain vesting provisions:

	Options	Weighted Average Grant Date Fair Value
Non-vested at July 31, 2018	1,741,316	\$ 9.20
Granted	908,925	12.27
Vested	(890,816)	8.70
Canceled	(47,987)	10.09
Non-vested at July 31, 2019	1,711,438	11.06

The total fair value of options vested during years ended July 31, 2019, 2018 and 2017, was \$44.5 million, \$42.0 million and \$39.6 million, respectively.

As of July 31, 2019, there was \$8.0 million of total unrecognized compensation expense related to non-vested stock options granted under the Plan. This unvested expense is expected to be recognized during fiscal years 2020, 2021 and 2022.

Performance-based awards

The Plan also allows for the granting of performance-based awards to a limited number of key executives. As administered by the Human Resources Committee of the Company's Board of Directors, these performance-based awards are payable in common stock and are based on a formula that measures performance of the Company over a three-year period. These awards are settled or forfeited after three years with payouts ranging from zero to 200% of the target award value depending on achievement. Performance-based award expense under these plans totaled \$3.8 million, \$7.5 million and \$0.9 million in the years ended July 31, 2019, 2018 and 2017, respectively.

Factors related to the Company's performance share awards are as follows:

	Ye	ar Ei	ided July .	31,	
	 2019		2018		2017
Weighted-average per award fair value at grant date	\$ 58.35	\$	45.43	\$	37.39

The table below summarizes the activity during fiscal 2019 for non-vested performance share awards:

	Performance Shares	Weighted Average Grant Date Fair Value
Non-vested at July 31, 2018	174,900	\$ 40.79
Granted	100,200	58.35
Vested	(101,000)	37.39
Canceled/forfeited		
Non-vested at July 31, 2019	174,100	52.87

As of July 31, 2019, there was \$1.7 million of total unrecognized compensation expense related to non-vested performance shares granted under the Plan. This unvested expense is expected to be recognized over the remaining vesting period.

NOTE 11. Employee Benefit Plans

Defined Benefit Pension Plans

The Company and certain of its international subsidiaries have defined benefit pension plans for many of their hourly and salaried employees. There are two types of U.S. plans. The first type of U.S. plan (Hourly Pension Plan) is a traditional defined benefit pension plan for union production employees. The second plan (Salaried Pension Plan) is for some salaried and non-union production employees that provides defined benefits pursuant to a cash balance feature whereby a participant accumulates a benefit comprised of a percentage of current salary that varies with years of service, interest credits and transition credits. The Company no longer allows entrants into the U.S. Salaried Pension Plan and the employees no longer accrue Company contribution credits under the plan. Instead, eligible employees receive a 3% annual Company retirement contribution to their 401(k) in addition to the Company's normal 401(k) match. The non-U.S. plans generally provide pension benefits based on years of service and compensation level.

Net periodic pension costs and amounts recognized in other comprehensive (income) loss for the Company's pension plans include the following components (in millions):

	Year Ended July 31,					
		2019	2018	2017		
Service cost	\$	6.0	\$ 8.1	\$ 8.3		
Interest cost		16.4	14.8	13.5		
Expected return on assets		(26.5)	(26.2)	(26.4)		
Prior service cost and transition amortization		0.6	0.3	0.6		
Actuarial loss amortization		4.4	4.6	7.3		
Settlement loss		2.9	3.5			
Net periodic benefit costs		3.8	5.1	3.3		
Other changes recognized in other comprehensive loss (income):						
Net actuarial loss (gain)		29.0	(7.2)	(21.7)		
Amortization of asset obligations		(0.2)	(0.2)	(0.2)		
Amortization of prior service cost		(0.4)	(0.1)	(0.4)		
Amortization of net actuarial loss		(7.3)	(8.1)	(7.3)		
Total recognized in other comprehensive loss (income)		21.1	(15.6)	(29.6)		
Total recognized in net periodic benefit costs and other comprehensive loss (income)	\$	24.9	\$ (10.5)	\$ (26.3)		

The changes in projected benefit obligations, fair value of plan assets and funded status of the Company's pension plans for the years ended July 31, 2019 and 2018 are summarized as follows (in millions):

Change in projected benefit obligation: 2018 Projected benefit obligation, beginning of year \$488.2 \$515.1 Service cost 6.6 8.1 Interest cost 16.4 14.8 Plan amendments 1.2 - Participant contributions 0.8 0.8 Actuarial loss (gain) 42.5 (16.9) Currency exchange rates (10.5) (17.7) Settlement (10.5) (17.7) Net transfers 1.2 - Benefits paid (14.2) (16.5) Projected benefit obligation, end of year \$20.4 \$488.2 Projected benefit obligation, end of year \$32.4 \$45.1 Actual return on plan assets, 39.4 16.5 Actual return on plan assets 39.4 16.5 Company contributions 10.8 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement 1.0 1.7 Not transfers 2.1 <		Y	Year Ended July 31			
Projected benefit obligation, beginning of year \$ 488.2 \$ 515.1 Service cost 6.0 8.1 Interest cost 16.4 14.8 Plan amendments 1.2 — Participant contributions 0.8 0.8 Actuarial loss (gain) 42.5 (16.9) Currency exchange rates (11.2) 0.5 Settlement 10.5 (17.7) Net transfers 1.2 — Benefits paid (12.5) — Projected benefit obligation, end of year \$ 520.4 \$ 488.2 Change in fair value of plan assets 39.4 16.5 Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) 17.7 Net transfers 1.2 — Benefits paid (12.5) — Fair value of plan assets, end of year \$ 0.8 10.5			2019	2018		
Service cost 6.0 8.1 Interest cost 16.4 14.8 Plan amendments 1.2 — Participant contributions 0.8 0.8 Actuarial loss (gain) 42.5 (16.9) Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Projected benefit obligation, end of year \$ 520.4 \$ 488.2 Change in fair value of plan assets. \$ 486.3 \$ 465.1 Actual return on plan assets. 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (11.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: \$ 502.2 \$ 486.3	Change in projected benefit obligation:					
Interest cost 16.4 14.8 Plan amendments 1.2 — Participant contributions 0.8 0.8 Actuarial loss (gain) 42.5 (16.9) Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Projected benefit obligation, end of year \$520.4 \$488.2 Change in fair value of plan assets. 39.4 16.5 Prair value of plan assets, beginning of year \$48.3 \$46.1 Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 Benefits paid (12.5) (15.5) Fair value of plan assets, end of year \$502.2 \$486.3 Further transfers \$1.2 <td>Projected benefit obligation, beginning of year</td> <td>\$</td> <td>488.2 \$</td> <td>515.1</td>	Projected benefit obligation, beginning of year	\$	488.2 \$	515.1		
Plan amendments 1.2 — Participant contributions 0.8 0.8 Actuarial loss (gain) 42.5 (16.9) Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Projected benefit obligation, end of year \$ 520.4 \$ 488.2 Change in fair value of plan assets. \$ 486.3 \$ 465.1 Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (11.2) 0.5 Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Furdicipant contributions \$ 502.2 \$ 486.3 Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Fair value of plan ass	Service cost		6.0	8.1		
Participant contributions 0.8 0.8 Actuarial loss (gain) 42.5 (16.9) Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Projected benefit obligation, end of year \$ 520.4 \$ 488.2 Change in fair value of plan assets. 8 2.2 \$ 486.3 \$ 485.1 Change in fair value of plan assets, beginning of year \$ 486.3 \$ 465.1 \$ 465.1 Actual return on plan assets 39.4 465.1 \$ 37.6 Participant contributions 10.4 37.6 \$ 38.8 \$ 0.8 \$ 0.8 Currency exchange rates (11.2) 0.5 \$ 50.2 \$ 486.3 \$ 16.5 \$ 17.7 Net transfers 1.2 —	Interest cost		16.4	14.8		
Actuarial loss (gain) 42.5 (16.9) Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Projected benefit obligation, end of year \$ 520.4 \$ 488.2 Change in fair value of plan assets. *** *** Fair value of plan assets, beginning of year \$ 486.3 \$ 465.1 Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: ** ** Projected benefit obligation in excess of plan assets, end of year \$ (18.2) \$ (1.9) Amounts recognized on the Consolidated Balance Sheets consist of: *	Plan amendments		1.2	_		
Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Projected benefit obligation, end of year \$ 520.4 \$ 488.2 Change in fair value of plan assets. Secondary Secondary Secondary 465.1 Actual return on plan assets 39.4 16.5 <td>Participant contributions</td> <td></td> <td>0.8</td> <td>0.8</td>	Participant contributions		0.8	0.8		
Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Projected benefit obligation, end of year \$ 520.4 \$ 488.2 Change in fair value of plan assets. *** *** Fair value of plan assets, beginning of year \$ 486.3 \$ 465.1 Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (10.5) (17.7) Net transfers 1.2 — Benefits paid (1.5) (1.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: ** ** Projected benefit obligation in excess of plan assets, end of year \$ (1.2) (1.5) Amounts recognized on the Consolidated Balance Sheets consist of: ** (1.5) </td <td>Actuarial loss (gain)</td> <td></td> <td>42.5</td> <td>(16.9)</td>	Actuarial loss (gain)		42.5	(16.9)		
Net transfers 1.2 — Benefits paid (14.2) (16.5) Projected benefit obligation, end of year \$ 520.4 \$ 488.2 Change in fair value of plan assets. \$ 20.4 \$ 486.3 \$ 465.1 Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: ** ** (1.5) (1.5) Amounts recognized on the Consolidated Balance Sheets consist of: ** (1.9) ** (1.9) Other long-term assets \$ 6.8 \$ 16.2 ** (1.5) (1.5) (1.5) (1.5) (1.5) (1.6) ** (1.6) (1.5) (1.5) (1.5) (1.5) (1.6) ** </td <td>Currency exchange rates</td> <td></td> <td>(11.2)</td> <td>0.5</td>	Currency exchange rates		(11.2)	0.5		
Benefits paid (14.2) (16.5) Projected benefit obligation, end of year \$ 520.4 \$ 488.2 Change in fair value of plan assets. \$ 486.3 \$ 465.1 Fair value of plan assets, beginning of year \$ 486.3 \$ 465.1 Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: ** ** Projected benefit obligation in excess of plan assets, end of year \$ (18.2) \$ (1.9) Amounts recognized on the Consolidated Balance Sheets consist of: ** (1.5) (1.5) Other long-term assets \$ 6.8 \$ 16.2 (1.5) (1.5) (1.5) Other long-term liabilities (23.5) (16.6) (16.6) (16.6) <td>Settlement</td> <td></td> <td>(10.5)</td> <td>(17.7)</td>	Settlement		(10.5)	(17.7)		
Projected benefit obligation, end of year \$ 520.4 \$ 488.2 Change in fair value of plan assets. \$ 486.3 \$ 465.1 Fair value of plan assets, beginning of year \$ 486.3 \$ 465.1 Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: *** Projected benefit obligation in excess of plan assets, end of year \$ (18.2) \$ (1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$ 6.8 \$ 16.2 Other long-term liabilities (1.5) (1.5) (1.5) Other long-term liabilities (1.5) (1.5)	Net transfers		1.2	_		
Change in fair value of plan assets. Fair value of plan assets, beginning of year \$ 486.3 \$ 465.1 Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: Projected benefit obligation in excess of plan assets, end of year \$ (18.2) \$ (1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$ 6.8 \$ 16.2 Other current liabilities (1.5) (1.5) Other long-term liabilities (23.5) (16.6)	Benefits paid		(14.2)	(16.5)		
Fair value of plan assets, beginning of year \$ 486.3 \$ 465.1 Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: Projected benefit obligation in excess of plan assets, end of year \$ (18.2) \$ (1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$ 6.8 \$ 16.2 Other current liabilities (1.5) (1.5) Other long-term liabilities (23.5) (16.6)	Projected benefit obligation, end of year	\$	520.4 \$	488.2		
Actual return on plan assets 39.4 16.5 Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: Projected benefit obligation in excess of plan assets, end of year \$ (18.2) \$ (1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$ 6.8 \$ 16.2 Other current liabilities (1.5) (1.5) Other long-term liabilities (23.5) (16.6)	Change in fair value of plan assets:					
Company contributions 10.4 37.6 Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: Projected benefit obligation in excess of plan assets, end of year \$ (18.2) \$ (1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$ 6.8 16.2 Other current liabilities (1.5) (1.5) Other long-term liabilities (23.5) (16.6)	Fair value of plan assets, beginning of year	\$	486.3 \$	465.1		
Participant contributions 0.8 0.8 Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: Projected benefit obligation in excess of plan assets, end of year \$ (18.2) \$ (1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$ 6.8 \$ 16.2 Other current liabilities (1.5) (1.5) Other long-term liabilities (23.5) (16.6)	Actual return on plan assets		39.4	16.5		
Currency exchange rates (11.2) 0.5 Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$ 502.2 \$ 486.3 Funded status: Projected benefit obligation in excess of plan assets, end of year \$ (18.2) \$ (1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$ 6.8 \$ 16.2 Other current liabilities (1.5) (1.5) Other long-term liabilities (23.5) (16.6)	Company contributions		10.4	37.6		
Settlement (10.5) (17.7) Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$502.2 \$486.3 Funded status: Projected benefit obligation in excess of plan assets, end of year \$(18.2) \$(1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$6.8 \$16.2 Other current liabilities (1.5) (1.5) Other long-term liabilities (23.5) (16.6)	Participant contributions		0.8	0.8		
Net transfers 1.2 — Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$502.2 \$486.3 Funded status: Projected benefit obligation in excess of plan assets, end of year \$(18.2) \$(1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$6.8 \$16.2 Other current liabilities (1.5) (1.5) Other long-term liabilities (23.5) (16.6)	Currency exchange rates		(11.2)	0.5		
Benefits paid (14.2) (16.5) Fair value of plan assets, end of year \$502.2 \$486.3 Funded status: Projected benefit obligation in excess of plan assets, end of year \$(18.2) \$(1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$6.8 \$16.2 Other current liabilities (1.5) (1.5) Other long-term liabilities (23.5) (16.6)	Settlement		(10.5)	(17.7)		
Fair value of plan assets, end of year \$502.2 \$486.3 Funded status: Projected benefit obligation in excess of plan assets, end of year \$(18.2) \$(1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$6.8 \$16.2 Other current liabilities \$(1.5) \$(1.5) Other long-term liabilities \$(23.5) \$(16.6)	Net transfers		1.2	_		
Funded status: Projected benefit obligation in excess of plan assets, end of year \$ (18.2) \$ (1.9) Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets \$ 6.8 \$ 16.2 Other current liabilities (1.5) (1.5) Other long-term liabilities (23.5) (16.6)	Benefits paid		(14.2)	(16.5)		
Projected benefit obligation in excess of plan assets, end of year Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets Sheets consist of: Other current liabilities Other long-term liabilities	Fair value of plan assets, end of year	\$	502.2 \$	486.3		
Amounts recognized on the Consolidated Balance Sheets consist of: Other long-term assets Other current liabilities Other long-term liabilities (1.5) Other long-term liabilities (23.5)	Funded status:					
Other long-term assets\$ 6.8 \$ 16.2Other current liabilities(1.5) (1.5)Other long-term liabilities(23.5) (16.6)	Projected benefit obligation in excess of plan assets, end of year	\$	(18.2) \$	(1.9)		
Other long-term assets\$ 6.8 \$ 16.2Other current liabilities(1.5) (1.5)Other long-term liabilities(23.5) (16.6)						
Other current liabilities(1.5)(1.5)Other long-term liabilities(23.5)(16.6)	Amounts recognized on the Consolidated Balance Sheets consist of:					
Other long-term liabilities (23.5) (16.6)	Other long-term assets	\$	6.8 \$	16.2		
	Other current liabilities		(1.5)	(1.5)		
Net recognized liability $$(18.2)$	Other long-term liabilities		(23.5)	(16.6)		
	Net recognized liability	\$	(18.2) \$	(1.9)		

The net underfunded status of \$18.2 million and \$1.9 million at July 31, 2019 and 2018, respectively, is recognized in the accompanying Consolidated Balance Sheets. The pension-related accumulated other comprehensive loss at July 31, 2019 and 2018 (prior to the consideration of income taxes) was \$152.0 million and \$130.8 million, respectively, and consisted primarily of unrecognized actuarial losses. The loss expected to be recognized in net periodic pension expense during the year ending July 31, 2020 is \$6.4 million. The accumulated benefit obligation for all defined benefit pension plans was \$499.1 million and \$469.3 million at July 31, 2019 and 2018, respectively.

The projected benefit obligation and fair value of plan assets for pension plans with projected benefit obligations in excess of plan assets were \$190.6 million and \$165.6 million, respectively, as of July 31, 2019, and \$68.4 million and \$50.3 million, respectively, as of July 31, 2018.

The projected benefit obligation, accumulated benefit obligation and fair value of plan assets for pension plans with accumulated benefit obligations in excess of plan assets were \$135.0 million, \$133.2 million and \$122.5 million, respectively, as of July 31, 2019 and \$18.7 million, \$16.9 million and \$6.2 million, respectively, as of July 31, 2018.

Assumptions

The weighted-average discount rate and rates of increase in future compensation levels used in determining the actuarial present value of the projected benefit obligation are as follows:

Projected Benefit Obligation	Year Ended July 31,					
Weighted average actuarial assumptions	2019	2018				
All U.S. plans:						
Discount rate	3.54%	4.43%				
Non-U.S. plans:						
Discount rate	1.79%	2.43%				
Rate of compensation increase	2.69%	2.69%				

The weighted-average discount rates, expected returns on plan assets and rates of increase in future compensation levels used to determine the net periodic benefit cost are as follows:

Net Periodic Benefit Cost	Year Ended July 31,						
Weighted average actuarial assumptions	2019	2018	2017				
All U.S. plans:							
Discount rate	4.43%	3.94%	3.65%				
Expected return on plan assets	6.25%	6.58%	6.90%				
Rate of compensation increase	N/A	N/A	2.56%				
Non-U.S. plans:							
Discount rate	2.43%	2.40%	2.08%				
Expected return on plan assets	4.08%	4.19%	3.93%				
Rate of compensation increase	2.69%	2.70%	2.69%				

Discount Rates The Company's objective in selecting a discount rate is to select the best estimate of the rate at which the benefit obligations could be effectively settled on the measurement date, taking into account the nature and duration of the benefit obligations of the plan. In making this best estimate, the Company looks at rates of return on high-quality, fixed-income investments currently available, and expected to be available, during the period to maturity of the benefits. This process includes looking at the universe of bonds available on the measurement date with a quality rating of Aa or better. Similar appropriate benchmarks are used to determine the discount rate for the non-U.S. plans.

The Company utilizes a full yield curve approach to estimate service and interest costs by applying specific spot rates along the yield curve used to determine the benefit obligation of relevant projected cash outflows. This method provides a precise measurement of service and interest costs by aligning the timing of the plans' liability cash flows to the corresponding spot rate on the yield curve.

Expected Long-Term Rate of Return To develop the expected long-term rate of return on assets assumption, the Company considers the historical returns and the future expectations for returns for each asset class, as well as the target asset allocation for each plan. Based on portfolio performance, as of the measurement date of July 31, 2019, the Company's long-term rate of return for the U.S. and non-U.S. pension plans is an asset-based weighted average of 6.08% and 3.76%, respectively. The expected long-term rate of return on assets shown in the pension benefit disclosure for U.S. and non-U.S. plans is an asset-based weighted average of all plans for each category.

Fair Value of Plan Assets

The estimated fair value of U.S. pension plan assets and their respective levels in the fair value hierarchy at July 31, 2019 and 2018 by asset category are as follows (in millions):

	U.S Pension Plans									
Asset Category	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Measured Using NAV Per Share as Practical Expedient		Total	
July 31, 2019										
Cash and cash equivalents	\$	3.6	\$	0.4	\$	_	\$	_	\$	4.0
Global equity securities		76.3		_		_		35.8		112.1
Fixed income securities		95.2		96.7		_		_		191.9
Private equity and other funds		_		_		_		33.1		33.1
Real asset funds		_		_		_		3.4		3.4
Total U.S. assets	\$	175.1	\$	97.1	\$	_	\$	72.3	\$	344.5
July 31, 2018										
Cash and cash equivalents	\$	4.7	\$	0.3	\$	_	\$	_	\$	5.0
Global equity securities		82.4		_		_		31.0		113.4
Fixed income securities		72.5		81.0		_		_		153.5
Private equity and other funds		_		_		_		53.7		53.7
Real asset funds		_		_		_		5.3		5.3
Total U.S. assets	\$	159.6	\$	81.3	\$		\$	90.0	\$	330.9

Certain investments held by the Plan as of July 31, 2019, valued at NAV, had the following unfunded commitments and/or redemption restrictions (in millions):

			U.S Pension Plans							
Asset Category	Measured Using NAV Per Share as Practical Expedient				Redemption Frequency (If Currently Eligible)	Redemption Notice Period				
July 31, 2019	_									
Global equity securities	\$	35.8	\$	1.8	Monthly, Weekly	10 - 90 days				
Private equity and other funds		33.1		_	Quarterly, Semi-Annually	60 - 90 days				
Real asset funds		3.4		4.3	Not eligible	N/A				
Total U.S. assets	\$	72.3	\$	6.1						

Global equity securities consists primarily of publicly traded U.S. and non-U.S. equities, mutual funds and collective investment trusts. Publicly traded equities and index funds are valued at the closing price reported in the active market in which the individual securities are traded.

Fixed income securities consists primarily of investment and non-investment grade debt securities, debt securities issued by the U.S. Treasury, and exchange-traded funds. Government, corporate and other bonds and notes are valued at the closing price reported if traded on an active market or at yields currently available on comparable securities of issuers with similar credit ratings.

Private equity and other funds consists primarily of equity private placement funds, private equity investments and alternative fixed income-like investments. Private equity consists of interests in partnerships that invest in U.S. and non-U.S. equity and debt securities. This may include a diversified mix of partnership interests including buyouts, restructured/distressed debt, growth equity, mezzanine/subordinated debt, real estate, special situation partnerships and venture capital investments. Alternative fixed income-like investments consist primarily of private partnership interests in hedge funds of funds. Interests in these funds are valued at the net asset value (NAV) per share, which is a practical expedient for measuring fair value and thus not classified in the fair value hierarchy. The NAV is determined by the administrator custodian of the fund based on the fair value of the underlying assets owned by the fund less its liabilities then divided by the number of units outstanding.

Real assets funds consists of funds and interests in partnerships that invest in private real estate, commodities and timber investments. Interests in partnerships are valued using the NAV from the most recent partnership statement, updated for any subsequent partnership interests' cash flows.

The estimated fair values of non-U.S. pension plan assets and their respective levels in the fair value hierarchy at July 31, 2019 and 2018 by asset category are as follows (in millions):

	Non-U.S. Pe	on-U.S. Pension Plans						
Asset Category	Quoted Prices in Active Markets for Identical Assets (Level 1)			Significant Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Total
July 31, 2019								
Cash and cash equivalents	\$	0.4	\$	_	\$	_	\$	0.4
Global equity securities		79.4				_		79.4
Fixed income securities		11.9				_		11.9
Investment funds		_		35.2		_		35.2
Insurance contracts		_		_		30.8		30.8
Total Non-U.S. assets	\$	91.7	\$	35.2	\$	30.8	\$	157.7
July 31, 2018								
Cash and cash equivalents	\$	0.6	\$	_	\$	_	\$	0.6
Global equity securities		78.8				_		78.8
Fixed income securities		11.3		_		_		11.3
Investment funds		_		36.1		_		36.1
Insurance contracts		_		_		28.6		28.6
Total Non-U.S. assets	\$	90.7	\$	36.1	\$	28.6	\$	155.4

Global equity securities consists of publicly traded diversified growth funds invested across a broad range of traditional and alternative asset classes that may include, but are not limited to: equities, investment grade and high yield bonds, property, private equity, infrastructure, commodities and currencies. They may invest directly or hold up to 100% of the fund in other collective investment vehicles and may use exchange traded and over-the-counter financial derivatives, such as currency forwards or futures, for both investment as well as hedging purposes. Publicly traded equities and funds are valued at the closing price reported in the active market in which the individual securities are traded.

Fixed income securities consists primarily of investment grade debt securities and bond funds. Corporate bonds and notes are valued at either the yields currently available on comparable securities of issuers with similar credit ratings or valued under a discounted cash flows approach that maximizes observable inputs, such as current yields of similar instruments, but can include adjustments for certain risks that may not be observable such as credit and liquidity risks. The bond funds are traded on an active market and are valued at the closing price reported.

Investment funds consists of liability driven investment funds that may hold a range of low-risk hedging instruments including but not limited to government and corporate bonds, interest rate and inflation swaps, physical inflation-linked and nominal gilts, synthetic gilts, cash and money market instruments. The investment funds are valued at the closing price reported if traded on an active market or at yields currently available on comparable securities of issuers with similar credit ratings.

Insurance contracts are individual contracts whereby an insurance company offers a guaranteed minimum interest return. The Company does not have any influence on the investment decisions made by the insurer. European insurers, in general, are strictly regulated by an external control mechanism and have to invest for their guaranteed interest products within certain boundaries. Typically they have a strategic asset allocation with 80% to 90% fixed income products and 10% to 20% equity type products (including real estate).

The following table summarizes the changes in the fair values of the non-U.S. pension plans' Level 3 assets for the years ended July 31, 2019, 2018 and 2017 (in millions):

	Non-U.S. Pension Plans
Ending balance at July 31, 2016	\$ 31.8
Unrealized gains	1.2
Foreign currency exchange	1.7
Purchases	1.0
Sales	(1.4)
Ending balance at July 31, 2017	34.3
Unrealized losses	(4.0)
Foreign currency exchange	0.2
Purchases	0.5
Sales	(2.4)
Ending balance at July 31, 2018	28.6
Unrealized gains	3.5
Foreign currency exchange	(1.5)
Purchases	0.5
Sales	(0.3)
Ending balance at July 31, 2019	\$ 30.8

Investment Policies and Strategies

For the Company's U.S. pension plans, the Company uses a total return investment approach to achieve a long-term return on plan assets, with what the Company believes to be a prudent level of risk for the purpose of meeting its retirement income commitments to employees. The plans' investments are diversified to assist in managing risk. During the year ended July 31, 2019, the Company's asset allocation guidelines targeted an allocation as follows:

	Salaried Pension Plan	Hourly Pension Plan
Global equities	33%	37%
Fixed income	65%	60%
Real assets	1%	2%
Cash and cash equivalents	1%	1%
Total	100%	100%

The targeted percentages are inclusive of private equity and other fund vehicles. These target allocation guidelines are determined in consultation with the Company's investment consultant and through the use of modeling the risk/return trade-offs among asset classes utilizing assumptions about expected annual return, expected volatility/standard deviation of returns and expected correlations with other asset classes.

For the Company's non-U.S. plans, the general investment objectives are to maintain a suitably diversified portfolio of secure assets of appropriate liquidity that will generate income and capital growth to meet, together with any new contributions from members and the Company, the cost of current and future benefits. Investment policy and performance is measured and monitored on an ongoing basis by the Company's Investment Committee through its use of an investment consultant and through quarterly investment portfolio reviews.

Estimated Contributions and Future Payments

The Company's general funding policy is to make at least the minimum required contributions as required by applicable regulations, plus any additional amounts that it determines to be appropriate. The Company made required contributions of \$1.4 million to its non-qualified U.S. pension plans during the year ended July 31, 2019 and estimates that it will contribute approximately \$1.5 million for the year ended July 31, 2020. The estimated minimum funding requirement for the Company's qualified U.S. plans for the year ending July 31, 2020 is \$4.4 million. In accordance with the Pension Protection Act of 2006, this contribution obligation may be met with existing credit balances that resulted from payments above the minimum obligation in prior years. The Company has sufficient credit balances to meet the minimum obligation for the plan year ended July 31, 2019 of its U.S. pension plans.

During the year ended July 31, 2019, the Company made discretionary contributions of \$8.0 million to the U.S. pension plans that were designated for the plan year ended July 31, 2018. The Company made contributions of \$0.9 million to its non-U.S. pension plans during the year ended July 31, 2019 and estimates that it will contribute approximately \$1.1 million in the year ended July 31, 2020 based upon the local government prescribed funding requirements. Future estimates of the Company's pension plan contributions may change significantly depending on the actual rate of return on plan assets, discount rates and regulatory requirements.

The estimated future benefit payments for the Company's U.S. and non-U.S. plans are as follows (in millions):

Year Ending July 31,	j	stimated Future Benefit ayments
2020	\$	29.6
2021		27.5
2022		28.5
2023		27.3
2024		26.2
2025-2029		139.9

Retirement Savings and Employee Stock Ownership Plan

The Company provides a contributory employee savings plan to U.S. employees that permits participants to make contributions by salary reduction pursuant to section 401(k) of the Internal Revenue Code. For eligible employees, employee contributions of up to 50% of compensation are matched at a rate equaling 100% of the first 3% contributed and 50% of the next 2% contributed. In addition, the Company contributes 3% of compensation annually for eligible employees. Total contribution expense for these plans was \$23.5 million, \$22.1 million and \$20.1 million for the years ended July 31, 2019, 2018 and 2017, respectively. This plan also includes shares from an Employee Stock Ownership Plan (ESOP). As of July 31, 2019, all shares of the ESOP have been allocated to participants. Total ESOP shares are considered to be shares outstanding for diluted earnings per share calculations.

Deferred Compensation and Other Benefit Plans

The Company provides various deferred compensation and other benefit plans to certain executives. The deferred compensation plan allows these employees to defer the receipt of all of their bonus and other stock-related compensation and up to 75% of their salary to future periods. Other benefit plans are provided to supplement the benefits for a select group of highly compensated individuals that are reduced because of compensation limitations set by the Internal Revenue Code. The Company has recorded a liability of \$5.0 million and \$5.7 million as of July 31, 2019 and 2018, respectively, related primarily to its deferred compensation plans.

NOTE 12. Income Taxes

The components of earnings before income taxes are as follows (in millions):

	 Year Ended July 31,						
	 2019		2018		2017		
Earnings before income taxes:							
United States	\$ 127.4	\$	103.2	\$	109.8		
Foreign	247.8		260.4		212.2		
Total	\$ 375.2	\$	363.6	\$	322.0		

The components of the provision for income taxes are as follows (in millions):

	Year Ended July 31,					
		2019		2018		2017
Income tax provision (benefit):						
Current						
Federal	\$	21.3	\$	100.0	\$	38.9
State		4.0		5.3		4.3
Foreign		72.5		71.0		56.6
		97.8		176.3		99.8
Deferred						
Federal		7.4		6.5		(7.7)
State		1.4		0.2		(0.4)
Foreign		1.4		0.3		(2.5)
		10.2		7.0		(10.6)
Total	\$	108.0	\$	183.3	\$	89.2

The following table reconciles the U.S. statutory income tax rate with the effective income tax rate:

	Yea	Year Ended July 31,				
	2019	2018	2017			
Statutory U.S. federal rate	21.0 %	26.9 %	35.0 %			
State income taxes	1.3 %	0.9 %	0.9 %			
Foreign operations	4.7 %	1.7 %	(8.3)%			
Global Intangible Low Tax Income (GILTI)	1.3 %	N/A	N/A			
Foreign Derived Intangible Income (FDII)	(1.4)%	N/A	N/A			
Export, manufacturing and research credits	(0.8)%	(1.0)%	(1.1)%			
Change in unrecognized tax benefits	(0.8)%	(0.3)%	1.0 %			
Tax benefits on stock-based compensation	(1.6)%	(1.2)%	N/A			
Impact of U.S. Tax Cuts and Jobs Act	5.0 %	23.2 %	N/A			
Other	0.1 %	0.2 %	0.2 %			
Effective income tax rate	28.8 %	50.4 %	27.7 %			

The tax effects of temporary differences that give rise to deferred tax assets and liabilities are as follows (in millions):

	July	31,	
	 2019		2018
Deferred tax assets:			
Accrued expenses	\$ 10.1	\$	13.2
Compensation and retirement plans	27.9		29.6
NOL and tax credit carryforwards	4.4		7.2
LIFO and inventory reserves	3.0		2.3
Other	4.5		3.6
Gross deferred tax assets	 49.9		55.9
Valuation allowance	(4.4)		(6.2)
Deferred tax assets, net of valuation allowance	45.5		49.7
Deferred tax liabilities:			
Depreciation and amortization	(43.2)		(33.6)
Other	(1.4)		(1.1)
Deferred tax liabilities	(44.6)		(34.7)
Net deferred tax asset	\$ 0.9	\$	15.0

On December 22, 2017, the U.S. Tax Cuts and Jobs Act (TCJA) was enacted into law. The TCJA significantly reforms the Internal Revenue Code of 1986, including but not limited to reducing the U.S. federal corporate income tax rate from 35 percent to 21 percent and moving toward a territorial tax system with a one-time transition tax imposed on previously unremitted foreign earnings and profits. TCJA also added many new provisions including changes to bonus depreciation, the deduction for executive compensation and interest expense, a tax on Global Intangible Low-Taxed Income (GILTI), the base-erosion anti-abuse tax (BEAT) and a deduction for foreign-derived intangible income (FDII).

The most significant impacts of the enacted legislation for the Company include lowering of the U.S. federal corporate income tax rate, the one-time transition tax imposed on deemed repatriated earnings in fiscal year 2018, and the GILTI and FDII provisions. The U.S. federal tax rate reduction was effective January 1, 2018, and thus the Company's U.S. federal statutory tax rate was a rate of 21.0 percent for fiscal 2019 and a blended rate 26.9 percent for fiscal 2018. The changes to the interest expense deduction and BEAT did not have an impact on the Company's fiscal 2019 income tax provision.

Staff Accounting Bulletin 118 (SAB 118) includes additional guidance allowing companies to use a measurement period that should not extend beyond one year from the TCJA enactment date to account for the impacts of the law in their financial statements. The Company completed its accounting for the income tax effects of the TCJA in accordance with SAB 118 during the second quarter of fiscal 2019. As a result, no material measurement period adjustments were made during the six months ended January 31, 2019 from those amounts recorded and disclosed in the Company's Annual Report on Form 10-K for the year ended July 31, 2018. The Company considers its provisional accounting for the effects of the TCJA as being complete.

The Company's finalized discrete tax charge for the one-time transition tax on deemed repatriated earnings of its non-U.S. subsidiaries is \$111.9 million. For the year ended July 31, 2018, the Company recorded a net discrete charge for this tax of \$94.5 million. For the year ended July 31, 2019, the Company recorded additional one-time transition tax charges of \$17.2 million due to the issuance of final regulations by the U.S. Department of the Treasury and the Internal Revenue Service, and of \$0.3 million in accordance with the SAB 118 measurement period. The transition tax is payable over an eight-year period, and the portion not due within 12 months of July 31, 2019, which the amount is \$93.8 million, is classified within non-current income taxes payable in the Consolidated Balance Sheet as of July 31, 2019.

Additionally, for the year ended July 31, 2019 the Company recorded a net tax charge of \$1.2 million related to TCJA-based global cash optimization initiatives, consisting of a tax benefit of \$2.2 million related to actions taken in fiscal 2019 and a tax charge of \$3.4 million due to the issuance of final regulations by the U.S. Department of the Treasury and the Internal Revenue Service.

The Company has made the accounting policy election to treat taxes related to the GILTI provision of the TCJA as a current period expense when incurred.

The TCJA moved toward a territorial tax system through the provision of a 100% dividends received deduction for the foreign-source portions of dividends received from controlled foreign subsidiaries. As a result, the Company re-evaluated its indefinite reinvestment assertions with respect to unremitted earnings for certain of its foreign subsidiaries for the year ended July 31, 2018 and concluded that the majority of these earnings are no longer subject to the indefinite reinvestment assertion. As of July 31,

2019, the total undistributed earnings of the Company's non-U.S. subsidiaries is approximately \$1.2 billion, of which approximately \$930 million are not considered indefinitely reinvested. The Company has recognized a tax charge of \$6.4 million in the current year on these undistributed earnings primarily for foreign withholding taxes on current year earnings. We previously accrued the transition tax and foreign withholding taxes on the prior year earnings not considered indefinitely reinvested in fiscal 2018. The remaining \$280 million of earnings are considered indefinitely reinvested, and it is not practicable to estimate, within any reasonable range, the additional taxes that may be payable on the potential distribution of the portion of the undistributed earnings considered indefinitely reinvested.

A reconciliation of the beginning and ending amount of gross unrecognized tax benefits is as follows (in millions):

	Year Ended July 31,							
		2019		2018		2017		
Gross unrecognized tax benefits at beginning of fiscal year	\$	18.5	\$	18.8	\$	15.7		
Additions for tax positions of the current year		2.5		4.4		3.9		
Additions for tax positions of prior years		0.7		0.2		0.1		
Reductions for tax positions of prior years		(4.9)		(3.1)		(0.1)		
Settlements		_		(0.4)		0.3		
Reductions due to lapse of applicable statute of limitations		(1.3)		(1.4)		(1.1)		
Gross unrecognized tax benefits at end of fiscal year	\$	15.5	\$	18.5	\$	18.8		

The Company recognizes interest and penalties accrued related to unrecognized tax benefits in income tax expense. During the year ended July 31, 2019, the Company recognized interest expense, net of tax benefit, of approximately \$0.5 million. At July 31, 2019 and 2018, accrued interest and penalties on a gross basis were \$1.6 million and \$1.7 million, respectively. If the Company were to prevail on all unrecognized tax benefits recorded, substantially all of the unrecognized tax benefits would benefit the effective tax rate. With an average statute of limitations of approximately five years, up to \$1.7 million of the unrecognized tax benefits could potentially expire in the next 12-month period, unless extended by an audit.

The Company files income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. With few exceptions, the Company is no longer subject to state and foreign income tax examinations by tax authorities for years before 2009. On May 29, 2018, as part of its examination of fiscal years 2015 and 2016, the IRS proposed an adjustment related to the Company's foreign legal entity restructuring which was completed in fiscal 2015. The Company protested the adjustment, and the issue was eventually resolved with no adjustment during the current year at the IRS Appellate level. Thus, the Company's U.S. federal income tax returns through 2016 are no longer subject to IRS examination.

The Company believes that it is remote that any adjustment necessary to the reserve for income taxes over the next 12-month period will be material. However, it is possible the ultimate resolution of audits or disputes may result in a material change to our reserve for income taxes, although the quantification of such potential adjustments cannot be made at this time.

NOTE 13. Fair Value Measurements

Fair value measurements of financial instruments are reported in one of three levels based on the lowest level of significant input used as follows:

- Level 1 Inputs to the fair value measurement are quoted prices in active markets for identical assets or liabilities.
- Level 2 Inputs to the fair value measurement include quoted prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active and inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly.
- Level 3 Inputs to the fair value measurement are unobservable inputs or valuation techniques.

At July 31, 2019 and 2018, the carrying values of cash and cash equivalents, accounts receivables, short-term borrowings and trade accounts payable approximate fair value because of the short-term nature of these instruments. As of July 31, 2019, the estimated fair value of long-term debt with fixed interest rates was \$281.5 million compared to its carrying value of \$275.0 million. As of July 31, 2018, the estimated fair value of long-term debt with fixed interest rates was \$263.3 million compared to its carrying value of \$275.0 million. The fair value is estimated by discounting the projected cash flows using the rate that similar amounts of debt could currently be borrowed. Long-term debt would be classified as Level 2 in the fair value hierarchy. The carrying values of long-term debt with variable interest rates approximate fair value.

The fair values of the Company's financial assets and liabilities listed below reflect the amounts that would be received to sell the assets or paid to transfer the liabilities in an orderly transaction between market participants at the measurement date (exit price). The fair values are based on inputs other than quoted prices that are observable for the asset or liability. These inputs include

foreign currency exchange rates and interest rates. The financial assets and liabilities are primarily valued using standard calculations and models that use as their basis readily observable market parameters. Industry standard data providers are the primary source for forward and spot rate information for both interest rates and currency rates.

Derivative Fair Value Measurements The Company enters into derivative instruments, including forward foreign currency exchange contracts and net investment hedges, to manage risk in connection with changes in foreign currency. The Company only enters into derivative instruments with counterparties who have highly rated credit. The Company does not enter into derivative contracts for trading or speculative purposes.

Forward Foreign Currency Exchange Contracts The Company uses forward currency exchange contracts to manage exposure to fluctuations in foreign currency. The Company enters into certain purchase commitments with foreign suppliers based on the value of its purchasing subsidiaries' local currency relative to the currency requirement of the supplier on the date of the commitment. The Company also sells into foreign countries based on the value of purchaser's local currency. The Company mitigates risk through using forward currency contracts that generally mature in 12 months or less, which is consistent with the related purchases and sales. Contracts that qualify for hedge accounting are designated as cash flow hedges.

Net Investment Hedges The Company uses fixed-to-fixed cross-currency swap agreements to hedge its exposure to adverse foreign currency exchange rate movements for its operations in Europe. In July 2019, the Company executed a fixed-to-fixed cross-currency swap in which the Company will pay Euros and receive U.S. Dollars on a notional amount of €50.0 million which matures in July 2029. The Company has elected the spot method of designating this contracts.

The Company determines the fair values of its derivatives based on valuation models which project future cash flows and discount the future amounts to a present value using market based observable inputs including foreign currency rates, interest rate curves, futures and basis spreads, as applicable.

The following table details the fair value of the Company's derivative contracts, which are recorded on a gross basis in the consolidated balance sheets as of July 31, 2019 and July 31, 2018 (in millions):

Fair Values	Significant	Other	Observable	Inputs
	(Le	vel 2)		_

				(Level 2)								
	Notional	Amo	ounts		Ass	sets			Liabilit	ies (1)		
	July	31,			July	y 31 ,			July .	31,		
	2019		2018		2019		2018		2019	2018		
Forward foreign currency exchange contracts	\$ 28.2	\$	19.3	\$	1.6	\$	0.7	\$	(1.8)	\$ (1.0)		
Net investment hedge	55.8		_		1.1		(3)		(1.9)			
Total	\$ 84.0	\$	19.3	\$	2.7	\$	0.7	\$	(3.7)	\$ (1.0)		

⁽¹⁾ Recorded within other long-term liabilities in the Company's audited consolidated balance sheets.

Changes in the fair value of the Company's forward foreign currency exchange contracts are recorded in equity as a component of accumulated other comprehensive income (loss), and are reclassified from accumulated other comprehensive income (loss) into earnings when the items underlying the hedged transactions are recognized into earnings, as a component of cost of sales within the Company's consolidated statements of operations and comprehensive income (loss). The net gain or loss on net investment hedges are reported within foreign currency translation gains and losses as a component of accumulated other comprehensive income (loss) on the Company's consolidated balance sheets. The interest earned is reclassified out of accumulated other comprehensive income (loss) and into other income, net.

Credit Risk Related Contingent Features Contract provisions may require the posting of collateral or settlement of the contracts for various reasons, including if the Company's credit ratings are downgraded below its investment grade credit rating by any of the major credit agencies or for cross default contractual provisions if there was a failure under other financing arrangements related to payment terms or covenants. As of July 31, 2019 and 2018, no collateral has been posted.

Counterparty Credit Risk There is risk that counterparties to derivative contracts will fail to meet their contractual obligations. In order to mitigate counterparty credit risk, the Company only enters into contracts with carefully selected financial institutions based upon their credit ratings and certain other financial factors.

⁽²⁾ Recorded within prepaid expenses and other current assets in the Company's audited consolidated balance sheets.

⁽³⁾ Recorded within other assets in the Company's audited consolidated balance sheets.

The following table summarizes the pre-tax impact of the gains and losses on the Company's designated forward foreign currency exchange contracts and net investment hedges (in millions):

Pre-tax Gains (Losses) Recognized in Accumulated Other
Compréhensive income (loss):

		Com	prenens	ive meome (i	ussj.	
	-	,	Year En	ded July 31,		
	-	2019		2018		2017
Forward foreign currency exchange contracts	\$	0.2	\$	3.2	\$	(2.4)
Net investment hedge	\$	(0.8)	\$	_	\$	_

Pre-tax (Gains) Losses Reclassified from Accumulated Other Comprehensive income (loss):

	o tiner c	P		(2000)	
		Year En	ded July 31,		
	 2019		2018		2017
Forward foreign currency exchange contracts	\$ 0.1	\$	0.2	\$	(1.4)
Net investment hedge	\$ _	\$	_	\$	_

The Company expects that substantially all of the amounts recorded in accumulated other comprehensive income (loss) for its forward foreign currency exchange contracts will be reclassified into earnings during the next 12 months, based upon the timing of inventory purchases and turnover as well as sales. See also Note 15.

The Company holds equity method investments, which are classified in other long-term assets in the accompanying Consolidated Balance Sheets. The aggregate carrying amount of these investments was \$23.0 million and \$21.7 million as of July 31, 2019 and 2018, respectively. These equity method investments are measured at fair value on a nonrecurring basis. The fair value of the Company's equity method investments has not been estimated as there have been no identified events or changes in circumstance that would have had an adverse impact on the value of these investments. In the event that these investments were required to be measured, these investments would fall within Level 3 of the fair value hierarchy, due to the use of significant unobservable inputs to determine fair value, as the investments are in privately-held entities.

NOTE 14. Shareholders' Equity

Treasury Stock The Company's Board of Directors authorized the repurchase of up to 13.0 million shares of common stock under the Company's stock repurchase plan dated May 31, 2019, replacing the Company's previous stock repurchase plan dated May 29, 2015. This repurchase authorization is effective until terminated by the Board of Directors. As of July 31, 2019, the Company had remaining authorization to repurchase 12.8 million shares under this plan. During the year ended July 31, 2019, the Company repurchased 2.6 million shares for \$129.2 million. During the year ended July 31, 2018, the Company repurchased 2.6 million shares for \$122.0 million.

Treasury stock share activity for the years ended July 31, 2019 and 2018 is summarized as follows:

	Year Ende	d July 31,
	2019	2018
Beginning balance	22,871,145	21,037,353
Stock repurchases	2,636,554	2,642,690
Net issuance upon exercise of stock options	(1,057,604)	(723,677)
Issuance under compensation plans	(104,483)	(78,304)
Other activity	(21,129)	(6,917)
Ending balance	24,324,483	22,871,145

On July 26, 2019, the Company's Board of Directors declared a cash dividend in the amount of 21.0 cents per common share, payable August 29, 2019, to shareholders of record as of August 13, 2019.

NOTE 15. Accumulated Other Comprehensive Loss

Changes in accumulated other comprehensive loss by component for the years ended July 31, 2019 and 2018 are as follows (in millions):

	cu tra	Foreign currency translation Pension adjustment benefits				rivative nancial ruments	 Total
Balance as of July 31, 2018, net of tax	\$	(66.1)	\$	(82.9)	\$	(0.8)	\$ (149.8)
Other comprehensive (loss) income before reclassifications and tax		(26.6)		(16.3)		(0.6)	(43.5)
Tax benefit		_		4.1		0.1	4.2
Other comprehensive (loss) income before reclassifications, net of tax		(26.6)		(12.2)		(0.5)	(39.3)
Reclassifications, before tax				(4.8)		0.1	(4.7)
Tax benefit		_		0.9		_	0.9
Reclassifications, net of tax		_		(3.9) (2)		0.1 (1)	(3.8)
Other comprehensive (loss) income, net of tax		(26.6)	'	(16.1)		(0.4)	(43.1)
Balance as of July 31, 2019, net of tax	\$	(92.7)	\$	(99.0)	\$	(1.2)	\$ (192.9)
Balance as of July 31, 2017, net of tax	\$	(58.8)	\$	(95.1)	\$	(3.1)	\$ (157.0)
Other comprehensive (loss) income before reclassifications and tax		(7.3)		11.4		3.2	7.3
Tax expense				(3.0)		(1.1)	(4.1)
Other comprehensive (loss) income before reclassifications, net of tax		(7.3)		8.4		2.1	3.2
Reclassifications, before tax				5.5		0.2	5.7
Tax expense		_		(1.7)			(1.7)
Reclassifications, net of tax				3.8 (2)		0.2 (1)	4.0
Other comprehensive (loss) income, net of tax		(7.3)		12.2		2.3	7.2
Balance as of July 31, 2018, net of tax	\$	(66.1)	\$	(82.9)	\$	(0.8)	\$ (149.8)

⁽¹⁾ Relates to foreign currency cash flow hedges that were reclassified from accumulated other comprehensive loss to other income, net (see Note 1).

NOTE 16. Guarantees

The Company and Caterpillar Inc. equally own the shares of Advanced Filtration Systems Inc. (AFSI), an unconsolidated joint venture, and guarantee certain debt of the joint venture. As of July 31, 2019 and 2018, AFSI had \$38.8 million and \$35.5 million, respectively, of outstanding debt, of which the Company guarantees half. In addition, during the years ended July 31, 2019, 2018 and 2017, the Company recorded (losses) earnings from this equity method investment of \$(0.3) million, \$1.3 million and \$2.1 million, respectively, and royalty income of \$6.5 million, \$7.0 million and \$5.9 million, respectively.

At July 31, 2019 and 2018, the Company had a contingent liability for standby letters of credit totaling \$11.0 million and \$8.2 million, respectively, that have been issued and are outstanding. The letters of credit guarantee payment to third parties in the event the Company is in breach of contract terms as detailed in each letter of credit. At July 31, 2019 and 2018, there were no amounts drawn upon these letters of credit.

NOTE 17. Commitments and Contingencies

Operating Leases The Company enters into operating leases primarily for office and warehouse facilities, production and non-production equipment, automobiles and computer equipment. Total expense recorded under operating leases for years ended July 31, 2019, 2018 and 2017, was \$30.8 million, \$35.2 million and \$28.7 million, respectively.

⁽²⁾ Primarily includes net amortization of prior service costs and actuarial losses included in net periodic benefit cost (see Note 11) that were reclassified from accumulated other comprehensive loss to operating expenses or cost of sales.

As of July 31, 2019, the estimated future minimum lease payments under operating leases are as follows (in millions):

Year Ending July 31,	-	erating eases
2020	\$	24.0
2021		17.5
2022		11.3
2023		6.4
2024		4.6
Thereafter		19.0
Total future minimum lease payments	\$	82.8

Litigation The Company records provisions with respect to identified claims or lawsuits when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Claims and lawsuits are reviewed quarterly and provisions are taken or adjusted to reflect the status of a particular matter. The Company believes the recorded estimated liability in its Consolidated Financial Statements is adequate in light of the probable and estimable outcomes. The recorded liabilities were not material to the Company's results of operations, liquidity or financial position and the Company believes it is remote that the settlement of any of the currently identified claims or litigation will be materially in excess of what is accrued.

NOTE 18. Segment Reporting

The Company has identified two reportable segments: Engine Products and Industrial Products. Segment determination is based on the internal organization structure, management of operations and performance evaluation by management and the Company's Board of Directors.

The Engine Products segment sells to OEMs in the construction, mining, agriculture, aerospace, defense and truck end markets and to independent distributors, OEM dealer networks, private label accounts and large equipment fleets. Products include replacement filters for both air and liquid filtration applications, air filtration systems, liquid filtration systems for fuel, lube and hydraulic applications, and exhaust and emissions systems and sensors, indicators and monitoring systems.

The Industrial Products segment sells to various dealers, distributors, OEMs of gas-fired turbines and OEMs and end users requiring clean air filtration solutions and replacement filters. Products include dust, fume and mist collectors, compressed air purification systems, air filtration systems for gas turbines, polytetrafluoroethylene (PTFE) membrane-based products and specialized air and gas filtration systems for applications including hard disk drives and semi-conductor manufacturing and sensors, indicators and monitoring systems.

Corporate and Unallocated includes corporate expenses determined to be non-allocable to the segments, such as interest expense.

The Company has manufacturing facilities that serve both of its reportable segments. As such, asset and capital expenditure information by reportable segment has not been provided, since the Company does not produce or utilize such information internally. In addition, although depreciation and amortization expense is a component of each reportable segment's operating results, it is not discretely identifiable.

The Company is an integrated enterprise, characterized by substantial intersegment cooperation, cost allocations and sharing of assets. Therefore, the Company does not represent that these segments, if operated independently, would report the earnings before income taxes and other financial information shown below.

Segment detail is summarized as follows (in millions):

	Engine Products	 ndustrial Products	rporate and allocated	C	Total Company
Fiscal 2019					
Net sales	\$ 1,926.0	\$ 918.9	\$ 	\$	2,844.9
Equity earnings in unconsolidated affiliates	2.1	0.1	_		2.2
Earnings (loss) before income taxes	254.6	140.1	(19.5)		375.2
Equity investments in unconsolidated affiliates	19.0	4.0	_		23.0
Fiscal 2018					
Net sales	\$ 1,849.0	\$ 885.2	\$ _	\$	2,734.2
Equity earnings in unconsolidated affiliates	3.7	(0.1)			3.6
Earnings (loss) before income taxes	258.8	135.5	(30.7)		363.6
Equity investments in unconsolidated affiliates	17.8	3.9			21.7
Fiscal 2017					
Net sales	\$ 1,553.3	\$ 818.6	\$ 	\$	2,371.9
Equity earnings in unconsolidated affiliates	4.4	0.6	_		5.0
Earnings (loss) before income taxes	218.4	128.5	(24.9)		322.0
Equity investments in unconsolidated affiliates	14.8	4.2	_		19.0

Net sales by product group within the Engine Products segment and Industrial Products segment is summarized as follows (in millions):

	Year Ended July 31,					
		2019		2018		2017
Engine Products segment:						
Off-Road	\$	315.1	\$	327.4	\$	252.1
On-Road		179.8		154.2		110.7
Aftermarket		1,315.3		1,261.9		1,086.2
Aerospace and Defense		115.8		105.5		104.3
Total Engine Products segment		1,926.0		1,849.0		1,553.3
Industrial Products segment:						
Industrial Filtration Solutions		641.8		594.3		533.2
Gas Turbine Systems		106.3		115.5		122.9
Special Applications		170.8		175.4		162.5
Total Industrial Products segment		918.9		885.2		818.6
Total net sales	\$	2,844.9	\$	2,734.2	\$	2,371.9

Net sales by origination and property, plant and equipment by geographic region are summarized as follows (in millions):

	7	Net Sales ⁽¹⁾	P	roperty, lant and uipment, Net
Fiscal 2019		tet baies		1100
United States	\$	1,192.6	\$	231.0
Europe, Middle East and Africa		826.8		199.1
Asia Pacific		597.9		50.2
Latin America		227.6		108.6
Total	\$	2,844.9	\$	588.9
	_			
Fiscal 2018				
United States	\$	1,120.8	\$	188.1
Europe, Middle East and Africa		791.5		181.1
Asia Pacific		599.2		53.4
Latin America		222.7		86.7
Total	\$	2,734.2	\$	509.3
Fiscal 2017				
United States	\$	990.4	\$	193.5
Europe, Middle East and Africa		679.1		170.0
Asia Pacific		500.5		55.3
Latin America		201.9		65.8
Total	\$	2,371.9	\$	484.6

⁽¹⁾ Net sales by origination is based on the country of the Company's legal entity where the customer's order was placed.

Concentrations There were no customers that accounted for over 10% of net sales during the years ended July 31, 2019, 2018 or 2017. There were no customers that accounted for over 10% of gross accounts receivable at July 31, 2019 or July 31, 2018.

NOTE 19. Quarterly Financial Information (Unaudited)

Unaudited consolidated quarterly financial information for the years ended July 31, 2019 and 2018 is as follows (in millions, except per share amounts):

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Fiscal 2019								
Net sales	\$	701.4	\$	703.7	\$	712.8	\$	726.9
Gross profit		238.4		225.4		240.7		243.8
Net earnings		73.8		60.1		75.2		58.0
Net earnings per share – basic		0.57		0.47		0.59		0.45
Net earnings per share – diluted		0.56		0.46		0.58		0.45
Dividends paid per share		0.19		0.19		0.19		0.21
Fiscal 2018								
Net sales	\$	644.8	\$	664.7	\$	700.0	\$	724.7
Gross profit		224.3		218.9		239.8		252.8
Net earnings (loss)		60.9		(52.9)		69.9		102.4
Net earnings (loss) per share – basic		0.47		(0.40)		0.54		0.79
Net earnings (loss) per share – diluted		0.46		(0.40)		0.53		0.78
Dividends paid per share		0.18		0.18		0.18		0.19

Note: Amounts may not foot due to rounding.

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

None

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Management of the Company, with the participation of its Chief Executive Officer and the Chief Financial Officer, evaluated the effectiveness of the Company's disclosure controls and procedures as of the end of the period. Based on their evaluation, as of the end of the period covered, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) were effective. The Company's disclosure controls and procedures are designed so that information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to management of the Company, with the participation of its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

No change in the Company's internal control over financial reporting (as defined by Rules 13a-15(f) under the Exchange Act) occurred during the fiscal quarter ended July 31, 2019, that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

See Management's Report on Internal Control over Financial Reporting under Item 8 of this Annual Report.

Report of Independent Registered Public Accounting Firm

See Report of Independent Registered Public Accounting Firm under Item 8 of this Annual Report.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information under the captions "Item 1: Election of Directors"; "Director Selection Process," "Audit Committee," "Audit Committee Expertise; Complaint-Handling Procedures," and "Delinquent Section 16(a) Reports" of the 2019 Proxy Statement is incorporated herein by reference. Information on the Executive Officers of the Company is found under the caption "Information about our Executive Officers" in Part I of this Annual Report.

The Company has adopted a code of business conduct and ethics in compliance with applicable rules of the Securities and Exchange Commission that applies to its Principal Executive Officer, its Principal Financial Officer and its Principal Accounting Officer or Controller or persons performing similar functions. A copy of the code of business conduct and ethics is posted on the Company's website at *ir.donaldson.com*. The code of business conduct and ethics is available in print, free of charge, to any shareholder who requests it. The Company will disclose any amendments to or waivers of the code of business conduct and ethics for the Company's Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer on the Company's website.

Item 11. Executive Compensation

The information under the captions "Executive Compensation" and "Director Compensation" of the 2019 Proxy Statement is incorporated herein by reference.

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

The information under the captions "Security Ownership" and "Equity Compensation Plan Information Table" of the 2019 Proxy Statement is incorporated herein by reference.

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

The information under the captions "Policy and Procedures Regarding Transactions with Related Persons" and "Board Oversight and Director Independence" of the 2019 Proxy Statement is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The information under the captions "Independent Registered Public Accounting Firm Fees" and "Audit Committee Pre-Approval Policies and Procedures" of the 2019 Proxy Statement is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules

Documents filed with this report:

(1) Financial Statements

Report of Independent Registered Public Accounting Firm

Consolidated Statements of Earnings — years ended July 31, 2019, 2018 and 2017

Consolidated Statements of Comprehensive Income — years ended July 31, 2019, 2018 and 2017

Consolidated Balance Sheets — July 31, 2019 and 2018

Consolidated Statements of Cash Flows — years ended July 31, 2019, 2018 and 2017

Consolidated Statements of Changes in Shareholders' Equity — years ended July 31, 2019, 2018 and 2017

Notes to Consolidated Financial Statements

(2) Financial Statement Schedules

All other schedules (Schedules I, II, III, IV and V) for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instruction, or are inapplicable, and therefore have been omitted.

(3) Exhibits

Exhibit Index

*10-X

*3-A	_	Restated Certificate of Incorporation of Registrant as currently in effect (Filed as Exhibit 3-A to Form 10-Q Report for the second quarter ended January 31, 2012)
*3-B		Amended and Restated Bylaws of Registrant, dated as of July 29, 2016 (Filed as Exhibit 3-C to Form 8-K Report filed on July 29, 2016)
4-A		Description of Registrant's Securities
*4-B		**
10-A		Annual Incentive Plan***
*10-B		ESOP Restoration Plan (2003 Restatement) (Filed as Exhibit 10-D to 2009 Form 10-K Report)***
*10-C	_	Supplemental Executive Retirement Plan (2008 Restatement) (Filed as Exhibit 10-G to 2011 Form 10-K Report)***
*10-D	_	Form of Agreement to Defer Compensation for certain Executive Officers (Filed as Exhibit 10-G to Form 10-Q Report for the first quarter ended October 31, 2008)***
*10-E		2001 Master Stock Incentive Plan (Filed as Exhibit 10-O to 2009 Form 10-K Report)***
*10-F	_	Form of Officer Stock Option Award Agreement under the 2001 Master Stock Incentive Plan (Filed as Exhibit 10-P to 2010 Form 10-K Report)***
*10-G	_	Form of Non-Employee Director Non-Qualified Stock Option Agreement under the 2001 Master Stock Incentive Plan (Filed as Exhibit 10-Q to 2010 Form 10-K Report)***
*10-H		Restated Long Term Compensation Plan, dated May 23, 2006 (Filed as Exhibit 10-R to 2011 Form 10-K Report)***
*10-I	_	Qualified Performance-Based Compensation Plan under the 2001 Master Stock Incentive Plan (Filed as Exhibit 10-S to 2011 Form 10-K Report)***
*10-J	_	Deferred Compensation and 401(k) Excess Plan (2008 Restatement) (Filed as Exhibit 10-T to 2011 Form 10-K Report)***
*10-K	_	First Amendment, dated as of November 19, 2010, to the Deferred Compensation and 401(k) Excess Plan (2008 Restatement) (filed as Exhibit 10-K to 2018 Form 10-K Report)***
*10-L	_	Deferred Stock Option Gain Plan (2008 Restatement) (Filed as Exhibit 10-U to 2011 Form 10-K Report) ***
*10-M	_	Excess Pension Plan (2008 Restatement) (Filed as Exhibit 10-V to 2011 Form 10-K Report) ***
*10-N	_	Form of Management Severance Agreement for Executive Officers (Filed as Exhibit 10-A to Form 10-Q Report for the third quarter ended April 30, 2008)***
*10-O		2010 Master Stock Incentive Plan (Filed as Exhibit 4.5 to Registration Statement on Form S-8 (File No. 333-170729) filed on November 19, 2010)***
*10-P	_	Form of Officer Stock Option Award Agreement under the 2010 Master Stock Incentive Plan (Filed as Exhibit 10.1 to Form 8-K Report filed on December 16, 2010) ***
*10-Q	_	Form of Restricted Stock Award Agreement under the 2010 Master Stock Incentive Plan (Filed as Exhibit 10.2 to Form 8-K Report filed on December 16, 2010) ***
*10-R	_	Form of Indemnification Agreement for Directors (Filed as Exhibit 10.1 to Form 8-K Report filed on April 2, 2012)***
*10-S	_	Form of Non-Employee Director Non-Qualified Stock Option Agreement under the 2010 Master Stock Incentive Plan (Filed as Exhibit 10-CC to 2012 Form 10-K Report)***
*10-T	_	Form of Management Severance Agreement for Executive Officers (Filed as Exhibit 10.1 to Form 8-K Report filed on October 4, 2012)***
10-U	_	Credit Agreement among Registrant, various subsidiaries of Registrant party thereto, the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent and letter of credit issuer, dated as of December 7, 2012 (Filed as Exhibit 10.1 to Form 8-K Report filed on December 13, 2012)
*10-V		Note Purchase Agreement by and among Registrant and the purchasers named therein, dated as of March 27, 2014 (Filed as Exhibit 10.1 to Form 8-K Report filed on April 2, 2014)
*10-W		First Amendment, dated as of March 9, 2015, to Note Purchase Agreement, dated as of March 27, 2014, by and among Registrant and the purchasers named therein (Filed as Exhibit 10.1 to Form 8-K Report filed on March 12, 2015)
*10 37		

First Supplement, dated as of April 16, 2015, to Note Purchase Agreement, dated as of March 27, 2014, by and among Registrant and the purchasers named therein (as amended) (Filed as Exhibit 10.1 to Form 8-K Report filed on April 21, 2015)

*10-Y	_	First Amendment, dated as of October 28, 2014, to Credit Agreement, dated as of December 7, 2012, among Registrant, each of the lenders from time to time parties to the Credit Agreement and Wells Fargo Bank, National Association, as administrative agent and letter of credit issuer (Filed as Exhibit 10.1 to Form 8-K Report filed on October 29, 2014)
*10-Z	_	Credit Agreement among Registrant, each of the lenders from time to time parties to the Credit Agreement and Wells Fargo Bank, National Association, as administrative agent and letter of credit issuer, dated as of July 21, 2017 (Filed as Exhibit 10.1 to Form 8-K/A Report filed on July 25, 2017)
*10-AA	_	Compensation Plan for Non-Employee Directors, effective January 1, 2018 (Filed as Exhibit 10-A to Form 10-Q for the second quarter ended January 31, 2018)***
*10-AB		Form of Non-Employee Director Restricted Stock Unit Award Agreement under the 2010 Master Stock Incentive Plan (Filed as Exhibit 10-B to Form 10-Q for the second quarter ended January 31, 2018)***
*10-AC		Form of Non-Employee Director Non-Qualified Stock Option Award Agreement under the 2010 Master Stock Incentive Plan (Filed as Exhibit 10-C to Form 10-Q for the second quarter ended January 31,2018)***
*10-AD		Form of Restricted Stock Unit Award Agreement under the 2010 Master Stock Incentive Plan (Filed as Exhibit 10-A to Form 10-Q for the first quarter ended October 31, 2018)***
*10-AE	_	Compensation Plan for Non-Employee Directors, as amended on January 25, 2019 (Filed as Exhibit 10-A to Form 10-Q for the second quarter ended January 31, 2019)***
21		Subsidiaries
23		Consent of PricewaterhouseCoopers LLP
24	_	Powers of Attorney
31-A		Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31-B		Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	_	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	_	The following financial information from the Donaldson Company, Inc. Annual Report on Form 10-K for the fiscal year ended July 31, 2019, formatted in Inline eXtensible Business Reporting Language (iXBRL): (i) the Consolidated Statements of Comprehensive Income, (iii) the Consolidated Balance Sheets, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Changes in Shareholders' Equity and (vi) the Notes to Consolidated Financial Statements.
104	_	The cover page from the Donaldson Company, Inc. Annual Report on Form 10-K for the fiscal year ended July 31, 2019, formatted in iXBRL (included as Exhibit 101).

^{*} Exhibit has previously been filed with the Securities and Exchange Commission and is incorporated herein by reference as an exhibit.

Item 16. 10-K Summary

None.

^{**} Pursuant to the provisions of Regulation S-K Item 601(b)(4)(iii)(A), copies of instruments defining the rights of holders of certain long-term debts of the Registrant and its subsidiaries are not filed and in lieu thereof the Registrant agrees to furnish a copy thereof to the Securities and Exchange Commission upon request.

^{***} Denotes compensatory plan or management contract.

SIGNATURES

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

DONALDSON COMPANY, INC.

Date: September 2	27, 2019	By: /s/ Tod E. Carpenter	
		Tod E. Carpenter Chief Executive Office	er
		Exchange Act of 1934, this report has been signed beloities indicated on September 27, 2019.	w by the following
/s/ Tod E.	Carpenter	Chairman, President and Chief Executive O	fficer
Tod E. C	arpenter	(Principal Executive Officer)	
/s/ Scott J.	Robinson	Senior Vice President and Chief Financial C	officer
Scott J. R	Robinson	(Principal Financial Officer)	
/s/ Peter .	J. Keller	Corporate Controller	
Peter J.	Keller	(Principal Accounting Officer)	
*	:	Director	
Andrew	Cecere		
*	:	Director	
Pilar	Cruz		
*	:	Director	
Michael J.	Hoffman		
*	:	Director	
Douglas A	A. Milroy		
*	:	Director	
Willard D	. Oberton		
*		Director	
James J.	Owens		
*	:	Director	
Ajita G. I	Rajendra		
*	:	Director	
Trudy A	. Rautio		
*	:	Director	
John P. V	Wiehoff		
*By: /s/ Amy C. Becl	ker		
Amy C.			
As attorne	ey-in-fact		

FIVE-YEAR COMPARISON OF RESULTS

(In millions, except per share amounts)

Twelve Months Ended July 31,

	2019 ^{1,2}	2018²	2017	2016	2015	
CAAR Operating People						
GAAP Operating Results						
Net Sales	\$2,845	\$2,734	\$2,372	\$2,220	\$2,371	
Gross Margin	33.3%	34.2%	34.7%	34.0%	34.1%	
Operating Margin	13.6%	13.9%	13.9%	12.3%	12.2%	
Net Earnings	\$267	\$180	\$233	\$191	\$208	
Diluted Earnings per Share	\$2.05	\$1.36	\$1.74	\$1.42	\$1.49	
Additional Shareholder Information						
Net Capital Expenditures	\$150	\$96	\$64	\$71	\$94	
Free Cash Flow	\$195	\$167	\$247	\$215	\$119	
After-Tax Return on Investment ³	18.4%	18.6%	16.8%	14.3%	15.0%	
Dividends Paid per Share	\$0.780	\$0.730	\$0.700	\$0.685	\$0.665	
Shares Outstanding	127.3	128.7	130.5	132.8	134.5	

¹ Fiscal 2019 revenue, operating margin and other income conform to the adoption of new FASB standards related to revenue recognition and pension accounting

CORPORATE OFFICERS

AMY C. BECKER VP, General Counsel and Secretary

JACQUIE L. BOYER VP, Global Engine OEM Sales

GUILLERMO N. BRISEÑO VP, Latin America

FRANKLIN G. CARDENAS VP, Asia Pacific

TOD E. CARPENTER Chairman. President and CEO

ANDREW C. DAHLGREN VP, Gas Turbine Systems and Special Applications

KATHRYN L. FREYTAG VP. Chief Information Officer

TIMOTHY H. GRAFE VP, New Business Development

SHEILA G. KRAMER VP, Human Resources

RICHARD B. LEWIS SVP, Global Operations

ROGER J. MILLER VP, Global Engine Aftermarket

SCOTT J. ROBINSON SVP. Chief Financial Officer

THOMAS R. SCALF SVP, Engine Products

TODD C. SMITH
VP. Global Industrial Air Filtration

JEFFREY E. SPETHMANN SVP. Industrial Products

WIM J. V. VERMEERSCH VP, Europe, Middle East and Africa

MICHAEL J. WYNBLATT VP, Chief Technology Officer

BOARD OF DIRECTORS

TOD E. CARPENTER Chairman, President and CEO Donaldson Company, Inc.

ANDREW CECERE Chairman, President and CEO U.S. Bancorp

PILAR CRUZ President, Cargill Aqua Nutrition Cargill, Inc.

MICHAEL J. HOFFMAN Retired Chairman and CEO The Toro Company

DOUGLAS A. MILROY Former Chairman and CEO G & K Services, Inc.

WILLARD D. OBERTON

Lead Independent Director Donaldson Company, Inc. Chairman of the Board Fastenal Company

JAMES J. OWENS President and CEO H.B. Fuller Company

AJITA G. RAJENDRA Executive Chairman A.O. Smith Corporation

TRUDY A. RAUTIO
Retired President and CEO
Carlson

JOHN P. WIEHOFF Executive Chairman C. H. Robinson Worldwide, Inc.

Independent Registered Public Accounting Firm PricewaterhouseCoopers LLP, Minneapolis, MN

Safe Harbor Statement

Statements in this document regarding future events and expectations, such as forecasts, plans, trends and projections relating to the Company's business and financial performance, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements speak only as of the date such statements are made and are subject to risks and uncertainties that could cause the Company's results to differ materially from these statements. These risks and uncertainties are described in the Company's Annual Report on Form 10-K, and Donaldson undertakes no obligation to update them unless otherwise required by law.

²The Federal Tax Cuts and Jobs Act ("TCJA") enacted in December 2017 impacted Donaldson's fiscal years 2019 and 2018, including a negative impact to net earnings of \$18.7 million and \$84.1 million, respectively. Details related to the impact from the TCJA are included in the Company's press releases and annual reports on Form 10-K for the respective periods.

³Return on Investment (ROII) is a ratio based on GAAP information and is calculated by: Net Earnings ÷ Average (Short-Term Borrowings and Long-Term Debt + Total Shareholders' Equity + Allowance for Doubtful Accounts - Net Deferred Tax Assets). Fiscal years 2019 and 2018 ROI exclude the impact on net earnings from the TCJA.



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