UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

	For the fisc	cal year ended December 3 OR	1, 2019
		RT PURSUANT TO SECTION RITIES EXCHANGE ACT O	
	For the trans	ition period from to	·
	Com	mission file number 1-568	4
		V. Grainger, In	
	Illinois		36-1150280
(State or c	ther jurisdiction of incorporatio	n or organization)	(I.R.S. Employer Identification No.)
100 Grainger Parkway,	Lake Forest, Illinois	3	60045-5201
	Address of principal executive		(Zip Code)
		847 535-1000	
	(Registrant's to	elephone number including a	area code)
Securities registered pursua Title of Each C Common Sto			nch Exchange on Which Registered New York Stock Exchange
Indicate by check mark if th	e registrant is a well-known sea	asoned issuer, as defined in	Rule 405 of the Securities Act. Yes \boxtimes No \square
Indicate by check mark if th	e registrant is not required to fi	le reports pursuant to Sectio	n 13 or Section 15(d) of the Act. Yes \square No \boxtimes
Indicate by check mark who of 1934 during the preceding 12 such filing requirements for the	months (or for such shorter pe	all reports required to be file eriod that the registrant was	ed by Section 13 or 15(d) of the Securities Exchange Act required to file such reports), and (2) has been subject to
	5 of this chapter) during the pre		active Data File required to be submitted pursuant to Rule ich shorter period that the registrant was required to
Indicate by check mark who company or an emerging growth "emerging growth company" in	n company. See the definitions	of "large accelerated filer," "	ed filer, a non-accelerated filer, a smaller reporting accelerated filer," "smaller reporting company," and
Large Acce		iler □ Non-accelerated File erging Growth Company □	er Smaller Reporting Company
If an emerging growth company new or revised financial accoun			use the extended transition period for complying with any change Act. \square
Indicate by check mark whether Yes \square No \boxtimes	the registrant is a shell compa	ny (as defined in Rule 12b-2	2 of the Exchange Act).
The aggregate market value of	the voting common equity hel	d by nonaffiliates of the red	istrant was \$13,765,366,450 as of the close of trading as

reported on the New York Stock Exchange on June 30, 2019. The Company does not have nonvoting common equity.

The registrant had 53,656,306 shares of the Company's Common Stock outstanding as of January 31, 2020.

Portions of the registrant's definitive proxy statement to be filed in connection with the annual meeting of shareholders to be held on April 29, 2020, are incorporated by reference into Part III hereof of this Form 10-K where indicated. The registrant's definitive 2019 proxy statement will be filed on or about March 19, 2020.

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PART I

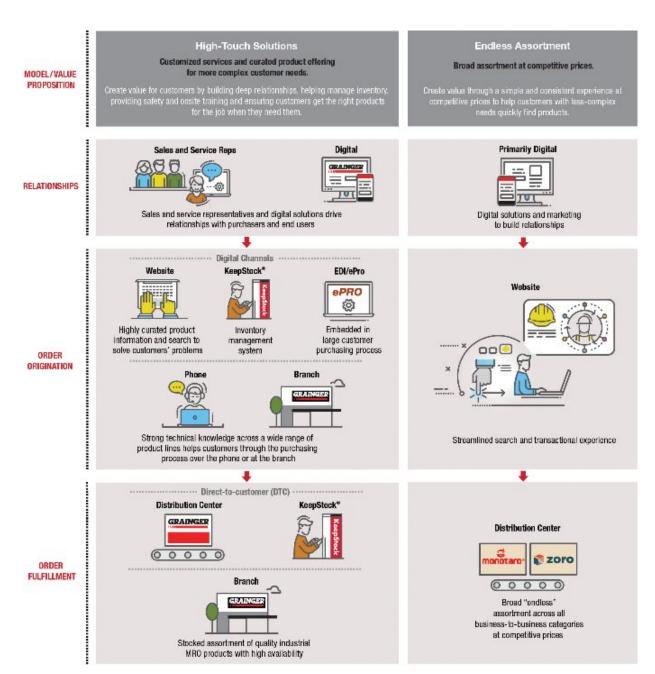
Item 1: Business

The Company

W.W. Grainger, Inc., incorporated in the State of Illinois in 1928, is a broad line, business-to-business distributor of maintenance, repair and operating (MRO) products and services with operations primarily in North America, Japan and Europe. In this report, the words "Grainger" or "Company" mean W.W. Grainger, Inc. and its subsidiaries, except where the context makes it clear that the reference is only to W.W. Grainger, Inc. itself and not its subsidiaries.

Strategy

In the large and fragmented MRO industry, Grainger's strategy is to relentlessly expand its leadership position (i.e., supply chain infrastructure, broad in-stock product offering and deep customer relationships) by being the go-to partner for customers who build and run safe, sustainable, and productive operations. To execute this strategy, the Company competes with two business models: high-touch solutions and endless assortment. Grainger's high-touch solutions businesses serve customers with complex needs primarily in North America and Europe. The endless assortment businesses are focused on customers with less-complex needs and includes Zoro Tools, Inc. (Zoro) in the United States (U.S.) and MonotaRO Co., Ltd. (MonotaRO) in Japan. Competing with these two models allows Grainger to leverage its scale and advantaged supply chain to meet the changing needs of its customers. The following provides a high-level view of each model:



MRO Industry

The estimated market where Grainger has operations is large with an estimated size of more than \$290 billion and is concentrated in North America, Japan and Europe. These large core markets have high gross domestic product per capita, advanced infrastructures and competition is highly fragmented. Grainger estimates to have 4% share within these markets with opportunity and a track record for growth.

Grainger's two reportable segments are the U.S. and Canada, and are further described below. Other businesses include the endless assortment businesses, Zoro and MonotaRO, and smaller international businesses primarily in Europe and Mexico. For further segment and financial information, see "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 14 to the Consolidated Financial Statements (Financial Statements).

The table below shows Grainger's estimated share of the MRO market and the summary of its operations by reporting segments and other businesses as of December 31, 2019:

	Approximate Market Share	Distribution Centers (DCs) ¹	Branches ¹	Approximate Number of Customers Served (thousands) ²
United States	7%	17	282	1,000
Canada	4%	5	53	50
Other businesses				
Endless assortment businesses	2%	4	_	2,600
International high-touch solutions businesses	1%	6	119	150
TOTAL	4%	32	454	3,800

¹ See Item 2, "Properties" for more information.

Customers and Products

Approximately 5,000 suppliers provide Grainger businesses with about 1.6 million products stocked in DCs and branches. Additionally, Grainger's endless assortment businesses offer millions more products through its expanding drop-ship assortment. No single supplier comprised more than 5% of total purchases and no significant barriers exist with respect to sources of supply.

Grainger's MRO product offering is grouped under several broad categories, including material-handling equipment, safety and security supplies, lighting and electrical products, power and hand tools, pumps and plumbing supplies, cleaning and maintenance supplies and metalworking tools. Products are regularly added and removed from Grainger's product lines on the basis of customer demand, market research, suppliers' recommendations, sales volumes and other factors. No single product category comprises more than 17% of global sales.

United States

The U.S. business offers a broad selection of MRO products and services through its eCommerce platforms, catalogs, branches and sales and service representatives. A combination of product breadth, local availability, speed of delivery, detailed product information and competitively priced products and services is provided by this business.

Sales in 2019 were made to approximately 1 million customers and no single end customer accounted for more than 2% of total sales. U.S. business customers range from mid-sized businesses to large corporations, government entities and other institutions within many industries. Macro trends and technology drive the way U.S. business customers behave. Customers desire highly tailored solutions with real-time access to information and efficient delivery of products and services. These trends are reflected in how customers do business as demonstrated in the following tables for the 2019 line mix:

² Customers served in the U.S. may include overlap with Zoro within the endless assortment businesses.

Order Origination Digital channels: 30% Website EDI/ePro 25% KeepStock® 16% 71% Subtotal Non-digital channels: Branch 10% Phone 19% 29% Subtotal 100% Total

Order i	diminicit
Direct-to-customer:	
Ship to Customer	70%
KeepStock®	17%
Subtotal	87%
Branch Pick-up	13%
Total	100%

Order Fulfillment

Customers have access to more than 4 million products through Grainger.com and other branded websites. Grainger.com provides real-time price and product availability, detailed product information and features such as product search and compare capabilities. For customers with sophisticated electronic purchasing platforms, the U.S. business utilizes technology that allows these systems to communicate directly with Grainger.com. The majority of products sold by the U.S. business are third-party owned products. In addition, approximately 21% of 2019 U.S. business sales were private label MRO items bearing Grainger's registered trademarks, including DAYTON®, SPEEDAIRE®, AIR HANDLER®, TOUGH GUY®, WESTWARD®, CONDOR® and LUMAPRO®. Grainger has taken steps to protect these trademarks against infringement and believes that they will remain available for future use in its business.

Sales and service representatives in the U.S. business drive relationships with customers by helping select the right products for their needs and reducing costs by utilizing Grainger as a consistent source of supply. Additionally, inventory management through KeepStock® allows the U.S. business to help customers be more productive. KeepStock® is a comprehensive program that includes vendor-managed inventory, customermanaged inventory and onsite vending machines.

DCs are the primary order fulfillment channel with approximately 70% of direct shipments. Automation in the DCs allows the majority of orders to ship complete with next-day delivery and replenish branches that provide same-day availability to customers. The U.S. business DC network is also a primary component of Grainger's North American distribution network and it supplies inventory, product management, supply chain and related support services to all Grainger subsidiaries in the North American region, including the Canada business, Mexico business and Zoro, which are part of other businesses. Approximately 18%, 62%, and 99% of inventory purchases in 2019 for the Canadian business, Mexican business and Zoro, respectively, were sourced from the U.S. business.

Branches in the U.S. business serve the immediate needs of customers by allowing them to directly pick up items and leverage branch staff for their technical product expertise and search-and-select support. Branches also fulfill local KeepStock® operations in their local markets.

The U.S. business houses the North American Customer Service Centers which support the needs of customers in the U.S. and Canada. The centers handle more than 73,000 daily customer interactions for the region via phone, email, eCommerce portals and online chat.

Canada

The Canada business provides a combination of product breadth, local availability, speed of delivery, detailed product information and competitively priced products and services. The Canada business primarily serves Canadian customers through its integrated DC and branch network as well as sales and service representatives.

Other businesses

Other businesses is comprised of the endless assortment businesses, Zoro and MonotaRO, and smaller international high-touch solutions businesses primarily in Europe and Mexico.

Zoro

Zoro is an online MRO distributor, primarily serving U.S. customers through its website, Zoro.com. With sales of more than \$625 million in 2019, Zoro offers a broad selection of more than 3.5 million products to its customers. Zoro has no branches or sales representatives, and customer orders are fulfilled through the U.S. business supply chain and third parties.

MonotaRO

Grainger operates in Japan primarily through its majority interest in MonotaRO. MonotaRO had more than \$1 billion in revenue in 2019 and provides customers with access to approximately 20 million MRO products primarily through its websites and catalogs. A majority of orders are conducted through MonotaRO.com and fulfilled from its DCs and third parties. MonotaRO also operates small operations in other Asian countries, which represent less than 5% of their sales.

Seasonality

Grainger sells products that may have seasonal fluctuations during the winter or summer seasons or during periods of natural disasters. However, historical seasonality impacts have not been material to Grainger's operating results.

Competition

In the large and fragmented MRO industry, Grainger faces competition from a variety of competitors, including manufacturers (including some of its own suppliers) that sell directly to certain segments of the market, wholesale distributors, retailers and internet-based businesses. Also, competitors vary by size, from large broad-line distributors to small local and regional competitors. Grainger differentiates itself by providing local product availability, a broad product line, sales and service representatives, catalogs (which include product descriptions and, in certain cases, extensive technical and application data) and advanced electronic and eCommerce technology. Grainger also offers other services, such as inventory management and technical support.

Employees

As of December 31, 2019, Grainger had approximately 25,300 employees, of whom approximately 23,800 were full-time and 1,500 were part-time or temporary. Grainger has never had a major work stoppage and considers employee relations to be good.

Website Access to Company Reports

Grainger makes available free of charge, through its website, *www.invest.grainger.com*, its Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and amendments to those reports if any, as soon as reasonably practicable after these materials are electronically filed with, or furnished to, the U.S. Securities and Exchange Commission (SEC).

The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC and the address of that site is http://www.sec.gov.

Information about our Executive Officers

Following is information about the executive officers of Grainger including age as of January 31, 2020. Executive officers of Grainger generally serve until the next annual appointment of officers, or until earlier resignation or removal.

Name and Age	Positions and Offices Held and Principal Occupation and Employment During the Past Five Years
Kathleen S. Carroll (51)	Senior Vice President and Chief Human Resources Officer, a position assumed in December 2018. Previously, Ms. Carroll served as Executive Vice President, Chief Human Resources Officer of First Midwest Bancorp, Inc., a diversified financial services company, from 2017 to 2018. Prior to that role, Ms. Carroll was employed at Aon Corporation, a global insurance brokerage and consulting company, between 2006 and 2017, in various human resources roles, culminating in her position as Vice President, Global Head of Talent Acquisition.
John L. Howard (62)	Senior Vice President and General Counsel, a position assumed in January 2000. Previously, Mr. Howard served in several roles of increasing responsibility at Tenneco, Inc., a global conglomerate. Prior to those roles, Mr. Howard held a variety of legal positions in the federal government, including Associate Deputy Attorney General in the U.S. Department of Justice and in The White House as Counsel to the Vice President.
D.G. Macpherson (52)	Chairman of the Board, a position assumed in October 2017, and Chief Executive Officer, a position assumed in October 2016 at which time he was also appointed to the Board of Directors. Previously, Mr. Macpherson served as Chief Operating Officer, a position assumed in 2015, Senior Vice President and Group President, Global Supply Chain and International, a position assumed in 2013, Senior Vice President and President, Global Supply Chain and Corporate Strategy, a position assumed in 2012, and Senior Vice President, Global Supply Chain, a position assumed in 2008.
Deidra C. Merriwether (51)	Senior Vice President and President, North American Sales & Service, a position assumed in November 2019. Previously, Ms. Merriwether served as Senior Vice President, U.S. Direct Sales and Strategic Initiatives, a position assumed in September 2017, Vice President, Pricing and Indirect Procurement, a position assumed in 2016, and as a Vice President in Finance from 2013 to 2016. Prior to joining Grainger in September 2013, Ms. Merriwether held various positions as a Vice President, including positions of increasing responsibility at Sears Holdings Corporation, a broadline retailer, PriceWaterhouseCoopers, a global professional services firm, and Eli Lilly & Company, a global pharmaceutical company, across Finance, Procurement and Operations, lastly serving as Chief Operating Officer, Retail Formats, at Sears Holdings Corporation.
Thomas B. Okray (57)	Senior Vice President and Chief Financial Officer, a position assumed in May 2018. Prior to joining Grainger, Mr. Okray served as Executive Vice President, Chief Financial Officer of Advance Auto Parts, Inc., a leading automotive aftermarket parts provider in North America, a position assumed in 2016. Previously, Mr. Okray served as Vice President, Finance, Global Customer Fulfillment, of Amazon.com, Inc., an online retailer, from January 2016 to October 2016, as Vice President, Finance, North American Operations of Amazon, from June 2015 to January 2016, and was employed by General Motors Company, a global automotive company, from July 1989 to June 2015, in a variety of finance and supply chain related roles, culminating in his position as CFO, Global Product Development, Purchasing & Supply Chain, from January 2010 to June 2015.
Paige K. Robbins (51)	Senior Vice President, Grainger Technology, Merchandising, Marketing, and Strategy, a position assumed in November 2019. Previously, Ms. Robbins served as Senior Vice President and Chief Merchandising, Marketing, Digital, Strategy Officer, a position assumed in May 2019, as Senior Vice President and Chief Digital Officer, a position assumed in September 2017, and as Senior Vice President, Global Supply Chain, Branch Network, Contact Centers and Corporate Strategy, a position assumed in 2016. Since joining Grainger in September 2010, Ms. Robbins has held various positions as a Vice President, including in the areas of Global Supply Chain and Logistics.
Eric R. Tapia (43)	Vice President and Controller, a position assumed in October 2016. Mr. Tapia served as Vice President, Internal Audit, from 2010 to 2016. Mr. Tapia is a Certified Public Accountant (CPA) and before joining Grainger in 2010 was an audit partner with KPMG.

Item 1A: Risk Factors

The following is a discussion of significant risk factors relevant to Grainger's business that could adversely affect its financial condition, results of operations and cash flows. The risk factors discussed in this section should be considered together with information included elsewhere in this Annual Report on Form 10-K and should not be considered the only risks to which the Company is exposed.

Weakness in the economy, market trends and other conditions affecting the profitability and financial stability of Grainger's customers could negatively impact Grainger's sales growth and results of operations.

Economic, political, and industry trends affect Grainger's business environments. Grainger serves several industries and markets in which the demand for its products and services is sensitive to the production activity, capital spending and demand for products and services of Grainger's customers. Many of these customers operate in markets that are subject to cyclical fluctuations resulting from market uncertainty, trade and tariff policies, costs of goods sold, currency exchange rates, central bank interest rate changes, foreign competition, offshoring of production, oil and natural gas prices, geopolitical developments, labor shortages, inflation, deflation, and a variety of other factors beyond Grainger's control. Any of these factors could cause customers to idle or close facilities, delay purchases, reduce production levels, or experience reductions in the demand for their own products or services.

Any of these events could also reduce the volume of products and services these customers purchase from Grainger or impair the ability of Grainger's customers to make full and timely payments, and could cause increased pressure on Grainger's selling prices and terms of sale. Accordingly, a significant or prolonged slowdown in economic activity in the U.S., Canada or any other major world economy, or a segment of any such economy, could negatively impact Grainger's sales growth and results of operations.

The facilities maintenance industry is highly competitive, and changes in competition could result in decreased demand for Grainger's products and services.

Grainger competes in a variety of ways, including product assortment and availability, services offered to customers, pricing, purchasing convenience, and the overall experience Grainger offers. This includes the ease of use of Grainger's high-touch high-service operations (branches and digital platforms) and delivery of products.

There are several large competitors in the industry, although most of the market is served by small local and regional competitors. Grainger faces competition in all markets it serves from manufacturers (including some of its own suppliers) that sell directly to certain segments of the market, wholesale distributors, catalog houses, retail enterprises and online businesses that compete with price transparency.

To remain competitive, the Company must be willing and able to respond to market pressures. Downward pressure on sales prices, changes in the volume of our orders, and an inability to pass higher product costs on to customers could cause our gross profit percentage to fluctuate or decline. We may not be able to pass rising product costs to customers if those customers have ready product or supplier alternatives in the marketplace. These pressures could have a material effect on Grainger's sales and profitability. If the Company is unable to grow sales or reduce costs, among other actions, the Company's results of operations and financial condition may be adversely affected.

Moreover, Grainger expects technological advancements and the increased use of eCommerce solutions within the industry to continue to evolve at a rapid pace. As a result, Grainger's ability to effectively compete requires Grainger to respond and adapt to new industry trends and developments. Implementing new technology and innovations may result in unexpected costs and interruptions to operations, may take longer than expected, and may not provide all anticipated benefits.

Volatility in commodity prices may adversely affect gross margins.

Some of Grainger's products contain significant amounts of commodity-priced materials, such as steel, copper, petroleum derivatives, or rare earth minerals, and are subject to price changes based on fluctuations in the commodities market. Fluctuations in the price of fuel could affect transportation costs. Grainger's ability to pass on such increases in costs in a timely manner depends on market conditions. The inability to pass along cost increases could result in lower gross margins. In addition, higher prices could reduce demand for these products, resulting in lower sales volumes.

Unexpected product shortages, tariffs, and risks associated with Grainger's suppliers could negatively impact customer relationships or result in an adverse impact on results of operations.

Grainger's competitive strengths include product selection and availability. Products are purchased from approximately 5,000 suppliers located in various countries around the world, not one of which accounted for more than 5% of total purchases.

Historically, no significant difficulty has been encountered with respect to sources of supply; however, disruptions could occur due to factors beyond Grainger's control, including economic downturns, geopolitical unrest, tariffs, new tariffs or tariff increases, trade issues and policies, labor problems experienced by Grainger's suppliers, transportation availability and cost, shortage of raw materials, inflation and other factors, any of which could adversely affect a supplier's ability to manufacture or deliver products or could result in an increase in Grainger's product costs.

Further, Grainger sources products from Asia and other areas of the world. This increases the risk of supply disruption due to the additional lead time required and distances involved.

If Grainger was to experience difficulty in obtaining products, there could be a short-term adverse effect on results of operations and a longer-term adverse effect on customer relationships and Grainger's reputation. In addition, Grainger has strategic relationships with a number of vendors. In the event Grainger was unable to maintain those relations, there might be a loss of competitive pricing advantages which could, in turn, adversely affect results of operations.

Changes in customer base or product mix could cause changes in Grainger's gross margin or affect Grainger's competitive position.

From time to time, Grainger experiences changes in customer base and product mix that affect gross margin. Changes in customer base and product mix result primarily from business acquisitions, changes in customer demand, customer acquisitions, selling and marketing activities, competition and the increased use of eCommerce by Grainger and its competitors. There can be no assurance that Grainger will be able to maintain historical gross margins in the future.

Additionally, as customer base and product mix change over time, Grainger must identify new products, product lines and services that respond to industry trends and customer needs. The inability to introduce new products and effectively integrate them into Grainger's existing product mix could have a negative impact on future sales growth and Grainger's competitive position.

Disruptions in Grainger's supply chain could result in an adverse impact on results of operations.

The occurrence of one or more natural disasters such as earthquakes, storms, hurricanes, floods, fires, droughts, tornados and other extreme weather; pandemic diseases or viral contagions such as the coronavirus outbreak; geopolitical events, such as war, civil unrest or terrorist attacks in a country in which Grainger operates or in which its suppliers are located; and the imposition of measures that create barriers to or increase the costs associated with international trade could result in disruption of Grainger's logistics or supply chain network. For example, should the coronavirus outbreak persist or spread, it could disrupt the operations of the Company and its suppliers and customers. Any such disruption or other catastrophic event could cause one or more of Grainger's distribution centers or branches to become non-operational, adversely affect Grainger's ability to obtain or deliver inventory in a timely manner, impair Grainger's ability to meet customer demand for products, result in lost sales, additional costs, or penalties, or damage Grainger's reputation. Grainger's ability to provide same-day shipping and next-day delivery is an integral component of Grainger's business strategy and any such disruption could adversely impact results of operations and financial performance.

Interruptions in the proper functioning of information systems could disrupt operations and cause unanticipated increases in costs and/or decreases in revenues.

The proper functioning of Grainger's information systems is critical to the successful operation of its business. Grainger continues to invest in software, hardware and network infrastructures in order to effectively manage its information systems. Although Grainger's information systems are protected with robust backup and security systems, including physical and software safeguards and remote processing capabilities, information systems are still vulnerable to damage or interruption from natural disasters, power losses, telecommunication failures, user error, third party actions

such as malicious computer programs, denial-of-service attacks and cybersecurity breaches, and other problems. In addition, from time to time Grainger relies on the IT systems of third parties to assist in conducting its business.

If Grainger's systems or those of third parties on which Grainger depends are damaged, breached or cease to function properly Grainger may have to make a significant investment to repair or replace them and may suffer interruptions in its business operations in the interim. If critical information systems fail or otherwise become unavailable, Grainger's ability to operate its eCommerce platforms, process orders, maintain proper levels of inventories, collect accounts receivable, disburse funds, manage its supply chain, monitor results of operations, and process and store employee or customer data, among other functions, could be adversely affected. Any such interruption of Grainger's information systems could have a material adverse effect on its business or results of operations.

Cybersecurity incidents, including breaches of information systems security, could damage Grainger's reputation, disrupt operations, increase costs and/or decrease revenues.

Through Grainger's sales and eCommerce channels, Grainger collects and stores personally identifiable, confidential, proprietary and other information from customers so that they may, among other things, purchase products or services, enroll in promotional programs, register on Grainger's websites or otherwise communicate or interact with the Company. Moreover, Grainger's operations routinely involve receiving, storing, processing and transmitting sensitive information pertaining to its business, customers, suppliers and employees, and other sensitive matters.

Cyber threats are rapidly evolving and those threats and the means for obtaining access to information in digital and other storage media are becoming increasingly sophisticated. Each year, cyber-attackers make numerous attempts to access the information stored in the Company's information systems.

Moreover, from time to time, Grainger may share information with vendors and other third parties that assist with certain aspects of the business. While Grainger requires assurances that these vendors and other parties will protect confidential information, there is a risk that the confidentiality of data held or accessed by them may be compromised. If successful, those attempting to penetrate Grainger's or its vendors' information systems may misappropriate intellectual property or personally identifiable, credit card, confidential, proprietary or other sensitive customer, supplier, employee or business information, or cause systems disruption.

In addition, a Grainger employee, contractor or other third party with whom Grainger does business may attempt to circumvent security measures in order to obtain such information or inadvertently cause a breach involving such information. Further, Grainger's systems are integrated with customer systems in certain cases, and a breach of the Company's information systems could be used to gain illicit access to customer systems and information.

While Grainger has instituted safeguards for the protection of such information, because techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until they are launched against a target, Grainger may be unable to anticipate these techniques or implement adequate preventative measures. Any breach of Grainger's security measures or any breach, error or malfeasance of those of its third party service providers could cause Grainger to incur significant costs to protect any customers, suppliers, employees, and other parties whose personal data is compromised and to make changes to its information systems and administrative processes to address security issues.

Loss of customer, supplier, employee or intellectual property or other business information or failure to comply with data privacy and security laws could disrupt operations, damage Grainger's reputation and expose Grainger to claims from customers, suppliers, financial institutions, regulators, payment card associations, employees and others, any of which could have a material adverse effect on Grainger, its financial condition and results of operations. In the past, Grainger has experienced certain cybersecurity incidents. In each instance, Grainger provided notifications and adopted remedial measures. While these incidents have not been deemed to be material to Grainger, there can be no assurance that a future breach or incident would not be material to Grainger's operations and financial condition.

Grainger's ability to adequately protect its intellectual property or successfully defend against infringement claims by others may have an adverse impact on operations.

Grainger's business relies on the use, validity and continued protection of certain proprietary information and intellectual property, which includes current and future patents, trade secrets, trademarks, service marks, copyrights and confidentiality agreements as well as license and sublicense agreements to use intellectual property owned by affiliated entities or third parties. Unauthorized use of Grainger's intellectual property by others could result in harm to various

aspects of the business and may result in costly and protracted litigation in order to protect Grainger's rights. In addition, Grainger may be subject to claims that it has infringed on the intellectual property rights of others, which could subject Grainger to liability, require Grainger to obtain licenses to use those rights at significant cost or otherwise cause Grainger to modify its operations.

Fluctuations in foreign currency could have an effect on reported results of operations.

Grainger's exposure to fluctuations in foreign currency rates results primarily from the translation exposure associated with the preparation of the Consolidated Financial Statements, as well as from transaction exposure associated with transactions in currencies other than an entity's functional currency. While the Consolidated Financial Statements are reported in U.S. dollars, the financial statements of Grainger's subsidiaries outside the U.S. are prepared using the local currency as the functional currency and translated into U.S. dollars. In addition, Grainger is exposed to foreign currency exchange rate risk with respect to the U.S. dollar relative to the local currencies of Grainger's international subsidiaries, primarily the Canadian dollar, euro, pound sterling, Mexican peso, renminbi and yen, arising from transactions in the normal course of business, such as sales and loans to wholly owned subsidiaries, sales to customers, purchases from suppliers, and bank loans and lines of credit denominated in foreign currencies. Grainger also has foreign currency exposure to the extent receipts and expenditures are not denominated in a subsidiary's functional currency and that could have an impact on sales, costs and cash flows. These fluctuations in foreign currency exchange rates could affect Grainger's results of operations and impact reported net sales and net earnings.

An inability to successfully implement Grainger's strategy or to integrate acquisitions, partnerships, joint ventures and other business combination transactions could result in the benefits anticipated not being realized and could have an adverse effect on results of operations.

Grainger has implemented and is implementing several initiatives to increase sales and earnings. If Grainger is unable to successfully implement these initiatives, Grainger's business, financial condition and results of operations could be materially adversely affected. In addition, acquisitions, partnerships, joint ventures and other business combination transactions, both foreign and domestic, involve various inherent risks, such as uncertainties in assessing value, strengths, weaknesses, liabilities and potential profitability. There is also risk relating to Grainger's ability to achieve identified operating and financial synergies anticipated to result from the transactions. Additionally, problems could arise from the integration of acquired businesses, including unanticipated changes in the business or industry or general economic or political conditions that affect the assumptions underlying the acquisition. Any one or more of these factors could cause Grainger to not realize the benefits anticipated or have a negative impact on the fair value of the reporting units. Accordingly, goodwill and intangible assets recorded as a result of acquisitions could, and have in the past, become impaired.

In order to compete, Grainger must attract, retain and motivate key employees, and the failure to do so could have an adverse effect on results of operations.

In order to compete and have continued growth, Grainger must attract, retain and motivate executives and other key employees, including those in managerial, technical, sales, marketing and support positions. Grainger competes to hire employees and then must train them and develop their skills and competencies. Grainger's results of operations could be adversely affected by increased costs due to increased competition for employees, higher employee turnover or increased employee benefit costs.

Grainger's continued success is substantially dependent on positive perceptions of Grainger's reputation.

One of the reasons why customers choose to do business with Grainger and why employees choose Grainger as a place of employment is the reputation that Grainger has built over many years. To be successful in the future, Grainger must continue to preserve, grow and leverage the value of Grainger's brand. Reputational value is based in large part on perceptions of subjective qualities. Even an isolated incident, or the aggregate effect of individually insignificant incidents, can erode trust and confidence, particularly if they result in adverse publicity, governmental investigations or litigation, and as a result, could tarnish Grainger's brand and lead to adverse effects on Grainger's business.

Grainger is subject to various domestic and foreign laws, regulations and standards. Failure to comply or unforeseen developments in related contingencies such as litigation could adversely affect Grainger's financial condition, results of operations and cash flows.

Grainger's business is subject to legislative, legal, and regulatory risks and conditions specific to the countries in which it operates. In addition to Grainger's U.S. operations, which in 2019 generated approximately 72% of its consolidated net sales, Grainger operates its business principally through wholly-owned subsidiaries in Canada, China, Germany, Mexico, the Netherlands, and the United Kingdom, and its majority-owned subsidiary in Japan.

The wide array of laws, regulations and standards in each domestic and foreign jurisdiction where Grainger operates, include, but are not limited to: advertising and marketing regulations, anti-bribery and corruption laws, anti-competition regulations, data protection (including, because Grainger accepts credit cards, the Payment Card Industry Data Security Standard), data privacy (including in the U.S., the California Consumer Privacy Act, and in the European Union, the General Data Protection Regulation 2016, with interpretations varying from state to state and country to country) and cybersecurity requirements (including protection of information and incident responses), environmental protection laws, foreign exchange controls and cash repatriation restrictions, health and safety laws, import and export requirements, intellectual property laws, labor laws (including federal and state wage and hour laws), product compliance or safety laws, supplier regulations regarding the sources of supplies or products, tax laws (including as to U.S. taxes on foreign subsidiaries), unclaimed property laws and laws, regulations and standards applicable to other commercial matters. Moreover, Grainger is also subject to audits and inquiries in the normal course of business.

Failure to comply with any of these laws, regulations and standards could result in civil, criminal, monetary and non-monetary fines, penalties and/or, remediation costs as well as potential damage to the Company's reputation. Changes in these laws, regulations and standards, or in their interpretation, could increase the cost of doing business, including, among other factors, as a result of increased investments in technology and the development of new operational processes. Furthermore, while Grainger has implemented policies and procedures designed to facilitate compliance with these laws, regulations and standards, there can be no assurance that employees, contractors, suppliers, vendors, or other third parties will not violate such laws, regulations and standards or Grainger's policies. Any such failure to comply or violation could individually or in the aggregate materially adversely affect Grainger's financial condition, results of operations and cash flows.

In addition, Grainger's business and results of operations in the UK may be negatively affected by changes in trade policies, or changes in labor, immigration, tax or other laws, resulting from the UK's anticipated exit from the European Union.

Grainger is subject to a number of rules and regulations related to its government contracts, which may result in increased compliance costs and potential liabilities.

Grainger's contracts with U.S. federal, state and local government entities are subject to various regulations related to procurement, formation and performance. In addition, the Company's government contracts may provide for termination, reduction or modification by the government at any time, with or without cause. From time to time, Grainger is subject to governmental or regulatory investigations or audits related to its compliance with these rules and regulations. Violations of these regulations could result in fines, criminal sanctions, the inability to participate in existing or future government contracting and other administrative sanctions. Any such penalties could result in damage to the Company's reputation, increased costs of compliance and/or remediation and could adversely affect the Company's financial condition and results of operations.

In conducting its business Grainger may become subject to legal proceedings or governmental investigations, including in connection with product liability or product compliance claims if people, property or the environment are harmed by Grainger's products or services.

Grainger is, and from time to time may become, party to a number of legal proceedings or governmental investigations for alleged violations of laws, rules or regulations. Grainger also may be subject to disputes and proceedings incidental to its business, including product-related claims for personal injury or illness, death, or environmental or property damage, including the proceedings discussed in Part I, Item 3. Legal Proceedings. Grainger also may be requested or required to recall products or take other actions. The defense of these proceedings may require significant expenses and divert management's time and attention, and Grainger may be required to pay damages that could individually or in the aggregate materially adversely affect its financial condition, results of operations and cash flows. The Company's

reputation could also be adversely affected by any resulting negative publicity. In addition, any insurance or indemnification rights that Grainger may have with respect to such matters may be insufficient or unavailable to protect the Company against potential loss exposures.

Tax changes could affect Grainger's effective tax rate and future profitability.

Grainger's future results could be adversely affected by changes in the effective tax rate as a result of changes in Grainger's overall profitability and changes in the mix of earnings in countries with differing statutory tax rates, changes in tax legislation, the results of the examination of previously filed tax returns and continuing assessment of the Company's tax exposures.

In December 2017, the U.S. government enacted comprehensive tax legislation that included significant changes to the taxation of business entities. The Company's accounting for the tax effects of such legislation may be subject to change due to subsequent clarification or amendment of the tax law which could adversely affect the Company's operating results or financial condition.

Grainger's common stock may be subject to volatility or price declines.

The trading price of Grainger's common stock is subject to broad and unpredictable fluctuation due to changes in economic, political and market conditions, the operating results of Grainger and its competitors, changes in expectations as to Grainger's future financial or operating performance, including estimates by securities analysts and investors, the Company's failure to meet the financial performance guidance or other forward-looking statements provided to the public, changes in capital structure, share repurchase programs or dividend policies, and a number of other factors, including those discussed in this Item 1A. These factors, many which are outside of Grainger's control, could cause stock price volatility or Grainger's stock price to decline.

Changes in Grainger's credit ratings and outlook may reduce access to capital and increase borrowing costs.

Grainger's credit ratings are based on a number of factors, including the Company's financial strength and factors outside of Grainger's control, such as conditions affecting Grainger's industry generally or the introduction of new rating practices and methodologies. Grainger cannot provide assurances that its current credit ratings will remain in effect or that the ratings will not be lowered, suspended or withdrawn entirely by the rating agencies. If rating agencies lower, suspend or withdraw the ratings, the market price or marketability of Grainger's securities may be adversely affected. In addition, any change in ratings could make it more difficult for the Company to raise capital on favorable terms, impact the Company's ability to obtain adequate financing, and result in higher interest costs for the Company's existing credit facilities or on future financings.

Grainger has incurred substantial indebtedness and may incur substantial additional indebtedness, which could adversely affect cash flow, decrease business flexibility, or prevent Grainger from fulfilling its obligations.

As of December 31, 2019, Grainger's consolidated indebtedness was approximately \$2.4 billion. The Company's indebtedness could, among other things, limit Grainger's ability to respond to rapidly changing business and economic conditions, require the Company to dedicate a substantial portion of its cash flows to the payment of principal and interest on its indebtedness, reducing the funds available for other business purposes, and make it more difficult to satisfy the Company's financial obligations as they come due during periods of adverse economic and industry conditions.

The agreements governing Grainger's debt agreements and instruments contain representations, warranties, affirmative, negative and financial covenants, and default provisions. Grainger's failure to comply with these restrictions and obligations could result in a default under such agreements, which may allow Grainger's creditors to accelerate the related indebtedness. Any such acceleration could have a material adverse effect on Grainger's business, financial condition, results of operations, cash flows, and its ability to obtain financing on favorable terms in the future.

In addition, Grainger may in the future seek to raise additional financing for working capital, capital expenditures, refinancing of indebtedness, share repurchases or other general corporate purposes. Grainger's ability to obtain additional financing will be dependent on, among other things, the Company's financial condition, prevailing market conditions and numerous other factors beyond the Company's control. Such additional financing may not be available

on commercially reasonable terms or at all. Any inability to obtain financing when needed could materially adversely affect the Company's business, financial condition or results of operations.

Item 1B: Unresolved Staff Comments

None.

Item 2: Properties

As of December 31, 2019, Grainger's owned and leased facilities totaled approximately 28.2 million square feet. The U.S. and Canada businesses accounted for the majority of the total square footage. Grainger believes that its properties are generally in excellent condition, well maintained and suitable for the conduct of business.

A brief description of significant facilities follows:

Location	Facility and Use (7)	Size in Square Feet (in thousands)
U.S. (1)	282 branch locations	6,348
U.S. (2)	17 DCs	9,660
U.S. (3)	Other facilities	3,970
Canada (4)	53 branch locations	686
Canada (5)	5 DCs	968
Canada	Other facilities	578
Other businesses (6)	Other facilities	5,034
Chicago area (2)	Headquarters and general offices	947
	Total Square Feet	28,191

- (1) Consists of 246 stand-alone, 34 onsite and 2 will-call express locations, of which 202 are owned and 80 are leased. These branches range in size from approximately 500 to 109,000 square feet.
- (2) These facilities are primarily owned and range in size from approximately 45,000 to 1.5 million square feet.
- (3) These facilities include both owned and leased locations and primarily consist of storage facilities, office space and call centers.
- (4) Consists of 34 stand-alone and 19 onsite locations, of which 18 are owned and 35 are leased. These branches range in size from approximately 500 to 70,000 square feet.
- (5) These facilities are primarily owned and range in size from approximately 40,000 to 540,000 square feet.
- (6) These facilities include owned and leased locations in North America, Japan and Europe.
- (7) Owned facilities are not subject to any mortgages.

Item 3: Legal Proceedings

For a description of legal proceedings, see the disclosure contained in Note 15 to the Financial Statements included in "Part II, Item 8: Financial Statements and Supplementary Data" of this report, which is incorporated herein by reference.

Item 4: Mine Safety Disclosures

Not applicable.

PART II

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

Market Information and Dividends

Grainger's common stock is listed and traded on the New York Stock Exchange, under the symbol GWW.

Grainger expects that its practice of paying quarterly dividends on its common stock will continue, although the payment of future dividends is at the discretion of Grainger's Board of Directors and will depend upon Grainger's earnings, capital requirements, financial condition and other factors.

Holders

The approximate number of shareholders of record of Grainger's common stock as of January 31, 2020, was 604 with approximately 206,588 additional shareholders holding stock through nominees.

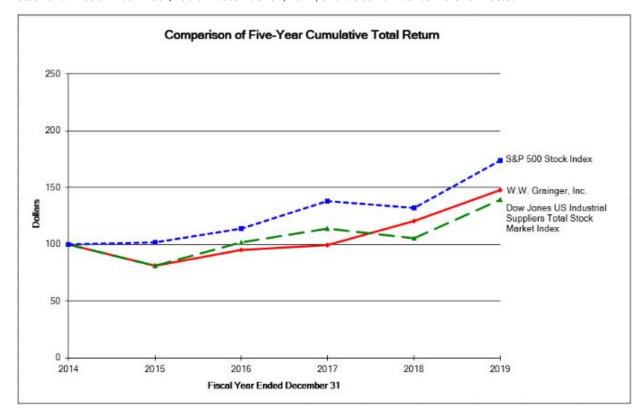
Issuer Purchases of Equity Securities - Fourth Quarter

Period	Total Number of Shares Purchased (A)	Average Price Paid Per Share (B)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (C)	Maximum Number of Shares That May Yet be Purchased Under the Plans or Programs
Oct. 1 – Oct. 31	112,700	\$301.83	112,700	3,284,920 shares
Nov. 1 – Nov. 30	126,183	\$320.04	126,183	3,158,737 shares
Dec. 1 – Dec. 31	81,184	\$319.32	80,144	3,078,593 shares
Total	320,067 (D)		319,027	

- (A) There were no shares withheld to satisfy tax withholding obligations.
- (B) Average price paid per share includes any commissions paid.
- (C) Purchases were made pursuant to a share repurchase program approved by Grainger's Board of Directors and announced on April 24, 2019 (2019 Program). The 2019 Program authorizes the repurchase of up to 5 million shares with no expiration date.
- (D) The difference of 1,040 shares between the Total Number of Shares Purchased and the Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs represents shares purchased by the administrator and record keeper of the W.W. Grainger, Inc. Employees Profit Sharing Plan for the benefit of the employees who participate in the plan.

Company Performance

The following stock price performance graph compares the cumulative total return on an investment in Grainger common stock with the cumulative total return of an investment in each of the Dow Jones US Industrial Suppliers Total Stock Market Index and the S&P 500 Stock Index. It covers the period commencing December 31, 2014, and ending December 31, 2019. The graph assumes that the value for the investment in Grainger common stock and in each index was \$100 on December 31, 2014, and that all dividends were reinvested.



	December 31,								
		2014	:	2015		2016	2017	2018	2019
W.W. Grainger, Inc.	\$	100	\$	81	\$	95	\$ 99	\$ 121	\$ 148
Dow Jones US Industrial Suppliers Total Stock Market Index		100		81		102	114	105	139
S&P 500 Stock Index		100		101		114	138	132	174

Item 6: Selected Financial Data

	2019			2018		2017		2016	2015
		(In millions of dollars, except for per share amo							
Net sales	\$	11,486	\$	11,221	\$	10,425	\$	10,137	\$ 9,973
Gross profit		4,397		4,348		4,098		4,115	4,231
Operating earnings		1,262		1,158		1,035		1,113	1,294
Net earnings attributable to W.W. Grainger, Inc. (herein referred to as Net earnings)		849		782		586		606	769
Net earnings per basic share		15.39		13.82		10.07		9.94	11.69
Net earnings per diluted share		15.32		13.73		10.02		9.87	11.58
Total current assets		3,555		3,557		3,206		3,020	3,049
Property, building and equipment, net		1,400		1,352		1,392		1,421	1,431
Long-term debt (less current maturities)		1,914		2,090		2,248		1,841	1,388
Total shareholders' equity		2,060		2,093		1,828		1,906	2,353
Operating cash flow		1,042		1,057		1,057		1,024	1,036
Cash dividends paid per share	\$	5.68	\$	5.36	\$	5.06	\$	4.83	\$ 4.59

The items discussed below are considered to materially affect the comparability of the information reflected in the selected financial data. For further information see "Part II, Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations" of this report, which is incorporated herein by reference.

Net earnings for 2019 included a net expense of \$109 million primarily consisting of a \$104 million net non-cash charge related to intangible assets impairment at the Cromwell business in the U.K., which is part of other businesses and a net charge of \$5 million related to restructuring primarily in the U.S business.

Net earnings for 2018 included a net expense of \$170 million primarily consisting of a \$133 million net non-cash charge related to goodwill and intangible asset impairment at Cromwell, which is part of other businesses and a net charge of \$37 million related to restructuring primarily consisting of asset impairment charges in Canada and other related charges, net of gains from the sale of real estate in the U.S., Canada and corporate offices.

Net earnings for 2017 included a net expense of \$84 million primarily consisting of a net charge of \$102 million related to restructuring and other charges primarily consisting of branch closures in the U.S. and Canada businesses, net of gains on sale of real estate in the U.S., the consolidation of the contact center network in the U.S. and the wind-down of operations in Colombia, which was part of other businesses. This was partially offset by the net benefit of \$15 million related to U.S. tax legislation and other discrete tax items.

Net earnings for 2016 included a net expense of \$105 million primarily related to restructuring actions in the U.S. and Canada, goodwill and intangible impairments in Europe and Latin America operations, contingencies and a net tax benefit.

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

General

W.W. Grainger, Inc. (Grainger or Company) is a broad line, business-to-business distributor of maintenance, repair and operating (MRO) products and services with operations primarily in North America, Japan and Europe. More than 3.5 million customers worldwide rely on Grainger for products such as safety, gloves, ladders, motors and janitorial supplies, along with services such as inventory management and technical support. These customers represent a broad collection of industries (see Note 2 to the Consolidated Financial Statements (Financial Statements)). They place orders through digital channels, over the phone and at local branches. Approximately 5,000 suppliers provide Grainger with about 1.6 million products stocked in Grainger's distribution centers (DCs) and branches worldwide.

Grainger's two reportable segments are the U.S. and Canada (Acklands - Grainger, Inc. and its subsidiaries). These reportable segments reflect the results of the Company's high-touch solutions businesses in those geographies. Other businesses include the endless assortment businesses, (Zoro in the U.S. and MonotaRO in Japan), and smaller international high-touch solutions businesses in Europe and Mexico.

Outlook

The Company's strategic priority for 2020 is clear: relentlessly expand Grainger's leadership position in the MRO space by being the go-to-partner for people who build and run safe, sustainable and productive operations. To achieve this, each Grainger business has a set of strategic objectives focused on top line growth through market share gain. The U.S. business is focused on growing through differentiated sales and services (e.g., direct customer relationships and onsite services), advantaged MRO solutions (e.g., get customers the exact products and services they need to solve a problem quickly) and unparalleled customer service (e.g., deliver flawlessly on every customer transaction). The Canada business is focused on growing volume and gaining market share after substantially completing a multi-year turnaround. The other businesses are primarily focused on profitably growing the international high-touch businesses in Europe and Mexico and the endless assortment businesses through product assortment expansion and innovative customer acquisition. Additionally, all Grainger businesses are focused on continuously improving cost structures, investing in digital marketing, technology and supply chain infrastructure to ultimately deliver long-term returns for shareholders.

Results of Operations

The following table is included as an aid to understanding changes in Grainger's Consolidated Statements of Earnings (in millions of dollars):

	For the Years Ended December 31,							
					Percent Increase/(Decrease) from Prior Year	As a Percent of	of Net Sales	
		2019		2018	2019	2019	2018	
Net sales	\$	11,486	\$	11,221	2 %	100.0%	100.0%	
Cost of goods sold		7,089		6,873	3 %	61.7%	61.3%	
Gross profit		4,397		4,348	1 %	38.3%	38.7%	
Selling, general and administrative expenses		3,135		3,190	(2)%	27.3%	28.4%	
Operating earnings		1,262		1,158	9 %	11.0%	10.3%	
Other expense, net		53		77	(31)%	0.5%	0.7%	
Income taxes		314		258	22 %	2.7%	2.3%	
Net earnings		895		823	9 %	7.8%	7.3%	
Noncontrolling interest		46		41	12 %	0.4%	0.4%	
Net earnings attributable to W.W. Grainger, Inc.	\$	849	\$	782	8 %	7.4%	7.0%	

2019 Compared to 2018

Grainger's net sales of \$11,486 million for the year ended 2019 increased \$265 million, or 2.5%, compared to the same period in 2018. The increase in net sales was primarily driven by volume increases in the U.S. business from market share gain and continued double-digit growth in the endless assortments businesses, partially offset by lower sales in the Canada business and other businesses. See Note 14 to the Financial Statements and refer to the *Segment Analysis* below for further details.

Gross profit of \$4,397 million for the year ended 2019 increased \$49 million, or 1% compared with the same period in 2018. The gross profit margin of 38.3% decreased 0.5 percentage points when compared to the same period in 2018, primarily driven by the lower margin endless assortment businesses which are growing at a faster rate than the rest of the Company. Elsewhere, lower gross profit margins in the U.S. were offset by supply chain favorability in Canada.

The tables below reconcile reported Selling, general and administrative expenses (SG&A), operating earnings, net earnings attributable to W.W. Grainger, Inc. and diluted earnings per share, determined in accordance with Generally Accepted Accounting Principles (GAAP) in the United States of America to adjusted SG&A, operating earnings, net earnings attributable to W.W. Grainger, Inc. and diluted earnings per share, which are all considered non-GAAP measures. The Company believes that these non-GAAP measures provide meaningful information to assist shareholders in understanding financial results and assessing prospects for future performance as they provide a better baseline for analyzing the ongoing performance of its businesses by excluding items that may not be indicative of core operating results. Because non-GAAP financial measures are not standardized, it may not be possible to compare these measures with other companies' non-GAAP measures having the same or similar names. These non-GAAP measures should not be considered in isolation or as a substitute for reported results. These non-GAAP measures reflect an additional way of viewing aspects of operations that, when viewed with GAAP results, provide a more complete understanding of the business. All tables below are in millions of dollars:

	Twelve Months Ended				
		December 31,			
		2019		2018	%
SG&A reported	\$	3,135	\$	3,190	(2)%
Restructuring, net of branch gains (U.S.)		5		9	
Restructuring, net of branch gains (Canada)		_		35	
Restructuring (Other businesses)		2		5	
Impairment charges (Other businesses)		120		139	
Restructuring (Unallocated expense)		(1)		(2)	
Subtotal		126		186	
SG&A adjusted	\$	3,009	\$	3,004	— %
		2019		2018	%
Operating earnings reported	\$	1,262	\$	1,158	9 %
Total restructuring, net and impairment charges		126		186	
Operating earnings adjusted	\$	1,388	\$	1,344	3 %
	-				
		2019		2018	%
Net earnings attributable to W.W. Grainger, Inc. reported	\$	849	\$	782	8 %
Total restructuring, net and impairment charges		126		186	
Tax effect (1)		(17)		(16)	
Total restructuring and impairment charges, net of branch gains and tax		109		170	
Net earnings attributable to W.W. Grainger, Inc. adjusted	\$	958	\$	952	1 %

⁽¹⁾ The tax impact of adjustments and non-cash impairments are calculated based on the income tax rate in each applicable jurisdiction, subject to deductibility and the Company's ability to realize the associated tax benefits.

SG&A of \$3,135 million for the year ended December 31, 2019 decreased \$55 million, or 2% compared to \$3,190 million in the same period in 2018. In the fourth quarter of 2019, Grainger recorded \$120 million of impairment charges related to intangible assets at the Cromwell business in the U.K., which is in other businesses and in the third quarter of 2018, the Company recorded \$139 million of impairment charges related to goodwill and other intangible assets for Cromwell. Excluding restructuring, net and impairment charges in both periods as noted in the table above, SG&A was flat to prior year on net sales growth of 2.5%.

Operating earnings of \$1,262 million in 2019 increased \$104 million, or 9% compared to \$1,158 million in the same period in 2018. Excluding restructuring, net and impairment charges in both periods as noted in the table above, operating earnings increased \$44 million, or 3%, driven primarily by cost take-out actions in the Canadian business and improved SG&A leverage in the U.S. business.

Other expense, net of \$53 million for the year ended 2019, decreased \$24 million, or 31% compared to the same period in 2018. The decrease in expense was primarily due to lower losses from the conclusion of the Company's clean energy investments during the second half of 2018.

Income taxes of \$314 million for the year ended 2019 increased \$56 million, or 22% compared to \$258 million for the same period in 2018. Grainger's effective tax rates were 26.0% and 23.9% in 2019 and 2018, respectively. The increase was primarily driven by lower tax benefit from stock-based compensation and the absence of the Company's clean energy tax benefits in 2019 as the Company concluded its investments in 2018.

Net earnings attributable to W.W. Grainger, Inc. for the year ended 2019 increased \$67 million, or 8% to \$849 million from \$782 million in the same period in 2018. Excluding restructuring, net and impairment charges and income taxes from both periods as noted in the table above, net earnings increased \$6 million, or 1%. The increase in net earnings primarily resulted from lower SG&A and other expense, net.

Diluted earnings per share was \$15.32 for the year ended 2019 and increased 12% compared to \$13.73 for the same period in 2018, due to higher net earnings and lower average shares outstanding. Excluding restructuring, net and impairment charges and income taxes from both periods as noted in the table above, diluted earnings per share would have been \$17.29 compared to \$16.70 in 2018, an increase of 4%.

2018 Compared to 2017

For the full year 2017 to 2018 comparative discussion, see Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations - Results of Operations in Grainger's Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

Segment Analysis - 2019 Compared to 2018

The following comments at the reportable segment and other business unit level include external and intersegment net sales and operating earnings. See Note 14 to the Financial Statements.

United States

Net sales were \$8,815 million for the year ended 2019, an increase of \$227 million, or 2.5% compared with net sales of \$8,588 million for 2018 and consisted of the following:

	Percent Increase (Decrease)
Volume	2.0%
Price	0.5
Intersegment sales to Zoro (included in other businesses)	0.5
Other	(0.5)
Total	2.5%

Overall, revenue increases were primarily driven by market share gains. See Note 2 to the Financial Statements for information related to disaggregated revenue.

Gross profit margin decreased 0.4 percentage points compared to the same period in 2018 reflecting the impact of contract renegotiations and customer mix.

SG&A for the year ended 2019 was flat compared to the same period in 2018 due to strong expense management.

Operating earnings of \$1,391 million increased \$53 million, or 4% from \$1,338 million in the same period of 2018. This increase was driven primarily by higher sales, higher gross profit dollars and improved SG&A leverage.

Canada

Net sales were \$529 million for the year ended 2019, a decrease of \$124 million, or 19% when compared with \$653 million for 2018 and consisted of the following:

	Percent (Decrease)/Increase
Volume	(19.0)%
Price	2.0
Foreign Exchange	(2.0)
Total	(19.0)%

For the year ended 2019, volume decreased by 19 percentage points compared to the same period in 2018 due to customer disruption as a result of actions taken to reduce the branch footprint and optimize sales coverage.

Gross profit margin increased 0.7 percentage points in 2019 compared to the same period in 2018 primarily due to inventory and supply chain efficiencies.

SG&A decreased \$89 million, or 34% in 2019 compared to the same period in 2018. Excluding restructuring, net in both periods as noted in the table above, SG&A would have decreased \$54 million, or 24% compared to the prior period. This decrease was primarily due to cost reduction actions and lower variable expense as a result of lower sales volume.

Operating earnings were \$3 million for the year ended 2019 compared to losses of \$49 million in the same period in 2018. Excluding restructuring, net in both periods (as noted in the table above and Note 5 to the Financial Statements), operating earnings would have been \$3 million compared to operating losses of \$14 million in the prior period primarily due to lower SG&A and lower sales volume.

Other businesses

Net sales for other businesses were \$2,651 million for the year ended 2019, an increase of \$210 million, or 8.5%, when compared to the same period in 2018. The net sales increase was primarily due to incremental sales at the endless assortment businesses and consisted of the following:

	Percent Increase/ (Decrease)
Volume	9.5%
Foreign exchange	(1.0)
Total	8.5%

The net sales increase was primarily due to customer acquisition growth from the endless assortment businesses, partially offset by foreign exchange headwinds from the euro and pound sterling.

Operating losses for other businesses were \$9 million for the year ended 2019, a decrease of \$17 million, or 216% compared to operating earnings of \$8 million for 2018. Other businesses included impairment charges in 2019 and 2018 relating to the Cromwell business in the U.K. See Note 4 and Note 5 to the Financial Statements. Excluding restructuring, net and impairment charges in both periods, operating earnings decreased \$40 million, or 27%. This decrease is primarily due to the endless assortment businesses' investments to drive long-term growth and performance in the high-touch solutions businesses.

Segment Analysis - 2018 Compared to 2017

For the full year 2017 to 2018 comparative discussion, see Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations - Segment Analysis - 2018 Compared to 2017 in Grainger's Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

Financial Condition

For the full year 2017 discussion, see Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations - Financial Condition in Grainger's Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

Grainger believes that its current level of cash and cash equivalents, marketable securities and availability under its revolving credit facilities will be sufficient to meet its liquidity needs. Grainger expects to continue to invest in its business and return excess cash to shareholders through cash dividends and share repurchases, which it plans to fund through total available liquidity and cash flows generated from operations. Grainger also maintains access to capital markets and may issue debt or equity securities from time to time, which may provide an additional source of liquidity.

Cash and Cash Equivalents

At December 31, 2019 and 2018, Grainger had cash and cash equivalents of \$360 million and \$538 million, respectively. Approximately 69% and 49% were outside the U.S. as of December 31, 2019 and 2018, respectively. Grainger has no material limits or restrictions on its ability to use these foreign liquid assets.

Cash Flows

2019 Compared to 2018

Net cash provided by operating activities was \$1,042 million and \$1,057 million for the years ended December 31, 2019 and 2018, respectively. The decrease in cash provided by operating activities was primarily related to employee variable compensation payments, partially offset by favorable net income and changes in working capital.

Net cash used in investing activities was \$202 million and \$166 million for the years ended December 31, 2019 and 2018, respectively. This increase in net cash used in investing activities was primarily driven by lower proceeds from the sales of assets when compared to the prior year.

Net cash used in financing activities was \$1,023 million and \$670 million in the years ended December 31, 2019 and 2018, respectively. The increase in net cash used in financing activities was primarily driven by higher treasury stock repurchases in 2019 compared to 2018 and lower proceeds from stock options exercised.

Working Capital

Internally generated funds are the primary source of working capital and growth initiatives including capital expenditures. Grainger's working capital is not impacted by significant seasonality trends throughout the year.

Working capital consists of current assets (less non-operating cash) and current liabilities (less short-term debt, current maturities of long-term debt and lease liabilities). Working capital was \$2,092 million at December 31, 2019, compared with \$1,898 million at December 31, 2018, primarily due to an increase in accounts receivable and inventory and decreases in accrued compensation and benefits partially offset by increases in accounts payable. At these dates, the ratio of current assets to current liabilities was 2.6 and 2.4, respectively.

Capital Expenditures

In each of the past two years, a portion of the Company's net cash flows has been used for additions to property, buildings, equipment and capitalized software (presented in Intangibles - net on the Consolidated Balance Sheet) as summarized in the following table (in millions of dollars):

	For the Years Ended December 31,					
	2019		2018			
Land, buildings, structures and improvements	\$	47	\$	69		
Furniture, fixtures, machinery and equipment		131		137		
Subtotal		178		206		
Capitalized software		43		33		
Total	\$	221	\$	239		

In 2019, the Company continued to invest in its North American and Japanese distribution networks (e.g. new DCs and branches as well as machinery and equipment to further automate the distribution process). In addition, the Company invested in the development of inventory management and software solutions.

In 2018, the Company continued to invest in its North American distribution network (e.g. new or expanding existing facilities and technology). Other investments include the consolidation of facility and office locations and development of software solutions.

Projected spending for 2020 is expected to be approximately \$250 million which includes continued investments in its supply chain, software development, office space maintenance and inventory management solutions. Grainger expects to fund 2020 capital spending primarily from operating cash flows.

<u>Debt</u>

Grainger maintains a debt ratio and liquidity position that provides flexibility in funding working capital needs and long-term cash requirements. In addition to internally generated funds, Grainger has various sources of financing available, including bank borrowings under lines of credit. Total debt, which is defined as total interest-bearing debt (short-term current and long-term) and lease liabilities as a percent of total capitalization, was 54.3% and 51.5%, as of December 31, 2019 and 2018, respectively.

Grainger receives ratings from two independent credit ratings agencies: Moody's Investor Service (Moody's) and Standard & Poor's (S&P). Both credit rating agencies currently rate our corporate credit at investment grade. The following table summarizes the Company's credit ratings at December 31, 2019:

	Corporate	Senior Unsecured	Short-term
Moody's	A3	A3	P2
S&P	A+	A+	A1

Commitments and Other Contractual Obligations

At December 31, 2019 Grainger's contractual obligations, including estimated payments due by period, are as follows (in millions of dollars):

		P	ayments	Due by Peri	od			
	Le	ss than 1 Year	1 - 3	3 Years	3 -	5 Years	More	than 5 Years
\$ 2,181	\$	246	\$	129	\$	6	\$	1,800
2,035		81		157		156		1,641
239		63		100		46		30
88		88		_		_		_
498		498		_		_		_
317		177		112		28		_
103		81		5		4		13
\$ 5,461	\$	1,234	\$	503	\$	240	\$	3,484
Cor	2,035 239 88 498 317 103	Committed \$ 2,181 \$ 2,035 239 88 498 317 103	Total Amounts Committed Less than 1 Year \$ 2,181 \$ 246 2,035 81 239 63 88 88 498 498 317 177 103 81	Total Amounts Committed Less than 1 Year 1 - 3 \$ 2,181 \$ 246 \$ 2,035 81 31 239 63 31 88 88 498 317 177 103 81 81 81	Total Amounts Committed Less than 1 Year 1 - 3 Years \$ 2,181 \$ 246 \$ 129 2,035 81 157 239 63 100 88 88 — 498 498 — 317 177 112 103 81 5	Committed Year 1 - 3 Years 3 - 9 \$ 2,181 \$ 246 \$ 129 \$ 2,035 81 157 157 239 63 100 100 88 88 — 498 — 498 498 — 317 177 112 103 81 5 5	Total Amounts Committed Less than 1 Year 1 - 3 Years 3 - 5 Years \$ 2,181 \$ 246 \$ 129 \$ 6 2,035 81 157 156 239 63 100 46 88 88 — — 498 498 — — 317 177 112 28 103 81 5 4	Total Amounts Committed Less than 1 Year 1 - 3 Years 3 - 5 Years More of the second se

See Notes 6, 7 and 9 to the Financial Statements for further detail related to debt, interest on debt and operating lease obligations.

Purchase obligations are made in the normal course of business to meet operating needs. While purchase orders for both inventory purchases and non-inventory purchases are generally cancelable without penalty, certain vendor agreements provide for cancellation fees or penalties depending on the terms of the contract.

Other liabilities represent future payments for profit sharing and other employee benefit plans.

The Company's net obligation for postretirement healthcare benefits plan of approximately \$2 million, is not included in the table above as no additional amounts are required to be funded as of December 31, 2019. The Company's historical practice regarding this plan has been to contribute amounts necessary to satisfy minimum pension funding requirements, plus periodic discretionary amounts determined to be appropriate.

Grainger has recorded a noncurrent liability of approximately \$32 million for tax uncertainties and interest at December 31, 2019. This amount is excluded from the table above, as Grainger cannot predict the timing of these cash payments by period. See Note 13 to the Financial Statements.

Off-Balance Sheet Arrangements

Grainger does not have any material off-balance sheet arrangements.

Critical Accounting Estimates

The methods, assumptions, and estimates that used in applying the Company's accounting policies may require the application of judgments regarding matters that are inherently uncertain. The Company considers an accounting policy to be a critical estimate if: (1) it involves assumptions that are uncertain when judgment was applied, and (2) changes in the estimate assumptions, or selection of a different estimate methodology could have a significant impact on Grainger's consolidated financial position and results. While the Company believes that estimates, assumptions, and judgments used are reasonable, they are based on information available when the estimate was made. See Note 1 to the Financial Statements for further information on the Company's critical accounting estimates, which are as follows:

<u>Inventory</u>: Inventory reflected at the lower of cost or net realizable value considering future demand, market conditions and liquidation values;

<u>Goodwill and Intangible Assets Impairment</u>: the valuation methods and assumptions used in assessing the impairment of goodwill and intangible assets; and

<u>Contingencies</u>: the estimation of when a contingent loss is probable and reasonably estimable.

Forward-Looking Statements

From time to time, in this Annual Report on Form 10-K, as well as in other written reports, communications and verbal statements, Grainger makes forward-looking statements that are not historical in nature but concern forecasts of future results, business plans, analyses, prospects, strategies, objectives and other matters that may be deemed to be "forward-looking statements" under the federal securities laws. Forward-looking statements can generally be identified by their use of terms such as "anticipate," "estimate," "believe," "expect," "could," "forecast," "may," "intend," "plan," "predict," "project," "will" or "would" and similar terms and phrases, including references to assumptions.

Grainger cannot guarantee that any forward-looking statement will be realized and achievement of future results is subject to risks and uncertainties, many of which are beyond the Company's control, which could cause Grainger's results to differ materially from those that are presented.

Important factors that could cause actual results to differ materially from those presented or implied in the forward-looking statements include, without limitation: higher product costs or other expenses; a major loss of customers; loss or disruption of sources of supply; increased competitive pricing pressures; failure to develop or implement new technology initiatives or business strategies; failure to adequately protect intellectual property or successfully defend against infringement claims; fluctuations or declines in the Company's gross profit percentage; the Company's responses to market pressures; the outcome of pending and future litigation or governmental or regulatory proceedings, including with respect to wage and hour, anti-bribery and corruption, environmental, advertising, product liability, safety or compliance, or privacy and cybersecurity matters; investigations, inquiries, audits and changes in laws and regulations; failure to comply with laws, regulations and standards; government contract matters; disruption of information technology or data security systems involving us or third parties on which we depend; general industry, economic, market or political conditions; general global economic conditions including tariffs and trade issues and policies; currency exchange rate fluctuations; market volatility, including volatility or price declines of the Company's common stock; commodity price volatility; labor shortages; facilities disruptions or shutdowns; higher fuel costs or disruptions in transportation services; pandemic diseases or viral contagions; natural and other catastrophes; unanticipated and/or extreme weather conditions; loss of key members of management; the Company's ability to operate, integrate and leverage acquired businesses; changes in effective tax rates; changes in credit ratings or outlook; the Company's incurrence of indebtedness and other factors identified under Item 1A: Risk Factors and elsewhere in this Form 10-K.

Caution should be taken not to place undue reliance on Grainger's forward-looking statements and Grainger undertakes no obligation to update or revise any of its forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Item 7A: Quantitative and Qualitative Disclosures About Market Risk

Grainger's primary market risk exposures as follows:

Foreign Currency Exchange Rates

Grainger's financial results, including the value of assets and liabilities, are exposed to foreign currency exchange rate risk when the financial statements of the business units outside the U.S., as stated in their local currencies, are translated into U.S. dollars. Grainger's net earnings exposure to foreign currency exchange rates was not material for 2019.

Interest Rate Risks

Grainger is exposed to interest rate risk on its variable-rate debt used to fund international businesses (See Note 7 to the Financial Statements) and it does not currently use any derivative instruments to manage these exposures. As of December 31, 2019, the annualized effect of a 0.1 percentage point increase in interest rates on Grainger's variable-rate debt obligations would not have a material impact on net earnings.

Commodity Price Risk

Grainger's transportation costs are exposed to fluctuations in the price of fuel and some sourced products contain commodity-priced materials. The Company regularly monitors commodity trends and, as a broadline supplier, mitigates any material exposure to commodity price risk by having alternative sourcing plans in place that mitigate the risk of supplier concentration, passing commodity-related inflation to customers or suppliers, and continuing to scale its distribution networks, including its transportation infrastructure.

Item 8: Financial Statements and Supplementary Data

The financial statements and supplementary data are included on pages 32 to 63. See the Index to Financial Statements and Supplementary Data on page 31.

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

None.

Item 9A: Controls and Procedures

Disclosure Controls and Procedures

Grainger carried out an evaluation, under the supervision and with the participation of its management, including the Chief Executive Officer and the Chief Financial Officer, of the effectiveness of the design and operation of Grainger's disclosure controls and procedures pursuant to Rule 13a-15 of the Securities Exchange Act of 1934, as amended (Exchange Act). Based upon that evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that Grainger's disclosure controls and procedures were effective as of the end of the period covered by this report.

Internal Control Over Financial Reporting

(A) Management's Annual Report on Internal Control Over Financial Reporting

Management's report on Grainger's internal control over financial reporting is included on page 32 of this Report under the heading Management's Annual Report on Internal Control Over Financial Reporting.

(B) Attestation Report of the Registered Public Accounting Firm

The report from Ernst & Young LLP on its audit of the effectiveness of Grainger's internal control over financial reporting as of December 31, 2019, is included on page 33 of this Report under the heading Report of Independent Registered Public Accounting Firm.

(C) Changes in Internal Control Over Financial Reporting

There have been no changes in Grainger's internal control over financial reporting during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, Grainger's internal control over financial reporting.

Item 9B: Other Information

None.

PART III

Item 10: Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated by reference to Grainger's proxy statement relating to the annual meeting of shareholders to be held April 29, 2020, under the captions "Nominees and Director Experience and Qualifications," "Annual Election of Directors," "Candidates for Board Membership," "Board Affairs and Nominating Committee," "Audit Committee" and "Delinquent Section 16(a) Reports." Information required by this item regarding executive officers of Grainger is set forth in Part I, Item 1, under the caption "Information about our Executive Officers."

Grainger has adopted a code of ethics that applies to its principal executive officer, principal financial officer and principal accounting officer and controller. This code of ethics is part of Grainger's Business Conduct Guidelines for directors, officers and employees, which is available free of charge through Grainger's website at www.invest.grainger.com. All Grainger employees are trained and certified yearly on these guidelines. A copy of the Business Conduct Guidelines is also available in print without charge to any person upon request to Grainger's Corporate Secretary. Grainger intends to disclose on its website any amendment to any provision of the Business Conduct Guidelines that relates to any element of the definition of "code of ethics" enumerated in Item 406(b) of Regulation S-K under the Exchange Act and any waiver from any such provision granted to Grainger's principal executive officer, principal financial officer, principal accounting officer and controller or persons performing similar functions. Grainger has also adopted Operating Principles for the Board of Directors, which are available on its website and are available in print to any person who requests them.

Item 11: Executive Compensation

The information required by this item is incorporated by reference to Grainger's proxy statement relating to the annual meeting of shareholders to be held April 29, 2020, under the captions "Director Compensation," "Compensation Discussion and Analysis," "Compensation Committee," "Report of the Compensation Committee of the Board" and "Fees for Independent Compensation Consultant."

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

The information required by this item is incorporated by reference to Grainger's proxy statement relating to the annual meeting of shareholders to be held April 29, 2020, under the captions "Ownership of Grainger Stock" and "Equity Compensation Plans."

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

The information required by this item is incorporated by reference to Grainger's proxy statement relating to the annual meeting of shareholders to be held April 29, 2020, under the captions "Director Independence," "Annual Election of Directors" and "Transactions with Related Persons."

Item 14: Principal Accountant Fees and Services

The information required by this item is incorporated by reference to Grainger's proxy statement relating to the annual meeting of shareholders to be held April 29, 2020, under the caption "Audit Fees and Audit Committee Pre-Approval Policies and Procedures."

PART IV

Item 15: Exhibits and Financial Statements Schedules

- (a) Documents filed as part of this Form 10-K
 - (1) Financial Statements: see "Item 8: Financial Statements and Supplementary Data," on page 31 hereof, for a list of financial statements. Management's Annual Report on Internal Control Over Financial Reporting.
 - (2) Financial Statement Schedules: the schedules listed in Rule 5-04 of Regulation S-X have been omitted because they are either not applicable or the required information is shown in the consolidated financial statements or notes thereto.
 - (3) Exhibits Required by Item 601 of Regulation S-K: the information required by this Item 15(a)(3) of Form 10-K is set forth on the Exhibit Index that follows the Signatures page 64 of the Form 10-K.

Item 16: Form 10-K Summary

None.

INDEX TO FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA December 31, 2019, 2018 and 2017

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MANAGEMENT'S ANNUAL REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of W.W. Grainger, Inc. (Grainger) is responsible for establishing and maintaining adequate internal control over financial reporting. Grainger's internal control system was designed to provide reasonable assurance to Grainger's management and Board of Directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements under all potential conditions. Therefore, effective internal control over financial reporting provides only reasonable, and not absolute, assurance with respect to the preparation and presentation of financial statements.

Grainger's management assessed the effectiveness of Grainger's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Based on its assessment under that framework and the criteria established therein, Grainger's management concluded that Grainger's internal control over financial reporting was effective as of December 31, 2019.

Ernst & Young LLP, an independent registered public accounting firm, has audited Grainger's internal control over financial reporting as of December 31, 2019, as stated in their report, which is included herein.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of W.W. Grainger, Inc. and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of W.W. Grainger, Inc. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of earnings, comprehensive earnings, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 20, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter 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 matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of Goodwill for the Canadian Reporting Unit

Description of the Matter

At December 31, 2019, the Company's Canadian reporting unit goodwill balance was \$126 million. As discussed in Notes 1 and 4 of the financial statements, goodwill is tested at the reporting unit level annually during the fourth quarter and more frequently if impairment indicators exist.

Auditing management's annual goodwill impairment test was complex and highly judgmental due to the significant estimation required in assessing the fair value of the Canadian reporting unit. The fair value estimate was sensitive to significant assumptions such as the revenue growth expectations, future expected cash flows, and operating earnings, which are affected by expectations about future market or economic conditions.

Our Audit

How We Addressed the Matter in Our audit procedures included, among others obtaining an understanding, evaluating the design and testing the operating effectiveness of controls over the Company's goodwill impairment review process, including controls over management's review of the significant assumptions described above.

> To test the estimated fair value of the Company's Canadian reporting unit, we performed audit procedures that included, among others, assessing methodologies and involving our valuation specialists to assist in testing the significant assumptions and testing the completeness and accuracy of the underlying data used by the Company in its analysis. We compared the significant assumptions used by management to current industry and economic trends, changes to the Company's business model, customer base or product mix, and other relevant factors. We assessed the historical accuracy of management's estimates and performed sensitivity analyses of significant assumptions to evaluate the changes in the fair value of the reporting units that would result from changes in the assumptions. In addition, we reviewed the reconciliation of the fair value of the reporting units to the market capitalization of the Company.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2005.

Chicago, Illinois February 20, 2020

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of W.W. Grainger, Inc. and Subsidiaries

Opinion on Internal Control over Financial Reporting

We have audited W.W. Grainger, Inc. and subsidiaries' internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (the COSO Criteria). In our opinion, W.W Grainger, Inc. and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, and the related consolidated statements of earnings, comprehensive earnings, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018 and the related notes and our report dated February 20, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP Chicago, Illinois February 20, 2020

W.W. Grainger, Inc. and Subsidiaries CONSOLIDATED STATEMENTS OF EARNINGS (In millions, except for per share amounts)

For the Years Ended December 31,

	r or the reale Ended Becomber or,					
		2019	20	18		2017
Net sales	\$	11,486	\$	11,221	\$	10,425
Cost of goods sold		7,089		6,873		6,327
Gross profit		4,397		4,348		4,098
Selling, general and administrative expenses		3,135		3,190		3,063
Operating earnings		1,262		1,158		1,035
Other (income) expense:						
Interest expense, net		79		82		86
Other, net		(26)		(5)		13
Total other expense, net		53		77		99
Earnings before income taxes		1,209		1,081		936
Income taxes		314		258		313
Net earnings		895		823		623
Less: Net earnings attributable to noncontrolling interest		46		41		37
Net earnings attributable to W.W. Grainger, Inc.	\$	849	\$	782	\$	586
Earnings per share:						
Basic	\$	15.39	\$	13.82	\$	10.07
Diluted	\$	15.32	\$	13.73	\$	10.02
Weighted average number of shares outstanding:	-					
Basic		54.7		56.1		57.7
Diluted		54.9		56.5		58.0

The accompanying notes are an integral part of these financial statements.

W.W. Grainger, Inc. and Subsidiaries CONSOLIDATED STATEMENTS OF COMPREHENSIVE EARNINGS (In millions of dollars)

For the Years Ended December 31,

		2019		2018	2017		
Net earnings	\$	895	\$	823	\$	623	
Other comprehensive earnings (losses):							
Foreign currency translation adjustments, net of reclassification (see Note 5 and Note 12)		26		(41)		93	
Postretirement benefit plan re-measurement, net of tax expense \$29 million (see Note 8 and Note 12)		_		_		47	
Postretirement benefit plan reclassification, net of tax benefit of \$2 million, \$3 million and \$1 million, respectively	1	(6)		(7)		2	
Total other comprehensive earnings (losses)		20	·	(48)		142	
Comprehensive earnings, net of tax		915		775		765	
Less: Comprehensive earnings (losses) attributable to noncontrolling interest							
Net earnings		46		41		37	
Foreign currency translation adjustments		3		3		4	
Total comprehensive earnings (losses) attributable to noncontrolling interest		49		44		41	
Comprehensive earnings attributable to W.W. Grainger, Inc.	\$	866	\$	731	\$	724	

The accompanying notes are an integral part of these financial statements.

W.W. Grainger, Inc. and Subsidiaries CONSOLIDATED BALANCE SHEETS (In millions of dollars, except for share and per share amounts)

		r 31,			
<u>ASSETS</u>	-	2019	2018		
CURRENT ASSETS			-		
Cash and cash equivalents	\$	360	\$	538	
Accounts receivable (less allowance for doubtful accounts of \$21 million and \$25 million, respectively)		1,425		1,385	
Inventories – net		1,655		1,541	
Prepaid expenses and other assets		104		83	
Prepaid income taxes		11		10	
Total current assets		3,555		3,557	
PROPERTY, BUILDINGS AND EQUIPMENT – NET		1,400		1,352	
DEFERRED INCOME TAXES		1,400		12	
GOODWILL		429		424	
INTANGIBLES – NET		304		460	
OTHER ASSETS		306		68	
TOTAL ASSETS	\$	6,005	\$	5,873	
TOTAL ASSETS	Ψ	0,003	Ψ	3,073	
LIABILITIES AND SHAREHOLDERS' EQUITY					
CURRENT LIABILITIES					
Short-term debt	\$	55	\$	49	
Current maturities of long-term debt		246		81	
Trade accounts payable		719		678	
Accrued compensation and benefits		228		262	
Accrued contributions to employees' profit-sharing plans		85		133	
Accrued expenses		318		269	
Income taxes payable		27		29	
Total current liabilities		1,678		1,501	
LONG-TERM DEBT (less current maturities)		1,914		2,090	
DEFERRED INCOME TAXES AND TAX UNCERTAINTIES		106		103	
OTHER NON-CURRENT LIABILITIES		247		86	
SHAREHOLDERS' EQUITY					
Cumulative preferred stock – \$5 par value – 12,000,000 shares authorized; none issued nor outstanding		_		_	
Common Stock – \$0.50 par value –300,000,000 shares authorized; issued 109,659,219 shares		55		55	
Additional contributed capital		1,182		1,134	
Retained earnings		8,405		7,869	
Accumulated other comprehensive losses		(154)		(171)	
Treasury stock, at cost - 55,971,691 and 53,796,859 shares, respectively		(7,633)		(6,966)	
Total W.W. Grainger, Inc. shareholders' equity		1,855		1,921	
Noncontrolling interest		205		172	
Total shareholders' equity		2,060		2,093	
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$	6,005	\$	5,873	
	<u> </u>			,	

The accompanying notes are an integral part of these financial statements.

W.W. Grainger, Inc. and Subsidiaries CONSOLIDATED STATEMENTS OF CASH FLOWS (In millions of dollars)

		For the Years Ended Decem				
		2019		2018		2017
CASH FLOWS FROM OPERATING ACTIVITIES:						
Net earnings	\$	895	\$	823	\$	623
Provision for losses on accounts receivable		12		7		16
Deferred income taxes and tax uncertainties		4		7		(5)
Depreciation and amortization		229		257		264
Impairment of goodwill, intangible and other assets		123		156		28
Net (gains) losses from sales of assets and business divestitures		(6)		(6)		28
Stock-based compensation		40		47		33
Subtotal		402	-	468		364
Change in operating assets and liabilities						
Accounts receivable		(42)		(79)		(103)
Inventories		(106)		(129)		(5)
Prepaid expenses and other assets		(33)		(2)		(5)
Trade accounts payable		32		(51)		72
Accrued liabilities		(84)		18		113
Income taxes – net		(3)		36		4
Other non-current liabilities		(19)		(27)		(6)
Net cash provided by operating activities		1,042		1,057		1,057
CASH FLOWS FROM INVESTING ACTIVITIES:						
Additions to property, buildings, equipment and intangibles		(221)		(239)		(237)
Proceeds from sales of assets		17		86		120
Equity method proceeds (investment)		2		(13)		(35)
Other – net		_				6
Net cash used in investing activities		(202)		(166)		(146)
CASH FLOWS FROM FINANCING ACTIVITIES:						,
Net decrease in commercial paper		_		_		(370)
Borrowings under lines of credit		20		26		74
Payments against lines of credit		(15)		(31)		(43)
Proceeds from issuance of long-term debt						401
Payments of long-term debt		(42)		(96)		(39)
Proceeds from stock options exercised		49		181		47
Payments for employee taxes withheld from stock awards		(11)		(12)		(28)
Purchases of treasury stock		(700)		(425)		(605)
Cash dividends paid		(328)		(316)		(304)
Other – net		4		3		_
Net cash used in financing activities		(1,023)		(670)		(867)
Exchange rate effect on cash and cash equivalents		5		(10)		9
NET CHANGE IN CASH AND CASH EQUIVALENTS:		(178)		211		53
Cash and cash equivalents at beginning of year		538		327		274
Cash and cash equivalents at end of year	\$	360	\$	538	\$	327
Supplemental cash flow information:	<u>*</u>		Ė		÷	
Cash payments for interest (net of amounts capitalized)	\$	84	\$	86	\$	78
Cash payments for income taxes	\$ \$	322	\$	229	\$	335
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The accompanying notes are an integral part of these consolidated financial statements.

W.W. Grainger, Inc. and Subsidiaries CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (In millions of dollars, except for per share amounts)

	Con	nmon Stock	Additional Contributed Capital	Retained Earnings	Accumulated Other Comprehensive Earnings (Losses) Treasury Stock		Noncontrolling Interest		Total	
Balance at January 1, 2017	\$	55	\$ 1,030	\$ 7,113	\$	(273)	\$ (6,128) \$	108	\$	1,905
Stock based compensation		_	10	_		_	60	_		70
Purchases of treasury stock		_	_	_		_	(608)	_		(608)
Net earnings		_	_	586		_	_	37		623
Other comprehensive earnings (losses)		_	_	_		138	_	4		142
Capital contribution		_	_	_		_	_	_		_
Cash dividends paid (\$5.06 per share)		_	1	(294)		_	_	(11)		(304)
Balance at December 31, 2017	\$	55	\$ 1,041	\$ 7,405	\$	(135)	\$ (6,676) \$	138	\$	1,828
Stock based compensation		_	92	_		_	122	_		214
Purchases of treasury stock		_	_	_		_	(412)	_		(412)
Net earnings		_	_	782		_	_	41		823
Other comprehensive earnings (losses)		_	_	_		(51)	_	3		(48)
Capital contribution		_	_	_		_	_	4		4
Reclassification due to the adoption of ASU 2018-02		_	_	(15)		15	_	_		_
Cash dividends paid (\$5.36 per share)		_	1	(303)		_	_	(14)		(316)
Balance at December 31, 2018	\$	55	\$ 1,134	\$ 7,869	\$	(171)	\$ (6,966) \$	172	\$	2,093
Stock based compensation		_	46	_		_	33	_		79
Purchases of treasury stock		_	_	_		_	(700)	_		(700)
Net earnings		_	_	849		_	_	46		895
Other comprehensive earnings (losses)		_	_	_		17	_	3		20
Capital contribution		_	2	_		_	_	_		2
Cash dividends paid (\$5.68 per share)		_	_	(313)		_	_	(16)		(329)
Balance at December 31, 2019	\$	55	\$ 1,182	\$ 8,405	\$	(154)	\$ (7,633) \$	205	\$	2,060

The accompanying notes are an integral part of these financial statements.

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

COMPANY BACKGROUND

W.W. Grainger, Inc. is a broad line, business-to-business distributor of maintenance, repair and operating (MRO) products and services with operations primarily in North America, Japan and Europe. In this report, the words "Company" or "Grainger" mean W.W. Grainger, Inc. and its subsidiaries.

PRINCIPLES OF CONSOLIDATION

The Consolidated Financial Statements (Financial Statements) include the accounts of the Company and its subsidiaries over which the Company exercises control. All significant intercompany transactions are eliminated from the consolidated financial statements. The Company has a controlling ownership interest in MonotaRO Co., Ltd. (MonotaRO), the endless assortment business in Japan, with the residual representing the noncontrolling interest.

USE OF ESTIMATES

The preparation of the Company's consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions affecting reported amounts in the consolidated financial statements and accompanying notes. Actual results may differ from those estimates.

FOREIGN CURRENCY TRANSLATION

The U.S. dollar is the Company's reporting currency for all periods presented. The financial statements of the Company's foreign operating subsidiaries are measured using the local currency as the functional currency. Assets and liabilities of the Company's foreign operating subsidiaries are translated into U.S. dollars at the exchange rate in effect at the balance sheet date. Revenues and expenses are translated at average rates in effect during the period. Translation gains or losses are recorded as a separate component of other comprehensive earnings (losses).

REVENUE RECOGNITION

The Company recognizes revenue when a sales arrangement with a customer exists (e.g., contract, purchase orders, others), the transaction price is fixed or determinable and the Company has satisfied its performance obligation per the sales arrangement.

The majority of Company revenue originates from contracts with a single performance obligation to deliver products, whereby performance obligations are satisfied when control of the product is transferred to the customer per the arranged shipping terms. Some Company contracts contain a combination of product sales and services, which are distinct and accounted for as separate performance obligations, and are satisfied when the services are rendered. Total service revenue is not material and accounted for approximately 1% of total Company revenue for the twelve months ended December 31, 2019.

The Company's revenue is measured at the determinable transaction price, net of any variable considerations granted to customers and any taxes collected from customers and subsequently remitted to governmental authorities. Variable considerations include rights to return product and sales incentives, which primarily consist of volume rebates. These variable considerations are estimated throughout the year based on various factors, including contract terms, historical experience and performance levels. Total accrued sales returns were approximately \$25 million and \$29 million as of December 31, 2019 and 2018, respectively, and are reported as a reduction of Accounts receivable, net. Total accrued sales incentives were approximately \$57 million and \$62 million as of December 31, 2019 and 2018, respectively, and are reported as part of Accrued expenses.

The Company records a contract asset when it has a right to payment from a customer that is conditioned on events other than the passage of time. The Company also records a contract liability when customers prepay but the Company has not yet satisfied its performance obligation. The Company did not have any material unsatisfied performance obligations, contract assets or liabilities as of December 31, 2019 and 2018.

COST OF GOODS SOLD (COGS)

COGS includes the purchase cost of goods sold, net of vendor considerations, in-bound shipping and handling costs and service costs. The Company receives vendor considerations, such as rebates to promote their products, which are generally recorded as a reduction to COGS. Rebates earned from vendors that are based on product purchases are capitalized into inventory and rebates earned based on products sold are credited directly to COGS.

ADVERTISING

Advertising costs, which includes online marketing, are generally expensed in the year the related advertisement is first presented or when incurred. Catalog expense is amortized over the life of the catalog, generally one year, beginning in the month of its distribution and is included in advertising expense. Total advertising expense was \$316 million, \$241 million and \$187 million for 2019, 2018 and 2017, respectively.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES (SG&A)

Company SG&A is primarily comprised of compensation and benefit costs, indirect purchasing, supply chain and branch operations, technology, leases, restructuring, impairments, advertising and selling expenses, as well as other types of general and administrative costs.

STOCK INCENTIVE PLANS

The Company measures all share-based payments using fair-value-based methods and records compensation expense on a straight line basis over the vesting periods, net of estimated forfeitures.

INCOME TAXES

The Company recognizes the provision for income taxes using the asset and liability method, under which deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax basis of assets and liabilities, and for operating losses and tax credit carryforwards. Deferred tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets are expected to be realized or settled. Also, the Company evaluates deferred income taxes to determine if valuation allowances are required using a "more likely than not" standard. This assessment considers the nature, frequency and amount of book and taxable income and losses, the duration of statutory carryback and forward periods, future reversals of existing taxable temporary differences and tax planning strategies, among other matters.

The Company recognizes tax benefits from uncertain tax positions only if (based on the technical merits of the position) it is more likely than not that the tax positions will be sustained on examination by the tax authority. The Company recognizes interest expense and penalties to its tax uncertainties in the provision for income taxes.

OTHER COMPREHENSIVE EARNINGS (LOSSES)

The Company's Other comprehensive earnings (losses) include foreign currency translation adjustments and unrecognized gains (losses) on postretirement and other employment-related benefit plans. Accumulated other comprehensive earnings (losses) (AOCE) are presented separately as part of shareholders' equity.

CASH AND CASH EQUIVALENTS

The Company considers investments in highly liquid debt instruments, purchased with an original maturity of 90 days or less, to be cash equivalents.

CONCENTRATION OF CREDIT RISK

The Company places temporary cash investments with institutions of high credit quality and, by policy, limits the amount of credit exposure to any one institution. Also, the Company has a broad customer base representing many diverse industries across North America, Japan and Europe. Consequently, no significant concentration of credit risk is considered to exist.

ACCOUNTS RECEIVABLE AND ALLOWANCE FOR DOUBTFUL ACCOUNTS

Accounts receivable are stated at their estimated net realizable value. The Company establishes allowances for customer accounts that are potentially uncollectible and these are determined based on several factors, including the age of the receivables, historical collection trends, and economic conditions that may have an impact on a specific industry, group of customers or a specific customer.

INVENTORIES

Company inventories primarily consist of merchandise purchased for resale, and they are valued at the lower of cost or net realizable value. The Company uses the last-in, first-out (LIFO) method to account for approximately 70% of total inventory and the first-in, first-out (FIFO) method for the remaining inventory. The Company regularly reviews inventory to evaluate continued demand and records provisions for the difference between excess and obsolete inventories and net realizable value. Estimated realizable value consider various variables, including product demand, aging and shelf life, market conditions, and liquidation or disposition history and values.

If FIFO had been used for all of the Company's inventories, they would have been \$426 million and \$394 million higher than reported at December 31, 2019 and December 31, 2018, respectively. Concurrently, net earnings would have increased by \$24 million and \$8 million, and decreased by \$1 million for the years ended December 31, 2019, 2018 and 2017, respectively.

PROPERTY, BUILDINGS AND EQUIPMENT

Company property, buildings and equipment are valued at cost. Depreciation is estimated using the declining-balance, sum-of-the-years-digits and straight-line depreciation methods over the assets' useful lives as follows:

Buildings, structures and improvements	10 to 30 years
Furniture, fixtures, machinery and equipment	3 to 10 years

Depreciation expense was \$150 million, \$162 million and \$170 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The Company capitalized interest costs of \$9 million, \$10 million and \$2 million for the years ended December 31, 2019, 2018 and 2017, respectively.

LEASES

The Company leases certain properties and buildings (including branches, warehouses, distribution centers and office space) and equipment under various arrangements which provide the right to use the underlying asset and require lease payments for the lease term. The Company's lease portfolio consists mainly of operating leases which expire at various dates through 2036.

Many of the property and building lease agreements obligate the Company to pay real estate taxes, insurance and certain maintenance costs (hereinafter referred to as non-lease components). Certain of the Company's lease arrangements contain renewal provisions from 1 to 30 years, exercisable at the Company's option. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

The Company determines if an arrangement is an operating lease at inception. Leases with an initial term of 12 months or less are not recorded on the balance sheet. All other leases are recorded on the balance sheet with right of use (ROU) assets representing the right to use the underlying asset for the lease term and lease liabilities representing the obligation to make lease payments arising from the lease.

ROU assets and lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term and include options to extend or terminate the lease when they are reasonably certain to be exercised. The present value of lease payments is determined primarily using the incremental borrowing rate based on the information available at lease commencement date. Lease agreements with lease and non-lease components are generally accounted for as a single lease component. The Company's operating lease expense is recognized on a straight-line basis over the lease term and is recorded in SG&A.

GOODWILL AND OTHER INTANGIBLE ASSETS

In a business acquisition, the Company recognizes goodwill as the excess purchase price of an acquired reporting unit over the net amount assigned to assets acquired including intangible assets, and liabilities assumed. Acquired intangibles include both: assets with indefinite lives and assets that are subject to amortization, which are amortized straight line over their estimated useful lives.

The Company tests goodwill and indefinite-lived intangibles for impairment annually during the fourth quarter and more frequently if impairment indicators exist. The Company performs qualitative assessments of significant events and circumstances, such as reporting units' historical and current results, assumptions regarding future performance, strategic initiatives and overall economic factors to determine the existence of impairment indicators and assess if it is more likely than not that the fair value of the reporting unit or indefinite-lived intangible asset is less than its carrying value and if a quantitative impairment test is necessary. In the quantitative test, Grainger compares the carrying value of the reporting unit or an indefinite-lived intangible asset with its fair value. Any excess of the carrying value over fair value is recorded as an impairment charge, presented as part of SG&A.

The fair value of reporting units is calculated primarily using the discounted cash flow method and utilizing value indicators from a market approach to evaluate the reasonableness of the resulting fair values. Estimates of market-

participant risk-adjusted weighted average cost of capital are used as a basis for determining the discount rates to apply to the reporting units' future expected cash flows and terminal value.

The Company's indefinite-lived intangibles are primarily trade names. The fair value of trade names is calculated primarily using the relief-from-royalty method, which estimates the expected royalty savings attributable to the ownership of the trade name asset. The key assumptions when valuing a trade name are the revenue base, the royalty rate, and the discount rate.

Additionally, the Company capitalizes certain costs related to the purchase and development of internal-use software, which are presented as intangible assets. Amortization of capitalized software is on a straight-line basis over three or five years.

LONG-LIVED ASSETS

The carrying value of long-lived assets, primarily property, buildings and equipment and amortizable intangibles, is evaluated whenever events or changes in circumstances indicate that the carrying value of the asset group may be impaired. An impairment loss is recognized when estimated undiscounted future cash flows resulting from use of the asset group, including disposition, are less than their carrying value. Impairment is measured as the amount by which the asset group's carrying amount exceeds the fair value.

CONTINGENCIES

The Company accrues for costs relating to litigation claims and other contingent matters, when it is probable that a liability has been incurred and the amount of the assessment can be reasonably estimated.

NEW ACCOUNTING STANDARDS

In July 2019, the FASB issued ASU 2019-07, Codification Updates to SEC Sections - Amendments to SEC Paragraphs *Pursuant to SEC Final Rule Releases No. 33-10532, Disclosure Update and Simplification, and Nos. 33-10231 and 33-10442, Investment Company Reporting Modernization, and Miscellaneous Updates (SEC Update).* This ASU clarifies or improves the disclosure and presentation requirements of a variety of codification topics by aligning with the SEC's regulations, thereby eliminating redundancies and making the codification easier to apply. This ASU was effective immediately upon issuance and did not have a material impact on the Company's Financial Statements and related disclosures.

On January 1, 2019, the Company adopted ASU 2016-02, *Leases* as modified subsequently by ASUs 2018-01, 2018-10, 2018-11, 2018-20 and 2019-01(Topic 842). The Company utilized the simplified modified retrospective transition method that allowed for a cumulative-effect adjustment in the period of adoption, and did not restate prior periods. Additionally, the Company elected the practical expedients package permitted under the transition guidance. Adoption of the new standard resulted in the recording of ROU assets and lease liabilities of approximately \$208 million and \$205 million, respectively, as of January 1, 2019 related to operating and finance leases.

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-13, *Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments* as modified by subsequently issued ASUs 2018-19, 2019-04, 2019-05 and 2019-11. This ASU requires estimating all expected credit losses for certain types of financial instruments, including trade receivables, held at the reporting date based on historical experience, current conditions and reasonable and supportable forecasts. Per the permitted effective dates, the Company will adopt this ASU effective January 1, 2020. The Company does not expect the adoption of this ASU to have a material impact on the Company's Financial Statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes.* This ASU clarifies and simplifies accounting for income taxes by eliminating certain exceptions for intraperiod tax allocation principles, the methodology for calculating income tax rates in an interim period, and recognition of deferred taxes for outside basis differences in an investment, among other updates. Per the permitted effective dates, the Company will adopt this ASU effective January 1, 2021. The Company is evaluating the impact of this ASU.

NOTE 2 - REVENUE

Company revenue is primarily comprised of MRO product sales and related activities, such as freight and services.

Grainger serves a large number of customers in diverse industries, which are subject to different economic and market specific factors. The Company's presentation of revenue by industry most reasonably depicts how the nature, amount, timing and uncertainty of Company revenue and cash flows are affected by economic and market specific factors. The

following table presents the Company's percentage of revenue by reportable segment and by major customer industry:

U.S.	Canada	Total Company (2)
18 %	6 %	14 9
19 %	20 %	17 9

Twelve Months Ended December 31, 2019

Government	18 %	6 %	14 %
Heavy Manufacturing	19 %	20 %	17 %
Light Manufacturing	12 %	6 %	10 %
Transportation	6 %	8 %	5 %
Healthcare	7 %	— %	6 %
Commercial	10 %	9 %	8 %
Retail/Wholesale	9 %	4 %	7 %
Contractors	10 %	10 %	8 %
Natural Resources	3 %	33 %	4 %
Other (1)	6 %	4 %	21 %
Total net sales	100 %	100 %	100 %
Percent of Total Company Revenue	72 %	5 %	100 %

- (1) Other category primarily includes revenue from individual customers not aligned to major industry segment, including small businesses and consumers, and intersegment net sales.
- (2) Total Company includes other businesses, which include the Company's endless assortment businesses and operations in Europe and Mexico and account for approximately 23% of revenue for the twelve months ended December 31, 2019.

Twelve Months Ended December 31, 2018

	I weive i	Months Ended December 3	1, 2016
	U.S.	Canada	Total Company (2)
Government	18 %	6 %	14 %
Heavy Manufacturing	19 %	20 %	18 %
Light Manufacturing	13 %	6 %	11 %
Transportation	6 %	7 %	5 %
Healthcare	7 %	— %	5 %
Commercial	9 %	10 %	8 %
Retail/Wholesale	8 %	4 %	7 %
Contractors	10 %	11 %	8 %
Natural Resources	3 %	32 %	4 %
Other (1)	7 %	4 %	20 %
Total net sales	100 %	100 %	100 %
Percent of Total Company Revenue	72 %	6 %	100 %

⁽¹⁾ Other category primarily includes revenue from individual customers not aligned to major industry segment, including small businesses and consumers, and intersegment net sales.

⁽²⁾ Total Company includes other businesses, which include the Company's endless assortment businesses and operations in Europe and Mexico and account for approximately 22% of revenue for the twelve months ended December 31, 2018.

NOTE 3 - PROPERTY, BUILDINGS AND EQUIPMENT

Property, buildings and equipment consisted of the following (in millions of dollars):

	As of									
		December 31, 2019		December 31, 2018						
Land	\$	332	\$	318						
Building, structures and improvements		1,329		1,338						
Furniture, fixtures, machinery and equipment		1,832		1,785						
Property, buildings and equipment	\$	3,493	\$	3,441						
Less: Accumulated depreciation and amortization		2,093		2,089						
Property, buildings and equipment, net	\$	1,400	\$	1,352						

NOTE 4 - GOODWILL AND OTHER INTANGIBLE ASSETS

The balances and changes in the carrying amount of Goodwill by segment are as follows (in millions of dollars):

	Uni	ted States		Canada	Other	businesses	Total
Balance at January 1, 2018	\$	192	\$	130	\$	222	\$ 544
Impairment		_		_		(105)	(105)
Translation		_		(10)		(5)	(15)
Balance at December 31, 2018		192		120		112	 424
Translation		_		6		(1)	5
Balance at December 31, 2019	\$	192	\$	126	\$	111	\$ 429
	Unite	United States		Canada	Other businesses		Total
Cumulative goodwill impairment charges, December 31, 2019 (1)	\$	_	\$	32	\$	152	\$ 184

⁽¹⁾ Restated to include only impairments related to current businesses in Grainger's portfolio.

There were no impairments to goodwill for the years ended December 31, 2019 and 2017. In 2018, there was a \$105 million goodwill impairment recorded in SG&A at the Cromwell business in the U.K.

The balances and changes in Intangible assets - net are as follows (in millions of dollars):

A C	D	04
AS OT	December	.37

		7.6 61 2 6 6 11 6 1 7 1												
		2019					2018							
	Weighted average life	s carrying mount	_			t carrying amount	Gross carrying amount		Accumulated amortization/impairment		Net carrying amount			
Customer lists and relationships	13.2 years	\$ 401	\$	301	\$	100	\$	410	\$	204	\$	206		
Trademarks, trade names and other	14.1 years	36		20		16		24		15		9		
Non-amortized trade names and other	_	100		38		62		133		34		99		
Capitalized software	4.2 years	626		500		126		657		511		146		
Total intangible assets	8.2 years	\$ 1,163	\$	859	\$	304	\$	1,224	\$	764	\$	460		

Amortization expense of intangible assets presented within SG&A, excluding impairment charges was \$78 million, \$92 million, and \$89 million for the years ended December 31, 2019, 2018 and 2017, respectively. Estimated amortization expense for future periods is as follows (in millions of dollars):

Year	Ex	pense
2020	\$	72
2021		55
2022		38
2023		13
2024		12
Thereafter		52
Total	\$	242

Grainger completed its annual impairment testing during the fourth quarter of 2019. Qualitative tests for the quarter indicated the existence of impairment indicators for the Canada business and Cromwell (included in other businesses). As such, quantitative tests were performed.

Based on the result of the quantitative tests performed for the Canada business, the Company concluded that there was no impairment of goodwill. The risk of impairment for the Canada business is dependent upon key assumptions included in the determination of the reporting unit's fair value, particularly revenue growth expectations, future expected cash flows and operating earnings performance. Changes in assumptions regarding future performance and unfavorable economic environment in Canada may have a significant impact on future cash flows expectations and require the recording of future impairment charges. The carrying value of the Canada businesses goodwill was \$126 million as of December 31, 2019.

The quantitative test for Cromwell indicated the existence of impairment of the reporting unit's intangible assets. Cromwell's declining operating performance and accelerated customer attrition resulted in lowered outlook projections. As a result, the Company concluded that Cromwell's trade name was fully impaired. Concurrently, as a result of the circumstances leading to trade name impairment, the Company performed a recoverability and fair value test of Cromwell's customer relationships intangible asset and concluded to impair the asset. The aggregate impairment charge for Cromwell's intangibles in 2019 amounted to approximately \$120 million.

Previously, during the third quarter of 2018 the Company recorded impairment charges totaling \$139 million attributable to all of Cromwell's goodwill and a portion of its trade name assets. This impairment was driven by the deterioration

of Cromwell's operating performance at the time combined with prolonged softness and uncertainty in the U.K. market due to Brexit and other unfavorable economic conditions.

NOTE 5 - RESTRUCTURING

Restructuring activity for the twelve months ended December 31, 2019 was not material. In the twelve months ended December 31, 2018 and 2017, the Company recorded restructuring charges of approximately \$47 million and \$116 million, respectively. These charges primarily consisted of involuntary employee termination costs across the business, asset impairments, write-down losses and other exit-related costs and are included in SG&A. The charges in the U.S. and Canada businesses were partially offset by gains from the sales of real estate. The reserve balance as of December 31, 2019 and December 31, 2018 was approximately \$10 million and \$47 million, respectively, and is primarily included in Accrued compensation and benefits. The remaining reserves are expected to be paid through 2020.

NOTE 6 - SHORT-TERM DEBT

Short-term debt consisted of the following (in millions of dollars):

	As of December 31,			
	2	2019		2018
Lines of Credit				
Outstanding at December 31	\$	55	\$	49
Maximum month-end balance during the year	\$	56	\$	138
Weighted average interest rate during the year		2.32%		2.29%
Weighted average interest rate at December 31		2.44%		2.35%
Commercial Paper				
Outstanding at December 31	\$	_	\$	_
Maximum month-end balance during the year	\$	_	\$	90
Weighted average interest rate during the year		—%		1.80%

Lines of Credit

The Company's U.S. business has a five-year \$750 million unsecured revolving line of credit, maturing in 2022. There were no borrowings outstanding under the line of credit as of December 31, 2019 and 2018. The primary purpose of this credit facility is to support the Company's commercial paper program and for general corporate purposes.

Foreign subsidiaries utilize lines of credit for working capital purposes and other operating needs. These foreign lines of credit in aggregate were \$55 million and \$49 million as of December 31, 2019 and 2018, respectively.

Commercial Paper

The Company issues commercial paper from time to time for general working capital needs. At December 31, 2019, there was none outstanding.

The Company's short-term debt instruments include affirmative and negative covenants that are usual and customary for companies with similar credit ratings and do not contain any financial performance covenants. The Company was in compliance with all debt covenants as of December 31, 2019.

NOTE 7 - LONG-TERM DEBT

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

	As of December 31,							
		2019				20	18	
	Carr	ying Value	Fai	r Value (1)	Car	rying Value	Fa	ir Value (1)
4.60% senior notes due 2045	\$	1,000	\$	1,194	\$	1,000	\$	1,026
3.75% senior notes due 2046		400		416		400		357
4.20% senior notes due 2047		400		449		400		383
British pound term loan		170		170		174		174
Euro term loan		123		123		126		126
Canadian dollar revolving credit facility		46		46		44		44
Other		42		42		49		49
Subtotal		2,181		2,440		2,193		2,159
Less current maturities		(246)		(246)		(81)		(81)
Debt issuance costs and discounts, net of amortization		(21)		(21)		(22)		(22)
Long-term debt (less current maturities)	\$	1,914	\$	2,173	\$	2,090	\$	2,056

(1) The estimated fair value of the Company's Senior Notes was based on available external pricing data and current market rates for similar debt instruments, among other factors, which are classified as level 2 inputs within the fair value hierarchy. The carrying value of other long-term debt approximates fair value due to their variable interest rates.

Senior Notes

In the years 2015-2017, Grainger issued \$1.8 billion in long-term debt (Senior Notes) to partially fund the repurchase of \$2.8 billion in shares of the total \$3 billion previously announced. The remaining share repurchases were funded from internally generated cash. Debt was issued as follows:

- In May 2017, \$400 million payable in 30 years and carries a 4.20% interest rate, payable semiannually.
- In May 2016, \$400 million payable in 30 years and carries a 3.75% interest rate, payable semiannually.
- In June 2015, \$1 billion payable in 30 years and carries a 4.60% interest rate, payable semiannually.

The Company may redeem the Senior Notes in whole at any time or in part from time to time at a "make-whole" redemption price prior to their respective maturity dates. The redemption price is calculated by reference to the then-current yield on a U.S. treasury security with a maturity comparable to the remaining term of the Senior Notes plus 20-25 basis points, together with accrued and unpaid interest, if any, at the redemption date. Additionally, if the Company experiences specific kinds of changes in control, it will be required to make an offer to purchase the Senior Notes at 101% of their principal amount plus accrued and unpaid interest, if any, at the date of purchase. Within one year of the maturity date, the Company may redeem the Senior Notes in whole at any time or in part at 100% of their principal amount, together with accrued and unpaid interest, if any, to the redemption date.

Costs and discounts of approximately \$24 million associated with the issuance of the Senior Notes, representing underwriting fees and other expenses, have been recorded as a contra-liability within Long-term debt and are being amortized to interest expense over the term of the Senior Notes.

British Pound Term Loan

In August 2015, the Company entered into an unsecured credit facilities agreement providing for a five-year term loan of £160 million and revolving credit facility of up to £20 million (see Note 6 to the Financial Statements). Under the agreement, the principal amount of the term loan will be repaid semiannually in installments of £4 million beginning February 2016 through February 2020 with the remaining outstanding amount due August 2020 and accordingly, the amount outstanding is included in Current maturities of long-term debt as of December 31, 2019. At the election of the Company, the term loan bears interest at the LIBOR Rate plus a margin of 75 basis points, as defined within the term loan agreement. At December 31, 2019, the Company had elected a one-month LIBOR interest period. The weighted average interest rate was 1.47% and 1.34% for the years ended December 31, 2019 and 2018, respectively.

Euro Term Loan

In August 2016, the Company entered into an agreement for a five-year term loan of €110 million and a revolving credit facility of up to €20 million (see Note 6 to the Financial Statements). Under the agreement, no principal amount of the loan will be required to be paid until the loan becomes due on August 31, 2021, at which time the loan will be required to be paid in full. The Company, at its option, may prepay this term loan in whole or in part at the end of any interest period without penalty. The loan bears interest at the EURIBOR plus a margin of 45 basis points, as defined within the term loan agreement. If EURIBOR is less than zero, then EURIBOR will be deemed to be zero. The interest rate at both December 31, 2019 and 2018 was 0.45%.

Canadian Dollar Revolving Credit Facility

In September 2014, the Company entered into an unsecured revolving credit facility with a maximum availability of C\$175 million. The loan bears interest at the Canadian Dollar Offered Rate (CDOR) plus a margin of 80 basis points, as defined within the loan agreement. The weighted average interest rate during the year on this outstanding amount was 2.82%. No principal payments are required on the credit facility until the maturity date. In July 2019, the facility was amended to mature in 2020 and accordingly, the amount outstanding is included in Current maturities of long-term debt as of December 31, 2019.

The scheduled aggregate principal payments related to long-term debt, excluding debt issuance costs, are due as follows (in millions of dollars):

Year	Payme	ent Amount
2020	\$	246
2021		129
2022		_
2023		_
2024		6
Thereafter		1,800
Total	\$	2,181

The Company's long-term debt instruments include affirmative and negative covenants that are usual and customary for companies with similar credit ratings and do not contain any financial performance covenants. The Company was in compliance with all debt covenants as of December 31, 2019.

NOTE 8 - EMPLOYEE BENEFITS

The Company provides various retirement benefits to eligible employees, including contributions to defined contribution plans, pension benefits associated with defined benefit plans, postretirement medical benefits and other benefits. Eligibility requirements and benefit levels vary depending on employee location. Various foreign benefit plans cover employees in accordance with local legal requirements.

Defined Contribution Plans

A majority of the Company's U.S. employees are covered by a noncontributory profit-sharing plan. The plan aligns Company contributions to Company performance and includes two components, a variable annual contribution based on the Company's rate of return on invested capital and an automatic contribution equal to 3% of the eligible employee's total eligible compensation. In addition, employees covered by the plan are also able to make personal contributions. The total Company contribution will be maintained at a minimum of 8% and a maximum of 18% of total eligible compensation paid to eligible employees. The total profit-sharing plan expense was \$113 million, \$164 million, and \$120 million for 2019, 2018 and 2017, respectively.

The Company sponsors additional defined contribution plans available to certain U.S. and foreign employees for which contributions are made by the Company and participating employees. The expense associated with these defined contribution plans totaled \$19 million, \$13 million, and \$18 million for 2019, 2018 and 2017, respectively.

Postretirement Healthcare Benefits Plans

The Company has a postretirement healthcare benefits plan that provides coverage for a majority of its U.S. employees hired prior to January 1, 2013, and their dependents should they elect to maintain such coverage upon retirement. Covered employees become eligible for participation when they qualify for retirement while working for the Company.

Participation in the plan is voluntary and requires participants to make contributions toward the cost of the plan, as determined by the Company.

During the third quarter of 2017, the Company implemented plan design changes effective January 1, 2018, for the post-65 age group. This plan change moved all post-65 Medicare eligible retirees to healthcare exchanges and provided them a subsidy to purchase insurance. The amount of the subsidy is based on years of service. As a result of the plan change, the plan obligation was remeasured as of August 31, 2017. The remeasurement resulted in a decrease in the postretirement benefit obligation of \$76 million and a corresponding unrecognized gain recorded in Other comprehensive earnings net of tax of \$29 million.

Certain amounts in the 2017 financial statements, as previously reported, have been reclassified to conform to the 2018 presentation. In March 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standard Update (ASU) 2017-07, Compensation Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost (ASU 2017-07), which became effective January 1, 2018.

The net periodic benefits costs were valued with a measurement date of January 1 for each year and August 31, 2017 remeasurement date and consisted of the following components (in millions of dollars):

	For the Years Ended December 31,					
	2	019	2	2018		2017
SG&A						
Service cost	\$	4	\$	6	\$	7
Other income (expense)						
Interest cost		7		7		8
Expected return on assets		(12)		(13)		(12)
Amortization of prior service credit		(10)		(10)		(7)
Amortization of unrecognized gains		(4)		(3)		(2)
Net periodic (benefits) costs	\$	(15)	\$	(13)	\$	(6)

Reconciliations of the beginning and ending balances of the postretirement benefit obligation, which is calculated as of December 31 measurement date, the fair value of plan assets available for benefits and the funded status of the benefit obligation follow (in millions of dollars):

	2	2019		2018
Benefit obligation at beginning of year	\$	190	\$	208
Service cost		4		6
Interest cost		7		7
Plan participants' contributions		3		3
Actuarial (gains)		5		(26)
Benefits paid		(9)		(9)
Prescription drug rebates		_		1
Benefit obligation at end of year	\$	200	\$	190
			·	
Plan assets available for benefits at beginning of year	\$	176	\$	189
Actual (losses) returns on plan assets		28		(8)
Plan participants' contributions		3		3
Prescription drug rebates		_		1
Benefits paid		(9)		(9)
Plan assets available for benefits at end of year		198		176
Noncurrent postretirement benefit obligation	\$	2	\$	14

The amounts recognized in AOCE consisted of the following (in millions of dollars):

	As of December 31,			
	2019	2	2018	
Prior service credit	\$ 61	\$	71	
Unrecognized gains	44		37	
Deferred tax (liability)	 (26)		(26)	
Net accumulated gains	\$ 79	\$	82	

The Company has elected to amortize the amount of net unrecognized gains over a period equal to the average remaining service period for active plan participants expected to retire and receive benefits of approximately 11.1 years for 2019.

The postretirement benefit obligation was determined by applying the terms of the plan and actuarial models. These models include various actuarial assumptions, including discount rates, long-term rates of return on plan assets, healthcare cost trend rate and cost-sharing between the Company and the retirees. The Company evaluates its actuarial assumptions on an annual basis and considers changes in these long-term factors based upon market conditions and historical experience.

The following assumptions were used to determine net periodic benefit costs at January 1 of each year (excluding the August 31, 2017 remeasurement date):

	For the Year	For the Years Ended December 31,		
	2019	2018	2017	
Discount rate	4.08%	3.44%	4.00%	
Long-term rate of return on plan assets, net of tax	7.13%	7.13%	7.13%	
Initial healthcare cost trend rate				
Pre age 65	6.31%	6.56%	6.81%	
Post age 65	NA	NA	9.36%	
Catastrophic drug benefit	NA	12.50%	NA	
Ultimate healthcare cost trend rate	4.50%	4.50%	4.50%	
Year ultimate healthcare cost trend rate reached	2026	2026	2026	
HRA credit inflation index for grandfathered retirees	2.50%	2.50%	NA	

The following assumptions were used to determine benefit obligations at December 31:

	2019	2018	2017
Discount rate	3.01%	4.08%	3.44%
Expected long-term rate of return on plan assets, net of tax	4.00%	7.13%	7.13%
Initial healthcare cost trend rate			
Pre age 65	6.06%	6.31%	6.56%
Post age 65	NA	NA	NA
Catastrophic drug benefit	NA	11.50%	12.50%
Ultimate healthcare cost trend rate	4.50%	4.50%	4.50%
Year ultimate healthcare cost trend rate reached	2026	2026	2026
HRA credit inflation index for grandfathered retirees	2.50%	2.50%	2.50%

The discount rate assumptions reflect the rates available on high-quality fixed income debt instruments as of December 31, the measurement date of each year. These rates have been selected due to their similarity to the duration of the projected cash flows of the postretirement healthcare benefit plan. As of December 31, 2019, the Company decreased the discount rate from 4.08% to 3.01% to reflect the decrease in the market interest rates at December 31, 2019.

The Company reviews external data and its own historical trends for healthcare costs to determine the healthcare cost trend rates. As of December 31, 2019, the initial healthcare cost trend rate was 6.06% for pre age 65. The

healthcare costs trend rates decline each year until reaching the ultimate trend rate of 2.50%. The plan amendment adopted in 2017 moves all post age 65 Medicare eligible retirees to an exchange and provides a subsidy to those retirees to purchase insurance. The amount of the subsidy is based on years of service and is indexed at 2.50% for grandfathered employees.

The Company has established a Group Benefit Trust (Trust) to fund the plan obligations and process benefit payments. In 2019, the Company liquidated previously held index funds and has temporarily invested all assets of the Trust in money market funds. The Company is in the process of transitioning the Trust assets from money market funds into a liability driven investment solution composed of growth assets and fixed income. The plan's assets are stated at fair value, which represents the net asset value of shares held by the plan in the registered investment companies at the quoted market prices (Level 1 input). The plan assets available for benefits are net of Trust liabilities, primarily related to deferred income taxes and taxes payable at December 31 (in millions of dollars):

	2	2019	2018
Registered investment companies:			
Vanguard Federal Money Market Fund	\$	109	\$ _
Fidelity Government Money Market Fund		95	_
Fidelity Spartan U.S. Equity Index Fund		_	80
Vanguard 500 Index Fund		_	93
Vanguard Total International Stock		_	26
Plan Assets		204	 199
Less: trust liabilities		(6)	(23)
Plan assets available for benefits	\$	198	\$ 176

Consistent with the new investment strategy, the after-tax expected long-term rates of return on plan assets of 4.00% at December 31, 2019 is based on the historical average of long-term rates of return and an estimated tax rate. The required use of an expected long-term rate of return on plan assets may result in recognition of income that is greater or lower than the actual return on plan assets in any given year. Over time, however, the expected long-term returns are designed to approximate the actual long-term returns and, therefore, result in a pattern of income recognition that more closely matches the pattern of the services provided by the employees.

The Company's investment policies include periodic reviews by management and trustees at least annually concerning: (1) the allocation of assets among various asset classes (e.g., domestic stocks, international stocks, short-term bonds, long-term bonds, etc.); (2) the investment performance of the assets, including performance comparisons with appropriate benchmarks; (3) investment guidelines and other matters of investment policy and (4) the hiring, dismissal or retention of investment managers.

The funding of the Trust is an estimated amount that is intended to allow the maximum deductible contribution under the Internal Revenue Code of 1986 (IRC), as amended. There are no minimum funding requirements and the Company intends to follow its practice of funding the maximum deductible contribution under the IRC.

The Company forecasts the following benefit payments related to postretirement (which include a projection for expected future employee service) for the next ten years (in millions of dollars):

	Estimated	Gross Benefit
Year	Pay	ments
2020	\$	9
2021		10
2022		11
2023		12
2024		12
2025-2029		62
Total	\$	116

NOTE 9 - LEASES

The Company leases certain properties and buildings (including branches, warehouses, distribution centers and office space) and equipment under various arrangements which provide the right to use the underlying asset and require lease payments for the lease term. The Company's lease portfolio consists mainly of operating leases which expire at various dates through 2036. Finance leases and service contracts with lease arrangements are not material and the following disclosures pertain to the Company's operating leases.

Information related to operating leases is as follows (in millions of dollars):

	As of Dece	ember 31, 2019
ROU Assets		
Other assets	\$	223
Operating lease liabilities		
Accrued expenses		58
Other non-current liabilities		171
Total operating lease liabilities	\$	229

	I welve Months December 31,	
Weighted average remaining lease term		5 years
Weighted average incremental borrowing rate		2.3%
Cash paid for operating leases	\$	67
ROU assets obtained in exchange for operating lease obligations	\$	88

Rent expense was \$76 million for 2019, 2018 and 2017. These amounts are net of sublease income of \$3 million, \$3 million and \$2 million for 2019, 2018 and 2017.

Maturities of operating lease liabilities as of December 31, 2019 (in millions of dollars) are as follows:

	Maturi	ty of operating lease liabilities
2020	\$	63
2021		55
2022		45
2023		30
2024		16
Thereafter		30
Total lease payments		239
Less interest		(10)
Present value of lease liabilities	\$	229

Capital leases as of December 31, 2019 and 2018 were not considered material. Capital lease obligations are reported in Long-term debt.

As of December 31, 2019, the Company's future lease obligations that have not yet commenced are immaterial.

NOTE 10 - STOCK INCENTIVE PLANS

The Company maintains stock incentive plans under which the Company may grant a variety of incentive awards to employees and executives, which include restricted stock units (RSUs), non-qualified stock options, performance shares and deferred stock units. As of December 31, 2019, there were 2.3 million shares available for grant under the plans. When awards are exercised or settled, shares of the Company's treasury stock are issued.

Pretax stock-based compensation expense included in SG&A was \$40 million, \$47 million, and \$33 million in 2019, 2018 and 2017, respectively, and was primarily comprised of RSUs. Related income tax benefits recognized in earnings were \$15 million, \$26 million, and \$26 million in 2019, 2018 and 2017, respectively.

Restricted Stock Units

The Company awards RSUs to certain employees and executives. RSUs vest generally over periods from one to seven years from issuance. RSU expense for the years ended December 31, 2019, 2018 and 2017 was approximately \$27 million, \$23 million and \$17 million, respectively. The following table summarizes RSU activity (in millions, except for share and per share amounts):

	20)19		2018				2017			
	Shares		Weighted verage Price Per Share		Shares	A	Weighted verage Price Per Share		Shares	Αv	Weighted erage Price Per Share
Beginning nonvested units	343,81	4 \$	245.38		352,919	\$	226.31		373,403	\$	221.77
Issued	96,82	3 \$	299.25		141,775	\$	284.98		129,378	\$	222.53
Canceled	(36,22	4) \$	253.22		(56,393)	\$	245.08		(47,488)	\$	229.36
Vested	(78,28	9) \$	247.96		(94,487)	\$	233.75		(102,374)	\$	203.51
Ending nonvested units	326,12	4 \$	259.88		343,814	\$	245.38		352,919	\$	226.31
Fair value of shares vested	\$ 1	9		\$	22			\$	21	_	

At December 31, 2019 there was \$45 million of total unrecognized compensation expense related to nonvested RSUs that the Company expects to recognize over a weighted average period of 2.1 years.

Stock Options

The Company issues stock options to certain employees and executives. Stock options are granted with an exercise price equal to the closing market price of the Company's stock on the day of the grant. The options generally expire 10 years from the grant date. Stock option expense for the years ended December 31, 2019, 2018 and 2017 was approximately \$8 million, \$9 million and \$13 million, respectively. At December 31, 2019 there was \$10.5 million of total unrecognized compensation expense related to nonvested option awards, which the Company expects to recognize over a weighted average period of 1.8 years.

NOTE 11 - CAPITAL STOCK

The Company had no shares of preferred stock outstanding as of December 31, 2019 and 2018. The activity related to outstanding common stock and common stock held in treasury was as follows:

	20	19	20	18	2017		
	Outstanding Common Stock	Treasury Stock	Outstanding Common Stock	Treasury Stock	Outstanding Common Stock	Treasury Stock	
Balance at beginning of period	55,862,360	53,796,859	56,328,863	53,330,356	58,804,314	50,854,905	
Exercise of stock options	232,052	(232,052)	930,258	(930,258)	407,542	(407,542)	
Settlement of restricted stock units, net of 26,107, 39,075 and 36,585 shares retained, respectively	52,182	(52,182)	80,988	(80,988)	103,331	(103,331)	
Settlement of performance share units, net of 6,737, 1,027 and 9,334 shares retained, respectively	14,027	(14,027)	1,911	(1,911)	13,978	(13,978)	
Purchase of treasury shares	(2,473,093)	2,473,093	(1,479,660)	1,479,660	(3,000,302)	3,000,302	
Balance at end of period	53,687,528	55,971,691	55,862,360	53,796,859	56,328,863	53,330,356	

NOTE 12 - ACCUMULATED OTHER COMPREHENSIVE EARNINGS (LOSSES) (AOCE)

The components of AOCE consisted of the following (in millions of dollars):

	Foreign C Translati	on and	Defined Other Employment- Postretirement related Benefit Benefit Plan Plans Total				Foreign Currency Translation Attributable to Noncontrolling Interests	AOCE Attributable to W.W. Grainger Inc.		
Balance at January 1, 2017, net of tax	\$	(316) \$	25	\$	(5)	\$	(296) \$	(23)	\$	(273)
Other comprehensive earnings (loss) before reclassifications, net of tax		75	86		1		162	4		158
Amounts reclassified to Net earnings		18	(38)		_		(20)	_		(20)
Net current period activity	\$	93 \$	48	\$	1	\$	142 \$	4	\$	138
Balance at December 31, 2017, net of tax	\$	(223) \$	73	\$	(4)	\$	(154) \$	(19)	\$	(135)
Other comprehensive earnings (loss) before reclassifications, net of tax		(43)	4		(1)		(40)	3		(43)
Amounts reclassified to Net earnings		2	(10)		_		(8)	_		(8)
Amounts reclassified to Retained earnings		_	15		_		15	_		15
Net current period activity	\$	(41) \$	9	\$	(1)	\$	(33) \$	3	\$	(36)
Balance at December 31, 2018, net of tax	\$	(264) \$	82	\$	(5)	\$	(187) \$	(16)	\$	(171)
Other comprehensive earnings (loss) before reclassifications, net of tax		25	8		(3)		30	3		27
Amounts reclassified to Net earnings		1	(11)		_		(10)	_		(10)
Net current period activity		26	(3)		(3)		20	3		17
Balance at December 31, 2019, net of tax	\$	(238) \$	79	\$	(8)	\$	(167) \$	(13)	\$	(154)

NOTE 13 - INCOME TAXES

Earnings (losses) before income taxes by geographical area consisted of the following (in millions of dollars):

		For the Years Ended December 31,							
			2018	2017					
U.S.	\$	1,226	\$	1,163	\$	971			
Foreign		(17)		(82)		(35)			
Total	\$	1,209	\$	1,081	\$	936			

Income tax expense consisted of the following (in millions of dollars):

	For the Years Ended December 31,									
		2019		2018	2017					
Current income tax expense:										
U.S. Federal	\$	199	\$	166	\$	248				
U.S. State		44		32		29				
Foreign		58		47		22				
Total current		301		245		299				
Deferred income tax expense		13		13		14				
Total income tax expense	\$	314	\$	258	\$	313				

The income tax effects of temporary differences that gave rise to the net deferred tax asset (liability) as of December 31, 2019 and 2018 were as follows (in millions of dollars):

	As of December 31,			
	 2019		2018	
Deferred tax assets:		-		
Accrued expenses	\$ 86	\$	35	
Foreign operating loss carryforwards	67		64	
Accrued employment-related benefits	49		49	
Tax credit carryforward	22		22	
Other	12		11	
Deferred tax assets	 236		181	
Less valuation allowance	(72)		(72)	
Deferred tax assets, net of valuation allowance	\$ 164	\$	109	
Deferred tax liabilities:				
Property, buildings and equipment	(134)		(44)	
Intangibles	(83)		(105)	
Prepaids	(6)		(6)	
Other	(6)		(8)	
Deferred tax liabilities	(229)		(163)	
Net deferred tax liability	\$ (65)	\$	(54)	
The net deferred tax asset (liability) is classified as follows:				
Noncurrent assets	\$ 11	\$	12	
Noncurrent liabilities	(76)		(66)	
Net deferred tax liability	\$ (65)	\$	(54)	

At December 31, 2019 the Company had \$286 million of net operating loss (NOLs) carryforwards related primarily to foreign operations. Some of the operating loss carryforwards may expire at various dates through 2039. The Company

has recorded a valuation allowance, which represents a provision for uncertainty as to the realization of the tax benefits of these carryforwards and deferred tax assets that may not be realized. The Company's valuation allowance changed as follows (in millions of dollars):

	For the Years Ended December 31,								
	20	2018							
Balance at beginning of period	\$	(72)	\$	(84)					
Increases primarily related to foreign NOLs		(9)		(3)					
Releases related to foreign NOLs		10		16					
Increase related to U.S. foreign tax credits		(1)		(1)					
Balance at end of period	\$	(72)	\$	(72)					

A reconciliation of income tax expense with federal income taxes at the statutory rate follows (in millions of dollars):

		For	the Years E	Ended Decembe	r 31,		
	-	2019		2018	2017		
Federal income tax	\$	254	\$	\$ 227		327	
State income taxes, net of federal income tax benefit		36		32		20	
Clean energy credit		_		(20)		(38)	
Foreign rate difference		25		20		10	
Goodwill impairment		_		20		_	
U.S. tax legislation impact		_		_		(3)	
Excess tax benefits from stock-based compensation		(2)		(15)		(14)	
Other - net		1		(6)		11	
Income tax expense	\$	314	\$	258	\$	313	
Effective tax rate		26.0%		23.9%		33.5%	

Foreign Undistributed Earnings

Estimated gross undistributed earnings of foreign subsidiaries at December 31, 2019, amounted to \$402 million. The Company considers these undistributed earnings permanently reinvested in its foreign operations and is not recording a deferred tax liability for any foreign withholding taxes on such amounts. The Company's permanent reinvestment assertion has not changed following the enactment of the 2017 Tax Cuts and Jobs Act. If at some future date the Company ceases to be permanently reinvested in its foreign subsidiaries, the Company may be subject to foreign withholding and other taxes on these undistributed earnings and may need to record a deferred tax liability for any outside basis difference in its investments in its foreign subsidiaries.

Tax Uncertainties

The Company recognizes in the financial statements a provision for tax uncertainties, resulting from application of complex tax regulations in multiple tax jurisdictions. The changes in the liability for tax uncertainties, excluding interest, are as follows (in millions of dollars):

	For the Years Ended December 31,								
	2	2018	3		2017				
Balance at beginning of year	\$	37	\$	45	\$	59			
Additions for tax positions related to the current year		3		4		4			
Additions for tax positions of prior years		1		3		5			
Reductions for tax positions of prior years		(1)		(5)		(13)			
Reductions due to statute lapse		(10)		(9)		(5)			
Settlements, audit payments, refunds - net		(2)		(1)		(5)			
Balance at end of year	\$	28	\$	37	\$	45			

The Company classifies the liability for tax uncertainties in deferred income taxes and tax uncertainties. Included in

this amount are \$8 million and \$13 million at December 31, 2019 and 2018, respectively, of tax positions for which the ultimate deductibility is highly certain but for which there is uncertainty about the timing of such deductibility. Any

changes in the timing of deductibility of these items would not affect the annual effective tax rate but would accelerate the payment of cash to the taxing authorities to an earlier period. Excluding the timing items, the remaining amounts would affect the annual tax rate. In 2019, the changes to tax positions related generally to the impact of expiring statutes, conclusion of audits and audit settlements. Estimated interest and penalties were not material.

The Company regularly undergoes examination of its federal income tax returns by the Internal Revenue Service. The statute of limitations expired for the Company's 2015 federal tax return while tax years 2016 through 2019 are open. The Company is also subject to audit by state, local and foreign taxing authorities. Tax years 2012-2019 remain subject to state and local audits and 2007-2019 remain subject to foreign audits. The amount of liability associated with the Company's tax uncertainties may change within the next 12 months due to the pending audit activity, expiring statutes or tax payments. A reasonable estimate of such change cannot be made.

NOTE 14 - SEGMENT INFORMATION

Grainger's two reportable segments are the U.S. and Canada. These reportable segments reflect the results of the Company's high-touch solutions businesses in those geographies. Other businesses include the endless assortment businesses, Zoro Tools, Inc. (Zoro) and MonotaRO Co. (MonotaRO), and smaller high-tough solutions businesses in Europe and Mexico. These businesses individually do not meet the criteria of a reportable segment. Operating segments generate revenue almost exclusively through the distribution of MRO supplies, as service revenues account for approximately 1% of total revenues for each operating segment.

The accounting policies of the segments are the same as those described in the summary of significant accounting policies. Intersegment transfer prices are established at external selling prices, less costs not incurred due to a related party sale. The segment results include certain centrally incurred costs for shared services that are charged to the segments based upon the relative level of service used by each operating segment.

Following is a summary of segment results (in millions of dollars):

		2019									
						Total					
						Reportable		Other			
	Un	ited States		Canada	Segments			businesses		Total	
Total net sales	\$	8,815	\$	529	\$	9,344	\$	2,651	\$	11,995	
Intersegment net sales		(505)		_		(505)		(4)		(509)	
Net sales to external customers	\$	8,310	\$	529	\$	8,839	\$	2,647		11,486	
-											
Segment operating earnings	\$	1,391	\$	3	\$	1,394	\$	(9)	\$	1,385	
	2018										
						Total					
					Reportable			Other			
	Un	ited States		Canada		Segments		businesses		Total	
Total net sales	\$	8,588	\$	653	\$	9,241	\$	2,441	\$	11,682	
Intersegment net sales		(457)		_		(457)		(4)		(461)	
Net sales to external customers	\$	8,131	\$	653	\$	8,784	\$	2,437	\$	11,221	
Segment operating earnings	\$	1,338	\$	(49)	\$	1,289	\$	8	\$	1,297	
						50					

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	Uı	nited States	Canada	Total Reportable Segments	ļ	Other businesses	Total
Total net sales	\$	7,960	\$ 753	\$ 8,713	\$	2,120	\$ 10,833
Intersegment net sales		(404)	_	(404)		(4)	(408)
Net sales to external customers	\$	7,556	\$ 753	\$ 8,309	\$	2,116	\$ 10,425
Segment operating earnings	\$	1,200	\$ (77)	\$ 1,123	\$	56	\$ 1,179

Following are reconciliations of the segment information with the consolidated totals per the Financial Statements (in millions of dollars):

	2019		2018	2017	
Operating earnings:			 		
Total operating earnings for reportable segments	\$	1,394	\$ 1,289	\$	1,123
Other businesses		(9)	8		56
Unallocated expenses		(123)	(139)		(144
Total consolidated operating earnings	\$	1,262	\$ 1,158	\$	1,035
Assets:					
United States	\$	2,668	\$ 2,496	\$	2,310
Canada		173	188		279
Assets for reportable segments	\$	2,841	\$ 2,684	\$	2,589
Other current and noncurrent assets		3,003	2,879		3,033
Unallocated assets		161	310		182
Total consolidated assets	\$	6,005	\$ 5,873	\$	5,804
Depreciation and amortization:					
United States	\$	148	\$ 166	\$	169
Canada		17	19		19
Depreciation and amortization for reportable segments	\$	165	\$ 185	\$	188
Other businesses and unallocated		45	49		53
Total consolidated depreciation and amortization	\$	210	\$ 234	\$	241
Additions to long-lived assets					
United States	\$	168	\$ 200	\$	187
Canada		9	7		8
Additions to long-lived assets for reportable segments	\$	177	\$ 207	\$	195
Other businesses and unallocated		72	39		67
Total consolidated additions to long-lived assets	\$	249	\$ 246	\$	262

Following are revenue and long-lived assets by geographic location (in millions of dollars):

	2019		2018	2017	
Revenue by geographic location:			 _		
United States	\$	8,865	\$ 8,613	\$	7,948
Canada		539	658		761
Other foreign countries		2,082	1,950		1,716
	\$	11,486	\$ 11,221	\$	10,425
Long-lived segment assets by geographic location:					
United States	\$	1,268	\$ 1,140	\$	1,098
Canada		152	136		199
Other foreign countries		327	202		247
	\$	1,747	\$ 1,478	\$	1,544

The Company is a broad-line distributor of MRO products and services. Products are regularly added and deleted from the Company's inventory. Accordingly, it would be impractical to provide sales information by product category due to the way the business is managed.

Unallocated amounts include corporate-level support and administrative expenses, corporate-level assets consisting primarily of cash, property, buildings and equipment and intersegment eliminations and other adjustments. Unallocated expenses and assets are not included in any reportable segment.

Assets for reportable segments include net accounts receivable and first-in, first-out inventory, which are reported to the Company's Chief Operating Decision Maker. Long-lived assets consist of property, buildings, equipment, capitalized software and ROU assets of \$223 million as of December 31, 2019.

Depreciation and amortization presented above includes depreciation of long-lived assets and amortization of capitalized software.

NOTE 15 - CONTINGENCIES AND LEGAL MATTERS

From time to time the Company is involved in various legal and administrative proceedings that are incidental to its business, including claims related to product liability, general negligence, contract disputes, environmental issues, unclaimed property, wage and hour laws, intellectual property, employment practices, regulatory compliance or other matters and actions brought by employees, consumers, competitors, suppliers, customers, governmental entities and other third parties. For example, beginning in the fourth quarter of 2019, Grainger has been named in several product liability-related lawsuits in the Harris County, Texas District Court relating to an explosion at a KMCO, LLC chemical refinery located in Harris County. The complaints seek recovery of compensatory and other damages and relief. Grainger is investigating the claims, which are at an early stage, and intends to contest these matters vigorously. Also, as a government contractor selling to federal, state and local governmental entities, the Company may be subject to governmental or regulatory inquiries or audits or other proceedings, including those related to contract administration or to pricing compliance. While the Company is unable to predict the outcome of any of these matters, it is not expected that the ultimate resolution of any of these matters will have, either individually or in the aggregate, a material adverse effect on the Company's consolidated financial position or results of operations.

From time to time, the Company has also been named, along with numerous other nonaffiliated companies, as a defendant in litigation in various states involving asbestos and/or silica. These lawsuits typically assert claims of personal injury arising from alleged exposure to asbestos and/or silica as a consequence of products manufactured by third parties purportedly distributed by the Company. While several lawsuits have been dismissed in the past based on the lack of product identification, if a specific product distributed by the Company is identified in any pending or future lawsuits, the Company will seek to exercise indemnification remedies against the product manufacturer to the extent available. In addition, the Company believes that a substantial number of these claims are covered by insurance. The Company has entered into agreements with its major insurance carriers relating to the scope and coverage and the costs of defense, of lawsuits involving claims of exposure to asbestos. The Company believes it has strong legal and factual defenses and intends to continue defending itself vigorously in these lawsuits. While the Company is unable

to predict the outcome of these proceedings, it believes that the ultimate resolution will not have, either individually or in the aggregate, a material adverse effect on the Company's consolidated financial position or results of operations.

NOTE 16 - SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

A summary of selected quarterly information for 2019 and 2018 is as follows (in millions of dollars, except for per share amounts):

				2019	9 Quarter Ende	ed		
	M	arch 31	June 30	Sep	tember 30	Dec	cember 31	Total
Net sales	\$	2,799	\$ 2,893	\$	2,947	\$	2,847	\$ 11,486
COGS		1,704	1,772		1,848		1,765	7,089
Gross profit		1,095	 1,121		1,099		1,082	 4,397
SG&A		732	741		761		901	3,135
Operating earnings		363	380		338		181	 1,262
Net earnings attributable to W.W. Grainger, Inc.	\$	253	\$ 260	\$	233	\$	103	\$ 849
Earnings per share - basic	\$	4.50	\$ 4.69	\$	4.27	\$	1.89	\$ 15.39
Earnings per share - diluted	\$	4.48	\$ 4.67	\$	4.25	\$	1.88	\$ 15.32
				2018	8 Quarter Ende	ed		
	M	arch 31	June 30	Sep	tember 30	Dec	cember 31	Total
Net sales	\$	2,766	\$ 2,861	\$	2,831	\$	2,763	\$ 11,221
COGS		1,674	1,750		1,752		1,697	6,873
Gross profit		1,092	 1,111		1,079		1,066	 4,348
SG&A		757	767		890		776	3,190
Operating earnings		335	344		189		290	1,158
Net earnings attributable to W.W. Grainger, Inc.	\$	232	\$ 237	\$	104	\$	209	\$ 782
Earnings per share - basic	\$	4.09	\$ 4.19	\$	1.84	\$	3.71	\$ 13.82
Earnings per share - diluted	\$	4.07	\$ 4.16	\$	1.82	\$	3.68	\$ 13.73

NOTE 17 - SUBSEQUENT EVENT

In February 2020, the Company entered into a five-year syndicated \$1.25 billion revolving credit facility (2020 Credit Facility). The 2020 Credit Facility is unsecured and repayable at maturity in February 2025, subject to two one-year extensions if sufficient lenders agree. This revolving credit facility replaced the Company's 2017 Credit Facility.

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.

DATE: February 20, 2020

W.W. GRAINGER, INC.

By: /s/ D.G. Macpherson

D.G. Macpherson

Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of Grainger on February 20, 2020, in the capacities indicated.

/s/ D.G. Macpherson	/s/ Brian P. Anderson
D.G. Macpherson	Brian P. Anderson
Chairman and Chief Executive Officer, Director	Director
(Principal Executive Officer)	
	/s/ V. Ann Hailey
/s/ Thomas B. Okray	V. Ann Hailey
Thomas B. Okray	Director
Senior Vice President	
and Chief Financial Officer	/s/ Neil S. Novich
(Principal Financial Officer)	Neil S. Novich
	Director
/s/ Eric R. Tapia	
Eric R. Tapia	/s/ E. Scott Santi
Vice President and Controller	E. Scott Santi
(Principal Accounting Officer)	Director
	/s/ Lucas E. Watson
	Lucas E. Watson
	Director

EXHIBIT INDEX (1)

EXHIBIT NO.	DESCRIPTION
2.1	Share Purchase Agreement, dated as of July 30, 2015, by and among Grainger, GWW UK Holdings Limited, Gregory Family Office Limited and Michael Gregory, incorporated by reference to Exhibit 2.1 to W.W. Grainger, Inc.'s Current Report on Form 8-K dated July 31, 2015.
3.1	Restated Articles of Incorporation, incorporated by reference to Exhibit 3(i) to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 1998.
3.2	By-laws, as amended on March 9, 2017, incorporated by reference to Exhibit 3.1.1 to W.W. Grainger, Inc.'s Current Report on Form 8-K dated March 9, 2017.
4.1	No instruments which define the rights of holders of W.W. Grainger, Inc.'s Industrial Development Revenue Bonds are filed herewith, pursuant to the exemption contained in Regulation S-K, Item 601(b)(4)(iii). W.W. Grainger, Inc. hereby agrees to furnish to the SEC, upon request, a copy of any such instrument.
<u>4.2</u>	Indenture, dated as of June 11, 2015, between W.W. Grainger, Inc. and U.S. Bank National Association, as trustee, incorporated by reference to Exhibit 4.1 to W.W. Grainger, Inc.'s Current Report on Form 8-K dated June 11, 2015.
4.3	First Supplemental Indenture, dated as of June 11, 2015, between W.W. Grainger, Inc. and U.S. Bank National Association, as trustee, and Form of 4.60% Senior Notes due 2045, incorporated by reference to Exhibit 4.2 to W.W. Grainger, Inc.'s Current Report on Form 8-K dated June 11, 2015.
4.4	Second Supplemental Indenture, dated as of May 16, 2016, between W.W. Grainger, Inc., and U.S. Bank National Association, as trustee, incorporated by reference to Exhibit 4.1 to W.W. Grainger, Inc.'s Current Report on Form 8-K dated May 16, 2016.
<u>4.5</u>	Third Supplemental Indenture, dated as of May 22, 2017, between W.W. Grainger, Inc., and U.S. Bank National Association, as trustee, incorporated by reference to Exhibit 4.1 to W.W. Grainger, Inc.'s Current Report on Form 8-K dated May 22, 2017.
<u>4.6</u>	Form of 3.75% Senior Notes due 2046 (included in Exhibit 4.4), incorporated by reference to Exhibit 4.2 to W.W. Grainger, Inc.'s Current Report on Form 8-K dated May 16, 2016.
<u>4.7</u>	Form of 4.20% Senior Notes due 2047 (included in Exhibit 4.5), incorporated by reference to Exhibit 4.2 to W.W. Grainger, Inc.'s Current Report on Form 8-K dated May 22, 2017.
<u>4.8</u>	Description of Registrant's Securities Pursuant to Section 12 of the Securities Exchange Act of 1934.
10.1	1990 Long-Term Stock Incentive Plan, as amended, incorporated by reference to Exhibit 10(a) to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2006.*
10.2	Form of Indemnification Agreement between W.W. Grainger, Inc. and each of its directors and certain of its executive officers, incorporated by reference to Exhibit 10(b)(i) to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2009.*
10.3	Frozen Executive Death Benefit Plan, as amended, incorporated by reference to Exhibit 10(b)(v) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007.*
<u>10.4</u>	First amendment to the Frozen Executive Death Benefit Plan, incorporated by reference to Exhibit 10(b)(v)(1) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008.*
<u>10.5</u>	Second amendment to the Frozen Executive Death Benefit Plan, incorporated by reference to Exhibit 10(b)(iv)(2) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009.*
<u>10.6</u>	Supplemental Profit Sharing Plan, as amended, incorporated by reference to Exhibit 10(viii) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2003.*
10.7	Supplemental Profit Sharing Plan II, as amended, incorporated by reference to Exhibit 10(b)(ix) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007.*
<u>10.8</u>	Voluntary Salary and Incentive Deferral Plan, as amended, incorporated by reference to Exhibit 10(b)(xi) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007.*
<u>10.9</u>	Summary Description of the 2019 Directors Compensation Program.*
<u>10.10</u>	2005 Incentive Plan, as amended, incorporated by reference to Exhibit 10(d) to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2006.*

10.11 2010 Incentive Plan, incorporated by reference to Exhibit B of W.W. Grainger, Inc.'s Proxy Statement dated March 12, 2010.* Form of Stock Option Award Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by 10.12 reference to Exhibit 10(b)(xvi) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, <u>10.13</u> Form of Stock Option Award and Restricted Stock Unit Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10(b)(xvii) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009.* Form of Restricted Stock Unit Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by 10.14 reference to Exhibit 10(b)(xviii) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010.* 10.15 Form of 2012 Performance Share Award Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10(b)(xix) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012,* 10.16 Summary Description of the 2020 Management Incentive Program.* Incentive Program Recoupment Agreement, incorporated by reference to Exhibit 10(b)(xxv) to W.W. Grainger, Inc.'s <u>10.17</u> Annual Report on Form 10-K for the year ended December 31, 2009.* 10.18 Form of Change in Control Employment Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10(b)(xxviii) to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2010.* Form of 2013 Performance Share Award Agreement between Grainger and certain of its executive officers, incorporated by 10.19 reference to Exhibit 10(b)(xxiii) to Grainger's Annual Report on Form 10-K for the year ended December 31, 2013.* 10.20 Form of 2014 Performance Share Award Agreement between W.W. Grainger, Inc. and certain of its executive officers. incorporated by reference to Exhibit 10(b)(xxiv) to Grainger's Annual Report on Form 10-K for the year ended December 31, 2014.* 10.21 Form of 2015 Performance Share Award Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10.28 to W.W. Grainger, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2015.* 10.22 W.W. Grainger, Inc. 2015 Incentive Plan, incorporated by reference to Exhibit B of W.W. Grainger, Inc.'s Proxy Statement dated March 13, 2015,* 10.23 First Amendment to the W.W. Grainger, Inc. 2015 Incentive Plan, incorporated by reference to 10.1 of W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the guarter ended March 31, 2017.* 10.24 W.W. Grainger, Inc. 2015 Incentive Plan as Amended and Restated Effective October 31, 2018, incorporated by reference to Exhibit 10.1 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the guarter ended September 30, 2018.* £180,000,000 Facilities Agreement, dated as of August 26, 2015, by and among GWW UK Holdings Ltd, W.W. Grainger, <u>10.25</u> Inc., the lender parties thereto, Lloyds Bank PLC and Lloyds Securities Inc., as Arrangers, and Lloyds Bank PLC, as Agent, incorporated by reference to W.W. Grainger, Inc.'s Current Report on Form 8-K dated September 1, 2015. Form of Stock Option Award Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by 10.26 reference to Exhibit 10.1 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the guarter ended June 30, 2016.* 10.27 Form of Restricted Stock Unit Award Agreement between W.W. Grainger, Inc. and certain of its executive officers. incorporated by reference to Exhibit 10.2 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the guarter ended June 30, 2016,* Form of 2016 Performance Share Award Agreement between W.W. Grainger, Inc. and certain of its executive officers, 10.28 incorporated by reference to Exhibit 10.3 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the guarter ended June 30, 2016.* Form of Stock Option Award Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by <u>10.29</u> reference to Exhibit 10.2 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.* 10.30 Form of Restricted Stock Unit Award Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10.3 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the guarter ended March 31, 2017.* Form of 2017 Performance Share Award Agreement between W.W. Grainger, Inc. and certain of its executive officers, 10.31 incorporated by reference to Exhibit 10.4 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the guarter ended March 31, 2017.* 10.32 Separation Agreement and General Release by and between W.W. Grainger, Inc. and Ronald L. Jadin dated April 2, 2018, incorporated by reference to Exhibit 10.1 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the guarter ended

March 31, 2018.*

10.33	Form of Separation Agreement and General Release by and between W.W. Grainger, Inc. and Joseph C. High, incorporated by reference to Exhibit 10.2 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.*
10.34	Form of 2018 W.W. Grainger, Inc. 2015 Incentive Plan Stock Option Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10.3 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.*
10.35	Form of 2018 W.W. Grainger, Inc. 2015 Incentive Plan Restricted Stock Unit Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10.4 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.*
10.36	Form of 2018 W.W. Grainger, Inc. 2015 Incentive Plan Performance Restricted Stock Unit Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10.5 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.*
10.37	Form of 2019 W.W. Grainger, Inc. 2015 Stock Incentive Plan Stock Option Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10.1 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2019.*
10.38	Form of 2019 W.W. Grainger, Inc. 2015 Stock Incentive Plan Restricted Stock Unit Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10.2 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2019.*
10.39	Form of 2019 W.W. Grainger, Inc. 2015 Stock Incentive Plan Performance Restricted Stock Unit Agreement between W.W. Grainger, Inc. and certain of its executive officers, incorporated by reference to Exhibit 10.3 to W.W. Grainger, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2019.*
10.40	Credit Agreement dated as of February 14, 2020, by and among W.W. Grainger, Inc., the lenders party thereto, and JPMorgan Chase Bank, N.A., as Administrative Agent, incorporated by reference to Exhibit 10.1 to W.W. Grainger, Inc.'s Current Report on Form 8-K dated February 14, 2020.
<u>21</u>	Subsidiaries of Grainger.
<u>23</u>	Consent of Independent Registered Public Accounting Firm.
<u>31.1</u>	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
<u>31.2</u>	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
<u>32</u>	Certification of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document - the instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101).

^(*) Management contract or compensatory plan or arrangement.

⁽¹⁾ Certain instruments defining the rights of holders of long-term debt securities of the Registrant are omitted pursuant to Item 601(b)(4)(iii) of Regulation S-K. The Registrant hereby undertakes to furnish to the SEC, upon request, copies of any such instruments.

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of December 31, 2019, W.W. Grainger, Inc. has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (Exchange Act), being its common shares.

Description of Common Stock

The following description of our common stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Restated Articles of Incorporation (Articles of Incorporation) and our By-Laws (By-Laws), each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.[8] is a part. We encourage you to read our Articles of Incorporation, our By-Laws and the applicable provisions of the Illinois Business Corporation Act of 1983, as amended (IBCA) for additional information.

Authorized Capital Shares

Our authorized shares of stock consist of 300,000,000 shares of common stock, \$0.50 par value per share (Common Stock), and 12,000,000 shares of preferred stock, \$5.00 par value per share (Preferred Stock). Each outstanding share of Common Stock is fully paid and nonassessable. As of December 31, 2019, 55,786,008 shares of Common Stock were issued and outstanding. As of December 31, 2019, no shares of Preferred Stock were issued and outstanding.

Voting Rights

As required under Illinois law, majority voting and cumulative voting apply to all elections of Grainger's Board of Directors. Under cumulative voting, stockholders have the right to cumulate their votes in the election of Directors, meaning stockholders have a number of votes in the election equal to the number of shares owned multiplied by the number of Directors being elected. Each stockholder is entitled to one vote for each share of Common Stock held on all other matters submitted to a vote of stockholders.

Dividend Rights

Subject to preferences that may apply to shares of Preferred Stock outstanding at the time, the holders of our Common Stock are entitled to receive dividends when and as declared by the Board of Directors in accordance with Illinois law.

Liquidation Rights

Upon the occurrence of a liquidation, dissolution or winding-up, the holders of our Common Stock would be entitled to share ratably in the distribution of all of our assets remaining available for distribution after satisfaction of all our liabilities and the payment of the liquidation preference of any outstanding Preferred Stock.

Certain Anti-Takeover Effects

Grainger is subject to the provisions of Section 11.75 of the IBCA. Section 11.75 prohibits a publicly held Illinois corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes mergers,

asset sales and other transactions resulting in a financial benefit to the interested stockholder. Subject to specified exceptions, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years did own, 15% or more of the corporation's voting stock.

Other Rights and Preferences

Our Common Stock is not entitled to preemptive rights and is not subject to conversion or redemption.

Exchange Listing

Our Common Stock is traded on the New York Stock Exchange under the trading symbol "GWW."

Transfer Agent

The transfer agent and registrar for Grainger's Common Stock is Computershare Trust Company, N.A., P.O. Box 505008, Louisville, Kentucky, 40233-9814.

Summary Description of the 2019 Directors Compensation Program

Members of the Company's Board of Directors who are not Company employees receive an annual retainer of \$100,000, which is intended to cover all regularly scheduled meetings of the Board and its committees.

The Chairs of Board committees receive additional annual retainers. For the Chair of the Audit Committee, the retainer is \$20,000; for the Chair of the Board Affairs and Nominating Committee, the retainer is \$10,000; and for the Chair of the Compensation Committee, the retainer is \$15,000. The retainer for the Lead Director is \$25,000.

All independent directors also receive an annual deferred stock unit grant. The number of shares covered by each grant is equal to \$145,000 (based on the 20-day average stock price as of January 31, in the year of the grant, a methodology consistent with the calculation for other executive equity awards), rounded up to the next ten-share increment. The deferred stock units are settled upon termination of service as a director. Directors may also defer their annual retainers, committee chair retainers, and meeting fees in a deferred stock unit account.

A director who is an employee of Grainger or any Grainger subsidiary does not receive any retainer fees for Board or Board committee service, Board or Board committee meeting attendance fees, or stock options or stock units under the Director Stock Plan.

Stock ownership guidelines applicable to non-employee directors were established in 1998. These guidelines provide that within five years after election, a director must own Grainger common stock and common stock equivalents having a value of at least five times the annual retainer fee for serving on the Board

SUMMARY DESCRIPTION OF THE 2020 COMPANY MANAGEMENT INCENTIVE PROGRAM

I. Introduction

The 2020 Company Management Incentive Program (CMIP) is designed to provide an incentive cash compensation opportunity to the CEO of W.W. Grainger, Inc. (Company) and the CEO's direct reports (individually, a participant, and collectively, the participants) based upon two key factors that drive improvements in shareholder value: Return on Invested Capital (ROIC) and Sales Growth.

II. Objectives

The CMIP is designed to:

- Encourage decision-making focused on growing the business profitably and efficiently, thus leading to improvements in shareholder value;
- Influence participants to make decisions consistent with shareholders' interests;
- Align participant actions with relevant Company objectives; and,
- Attract and retain the talent required to achieve the Company's objectives.

III. Eligibility

Eligibility for participation in the CMIP is limited to the Company's CEO and the CEO's direct reports. Criteria for selection as a participant are external market practice, impact of the role, and internal practice. Participation in the CMIP is subject to the eligibility provisions in Section B of the attached Terms and Conditions.

IV. Performance Measures

Shareholder value will improve most dramatically if the Company can achieve these goals simultaneously:

- 1. Produce a favorable rate of ROIC; and
- 2. Grow the business rapidly.

Incentive cash compensation earned by participants under the 2020 Company MIP will be based on the Company's achievement of ROIC and Sales Growth targets, as follows:

% Payout = ROIC Component + Sales Growth Component The maximum award is capped at 200% of target.

ROIC Component

ROIC is defined as the Company's operating earnings divided by the Company's net working assets:

ROIC = Operating Earnings
Net Working Assets

The ROIC component will range from 0% to 100% of a participant's total target incentive. Payouts will occur as follows:

Adjusted ROIC	Payout as a Percent of Target
< 14.3%	0%
28.1%	40%
29.5% to 29.8%	50%
31.3%	60%
45.1%	100%

Amounts will be interpolated as necessary.

Sales Growth Component

Sales Growth is defined as the Company's year-over-year performance:

The Sales Growth component is added to the ROIC results and will be determined as follows:

Daily Sales Growth	Payout as a Percent of Target
< -10.6%	0%
3.2%	40%
4.5% to 4.9%	50%
6.0%	60%
19.8%	100%

Amounts will be interpolated as necessary.

The calculation of ROIC and Sales Growth will exclude the effect of any mergers, acquisitions or divestitures with a closing date or acquisition/divestiture date that occurs during the same fiscal year. In other words, the impact of any merger, acquisition, or divestiture on sales growth, operating earnings and net working assets will be excluded when calculating the Company's achievement of the performance measures.

The Compensation Committee of the Board (CCOB) retains discretion to modify the payout formula based on windfalls and shortfalls.

V. Target Award

Also known as the target incentive, the target awards for each participant are stated as a percentage of the participant's Base Salary or a target value (expressed as fixed dollar amount). Target awards follow competitive market practice and internal considerations, and are determined in the sole discretion of the CCOB.

VI. Determination of Payment Amounts

The following process is used to determine the payment amount for each participant.

Step 1: Corporate Finance determines the performance results for the ROIC Component and the resultant performance to goal, and computes the appropriate percentage of Target Incentive earned.

Step 2: Corporate Finance determines the performance results for the Sales Growth Component and the resultant performance to goal, and computes the appropriate percentage of Target Incentive earned.

Step 3: Corporate Finance calculates the MIP Payout Amount.

Total % Payout = ROIC Component + Sales Growth Component

Step 4: Corporate Compensation calculates each participant's incentive award earned as follows:

Incentive Earned = Base Salary (as of December 31, 2020) x Target Incentive % x Total % Payout

Participants holding incentive-eligible jobs for part of the year will earn an adjusted award based on the eligibility provisions of the Terms and Conditions.

Step 5: The Compensation Committee of Management (CCOM) and the CCOB review and approve final incentive amounts for each participant.

Step 6: Corporate Compensation is responsible for setting communication standards for the final incentive amounts earned by each participant and the payment dates.

TERMS AND CONDITIONS OF THE 2020 COMPANY MANAGEMENT INCENTIVE PROGRAM (CMIP)

A. Program Year

The CMIP covers the period from January 1, 2020 to December 31, 2020.

B. Eligibility Provisions

Specific eligibility provisions are developed and reviewed annually. Eligibility provisions for Participants on active payroll are as follows:

- 1. Full-Year Participation Participants who were in incentive-eligible jobs for the full year will be eligible to receive a full award under the MIP, except as noted below.
- 2. First-Year Participation (internal promotion or external hire) Participants who are placed into an incentive eligible job on or before December 1 will be eligible to receive a pro-rata award based on the number of months in the eligible job. Participants placed in an eligible job after December 1 are not eligible to participate for that year.
- 3. Changes in Target MIP Percentage Participants whose target MIP percentage changes during the year due to promotion, demotion or reclassification of the current job will receive an award pro-rated based on the number of months at each MIP level.
- 4. Transfer to Another Incentive Program A Participant who changes jobs during the year such that the former and current jobs participate in different incentive programs will receive an award pro-rated based on the number of months in each eligible job.
- 5. Transfer to a Non-Incentive Eligible Job A Participant in an incentive-eligible job who transfers to a non-incentive-eligible job will receive a pro-rata award for the number of months in an eligible job. Payment will be made on the next incentive payment date.

Job Elimination or Downgrade - In the sole discretion of the CCOM, if a Participant's job is eliminated for business reasons or is downgraded and the Participant's new job is non-incentive eligible, a pro-rata award for the current year will be made on the next incentive payment date, regardless of the effective date of the job elimination or downgrade. In the event the Participant

does not continue Employment, any award for the current year will be made on the next incentive payment date. The salary used in the calculations will be the Participant's base salary as of the Participant's last day of Employment.

- 6. Voluntary Resignation If a Participant's resignation date is before December 31, no award will be paid for the current year. Subject to paragraphs 8 and 10 below, if a Participant's resignation date is after December 31 and the Participant was in an eligible job on December 1 of that year, the Participant will be deemed to have earned that year's payment, if any. The Participant will receive a prorata payment based on the number of months in an incentive-eligible job that year on the next incentive payment date.
- 7. Death, Retirement or Long-term Disability A pro-rata award will be made for the current year to the Participant or his/her estate on the next incentive payment date. The salary used in the calculations will be the base salary as of their last day worked.
- 8. Pro-rata Calculation Participation in CMIP will be calculated in whole months with the 14th calendar day of the month as the cutoff. For example, if a Participant is in the job on the 14th day of the month, they will get credit for the whole month, if they are in the job on the 15th, they will get credit beginning the next month (e.g., transfer into an eligible job on January 15th February 14th will get 11/12th MIP).
- 9. Eligible Employees must be in good standing, as determined in the sole discretion of the CCOM, to be eligible for participation in the CMIP. Good standing includes not currently being on a performance improvement program.

C. Termination of Employment; Engaging in Misconduct; Excess Payments; Restatement of Inaccurate Financial Results; Indemnification

- 1. If (a) the Participant's Employment is terminated by the Employer for whatever reason (other than by reason of job elimination), (b) the Employer does not renew an employment contract with a Participant, or (c) the Participant Engaged in Misconduct, or is believed to have Engaged in Misconduct, all awards will be forfeited.
- 2. If a Participant Engaged in Misconduct or is believed to have Engaged in Misconduct, the Company shall be entitled to recover from the Participant, and Participant shall re-pay any cash sum received pursuant to the CMIP, in whole or in part, for any period of time, as the Company deems appropriate under the circumstances. Further, if the Participant (or former Participant) receives any amount in excess of what the Participant (or former Participant) should have received under the terms of the CMIP for any reason (including, without limitation, by reason of a mistake in calculations or administrative error), all as determined by the CCOM in its discretion, then the Company shall have the right to cancel the award, require the repayment of any excess cash distribution acquired pursuant to, or received in connection with, the CMIP or take any other action it deems appropriate under the circumstances with respect to recouping the excess payment.
- 3. The Company shall have the discretion to recover awards that were paid or settled to the Participant at a time when she or he was an employee in the following instances:
 - a. If the payment or settlement of awards would have been lower had the achievement of applicable financial performance goals been calculated based on such restated financial results, if the Participant Engaged in Misconduct; and/or
 - b. In the case of materially inaccurate financial results, whether or not they result in a

restatement, and whether or not the Participant has Engaged in Misconduct; and/or

c. For any reason (including, without limitation, by reason of a mistake in calculations or administrative error), all as determined by the CCOM in its discretion.

Except in circumstances where a Participant has Engaged in Misconduct, awards received or settled more than three years after the date of the initial filing with the U.S. Securities & Exchange Commission that contained the incorrect financial results shall not be subject to recovery under this Section C.3.

- 4. The rights and obligations of each Participant under the terms and conditions of his/her Employment shall be unaffected by his/her participation in the CMIP or any right he/she may have with the Company to participate in the CMIP. A Participant who participates in the CMIP waives any and all rights to compensation or damages in consequence of the termination of his/her Employment for any reason insofar as those rights arise or may arise from his/her forfeiture of an award under the CMIP as a result of such termination or from the loss or diminution in value of rights or entitlements he/she may have under the CMIP. If necessary, a Participant's terms of Employment shall be varied accordingly.
- 5. The exercise of the Company of its rights under this Section C shall not constitute the recovery of liquidated damages, nor shall the exercise of such rights be deemed its exclusive remedies, but shall be in addition to all other rights available at law or in equity. The Participant expressly agrees to indemnify and hold the Company and the Participant's Employer harmless from any loss, cost, damage, or expense (including attorneys' fees) that the Company or the Employer may incur as a result of the Participant's actions or in the Company's and/or the Employer's efforts to recover such previously made payments or value pursuant to this Section C.

D. Administration and Oversight of the CMIP

The governance of the CMIP is the responsibility of the CCOM subject to the review and approval of the CCOB. The CCOM shall have the sole and complete authority and discretion to interpret the CMIP, determine all questions relating to it, and to modify its provisions. All determinations, interpretations or other actions made or taken by the CCOM in connection with the CMIP shall be final and conclusive for all purposes and upon all persons.

The administration of the CMIP, including the calculation of payments, is the responsibility of the Company's Vice President, Controller, Treasurer and the Company's Vice President, Total Rewards.

E. Payment

Payment under the CMIP will be made annually on or before March 15 for the prior year's results unless country-specific regulations require otherwise. Payment will be made by the Employer in local currency or equivalent, less applicable withholding taxes and other amounts required to be withheld.

Notwithstanding anything herein to the contrary, payment of all or part of awards under this Program that are subject to or otherwise result in disallowance as deductions for employee remuneration under Section 162(m) of the Internal Revenue Code of 1986, as amended, shall be deferred as and to the extent provided by the Board of Directors or the CCOB.

F. Right of Continued Employment

Participation in the CMIP is not a guarantee of continuing Employment or of continued participation in the CMIP in any subsequent year.

G. Amendment or Termination of CMIP

The CCOB may from time to time recommend to the CCOM that the Company amend, change or terminate the CMIP at any time and may approve any material amendments to the CMIP. The Company also reserves the right to amend these Terms and Conditions or the CMIP at any time and from time to time, with or without prior notice; provided, that no amendment shall, without the consent of the Participant, operate to affect adversely any payment.

H. Definitions

Base Salary is defined as the locally relevant rate of pay used to determine a MIP award;

CCOB is the Compensation Committee of the Board, the body that has oversight responsibility for the CMIP;

CCOM is Compensation Committee of Management, the body that has authority to govern and administer the CMIP;

CMIP is the 2020 Company Management Incentive Program, as governed by these Terms and Conditions;

Company is W.W. Grainger, Inc.;

Eligible Employee is the Company's CEO and each employee of the Company or its subsidiaries that directly reports to the Company's CEO;

Employer is the Company or the local subsidiary of the Company that employs the Participant;

Employment is a Participant's employment with the Employer in accordance with the terms and conditions of their employment contract, if any, in business units where applicable;

Engaged in Misconduct means a Participant:

- (i) has breached any contract or agreement with the Employer;
- (ii) has made any unauthorized disclosure of any of the trade secrets or confidential information of Employer;
- (iii) has committed an act of embezzlement, fraud or theft with respect to the property of Employer;
- (iv) has engaged in conduct which violates the company's Business Conduct Guidelines, employee handbook, or any anti-corruption or bribery law (whether involving government officials or otherwise);
- (v) has deliberately disregarded the rules of the Employer in such a manner as to cause any loss, damage or injury to, or otherwise endanger the property, reputation or employees of the Employer;
- (vi) induced any employee, supplier, customer, agent or contractor of Employer or any other individual to take any action described in (i)-(v) above;
- (vii) intends to take any action described in (i)-(vi) above; or
- (viii) has taken any other action that the CCOM in its discretion determines to be detrimental;

Participant is each Eligible Employee who has been designated by the CCOB to participate in the CMIP;

Retirement is defined based on the payroll from which a Participant is paid. In the United States, the definition

is the same as W.W. Grainger, Inc. Employees Profit Sharing Plan;

Target Award is the amount of the incentive before any performance criteria increase or decrease the award;

Termination Date is the date a Participant ceases Employment howsoever caused;

Terms and Conditions are these Terms and Conditions as amended from time to time.

W.W. GRAINGER, INC.

Subsidiaries and Affiliated Companies (as of December 31, 2019)

Subsidiaries (over 50% ownership)

Subsidiary	Jurisdiction
2422626 Ontario Inc.	Ontario
971086 Ontario Inc.	Ontario
Acklands - Grainger Inc.	Canada
Apex Industrial Limited	Scotland
Ashlink Software Limited	England & Wales
Blackrock Tools Inc.	Ontario
BMF Finance B.V.	Netherlands
BMF Fundco B.V.	Netherlands
BMF Management Services B.V.	Netherlands
BMFGH Holding B.V.	Netherlands
Bogle and Timms Limited	England & Wales
Borstlap International B.V.	Netherlands
CJ Bent & Son Limited	England & Wales
Combori N.V.	Belgium
Cromwell Bearings and Transmission Services Limited	England & Wales
Cromwell Czech Republic s.r.o.	Czech Republic
Cromwell France SAS	France
Cromwell Group (Holdings) Limited	England & Wales
Cromwell Group (International) Limited	England & Wales
Cromwell Industrial Supplies Private Limited	India
Cromwell Logistics Limited	England & Wales
Cromwell Poland sp. z.o.o.	Poland
Cromwell Tools (Norwich) Limited	England & Wales
Cromwell Tools (Rochester) Limited	England & Wales
Cromwell Tools (Shanghai) Co. Ltd.	People's Republic of China
Cromwell Tools (Thailand) Co. Ltd.	Thailand
Cromwell Tools Limited	England & Wales
Cromwell Tools SDN BHD	Malaysia
Cromwell Tools SRL	Romania
Cromwell-Siddle (Grimsby) Limited	England & Wales
Dayton Electric Manufacturing Co.	Illinois
E & R Industrial Sales, Inc.	Michigan
E&R Tooling and Solutions de Mexico, S. de R.L. de C.V.	Mexico
East Midlands Property Developments Limited	England & Wales
Fabory Asia B.V.	Netherlands
Fabory Canada Inc.	Canada
Fabory Centres Belgium N.V.	Belgium
Fabory CZ Holding s.r.o.	Czech Republic
Fabory France S.A.	France
Fabory Kötoelem Kereskedelmi KFT	Hungary

Fabory Masters in Fasteners Group B.V. Netherlands Fabory Nederland B.V. Netherlands Fabory Overseas Holding B.V. Netherlands Fabory Poland Sp. z.o.o. Poland Portugal Fabory Portugal Lda. Fabory Shanghai Co. Ltd. People's Republic of China Fabory Slovakia s.r.o. Slovakia Fabory Spain S.L. Spain Fabory SRL Romania Fabory UK Holdings Limited England & Wales Fabory UK Limited England & Wales FEC Distribution Specialties Inc. Ontario FFSA S.A. France People's Republic of China Fixbolt (Suhzou) Co., Ltd. Taicang Gamut Supply LLC Delaware GHC Specialty Brands, LLC Wisconsin GMMI LLC Delaware Grainger Asia Pacific K.K. Japan Grainger Brasil Comércio e Distribuição Ltda. Brazil Brazil Grainger Brasil Participações Ltda. Grainger Canada Holdings ULC Alberta Grainger Caribe, Inc. Illinois People's Republic of China Grainger China LLC Grainger Colombia Holding Company, LLC Delaware Grainger Colombia S.A.S. Colombia Grainger Dominicana SRL Dominican Republic Grainger Global Holdings, Inc. Delaware England and Wales Grainger Global Online Business Ltd Grainger Global Trading (Shanghai) Company Limited People's Republic of China Grainger Guam L.L.C. Guam Grainger Industrial Supply India Private Limited India Grainger International Holdings B.V. Netherlands Grainger International, Inc. Illinois Grainger Management LLC Illinois Grainger Mexico LLC Delaware Grainger Panama S.A. Panama Grainger Panama Services S. de R.L. Panama Illinois Grainger Procurement Company LLC Delaware Grainger Registry Services, LLC Grainger Service Holding Company, Inc. Delaware Grainger Services International Inc. Illinois Grainger Singapore Pte. Ltd. Singapore Grainger, S.A. de C.V. Mexico GWW Investments C.V. Netherlands GWW UK Holdings Ltd. England and Wales Imperial Supplies Holdings, Inc. Delaware Imperial Supplies LLC Delaware

Inbema N.V.

Curação Netherlands Antilles

India Pacific Brands Mauritius Industrial Supply Alliance Limited England & Wales John Smallman Limited England & Wales JSL Bearbreak Limited England & Wales Krusters 2000 Inc. Ontario LN Participações Ltda. Brazil Merlin Business Software Limited England & Wales MonotaRO Co., Ltd. Japan Mountain Ventures WWG IV, LLC Delaware

Mountain Ventures WWG IV, LLCDelawareMountain Ventures WWG V, LLCDelawareMountain Ventures WWG, LLCDelawareMRO Soluciones, S.A. de C.V.Mexico

NAVIMRO Co., Ltd. Republic of Korea (South Korea)

Norwell Engineering Limited England & Wales
PT Cromwell Tools Indonesia
PT MonotaRO Indonesia Indonesia
Safety Registry Services, LLC Delaware
Safety Solutions, Inc. Ohio

Technical Tooling Limited

The Kennedy Group Limited

Tooling & Engineering Distributors (TED) Limited

England & Wales

Ireland

Turners (Ironmongers) Limited England & Wales
Valentine Tools Limited England & Wales
WFS (USA) Ltd. South Carolina
WFS Enterprises Inc. Ontario
WFS Holding Company, Inc. Michigan

WFS Ltd. Ontario
Windsor Factory Supply Inc. Michigan
WWG de Mexico, S.A. de C.V. Mexico
WWG International Finance C.V. Netherlands
WWG Servicios, S.A. de C.V. Mexico
WWGH LLC Delaware

Zoro Shanghai People's Republic of China

Zoro Tools Europe GmbH Germany
Zoro Tools, Inc. Delaware
Zoro UK Limited England & Wales

Subsidiaries (50% and less ownership)

Zoro IP Holdings, LLC

Subsidiary Jurisdiction

Sterling Fabory India Private Ltd. (50%)

India

Illinois

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-3 No. 333-203444) of W. W. Grainger, Inc.
- (2) Registration Statement (Form S-4 No. 33-32091 and Post-Effective Amendment No.1) of W. W. Grainger, Inc.

- (3) Registration Statement (Form S-8 No. 33-43902) pertaining to the 1990 Long Term Stock Incentive Plan of W. W. Grainger, Inc.
- (4) Registration Statement (Form S-8 No. 333-166345) pertaining to the 2010 Incentive Plan of W. W. Grainger Inc.
- (5) Registration Statement (Form S-8 No. 333-203715) pertaining to the 2015 Incentive Plan of W. W. Grainger, Inc.

of our reports dated February 20, 2020, with respect to the consolidated financial statements of W. W. Grainger, Inc. and the effectiveness of internal control over financial reporting of W.W. Grainger, Inc. included in this Annual Report on Form 10-K of W. W. Grainger, Inc. for the year ended December 31, 2019.

/s/ Ernst & Young LLP Chicago, Illinois February 20, 2020

I, D.G. Macpherson, certify that:

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

Date: February 20, 2020

By: /s/ D.G. Macpherson

Name: D.G. Macpherson

Title: Chairman and Chief Executive Officer

I, Thomas B. Okray, certify that:

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

Date: February 20, 2020

By: /s/ Thomas B. Okray

Name: Thomas B. Okray

Title: Senior Vice President and Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of W.W. Grainger, Inc. ("Grainger") for the annual period ended December 31, 2019, (the "Report"), D.G. Macpherson, as Chairman and Chief Executive Officer of Grainger, and Thomas B. Okray, as Senior Vice President and Chief Financial Officer of Grainger, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ D.G. Macpherson

D.G. Macpherson Chairman and Chief Executive Officer February 20, 2020

/s/ Thomas B. Okray

Thomas B. Okray Senior Vice President and Chief Financial Officer February 20, 2020