Univar Inc.
Form 10-K
February 21, 2019
Table of Contents

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

Form 10-K

ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018
or
¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission File Number 001-37443

Univar Inc.
(Exact name of registrant as specified in its charter)

Delaware	26-1251958
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

3075 Highland Parkway, Suite 200 Downers Grove, Illinois	60515
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (331) 777-6000

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

Title of each class	Name of each exchange on which registered
Common Stock ($0.01 par value)	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ý No ¨
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ¨ No ý
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No ¨
Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ý No ¨
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ¨
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.
Large accelerated filer ý Accelerated filer ¨ Non-accelerated filer ¨ Smaller reporting company ¨ ¨

Emerging growth company

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

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

Aggregate market value of common stock held by non-affiliates of registrant on June 29, 2018: $3.4 billion (see Item 12, under Part III hereof), based on a closing price of registrant's Common Stock of $26.24 per share.

At February 12, 2019, 141,732,317 shares of the registrant's common stock, $0.01 par value, were outstanding.

Documents Incorporated by Reference

Certain portions of the registrant's Proxy Statement for the Annual Meeting of Stockholders to be held May 8, 2019 and to be filed within 120 days after the registrant's fiscal year ended December 31, 2018 (hereinafter referred to as "Proxy Statement") are incorporated by reference into Part III.

Table of Contents

Univar Inc.
Form 10-K
TABLE OF CONTENTS

Part I		Page
Item 1.	Business	5
Item 1A.	Risk Factors	21
Item 1B.	Unresolved Staff Comments	40
Item 2.	Properties	40
Item 3.	Legal Proceedings	41
Item 4.	Mine Safety Disclosures	41
Part II		
Item 5.	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	42
Item 6.	Selected Financial Data	43
Item 7.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	45
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	69
Item 8.	Financial Statements and Supplementary Data	72
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	126
Item 9A.	Controls and Procedures	126
Item 9B.	Other information	127
Part III		
Item 10.	Directors, Executive Officers and Corporate Governance	127
Item 11.	Executive Compensation	127
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	127
Item 13.	Certain Relationships and Related Transactions, and Director Independence	127
Item 14.	Principal Accounting Fees and Services	127
Part IV		
Item 15.	Exhibits	128
Item 16.	Form 10-K Summary	134
Signatures		134

Table of Contents

SUPPLEMENTAL INFORMATION

Unless the context otherwise indicates or requires, as used in this Annual Report on Form 10-K, (i) the terms “we,” “our,” “us,” “Univar” and the “Company,” refer to Univar Inc. and its consolidated subsidiaries, and (ii) the term “issuer” refers to Univar Inc. exclusive of its subsidiaries.

Our fiscal year ends on December 31, and references to “fiscal” when used in reference to any twelve month period ended December 31, refer to our fiscal years ended December 31.

The term “GAAP” refers to accounting principles generally accepted in the United States of America.

Forward-looking statements and information

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities litigation Reform Act of 1995. Some of the forward-looking statements can be identified by the use of forward-looking terms such as “believes,” “expects,” “may,” “will,” “should,” “could,” “seeks,” “intends,” “plans,” “estimates, or other comparable terms. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this Annual Report on Form 10-K and include statements regarding our intentions, beliefs or current expectations concerning, among other things, our results of operations, financial condition, capital commitments, macro-economic conditions, liquidity, prospects, business trends, currency trends, competition, markets, growth strategies and the industries in which we operate and including, without limitation, statements relating to our estimated or anticipated financial performance or results. Forward-looking statements are subject to known and unknown risks and uncertainties, many of which may be beyond our control. We caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industries in which we operate may differ materially from those made in or suggested by the forward-looking statements contained in this Annual Report on Form 10-K. In addition, even if our results of operations, financial condition and liquidity, and the development of the industries in which we operate are consistent with the forward-looking statements contained in this Annual Report on Form 10-K, those results or developments may not be indicative of results, conditions or developments in subsequent periods. A number of important factors could cause actual results to differ materially from those contained in or implied by the forward-looking statements, including those reflected in forward-looking statements relating to our operations and business and the risks and uncertainties discussed in “Risk Factors.” Factors that could cause actual results to differ from those reflected in forward-looking statements relating to our operations and business include:

- general economic conditions, particularly fluctuations in industrial production and the demands of our customers;
- disruptions in the supply of chemicals we distribute or our customers’ or producers’ operations;
- termination or change of contracts or relationships with customers or producers on short notice;
- the price and availability of chemicals, or a decline in the demand for chemicals;
- our ability to pass through cost increases to our customers;
- our ability to meet customer demand for a product;
- trends in oil and gas prices;
- competitive pressures in the chemical distribution industry;
- consolidation of our competitors;
- our ability to execute strategic investments, including pursuing acquisitions and/or dispositions, and successfully integrating and operating acquired companies;
- liabilities associated with acquisitions, dispositions and ventures;
- potential impairment of goodwill;
- inability to generate sufficient working capital;
- our ability to sustain profitability;
- our ability to implement and efficiently operate the systems needed to manage our operations;
- the risks associated with security threats, including cybersecurity threats;
- increases in transportation costs and changes in our relationship with third party carriers;
- the risks associated with hazardous materials and related activities;

3

Table of Contents

- accidents, safety failures, environmental damage, product quality issues, major or systemic delivery failures involving our distribution network or the products we carry or adverse health effects or other harm related to the materials we blend, manage, handle, store, sell or transport;
- challenges associated with international operations, including securing producers and personnel, import/export requirements, compliance with foreign laws and international business laws and changes in economic or political conditions;
- our ability to effectively implement our strategies or achieve our business goals;
- exposure to interest rate and currency fluctuations;
- evolving laws and regulations relating to hydraulic fracturing and risks associated with chemicals used in hydraulic fracturing;
- losses due to potential product liability claims and recalls and asbestos claims;
- compliance with extensive environmental, health and safety laws, including laws relating to our environmental services businesses and the investigation and remediation of contamination, that could require material expenditures or changes in our operations;
- general regulatory and tax requirements;
- operational risks for which we may not be adequately insured;
- ongoing litigation and other legal and regulatory actions and risks, including asbestos claims;
- loss of key personnel;
- labor disruptions and other costs associated with the unionized portion of our workforce;
- negative developments affecting our pension plans and multi-employer pensions;
- changes in legislation, regulation and government policy; and
- our substantial indebtedness and the restrictions imposed by our debt instruments and indenture.

All forward-looking statements made in this Annual Report on Form 10-K are qualified by these cautionary statements. These forward-looking statements are made only as of the date of this Annual Report on Form 10-K and we do not undertake any obligation, other than as may be required by law, to update or revise any forward-looking or cautionary statements to reflect changes in assumptions, the occurrence of events, unanticipated or otherwise and changes in future operating results over time or otherwise.

Comparisons of results between current and prior periods are not intended to express any future trends, or indications of future performance, unless expressed as such, and should only be viewed as historical data.

Table of Contents

PART I

ITEM 1. BUSINESS

Our Company

We are a leading global chemical and ingredients distributor and provider of specialty services. We purchase chemicals from thousands of chemical producers worldwide and warehouse, repackage, blend, dilute, transport and sell those chemicals to more than 100,000 customer locations across approximately 130 countries. Our specialized services include e-commerce and digital marketing of chemicals for our producers, chemical waste removal and ancillary services, on-site storage of chemicals for our customers, and support services for the agricultural and pest control industries. We derive competitive advantage from our scale, broad product offering, leading digital solutions, technical expertise, specialized services, long-standing relationships with leading chemical producers and our industry leading safety record.

The global chemical distribution industry is large and fragmented with thousands of distributors but represents a relatively small portion of the total chemical industry. While the total chemical industry is projected to grow at rates about equal to the growth of the gross national product of countries we operate in around the world, the distributed chemicals portion of the market is projected to grow faster as producers and customers increasingly realize the benefits of outsourcing. Chemical producers rely on us to warehouse, repackage, transport and sell their products as a way to expand their market access, enhance their geographic reach, lower their costs and grow their business. Customers who purchase products and services from us benefit from a lower total cost of ownership, as they are able to simplify their chemical sourcing process and outsource functions to us such as just-in-time availability of the right product, packaging, mixing, blending and technical expertise. They also rely on us for safe delivery and off-loading of chemicals that is fully compliant with increasing local and federal regulations.

In the year ended December 31, 2018, we generated $8.6 billion in net sales, net income of $172.3 million and $640.4 million in Adjusted EBITDA. For a reconciliation of Adjusted EBITDA to net income (loss), see “Selected Financial Data” in Item 6 of this Annual Report on Form 10-K.

The following charts illustrate the geographical and end market diversity of our 2018 net sales:

Table of Contents

We maintain strong, long-term relationships with our producers and our customers, many of which span decades. We source materials from thousands of producers worldwide, including premier global leaders. For the year ended December 31, 2018, our 10 largest producers accounted for approximately 27 percent of our total chemical purchases. Similarly, we sell products to thousands of customers globally, ranging from small and medium-sized businesses to large industrial customers. For the year ended December 31, 2018, our top 10 customers accounted for approximately 10 percent of our consolidated net sales. Globally, we service our customers with highly responsive on-time delivery.

Our Segments

Our business is organized and managed in four geographical segments: Univar USA ("USA"), Univar Canada ("Canada"), Univar Europe and the Middle East and Africa ("EMEA"), and Rest of World ("Rest of World"), which is predominantly in Latin America. For additional information on our geographical segments, see "Note 22: Segments" in Item 8 of this Annual Report on Form 10-K for additional information.

USA

We supply a broad offering of commodity and specialty chemicals and ingredients, as well as specialized services to a wide range of end markets, touching a majority of the manufacturing and industrial production sectors in the United States. Our close proximity to customers, combined with our deep product knowledge and end market expertise, serves as a competitive advantage.

We repackage and blend bulk chemicals for shipment by our transportation fleet as well as common carriers. Our highly skilled salesforce is deployed by a geographic sales district as well as by end-use market and industry, e.g., coatings and adhesives, food ingredients and products, pharmaceutical ingredients and products, personal care, and energy.

Canada

Our Canadian operations are regionally focused, with a highly skilled salesforce supplying a broad offering of commodity and specialty chemicals and specialized services to the local customer base. In Eastern Canada, we primarily focus on industrial markets such as food ingredients, pharmaceutical ingredients, coatings and adhesives, and chemical manufacturing. We also service the cleaning and sanitation, personal care, mining, and energy markets. In Western Canada, we focus on forestry, chemical manufacturing, mining, and energy markets (e.g., midstream gas pipeline, oil sands processing and oil refining). Lastly, due to its

Table of Contents

size, we have dedicated resources and expertise serving the agriculture end market. In agriculture, we formulate and distribute crop protection and fertilizer products to independent retailers and specialty applicators servicing the agricultural end markets in both Western Canada and Eastern Canada and we provide support services to agricultural chemical producers throughout the country.

EMEA

We maintain a strong presence in the United Kingdom and Continental Europe with sales offices in 20 countries. We also have four sales offices in the Middle East and Africa.

We execute primarily on a pan-European basis, leveraging centralized or shared information technology systems, raw materials procurement, logistics, route operations and the management of producer relationships where possible to benefit from economies of scale and improve cost efficiency. We have strong end market expertise and key account management capability across Europe to better support sales representatives in each country and for serving our key customer end markets, namely pharmaceutical ingredients and finished products, food ingredients, coating and adhesives, and personal care.

Rest of World

We operate sales offices and distribution sites in Mexico, Brazil and to a lesser extent the Asia-Pacific region. We continue to look for expansion opportunities throughout Latin America and opened a new sales center in Colombia, in 2018.

Our Competitive Strengths

We derive strength and competitive advantage from our scale, broad product offering, leading digital solutions, high levels of service and expertise, long-standing relationships with producers, and our industry leading safety record.

Scale

We operate one of the most extensive chemical distribution networks in the world, comprising more than 600 distribution facilities, approximately 90 million gallons of chemical storage tank capacity and hundreds of tractors, railcars, tankers and trailers operating daily through our facilities. We purchase thousands of different chemicals, some in large quantities, from over thousands of producers. Our purchasing power and global procurement relationships provide us with advantages over local and regional competitors due to economies of scale and our ability to manage our working capital.

Product breadth and market reach

We offer a wide range of chemical products and services across nearly all end-use markets. This enables us to present to customers a “one-stop-shop” approach that simplifies their procurement process and lowers their total cost of ownership, and provides suppliers with the opportunity to achieve growth by accessing new end markets through us.

Leading digital solutions

We offer today’s customers a flexible, omni-channel experience empowered partially by an industry-leading digital commerce platform, MyUnivar.com. Here, customers can - at any time from any device - browse our full catalog, request a quote, and access a wide array of documents necessary to managing their business. This provides unparalleled access to valuable information, allows customers to do business on their own terms, and enhances the customer experience.

In addition, through both Univar and ChemPoint capabilities, we offer suppliers cutting edge digital marketing and sales solutions to extend market reach and improve penetration. Leveraging digital solutions such as CRM, digital marketing, and advanced analytics enables us to effectively create and capture demand on behalf of our supplier partners.

Service and expertise

Globally, we provide our customers with highly responsive on-time delivery from our nearby facilities. This highly responsive service level enables our customers to lower their inventory levels and avoid production interruptions from lack of chemical ingredients.

To complement our extensive product portfolio, we offer to our customers specialized services, such as our chemical waste removal and environmental response services, chemical storage, and specialty product blending and formulation services. These services provide efficiency gains to our customers and deepen our relationships with them.

We also provide, through our highly skilled sales force, in-depth product technical knowledge and end market expertise to our customers, as well as valuable market and customer insights to our producers about how their products are performing in the market.

Table of Contents

Long-standing producer and customer relationships

We have developed strong, long-term relationships, many spanning several decades, with the world's premier global chemical producers and distribute products to more than 100,000 customer locations around the globe, from small and medium sized businesses to global industrial customers. The strength of our relationships has provided opportunities for us to integrate our service and logistics capabilities into our customers’ and producers’ business processes and to promote collaboration on supply chain optimization, marketing and other revenue enhancement strategies.

Safety and regulatory compliance

At Univar we are Serious about Safety. Our safety culture is embedded into our global operations. Safety is foundational in planning for operations, products, processes and facilities. Specific initiatives include:

- data driven and causality-based accident prevention work;
- improved process and facility controls;
- mandatory general education and role specific safety training;
- joint management-worker Health and Safety Committees; and
- safety audits, incident investigation and improvement measures.

Our efforts have resulted in significant improvements in global safety metrics during the last 7 years. We track worker injuries using the US Occupational Safety & Health Administration (OSHA) standardized methodology of Total Case Incident Rate (TCIR), which is the rate of recordable injuries per 200,000 hours worked. We have reduced our TCIR from 1.69 in 2011 to 0.58 in 2018, an improvement of 66.0%.

We believe that being Serious about Safety results in a competitive advantage by:

- maintaining and improving relationships with our customers, who view safety performance as a key criterion for vendor selection;
- improving employee recruitment and retention; and
- reducing the likelihood of incidents and enabling our employees to focus on their contributions.

While we believe being Serious about Safety improves our service, productivity and financial performance, that is not why safety is important to us. At Univar, we believe it is our responsibility to provide safe working conditions and challenge ourselves to continually improve.

Our Growth Strategy

We believe that we are well positioned to drive profitable growth, increase our market share, and capitalize on industry outsourcing trends by focusing on our key initiatives of Commercial Greatness, Operational Excellence and One Univar.

Drive profitable growth

Commercial Greatness. We seek to increase the value we provide our customers and our producers by improving our customers’ experience and driving additional growth for our producers. We seek to:

- further develop a highly skilled and well-equipped sales force utilizing a value-based consultative sales approach that is aligned to customer and end market needs by geography, product and service, and industry specialization;
- continue to increase our technical and industry-specific product and market expertise;
- develop a world-class marketing capability to dynamically identify and align resources with high-growth, high value opportunities;
- cultivate and maintain long-term producer relationships through deep market and product knowledge, value-based selling, reduced complexity in distribution channels, and offering complementary products and services as a total solution for our customers; and
- offer industry-leading digital solutions that drive customer and supplier preference, enhance supply chain efficiency, empower employees with valuable insights and provide new sources of profitable growth through innovation.

Table of Contents

Operational Excellence. We are committed to continuously improving our operating performance and lowering our costs per transaction. We seek to:

- align our business teams with identified growth opportunities in customer end markets, product markets, services, and industries in a way that narrows focus and increases accountability;
- increase our use of digital tools to simplify tasks, lower costs and improve customer experience;
- continue to use Lean methodologies to deliver project-by-project productivity gains;
- increase the cost efficiency of our warehouses, terminals, tank farms and logistics, and improve our net working capital efficiency;
- deliver a compelling customer value proposition by providing simplified sourcing, cost effective just-in-time delivery and managed inventory along with value-added services; and
- continue to build on our industry leading safety performance as a differentiator with both customers and producers.

One Univar. We are committed to developing a healthy, high-performance culture through the selection, recognition and development of engaged employees. We aspire to build an environment where the best people want to work and add value for our customers, producers and shareholders. We will strengthen the overall governance and efficiency of our global business operations with integrated, disciplined operating processes and by leveraging best practices.

Expand our market share

We believe our Commercial Greatness, Operational Excellence and One Univar initiatives will allow us to outperform competitors, leading to market share gains. We will continue to streamline and enhance our customer experience in order to be the easiest distributor to do business with and to increase customer preference for Univar. In addition, we believe our industry-focused go-to-market strategy combined with innovative sales and marketing support and strong customer preference will lead to winning additional product authorizations from producers. Finally, we are also pursuing selective acquisitions to increase our presence and develop competitive advantage in attractive end markets and whose products and service capabilities can benefit from our scale advantages. As a result, Univar is positioned well to gain market share.

Capitalize on industry outsourcing trends

We are well positioned to benefit from the growing trend of chemical producers and customers to outsource key tasks to chemical distributors. As a full-line distributor with a strong supply-chain-network across a broad geographic region, we are well suited to help customers and producers consolidate their distributor relationships and lower their total costs of ownership or service. Finally, as a leader in chemical distribution, we believe we can accelerate this trend by increasing the attractiveness of our total value proposition to both customers and our producers.

Through our Commercial Greatness, Operational Excellence and One Univar initiatives and by reinforcing our “one-stop-shop” provider capability, we will build on and increase the economic value we create in the global supply chain.

Accelerate digital transformation

We are positioned well to drive profitable growth and increased operational efficiency by orchestrating a multi-year digital transformation. We will continue to introduce new, innovative digital solutions that enhance our customer experience and drive stronger customer preference and customer loyalty, thereby increasing the lifetime value of customers to Univar. Through MyUnivar.com, we already offer an industry leading digital portal that allows customers to conduct business 24 hours a day, seven days a week, from virtually any device; and customers are increasingly adopting this platform to transact with us. We are committed to expanding our offering of digital solutions and bolstering our leadership position in the industry.

In addition, we will leverage new digital solutions to deliver a truly superior experience to our supplier partners, improving their market reach and penetration and providing valuable market insights through data analytics. Also, we will continue our progress to digitize our distribution network, creating a more agile, transparent supply chain, resulting in improved capabilities and efficiency. Finally, we will leverage digital to empower our employees with valuable, timely insights resulting in better decisions, and we will continue to automate administrative functions in order to enhance employee productivity.

Company History

Our history dates back to 1924 when we were founded as a brokerage business. In 1986, we acquired McKesson Chemical Corporation, then the third largest US chemical distributor, solidifying our presence throughout the United States and making us the largest chemical distributor in North America. In 2001, we continued our expansion into Europe through the acquisition of Ellis & Everard, which specialized in the distribution of chemicals in the United Kingdom and Ireland and had additional facilities

in Europe and the Eastern United States. In 2007, we acquired ChemCentral, which enabled us to improve our market share and operational efficiencies in North America.
In 2007, we were acquired by investment funds advised by CVC Capital Partners Advisory (US), Inc. ("CVC") as well as investment funds associated with Goldman, Sachs & Co. and Parcom. In November 2010, investment funds associated with Clayton, Dubilier & Rice, LLC ("CD&R") acquired a 42.5 percent ownership interest in us. In December 2010, we acquired Basic Chemicals Solutions, a global distributor and trader of commodity chemicals, which strengthened our ability to provide value in the supply chain between chemical producers and end-users and reinforced our global sourcing capabilities. In January 2011, we completed the acquisition of Quaron, a chemical distributor operating in Belgium and the Netherlands, which complemented our strong European foothold in specialty chemicals with expanded product portfolio and increased logistical capability. We continued our expansion into the emerging markets in 2011 through our acquisition of Eral-Protek, a leading chemical distributor in Turkey, and the acquisition of Arinos, a leading chemical distributor of specialty and commodity chemicals and high-value services in Brazil. In December 2012, we acquired Magnablend, whose specialty chemical and manufactured products broadened our energy offerings. In May 2013, we expanded our Mexican presence with the acquisition of Quimicompuestos, making us a leading chemical distributor in the Mexican market. In November 2014, we acquired D'Altomare Quimica Ltda., a Brazilian distributor of specialty chemicals and ingredients, which expanded our geographic footprint and market presence in Brazil. In April 2015, we acquired Key Chemical, Inc., one of the largest distributors of fluoride to municipalities in the United States, which expanded our offerings into the municipal and other industrial markets.
On June 23, 2015, we closed our initial public offering ("IPO") in which we issued and sold 20.0 million shares of common stock at a public offering price of $22.00 per share. In addition, we completed a concurrent private placement of $350.0 million for shares of common stock (17.6 million shares) to Dahlia Investments Pte. Ltd., an indirect wholly owned subsidiary of Temasek Holdings (Private) Limited ("Temasek"). We received total net proceeds of approximately $760.0 million from the IPO and the private placement after deducting underwriting discounts and commissions and other offering expenses of approximately $30.0 million. These expenses were recorded against the proceeds received from the IPO. Certain selling stockholders sold an additional 25.3 million shares of common stock in the IPO and concurrent private placement. We did not receive any proceeds from the sale of these shares.
In July 2015, we acquired the assets of Chemical Associates, Inc., a marketer, manufacturer, and distributor of oleochemicals, many of which are based on renewable and sustainable resources, thereby enhancing the value Univar brings to a number of our key markets such as personal care, food, cleaning and sanitization, lubricants, and coatings and adhesives. In October 2015, we entered into the agrochemical formulation market and expanded our capabilities in the third-party agriculture logistics market in Canada with the acquisition of the Future Group. In November 2015, we acquired Arrow Chemical, Inc., adding a complementary portfolio of active pharmaceutical ingredients ("APIs") and other specialty ingredients essential to the formulation of generic and over-the-counter pharmaceuticals. In December 2015, we acquired Weaver Town Oil Services, Inc., and Weavertown Transport Leasing, Inc., operating as the Weavertown Environmental Group, which strengthened our ChemCare waste management service offering with a broad range of complementary services, including industrial cleaning, waste management and transportation, site remediation, and 24/7 emergency response services. In December 2015, we also acquired Polymer Technologies Ltd., a U.K.-based developer and distributor of unique ultraviolet/electron beam curable chemistries used to formulate environmentally responsible paints, inks, and adhesives.
In March 2016, we acquired Bodine Services of the Midwest, further strengthening our ChemCare waste management, environmental maintenance and response service offering in key geographic markets. That same month, we acquired the assets of Nexus Ag Business, Inc., enhancing our existing macronutrient and crop protection inputs through a proprietary line of micronutrients, macronutrients and specialty fertilizers. Together with our leading distribution and services network in the region, this acquisition further strengthens our agriculture group's ability to provide customers in Canada with a complete product service offering that covers the entire growing cycle from start to finish.
In September 2017, we acquired Tagma Brasil Ltda. ("Tagma"), expanding our agriculture business in one of the world's fastest-growing agricultural markets. That same month, we acquired the assets of PVS Minibulk, Inc. ("PVS"), strengthening our MiniBulk business in the West Coast market.

In January 2018, we acquired Kemetyl Norge Industri AS ("Kemetyl") as well as the assets of Kemetyl Aktiebolag, expanding our leading position in the pharmaceutical industry in Norway and Sweden. In May 2018, we acquired Earthoil Plantations Limited ("Earthoil"), expanding and strengthening our existing global natural beauty and personal care product line in EMEA.

In September 2018, we announced the signing of a definitive agreement to acquire Nexeo Solutions, Inc. ("Nexeo"). The transaction ("Nexeo Acquisition") was unanimously approved by the Boards of Directors of both companies, and is anticipated to close in the first quarter of 2019, subject to the approval of Univar's shareholders, as well as satisfaction of other customary conditions. On January 29, 2019, Nexeo's key stockholders, TPG Global and First Pacific, provided consent for the proposed transaction.

Table of Contents

During 2016 and 2017, we engaged in a series of secondary registrations of our stock. As a result, CVC divested its ownership interest in our company and both CD&R and Temasek continued to reduce their ownership stakes in our company. As of January 31, 2018, CD&R and Temasek owned 8.2% and 9.9%, respectively, of our issued and outstanding shares. As a result of Temasek's reduction in ownership below 10% , it is no longer considered a significant stockholder in 2018.

The below chart illustrates the change in our Significant Stockholders since the IPO date.

Products and End Markets

The focus of our marketing approach is to identify attractive end-user markets and provide customers in those markets all of their commodity and specialty chemical or ingredient needs. We also offer value-added services as well as procurement solutions that leverage our chemical, supply chain and logistics expertise, networked inventory sourcing and producer relationships. We provide our customers with a “one-stop shop” for their commodity and specialty chemical needs and offer a reliable and stable source of quality products and services.

We buy and inventory chemicals and ingredients in large quantities such as barge loads, railcars or full truck loads from chemical producers and sell and distribute smaller quantities to our customers. Approximately 40 percent of the chemicals and ingredients we purchase are in bulk form, and we repackage them into various size containers for sale and distribution.

Commodity chemicals and ingredients represent the largest portion of our business by sales and volume. Our commodity portfolio includes acids and bases, surfactants, glycols, inorganic compounds, alcohols and general chemicals used extensively throughout most end markets. Our specialty chemicals and ingredient sales represent an important, high-value, higher-growth portion of the chemical distribution market. We typically sell specialty products in lower volumes but at a higher profit than commodity products and our intent is to increase our presence in the specialty market. While many producers supply specialty products directly to customers, there is an increasing trend toward outsourcing the distribution of these specialized, lower volume products and ingredients. We believe that customers and producers value Univar’s ability to supply both commodity and specialty products, particularly as the markets continue to consolidate.

We focus on sourcing high-volume products that we distribute to our customers. Generally, we sell chemicals and ingredients via our industry-focused salesforce. However, a small proportion of the chemicals that we source are sold directly to certain high-volume customers through a dedicated sales team who handles these unique products and transactions. Our global sourcing capabilities enhance our global market presence, ensure safety of supply and competitive pricing, and provide product expertise across all market segments.

We serve a diverse set of end markets and regions, with no end market accounting for more than 14 percent of our net sales over the past year.

Our key global end markets include:

- Agricultural and Environmental Sciences. Within the Agriculture industry we are a leading wholesale distributor of crop protection products to independent retailers and specialty applicators in Canada. To support this end market, we distribute herbicides, fungicides, insecticides, seed, micronutrients, macronutrients, horticultural products and

fertilizers among other products. In addition, we provide storage, packaging and logistics services for major crop protection companies. The Environmental Sciences group supplies pest control products and equipment to the structural pest control, public health, vegetation management, turf and ornamental, food processing and post-harvest storage, animal health and hay production markets. We operate a network of approximately 70 Univar ProCenter distribution centers in North America to serve this end market.

- Chemical Manufacturing. We distribute a full suite of chemical products in support of the chemical manufacturing industry (organic, inorganic and polymer chemistries). Our broad warehousing and delivery resources permit us to assure our chemical manufacturing customers efficient inventory management, just-in-time delivery, and custom blends and packages. Our industry expertise also assists our customers in both selecting products that best suit their objectives and addressing chemical waste and wastewater issues.
- Cleaning and Sanitization. The cleaning and sanitization industry is made up of thousands of large and small formulators that require a multitude of chemical ingredients to make cleaning products and detergents for home and industrial use. We distribute chemicals manufactured by many of the industry's leading producers of enzymes, surfactants, solvents, dispersants, thickeners, bleaching aides, builders, sealants, acids, alkalis and other chemicals that are used as ingredients and processing aids in the manufacturing of cleaning products.
- Coatings and Adhesives. The coatings and adhesives industry is one of our largest customer end markets. We sell resins, pigments, solvents, thickeners, dispersants and other additives used to make paints, inks, and coatings. We have a large, dedicated team of industry and product specialists with market expertise that enables us to work closely with formulators and producers to offer new technologies, new and improved formulations and to scale-up support. Our product line includes epoxy resins, polyurethanes, titanium dioxide, fumed silica, esters, plasticizers, silicones and specialty amines.
- Food Ingredients and Products. For the food and beverage industry, we distribute a diverse portfolio of commodity and specialty products that are sold as food additives or processing aids. We sell food ingredients such as thickeners, emulsifiers, sweeteners, preservatives, leavening agents and humectants, as well as texturizer and fat replacement products that include xanthan gum, locust bean gum, cellulosics and guar gum. We also distribute acidulants such as citric acid, lactic acid and malic acid, as well as alkalis. Additional offerings include supplements and products such as proteins, vitamins and minerals. The major food and beverage markets we serve are meat processing, baked goods, dairy, grain mill products, processed foods, carbonated soft drinks, fruit drinks and alcoholic beverages. We carefully manage our product portfolio to ensure quality standards, security of supply and cost competitiveness. We continuously refresh our product offering with products that meet key trends impacting the food industry. Our industry experts have developed marketing tools that simplify the ingredient selection process for our customers and provide valuable product performance information and technical solutions.
- Energy. We provide chemicals and service to midstream pipeline and downstream refinery operators primarily in the US and Canada. We offer an expansive product line with a team of highly skilled and uniquely dedicated specialists to stay on top of the latest trends, technologies and regulations. We also service the upstream oil and gas production market, including the US shale hydraulic-fracturing sector, by providing a variety of bulk chemicals to drill sites, as well as specialty blended products used to fracture rock and stimulate oil and gas production from the well. Other markets served to a lesser extent include Mexico, Europe's North Sea and parts of Africa.
- Personal Care. We are a full-line distributor in the personal care industry providing a wide variety of specialty and basic chemicals and ingredients used in skin care products, shampoos, conditioners, styling products, hair color, body washes, sun care, color cosmetics, and pet care products. The products that we distribute include surfactants, emollients, emulsifiers, rheology modifiers, active ingredients, color, preservatives and processing aids. Our dedicated team of industry experts and technical marketers work with our customers to formulate traditional and cutting-edge products that address key trends in the personal care end markets.
- Pharmaceutical Ingredients and Finished Products. We are uniquely positioned in the highly-regulated pharmaceutical ingredients industry due to the combination of our product portfolio, logistics footprint and customized solutions. We represent some of the world's leading excipient, process, solvent and active pharmaceutical ingredient producers, as well as producers of chemicals used to support water treatment, filtering and purification systems, thus offering our customers a very broad product selection in the pharmaceutical industry. We sell active ingredients such as aspirin,

ascorbic acid, caffeine and ibuprofen, and excipients that include phosphates, polyethylene glycols, polysorbates, methylcellulose, stearyl alcohol and stearates. We also make and sell certain finished pharmaceutical products.

Table of Contents

Services

In addition to selling and distributing chemicals, we use our transportation and warehousing infrastructure, along with our broad knowledge of chemicals and hazardous materials handling to provide important distribution and specialized services for our producers and our customers. This intermediary role Univar plays is increasingly important, in particular due to the recent trend of increased outsourcing of distribution by chemical producers to satisfy their need for supply chain efficiency. These services include:

Distribution and specialized services

- Inventory Management. We manage our inventory in order to meet customer demands on short notice whenever possible. Our value as channel partners of chemical producers also enables us to obtain access to chemicals in times of short supply, when smaller chemical distributors may not be able to obtain or maintain stock. Further, our global distribution network permits us to stock products locally to enhance "just-in-time" delivery, providing outsourced inventory management to our customers in a variety of end markets.
- Product Knowledge and Technical Expertise. We partner with our customers in their production processes. For example, we employ teams of food technologists, chemical engineers and petroleum engineers who have the technical expertise to assist in the formulation of products to meet specific customer performance requirements as well as provide customers with after-market support and consultation.
- Mixing, Blending and Repackaging. We provide a full suite of blending and repackaging services for our customers across diverse industries. Additionally, we can fulfill small orders through our repackaging services, enabling customers to maintain smaller inventories.
- E-commerce and Digital Marketing. MyUnivar.com is an e-commerce solution offering Univar's full catalog of products, complete with invoicing, order status and tracking, as well as documentation of prior purchases. Customers of MyUnivar.com are provided with easy, two-click re-ordering and document access 24 hours a day, seven days a week, from any device. ChemPoint is our unique distribution business that provides digital promotion or e-marketing channels for specialty and fine chemicals. ChemPoint operates principally in North America and EMEA and is primarily focused on expanding market share of high-value and highly specialized chemicals for partnered producers.
- Chemical Waste Removal and Environmental Response Services. Our ChemCare waste management service collects both hazardous and non-hazardous waste products at customer locations in the United States and Canada, and then works with select vendors in the waste disposal business to safely transport these materials to licensed third party treatment, storage and disposal facilities. ChemCare reviews each waste profile, recommends disposal alternatives to the customer and offers transportation of the waste to the appropriate waste disposal company. Hazardous and non-hazardous waste management technologies provided from our approved treatment storage and disposal facility vendors include recycling, incineration, fuels blending, lab packing, landfill, deep well injection and waste-to-energy. Through our acquisitions of Bodine and Weavertown Environmental Group, we are also able to provide our customers with industrial cleaning, site remediation and emergency environmental response services.
- Specialized Formulation and Blending. Leveraging our technical expertise, we are able to utilize our blending and mixing capabilities to create specialty chemical formulations to meet specific customer performance demands for agriculture and energy products through our Future Group, Tagma, and Magnablend blending services.

Producers

Maintaining strong relationships with producers is important to our overall success, and we source chemicals and ingredients from many of the premier global chemical and ingredient manufacturers. Our relationships with some of the world's largest commodity and specialty chemical and ingredient producers have been in place for decades. We typically maintain relationships with multiple producers in order to protect against disruption in supply and distribution logistics, as well as to ensure competitive pricing of our supply. Our scale, geographic reach, diversified distribution channels and industry expertise enable us to develop strong, long-term relationships with producers, and integrate our service and logistics capabilities into their business processes. This promotes collaboration on supply chain optimization, marketing and other revenue enhancement strategies. The producers we work with also benefit from the insight we provide into customer buying patterns and trends. More and more, chemical and ingredient producers are depending on the sales forces and infrastructure of large distributors to efficiently market, warehouse and deliver their chemicals and ingredients to end users.

Our supplier community is well diversified, with our largest producer representing approximately 13% of our 2018 chemicals expenditures, and no other chemical producer accounting for more than 5% of the total. Our 10 largest producers accounted for approximately 27% of our total chemical purchases in 2018.

We typically purchase our chemicals and ingredients through purchase orders rather than long-term contracts, although we have exclusive supply arrangements for certain chemicals and ingredients. We normally enter into framework supply contracts with key producers. These framework agreements generally operate on an annual basis either with pricing items fixed to an index or without fixed pricing terms, although they often include financial incentives if we meet or exceed specified purchase volumes. We also have a limited number of longer term agreements with certain producers of commodity chemicals. For all of these chemicals, once we purchase the products, we ship them either directly to a customer or, more commonly, to one of our distribution centers.

Sales and Marketing

We organize our business to align with our customers and end markets needs by geography, product and service, and industry specialization, including high-focus industries such as coatings and adhesives, food ingredients, pharmaceutical ingredients and products, personal care, agricultural and environmental sciences, and energy. We train our sales personnel so that they develop expertise in the industries that they serve. Our sales force leverages our strong producer relationships to provide superior product insight and expertise supporting the delivery of critical-use specialty, organic and inorganic chemicals and ingredients to customers. Aligning our business to customers and end markets enables our sales force and supply chain to deliver valuable market insights to both our customers and producers.

Distribution Channels

We continue to refine our distribution business model to provide producers and our customers with the highest level of service, reliability and timeliness of deliveries while offering cost competitive products. We have multiple channels to market, including both warehouse delivery, and direct-to-consumer delivery. The principal determinants of the way a customer is serviced include the size, scale and level of customization of a particular order, the nature of the product and the customer, and the location of the product inventories. For the year ended December 31, 2018, warehouse distribution accounted for approximately 80% of our net sales while direct distribution accounted for approximately 18% of our net sales, with the remaining approximate 2% of net sales derived primarily from our waste management services.

Warehouse distribution

Our warehouse distribution channel is the core of our operations. We purchase chemicals and ingredients in truck load or larger quantities from producers based on contracted demands of our customers and our estimates of anticipated customer purchases. Once received, products are stored in one or more of our distribution facilities, for sale and distribution in smaller, less-than-truckload quantities to our customers. Our warehouses have various facilities for services such as repackaging, blending and mixing to create specialized solutions needed by our customers in ready-to-use formulations.

Our warehouse network connects large producers with smaller volume customers whose consumption patterns tend to make them uneconomical to be served directly by producers. Thus, the core customer serviced via our warehouses is a small or medium-volume consumer of chemicals and ingredients. Since chemicals and ingredients comprise only a fraction of the input costs for many of our customers' products, our warehouse customers typically value quality, reliability of supply and ease of service. Our breadth of product offerings also allows us to provide customers with complete management solutions for their chemical needs as they are able to obtain small volumes of many different products from us more efficiently and economically than if they dealt directly with multiple chemical producers. Our network of warehouses allows us to service most customers from multiple locations and also enables us to move products efficiently and economically throughout our own warehouse system to service customers on a real-time basis. Further, by leveraging our geographic footprint and logistics platform, we are able to combine multiple customer orders along the same distribution routes to reduce delivery costs and facilitate customer inventory management. For example, we combine multiple less-than-truckload deliveries for different customers along the same route to better utilize our delivery assets while at the same time minimizing our customers' inventories.

Our network of warehouses allows us to offer a delivery system that increases inventory visibility and improves plant safety and productivity. MiniBulk is a safe and efficient handling and use system for customers receiving less than full truckload quantities of chemicals. Our trained specialists deliver products to on-site storage containment systems that minimize employee exposure to hazardous chemicals. In addition, the need for drum storage and disposal are

eliminated, thereby saving costs and improving access to product inventory. Our remote telemetry systems used in conjunction with MiniBulk storage solutions permit around-the-clock access to inventory information. The result is better inventory management, elimination of manual measurement and better assurance of timely replenishment.
With the leading market position in North America, our operations are capable of serving customers throughout the United States, including Hawaii and Alaska, and all major provinces and major manufacturing centers within Canada including remote areas such as the oil sands regions of Northern Canada. Our close proximity to major transportation arteries allows us to service customers in the most remote locations throughout the United States, particularly those markets that chemical producers are not

14

able to serve profitably. In the USA, we rely on a combination of our own fleet of distribution vehicles and third-party carriers, while we primarily use third parties for the transportation of chemicals and ingredients in Canada, EMEA and Rest of World.

Direct distribution

Our direct distribution channel provides point-to-point logistics for full truckloads or larger quantities of chemicals between producers and customers. In direct distribution, we sell and service large quantity purchases that are shipped directly from producers through our logistics infrastructure, which provides our customers with sourcing and logistics support services for inventory management and delivery, in many cases far more economically than the producer might provide. We believe that producers view us not as competitors, but as providers of a valuable service, supporting these large orders through the utilization of our broad distribution network. We typically do not maintain inventory for direct distribution, but rather use our existing producer relationships and marketing expertise, ordering and logistics infrastructure to serve this demand, resulting in limited working capital investment for these sales. Our direct distribution service is valuable to major chemical producers as it allows them to deliver larger orders to customers utilizing our existing ordering, delivery and payment systems.

Insurance

The nature of our business exposes us to operational risk, including damages to the environment and property, and injury to employees or the general public. Although we focus on operating safely and prudently, we occasionally receive claims, alleging damages, negligence or other wrongdoing in the planning or performance of our services. Our liabilities resulting from these claims can be significant. Accruals for deductibles are based on claims and actuarial estimates of claims development and claims incurred but not recorded.

We maintain policies of insurance that provide coverage for these types of claims (subject to limitations, exclusions, or deductibles) for our worldwide facilities and activities. To mitigate aggregate loss potential above these retentions and deductibles, the company purchases insurance coverage from highly rated insurance companies. The company does not currently operate or participate in any captive insurance companies or other non-traditional risk transfer alternatives.

In the normal course of business, as a financial guarantee of our performance, we also purchase surety bonds or issue letters of credit in connection with municipal contracts, import and export activities, environmental remediation, and environmental permits.

Competition

The chemical and ingredient production, distribution and sales markets are highly competitive. Most of the products that we distribute are made to standard specifications and are either produced by or available from multiple sources. Chemical and ingredient distribution itself is a fragmented market in which only a small number of competitors have substantial international operations. Our principal large international competitor is Brenntag, which has a particularly strong position in Europe.

Many other chemical distributors operate on a regional, national or local basis and may have a strong relationship with local producers and customers that may give them a competitive advantage in their local market. Some of our competitors are either local or regional distributors with a broad product portfolio, while others are niche players which focus on a specific end market, either industry or product-based.

Chemical and ingredient producers may also sell their products through a direct sales force or through multiple chemical distributors, limit their use of third party distributors, particularly with respect to higher margin products, or to partner with other chemical and ingredient producers for distribution. Each of which could increase our competition.

We compete on the basis of service, on-time delivery, product breadth and availability, product and market knowledge and insights, safety and environmental compliance, global reach, product price, as well as our ability to provide certain additional value-added services.

North America

The independent chemical distribution market in North America is fragmented. Our principal competitors in North America include Brenntag, Helm America, Hydrite Chemical, Prinova and Nexeo Solutions. In September 2018, we announced the signing of a definitive agreement to acquire Nexeo Solutions. The transaction was unanimously

approved by the Boards of Directors of both companies, and is anticipated to close in the first quarter of 2019, subject to the approval of Univar's shareholders, as well as satisfaction of other customary conditions. On January 29, 2019, Nexeo's key stockholders, TPG Global and First Pacific, provided consent for the proposed transaction.

We also compete with a number of smaller companies in certain niche markets.

Table of Contents

EMEA

The independent chemical distribution market in Europe historically has been highly fragmented. Consolidation among chemical distributors has increased, mirroring developments within the chemical sector as a whole. Brenntag is our leading competitor in Europe due to its strong market position in Germany, which is the largest European chemical distribution market. Other regional competitors in Europe include Azelis, Helm and IMCD. We believe that we are the leading chemical distributor in the United Kingdom and Ireland.

Rest of World

In Rest of World, the markets for chemical distribution are much more fragmented and credible competitive information for smaller companies is not available. Our relative competitive position in the Rest of World markets is smaller than in North America or EMEA.

Regulatory Matters

Our business is subject to a wide range of regulatory requirements in the jurisdictions in which we operate. Among other things, these laws and regulations relate to environmental protection, economic sanctions, product regulation, anti-terrorism concerns, management, storage, transport and disposal of hazardous chemicals and other dangerous goods, and occupational health and safety issues. Changes in and introductions of regulations have in the past caused us to devote significant management and capital resources to compliance programs and measures. New laws, regulations, or changing interpretations of existing laws or regulations, or a failure to comply with current laws, regulations or interpretations, may have a material adverse effect on our business, financial condition and results of operations. The following summary illustrates some of the significant regulatory and legal requirements applicable to our business.

Environmental, health and safety matters

We operate in a number of jurisdictions and are subject to numerous foreign, federal, state and local laws and regulations related to the protection of the environment, human health and safety, including laws regulating discharges of hazardous substances into the soil, air and water, blending, managing, handling, storing, selling, transporting and disposing of hazardous substances, investigation and remediation of contaminated properties and protecting the safety of our employees and others. Some of our operations are required to hold environmental permits and licenses and certain of our services businesses are also impacted by these laws. The cost of complying with these environmental, health and safety laws, permits and licenses has, in some instances, been substantial.

Some of our historic operations, including those of companies we acquired, have resulted in contamination at a number of currently and formerly owned or operated sites. We are required to investigate and remediate at many of such sites. Contamination at these sites generally resulted from releases of chemicals and other hazardous substances. We have spent substantial sums on such investigation and remediation and expect to continue to incur such expenditures, or discover additional sites in need of investigation and remediation, until such investigation and remediation is deemed complete. Information on our environmental reserves is included in “Note 20: Commitments and contingencies” to our consolidated financial statements for the year ended December 31, 2018 which are included in Item 8 of this Annual Report on Form 10-K.

CERCLA. The US Comprehensive Environmental Response, Compensation, and Liability Act, or CERCLA, also known as Superfund, as well as similar laws in other jurisdictions, governs the remediation of contaminated sites and establishes liability for the release of hazardous substances at such sites. A party that transported waste, or arranged for the shipment of waste, to a waste disposal facility or other third party site that requires remediation can be liable for the cost of cleanup regardless of fault, the lawfulness of the disposal or the actions of other parties. Under CERCLA, the EPA or a delegated state agency can oversee or require remediation of such sites and seek cost recovery from any party whose wastes were disposed at, or who otherwise contributed to the contamination of, such sites. We are party to consent agreements with the EPA and state regulatory authorities with respect to environmental remediation at a number of such sites. We may be identified as a Potentially Responsible Party at additional third party sites or waste disposal facilities.

RCRA. The EPA regulates the generation, transport, treatment, storage and disposal of hazardous waste under the US Resource Conservation and Recovery Act, or RCRA. RCRA also sets forth a framework for managing non-hazardous waste. Most owners and operators of hazardous waste treatment, storage and disposal facilities must obtain a RCRA

permit. RCRA also mandates certain operating, recordkeeping and reporting obligations for owners and operators of hazardous waste facilities. Our facilities generate various hazardous and non-hazardous wastes and we are a hazardous waste transporter and temporary storage facility. As a result of such activities, we are required to comply with RCRA requirements, including the maintenance of financial resources and security to address forced closures or accidental releases.

Clean Air Act. The US Clean Air Act and similar laws in other jurisdictions establish a variety of air pollution control measures, including limits for a number of airborne pollutants. These laws also establish controls for emissions from automobiles

Table of Contents

and trucks, regulate hazardous air pollutants emitted from industrial sources and address the production of substances that deplete stratospheric ozone. Under the Clean Air Act, we are required to obtain permits for, and report on emissions of, certain air pollutants, or qualify for and maintain records substantiating that we qualify for an exemption. Owners and operators of facilities that handle certain quantities of flammable and toxic substances must implement and regularly update detailed risk management plans filed with and approved by the EPA. Failure to comply with the Clean Air Act may subject us to fines, penalties and other governmental and private actions.

Clean Water Act. Many of the jurisdictions in which we operate regulate water quality and contamination of water. In the United States, the EPA regulates discharges of pollutants into US waters, sets wastewater standards for industry and establishes water quality standards for surface waters, such as streams, rivers and lakes, under the US Clean Water Act. The discharge of any regulated pollutant from point sources (such as pipes and manmade ditches) into navigable waters requires a permit from the EPA or a delegated state agency. Several of our facilities have obtained permits for discharges of treated process wastewater directly to surface waters. In addition, several of our facilities discharge to municipal wastewater treatment facilities and therefore are required to obtain pretreatment discharge permits from local agencies. A number of our facilities also have storm water discharge permits.

Oil Pollution Prevention Regulations. The Oil Pollution Prevention regulations promulgated by the EPA under the authority of the Clean Water Act require that facilities storing oil in excess of threshold quantities or which have the ability to reach navigable water have a spill prevention, control and countermeasure, or SPCC, plan. Many of our facilities have SPCC plans or similar oil storage plans required in non-US jurisdictions.

Storage Requirements. Our warehouse facilities are required to comply with applicable permits and zoning requirements from local regulatory authorities and pursuant to leases. These requirements, which differ based on type of facility and location, define structural specifications and establish limits on building usage. Regulators typically have the authority to address non-compliance with storage requirements through fines, penalties and other administrative sanctions.

EPCRA. The US Emergency Planning and Community Right-To-Know Act, or EPCRA, establishes reporting rules for facilities that store or manage chemicals and requires such facilities to maintain certain safety data. EPCRA is intended to facilitate state and local planning for chemical emergencies. EPCRA requires state and local emergency planning and emergency response authorities to be informed of the presence of specified quantities of “extremely hazardous substances” at a facility and the release of listed hazardous substances above threshold quantities. Facilities that store or use significant amounts of toxic chemicals must also submit annual toxic chemical release reports containing information about the types and amounts of toxic chemicals that are released into the air, water and soil, as well as information on the quantities of toxic chemicals sent to other facilities. We store and handle a number of chemicals subject to EPCRA reporting and recordkeeping requirements.

TSCA and the Lautenberg Act. The US Toxic Substances Control Act, the recently enacted Lautenberg Act (collectively TSCA) and similar laws in other jurisdictions, are intended to ensure that chemicals do not pose unreasonable risks to human health or the environment. TSCA requires the EPA to maintain the TSCA registry listing chemicals manufactured or processed in the United States. Chemicals not listed on the TSCA registry cannot be imported into or sold in the United States until registered with the EPA. TSCA also sets forth specific reporting, recordkeeping and testing rules for chemicals, including requirements for the import and export of certain chemicals, as well as other restrictions relevant to our business. Pursuant to these laws, the EPA from time to time issues Significant New Use Rules, or SNURs, when it identifies new uses of chemicals that could pose risks to human health or the environment and also requires pre-manufacture notification of new chemical substances that do not appear on the TSCA registry. When we import chemicals into the United States, we must ensure that chemicals appear on the TSCA registry prior to import, participate in the SNUR process when a chemical we import requires testing data and report to the EPA information relating to quantities, identities and uses of imported chemicals.

FIFRA and Other Pesticide and Biocide Regulations. We have a significant operation in the distribution and sale of pesticides and biocides. These products are regulated in many jurisdictions. In the United States, the Federal Insecticide, Fungicide, and Rodenticide Act, or FIFRA, authorizes the EPA to oversee and regulate the manufacture, distribution, sale and use of pesticides and biocides. We are required to register with the EPA and certain state regulatory authorities as a seller and repackager of pesticides and biocides. The EPA may cancel registration of any

pesticide or biocide that does not comply with FIFRA, effectively prohibiting the manufacture, sale, distribution or use of such product in the United States.

The EPA has established procedures and standards for the design of pesticide and biocide containers, as well as the removal of pesticides and biocides from such containers prior to disposal. Applicable regulations also prescribe specific labeling requirements and establish standards to prevent leaks and spills of pesticides and biocides from containment structures at bulk storage sites and dispensing operations. These standards apply to dealers who repackage pesticides, commercial applicators and custom blenders.

REACH. In Europe, our business is affected by legislation dealing with the Registration, Evaluation, Authorization and Restriction of Chemicals, or REACH. REACH requires manufacturers and importers of chemical substances to register such substances with the European Chemicals Agency, or the ECHA, and enables European and national authorities to track such

substances. Depending on the amount of chemical substances to be manufactured or imported, and the specific risks of each substance, REACH requires different sets of data to be included in the registration submitted to the ECHA. Registration of substances with the ECHA imposes significant recordkeeping requirements that can result in significant financial obligations for chemical distributors, such as us, to import products into Europe. REACH is accompanied by legislation regulating the classification, labeling and packaging of chemical substances and mixtures.

GHG Emissions. In the US, various legislative and regulatory measures to address greenhouse gas, or GHG, emissions are in various phases of discussion or implementation. At the federal legislative level, Congress has previously considered legislation requiring a mandatory reduction of GHG emissions. Although Congressional passage of such legislation does not appear likely at this time, it could be adopted at a future date. It is also possible that Congress may pass alternative climate change bills that do not mandate a nationwide cap-and-trade program and instead focus on promoting renewable energy and energy efficiency. In the absence of congressional legislation curbing GHG emissions, the EPA is moving ahead administratively under its Clean Air Act authority.

The implementation of additional EPA regulations and/or the passage of federal or state climate change legislation will likely result in increased costs to operate and maintain our facilities. Increased costs associated with compliance with any future legislation or regulation of GHG emissions, if it occurs, may have a material adverse effect on our results of operations, financial condition and ability to make cash distributions.

Internationally, many of the countries in which we do business (but not the US) have ratified the Kyoto Protocol to the United Nations Framework Convention on Climate Change, or the Kyoto Protocol, and we have been subject to its requirements, particularly in the European Union. Many nations entered into the Copenhagen Accord, which may result in a new international climate change treaty in the future. If so, we may become subject to different and more restrictive regulation on climate change to the extent the countries in which we do business implement such a new treaty.

OSHA. We are subject to workplace safety laws in many jurisdictions, including the United States. The US Occupational Safety and Health Act, or OSHA, which addresses safety and health in workplace environments and establishes maximum workplace chemical exposure levels for indoor air quality. Chemical manufacturers and importers must employ a hazard communication program utilizing labels and other forms of warnings, as well as Material Safety Data Sheets, setting forth safety and hazardous materials information to employees and customers. Employers must provide training to ensure that relevant employees are equipped to properly handle chemicals.

We train employees and visitors who have access to chemical handling areas. OSHA requires the use of personal protective equipment when other controls are not feasible or effective in reducing the risk of exposure to serious workplace injuries or illnesses resulting from contact with hazardous substances or other workplace hazards. Employers must conduct workplace assessments to determine what hazards require personal protective equipment, and must provide appropriate equipment to workers.

OSHA operates a process safety management rule, or PSM Rule, that requires employers to compile written process safety information, operating procedures and facility management plans, conduct hazard analyses, develop written action plans for employee participation in safety management and certify every three years that they have evaluated their compliance with process safety requirements. Employees must have access to safety analyses and related information, and employers must maintain and provide process-specific training to relevant employees. We handle several chemicals that are hazardous and listed under the PSM Rule, which imposes extensive obligations on our handling of these chemicals and results in significant costs on our operations.

OSHA's Hazardous Waste Operations and Emergency Response rules require employers and employees to comply with certain safety standards when conducting operations involving the exposure or potential exposure to hazardous substances and wastes. These standards require hazardous substances preparedness training for employees and generally apply to individuals engaged in cleanup operations, facility operations entailing the treatment, storage and disposal of hazardous wastes, and emergency responses to uncontrolled releases of hazardous substances.

OSHA regulations require employers to develop and maintain an emergency action plan to direct employer and employee actions in the event of a workplace emergency. Under most circumstances, the plan must be maintained in writing, remain accessible at the workplace and be made available to employees for review.

Chemical Facility Anti-Terrorism Standards. The US Department of Homeland Security, or DHS, regulates certain high-risk chemical facilities through its Chemical Facility Anti-Terrorism Standards. These standards establish a Chemical Security Assessment Tool comprised of four elements, including facility user registration, top-screen evaluation, security vulnerability assessment and site security planning. The site security plan must address any vulnerabilities identified in the security vulnerability assessment, including access control, personnel credentialing, recordkeeping, employee training, emergency response, testing of security equipment, reporting of security incidents and suspicious activity, and deterring, detecting and delaying potential attacks. DHS must approve all security vulnerability assessments and site security plans. We handle a number of chemicals regulated by DHS.

Table of Contents

FDA. The US Food & Drug Administration's, or FDA's, Food Safety Modernization Act, or FSMA, directs FDA to build an integrated national food safety system in partnership with state and local authorities. Univar facilities that handle FDA regulated products are required to implement a written preventive controls plan. This involves evaluating the hazards that could affect food safety and specifying what preventive steps, or controls, will be put in place to significantly minimize or prevent the hazards. Also, when we import FDA regulated products into the United States, we have an explicit responsibility to verify that our foreign suppliers have adequate preventive controls in place. Finally, the rule establishes requirements for companies involved in transporting FDA regulated products to use sanitary practices to ensure the safety of those products.

Other regulations

We are subject to other foreign, federal, state and local regulations. For example, many of the products we repackage, blend and distribute are subject to Food and Drug Administration regulations governing the handling of chemicals used in food, food processing or pharmaceutical applications. Compliance with these regulations requires testing, additional policies, procedures and documentation and segregation of products. In addition, we are subject to a variety of state and local regulations, including those relating to the fire protection standards, and local licensing and permitting of various aspects of our operations and facilities.

Legal Proceedings

In the ordinary course of our business, we are subject to periodic lawsuits, investigations and claims. Although we cannot predict with certainty the ultimate resolution of pending or future lawsuits, investigations and claims asserted against us, we do not believe that any currently pending legal proceeding to which we are a party is likely to have a material adverse effect on our business, results of operations, cash flows or financial condition. See "Note 20: Commitments and contingencies" in Item 8 of this Annual Report on Form 10-K for additional information.

Asbestos claims

In its 1986 purchase of McKesson Chemical Company from McKesson Corporation, or McKesson, our wholly owned subsidiary, Univar USA Inc., entered into an indemnification agreement with McKesson. Univar USA has an obligation to defend and indemnify McKesson for claims alleging injury from exposure to asbestos-containing products sold by McKesson Chemical Company, or the asbestos claims. Univar USA's obligation to indemnify McKesson for settlements and judgments arising from asbestos claims is the amount which is in excess of applicable insurance coverage, if any, which may be available under McKesson's historical insurance coverage. In addition, we are currently defending a small number of claims which name Univar USA as a defendant.

As of December 31, 2018, Univar USA has accepted the tender of, and is defending McKesson in, eight pending separate-plaintiff claims in multi-plaintiff lawsuits filed in the State of Mississippi. These lawsuits have multiple plaintiffs, include a large number of defendants, and provide no specific information on the plaintiffs' injuries and do not connect the plaintiffs' injuries to any specific sources of asbestos. Additionally, the majority of the plaintiffs in these lawsuits have not put forth evidence that they have been seriously injured from exposure to asbestos. No new claims in Mississippi have been received since 2010. At the peak there were approximately 16,000 such claims pending against McKesson. To date, the costs for defending these cases have not been material, and the cases that have been finalized have either been dismissed or resolved with either minimal or no payments. Although we cannot predict the outcome of pending or future claims or lawsuits with certainty, we believe the future defense and liability costs for the Mississippi cases will not be material. Univar USA has not recorded a reserve related to these lawsuits, as it has determined that losses are neither probable nor estimable.

As of December 31, 2018, Univar USA was defending fewer than 200 single-plaintiff asbestos claims against McKesson (or Univar USA as a successor in interest to McKesson Chemical Company) pending in 12 states. These cases differ from the Mississippi multi-plaintiff cases in that they are single-plaintiff cases with the plaintiff alleging substantial specific injuries from exposure to asbestos-containing products. These cases are similar to the Mississippi cases in that numerous defendants are named and that they provide little specific information connecting the plaintiffs' injuries to any specific source of asbestos. Although we cannot predict the outcome of pending or future claims or lawsuits with certainty, we believe the liabilities for these cases will not be material. In 2018, there were 56 single-plaintiff lawsuits filed against McKesson and 100 cases against McKesson which were resolved.

Environmental remediation

The Company is subject to various federal, state and local environmental laws and regulations that require environmental assessment or remediation efforts (collectively "environmental remediation work") at approximately 130 locations, some that are now or were previously Company-owned/occupied and some that were never Company-owned/occupied ("non-owned sites").

The Company's environmental remediation work at some sites is being conducted pursuant to governmental proceedings or investigations, while the Company, with appropriate state or federal agency oversight and approval, is conducting the environmental remediation work at other sites voluntarily. The Company is currently undergoing remediation efforts or is in the

Table of Contents

process of active review of the need for potential remediation efforts at approximately 107 current or formerly Company-owned/occupied sites. In addition, the Company may be liable for a share of the cleanup of approximately 23 non-owned sites. These non-owned sites are typically (a) locations of independent waste disposal or recycling operations with alleged or confirmed contaminated soil and/or groundwater to which the Company may have shipped waste products or drums for re-conditioning, or (b) contaminated non-owned sites near historical sites owned or operated by the Company or its predecessors from which contamination is alleged to have arisen.

In determining the appropriate level of environmental reserves, the Company considers several factors such as information obtained from investigatory studies; changes in the scope of remediation; the interpretation, application and enforcement of laws and regulations; changes in the costs of remediation programs; the development of alternative cleanup technologies and methods; and the relative level of the Company's involvement at various sites for which the Company is allegedly associated. The level of annual expenditures for remedial, monitoring and investigatory activities will change in the future as major components of planned remediation activities are completed and the scope, timing and costs of existing activities are changed. Project lives, and therefore cash flows, range from 2 to 30 years, depending on the specific site and type of remediation project.

Although the Company believes that its reserves are adequate for environmental contingencies, it is possible, due to the uncertainties noted above, that additional reserves could be required in the future that could have a material effect on the overall financial position, results of operations, or cash flows in a particular period. This additional loss or range of losses cannot be recorded at this time, as it is not reasonably estimable.

Customs and international trade laws

In 2015, the US Department of Justice ("DOJ"), on behalf of US Customs and Border Patrol ("CBP"), filed a complaint against Univar USA Inc., ("Univar") in the Court of the International Trade seeking approximately $84.0 million, plus additional interest and fees, in allegedly unpaid duties that applied to imports of saccharin from China. Univar denies that any such duties were due because Univar contends the saccharin it imported during the time in question was Taiwanese in origin. The case has progressed through the discovery phase and earlier this year Univar filed a motion for summary judgement, which the Court denied. The case is scheduled for trial in April 2019. Univar has not recorded a liability related to this matter. Although the Company believes its position is defensible, it cannot guarantee the outcome of this or other litigation.

Proprietary Rights

We rely primarily on trademarks, copyrights and trade secret laws to establish and maintain our proprietary rights in our intellectual property including technology, creative works and products.

We currently own trademark registrations or pending applications in approximately 86 countries for the Univar name and in approximately 68 countries for the Univar hexagon logo. Each of the issued registrations is current and valid for the maximum available statutory duration and can be renewed prior to expiration of the relevant statutory period. We renew the registrations as they become due for both of these marks. We claim common law rights in the mark "Univar" and other Univar-owned trademarks in those jurisdictions that recognize trademark rights based on use without registration. Additionally, we currently own registrations and pending applications in the United States and various jurisdictions for numerous other trademarks that identify Univar as the source of products and services, including "ChemPoint.com," "ChemCare," and "PESTWEB."

Employees

As of December 31, 2018, we employed more than 8,500 persons on a full-time equivalent basis worldwide.

Available Information

We file our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports, as well as proxy statements and registration statements, with the Securities and Exchange Commission (the "SEC"). The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers, including us, that file electronically. We make our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act available free of charge on or through our website at www.univar.com as soon as reasonably practicable after we file or furnish them to the SEC. The contents of our website are not, however, a part of this Form 10-K or our other SEC filings.

20

Table of Contents

Item 1A. RISK FACTORS

Risks Related to Our Business

Business and Economic Risks

We are affected by general economic conditions, particularly fluctuations in industrial production and consumption, and an economic downturn could adversely affect our operations and financial results.

We sell chemicals that are used in manufacturing processes and as components of or ingredients in other products. Our sales are correlated with and affected by fluctuations in the levels of industrial production, manufacturing output, and general economic activity. Producers of commodity and specialty chemicals are likely to reduce their output in periods of significant contraction in industrial and consumer demand, while demand for the products we distribute depends largely on trends in demand in the end markets our customers serve. A majority of our sales are in North America and Europe and our business is therefore susceptible to downturns in those economies as well as, to a lesser extent, the economies in the rest of the world. Our profit margins, as well as overall demand for our products and services, could decline as a result of a large number of factors outside our control, including economic recessions, reduced customer demand (whether due to changes in production processes, consumer preferences, laws and regulations affecting the chemicals industry and the manner in which they are enforced, or other factors), inflation, fluctuations in interest and currency exchange rates, and changes in the fiscal or monetary policies of governments in the regions in which we operate.

General economic conditions and macroeconomic trends, as well as the creditworthiness of our customers, could affect overall demand for chemicals. Any overall decline in the demand for chemicals could significantly reduce our sales and profitability. If the creditworthiness of our customers declines, we would face increased credit risk. In addition, volatility and disruption in financial markets could adversely affect our sales and results of operations by limiting our customers' ability to obtain financing necessary to maintain or expand their own operations.

A historical feature of past economic weakness has been significant destocking of inventories, including inventories of chemicals used in industrial and manufacturing processes. It is possible that an improvement in our net sales in a particular period may be attributable in part to restocking of inventories by our customers and represent a level of sales or sales growth that will not be sustainable over the longer term. Further economic weakness could lead to insolvencies among our customers or producers, as well as among financial institutions that are counterparties on financial instruments or accounts that we hold. Any of these developments could have a material adverse effect on our business, financial condition and results of operations.

Disruptions in the supply of chemicals we distribute or in the operations of our customers could adversely affect our business.

Our business depends on access to adequate supplies of the chemicals our customers purchase from us. From time to time, we may be unable to purchase adequate quantities of certain chemicals at prices that would enable us to earn a profit, if at all due to supply disruptions. Causes of supply disruptions may include natural disasters (including hurricanes and other extreme weather), industrial accidents, scheduled production outages, producer breaches of contract, producer disruptions, high demand leading to difficulties allocating appropriate quantities, port closures and other transportation disruptions and other circumstances beyond our control. In addition, unpredictable events may have a significant impact on the industries in which many of our customers operate, reducing demand for products that we normally distribute in significant volumes. Significant disruptions of supply and disruptions in customer industries could have a material adverse effect on our business, financial condition and results of operations.

Significant changes in the business strategies of producers could also disrupt our supply. Large chemical manufacturers may elect to sell certain products (or products in certain regions) directly to customers, instead of relying on distributors such as us. While we do not believe that our results depend materially on access to any individual producer's products, a reversal of the trend toward more active use of distributors would likely result in increasing margin pressure or products becoming unavailable to us. Any of these developments could have a material adverse effect on our business, financial condition and results of operations.

To the extent we have contracts with producers and our customers, they are generally short term or terminable upon short notice or at will, and termination or renegotiation of our relationships with producers and customers could negatively affect our business.

Our purchases and sales of chemicals are typically made pursuant to purchase orders rather than long-term contracts. Many of our contracts with both producers and our customers are terminable without cause upon 30 days' or less notice to us from the producer or customer. While some of our relationships for the distribution and sale of chemicals have exclusivity or preference provisions, we may not enforce these provisions effectively due to legal or business considerations. Our business relationships and reputation may suffer if we are unable to meet our delivery obligations to our customers which may occur because many producers are not subject to contracts or can terminate contracts on short notice. In addition, renegotiation of purchase or sales

terms to our disadvantage could reduce our sales margins. Any of these developments could adversely affect our business, financial condition and results of operations.

The prices and costs of the products we purchase may be subject to large and significant price increases. We might not be able to pass such cost increases through to our customers. We could experience financial losses if our inventories of one or more chemicals exceed our sales and the price of those chemicals decreases significantly while in our inventories or if our inventories fall short of our sales and the purchase price of those chemicals increases significantly.

We purchase and sell a wide variety of chemicals, the price and availability of which may fluctuate, and may be subject to large and significant price increases. Many of our contracts with producers include chemical prices that are not fixed or are tied to an index, which allows our producers to change the prices of the chemicals we purchase as the price of the chemicals fluctuates in the market. Our business is exposed to these fluctuations, as well as to fluctuations in our costs for transportation and distribution due to rising fuel prices or increases in charges from common carriers, rail companies and other third party transportation providers, as well as other factors. Changes in chemical prices affect our net sales and cost of goods sold, as well as our working capital requirements, levels of debt and financing costs. We might not always be able to reflect increases in our chemical costs, transportation costs and other costs in our own pricing. Any inability to pass cost increases onto customers may adversely affect our business, financial condition and results of operations.

In order to meet customer demand, we typically maintain significant inventories, and we are therefore subject to a number of risks associated with our inventory levels, including the following:

- declines in the prices of chemicals that are held by us;
- the need to maintain a significant inventory of chemicals that may be in limited supply and therefore difficult to procure;
- buying chemicals in bulk for the best pricing and thereby holding excess inventory;
- responding to the fluctuating demand for chemicals;
- cancellation of customer orders; and
- responding to customer requests for rapid delivery.

In order to manage our inventories successfully, we must estimate demand from our customers and purchase chemicals that substantially correspond to that demand. If we overestimate demand and purchase too much of a particular chemical, we face a risk that the price of that chemical will fall, leaving us with inventory that we cannot sell profitably or have to write down such inventory from its recorded value. If we underestimate demand and purchase insufficient quantities of a particular chemical and prices of that chemical rise, we could be forced to purchase that chemical at a higher price and forego profitability in order to meet customer demand. Our business, financial condition and results of operations could suffer a material adverse effect if either or both of these situations occur frequently or in large volumes.

We could lose our customers and suffer damage to our reputation if we are unable to meet customer demand for a particular product.

It can be difficult to anticipate our customers’ requirements for particular chemicals, particularly in the cases on pronounced cyclicality in our end markets. We could be, and often are, asked to deliver larger-than-expected quantities of a particular chemical on short notice. If for any reason we experience difficulties in filling customer orders, our reputation and customer relationships could be harmed. Customers may discontinue their relationship with us or we may be required to pay a higher price in order to obtain the needed chemical on short notice, thereby adversely affecting our margins.

Trends in oil, gas and mineral prices could adversely affect the level of exploration, development and production activity of certain of our customers and in turn the demand for our products and services.

Demand for our oil, gas and mining products and services is sensitive to the level of exploration, drilling, development and production activity of, and the corresponding capital spending by, oil, gas and mining companies and oilfield service providers. The level of exploration, drilling, development and production activity is directly affected by trends in oil, gas and mineral prices, which historically have been volatile and are likely to continue to be volatile. Many factors may affect these prices, including global market conditions, political conditions and weather. The

unpredictability of these factors prevents any reasonable forecast on the movements of such prices.

Any reduction in oil and gas prices, could depress the immediate levels of exploration, drilling, development and production activity by certain of our customers. Even the perception of longer-term lower oil and gas prices by certain of our customers could similarly reduce or delay major expenditures by these customers given the long-term nature of many large-scale development

projects. If any of these events were to occur, it could have an adverse effect on our business, results of operations and financial condition.

The markets in which we operate are highly competitive.

The chemical distribution market is highly competitive. Chemicals can be purchased from a variety of sources, including traders, brokers, wholesalers and other distributors, as well as directly from producers. Many of the products we distribute or finish are essentially fungible with products offered by our competition, including emerging competitors. The competitive pressure we face is particularly strong in sectors and markets where local competitors have strong positions or where new competitors can easily enter. Increased competition from distributors of products similar to or competitive with ours could result in price reductions, reduced margins and a loss of market share.

We expect to continue to experience significant and increasing levels of competition in the future. We must also compete with smaller companies that have been able to develop strong local or regional customer bases. In certain countries, some of our competitors are more established, benefit from greater name recognition and have greater resources within those countries than we do.

Consolidation of our competitors in the markets in which we operate could place us at a competitive disadvantage and reduce our profitability.

We operate in an industry, which is highly fragmented on a global scale, but in which there has been a trend toward consolidation in recent years. Consolidations of our competitors may jeopardize the strength of our positions in one or more of the markets in which we operate and any advantages we currently enjoy due to the comparative scale of our operations. Losing some of those advantages could adversely affect our business, financial condition and results of operations, as well as our growth potential.

We have in the past and may in the future make acquisitions, ventures and strategic investments, some of which may be significant in size and scope, which have involved in the past and will likely involve in the future numerous risks. We may not be able to address these risks without substantial expense, delay or other operational or financial problems.

We have made and may in the future make acquisitions of, or investments in, businesses or companies (including strategic partnerships with other companies). Acquisitions or investments have involved in the past and will likely involve in the future various risks, such as:

- integrating the operations and personnel of any acquired business;
- the potential disruption of our ongoing business, including the diversion of management attention;
- the possible inability to obtain the desired financial and strategic benefits from the acquisition or investment;
- customer attrition arising from preferences to maintain redundant sources of supply;
- producer attrition arising from overlapping or competitive products;
- assumption of contingent or unanticipated liabilities or regulatory liabilities;
- dependence on the retention and performance of existing management and work force of acquired businesses for the future performance of these businesses;
- regulatory risks associated with acquired businesses (including the risk that we may be required for regulatory reasons to dispose of a portion of our existing or acquired businesses); and
- the risks inherent in entering geographic or product markets in which we have limited prior experience.

Future acquisitions and investments may need to be financed in part through additional financing from banks, through public offerings or private placements of debt or equity securities or through other arrangements, and could result in substantial cash expenditures. The necessary acquisition financing may not be available to us on acceptable terms if and when required, particularly because our current high leverage may make it difficult or impossible for us to secure additional financing for acquisitions.

To the extent that we make acquisitions that result in our recording significant goodwill or other intangible assets, the requirement to review goodwill and other intangible assets for impairment periodically may result in impairments that could have a material adverse effect on our financial condition and results of operations.

In connection with acquisitions, ventures or divestitures, we may become subject to liabilities.

In connection with any acquisitions or ventures, we may acquire liabilities or defects such as legal claims, including but not limited to third party liability and other tort claims; claims for breach of contract; employment-related claims;

environmental

Table of Contents

liabilities, conditions or damage; permitting, regulatory or other compliance with law issues; hazardous materials or liability for hazardous materials; or tax liabilities. If we acquire any of these liabilities, and they are not adequately covered by insurance or an enforceable indemnity or similar agreement from a creditworthy counterparty, we may be responsible for significant out-of-pocket expenditures. In connection with any divestitures, we may incur liabilities for breaches of representations and warranties or failure to comply with operating covenants under any agreement for a divestiture. In addition, we may indemnify a counterparty in a divestiture for certain liabilities of the subsidiary or operations subject to the divestiture transaction. These liabilities, if they materialize, could have a material adverse effect on our business, financial condition and results of operations.

Our balance sheet includes significant goodwill and intangible assets, the impairment of which could affect our future operating results.

We carry significant goodwill and intangible assets on our balance sheet. As of December 31, 2018, our goodwill and intangible assets totaled approximately $1.8 billion and $0.2 billion, respectively, including approximately $1.2 billion in goodwill resulting from our 2007 acquisition by investment funds advised by CVC. We may also recognize additional goodwill and intangible assets in connection with future business acquisitions. Goodwill is not amortized for book purposes. We test for impairment annually using a fair value based approach. We also test goodwill for impairment if an event occurs or circumstances change that indicate that the fair value of a reporting unit has more likely than not declined below its carrying value. The identification and measurement of impairment involves the estimation of the fair value of reporting units, which requires judgment and involves the use of significant estimates and assumptions by management. The estimates of fair value of reporting units are based on the best information available as of the date of the assessment and incorporate management assumptions about expected future cash flows and contemplate other valuation techniques. Our estimates of future cash flows may differ from actual cash flows that are subsequently realized due to many factors, including future worldwide economic conditions and the expected benefits of our initiatives, among other things. Intangible assets are amortized for book purposes over their respective useful lives and are tested for impairment if any event occurs or circumstances change that indicates that carrying value may not be recoverable. Although we currently do not expect that our goodwill and intangible assets will be further impaired, we cannot guarantee that a material impairment will not occur, particularly in the event of a substantial deterioration in our future prospects either in total or in a particular reporting unit. See “Note 13: Goodwill and intangible assets” in Item 8 of this Annual Report on Form 10-K for a discussion of our 2018 impairment review. If our goodwill and intangible assets become impaired, it could have a material adverse effect on our financial condition and results of operations.

We require significant working capital, and we expect our working capital needs to increase in the future, which could result in having lower cash available for, among other things, capital expenditures and acquisition financing.

We require significant working capital to purchase chemicals from chemical producers and distributors and sell those chemicals efficiently and profitably to our customers. Our working capital needs may increase if the price of products we purchase and inventory increase. Our working capital needs also increase at certain times of the year, as our customers’ requirements for chemicals increase. For example, our customers in the agricultural sector require significant deliveries of chemicals within a growing season that can be very short and depend on weather patterns in a given year. We need inventory on hand to have product available to ensure timely delivery to our customers. If our working capital requirements increase and we are unable to finance our working capital on terms and conditions acceptable to us, we may not be able to obtain chemicals to respond to customer demand, which could result in a loss of sales.

In addition, the amount of working capital we require to run our business is expected to increase in the future due to expansions in our business activities. If our working capital needs increase, the amount of free cash we have at our disposal to devote to other uses will decrease. A decrease in free cash could, among other things, limit our flexibility, including our ability to make capital expenditures and to acquire suitable acquisition targets that we have identified. If increases in our working capital occur and have the effect of decreasing our free cash, it could have a material adverse effect on our business, financial condition and results of operations.

We have a history of net losses and may not sustain profitability in the future.

Although we achieved profitability in 2018 and 2017, we had a net loss of $68.4 million in 2016 and there can be no assurance that we will sustain profitability. We have incurred net losses in three of the last six fiscal years. Growth of our revenues may slow or revenues may decline for a number of possible reasons, including slowing demand for our products and services, increasing competition or decreasing growth of our overall market. Our cost of goods sold could increase for a number of possible reasons, including increases in chemical prices and increases in chemical handling expenses due to regulatory action or litigation. In addition, our ability to generate profits could be impacted by our substantial indebtedness and the related interest expense. The interest payments on our indebtedness have exceeded operating income in two of our last six fiscal years. All of these factors could contribute to further net losses and, if we are unable to meet these risks and challenges as we encounter them, our business may suffer.

Table of Contents

We rely on our computer and data processing systems, and a large-scale malfunction could disrupt our business or create potential liabilities.

Our ability to keep our business operating effectively depends on the functional and efficient operation of our enterprise resource planning, telecommunications systems, inventory tracking, billing and other information systems and related records and information management policies. We rely on these systems to track transactions, billings, payments and inventory, as well as to make a variety of day-to-day business decisions. Our systems are aging and susceptible to malfunctions, lack of support, interruptions (including due to equipment damage, power outages, computer viruses and a range of other hardware, software and network problems) and we may experience such malfunctions, interruptions or security breaches in the future. Our systems may also be older generations of software which are unable to perform as efficiently as, and fail to communicate well with, newer systems. As the development and implementation of our information technology systems continue, we may elect to modify, replace or discontinue certain technology initiatives, which would result in write-downs.

Although our systems are diversified, including multiple server locations and a range of software applications for different regions and functions, a significant or large-scale malfunction, interruption or security breach of our computer or data processing systems could adversely affect our ability to manage and keep our operations running efficiently and damage our reputation if we are unable to track transactions and receive products from producers or deliver products to our customers. A malfunction that results in a wider or sustained disruption to our business could have a material adverse effect on our business, financial condition and results of operations, as well as on the ability of management to align and optimize technology to implement business strategies. A security breach might also lead to potential claims from third parties or employees.

Data privacy is subject to frequently changing rules and regulations regarding the handling of personal data, such as the General Data Protection Regulation ("GDPR") which was recently adopted by the European Union. These rules and regulations are frequently changing and are becoming increasingly complex and sometimes conflict among the various jurisdictions and countries in which we operate, which makes compliance challenging and expensive. Any breach in our information technology security systems could result in the disclosure or misuse of confidential or proprietary information, including sensitive customer, supplier, employee or investor information maintained in the ordinary course of our business. Any such event, or any failure to comply with the requirements of GDPR or other laws in this area, could cause damage to our reputation, loss of valuable information or loss of revenue and could result in legal liability, or regulatory or other penalties. In addition, we may incur large expenditures to investigate or remediate, to recover data, to repair or replace networks or information systems, or to protect against similar future events.

Further, a failure to comply with our records and information management and retention policies could lead to potential claims, liabilities or exposures.

Our business could be negatively affected by security threats, including cybersecurity threats to us, and other disruptions.

We face various security threats, including cybersecurity threats to gain unauthorized access to sensitive information or to render data or systems unusable, threats to the security of our facilities, and threats from terrorist acts. The potential for such security threats subjects our operations to increased risks that could have a material adverse effect on our business. Under the oversight of our board of directors and the leadership and active participation of our senior management team, we are continuously working to improve our ability to respond to and recover from potential security threats through technological improvements and employee awareness training around cyber risks. In responding to these risks, we continue to implement various procedures and controls to monitor and mitigate security threats and to increase security for our information, facilities and infrastructure which may result in increased capital and operating costs. We may be the recipients of intelligence or other threat information that we are unable to share with investors and other stakeholders. There can be no assurance that such procedures, controls, and intelligence will be sufficient to prevent security breaches from occurring. If any security breaches were to occur, they could lead to losses of sensitive information, critical infrastructure or capabilities essential to our operations and could have a material adverse effect on our reputation, financial position, results of operations or cash flows, and could result in claims being brought against us. Cybersecurity attacks in particular are becoming more sophisticated and include, but

are not limited to, malicious software, attempts to gain unauthorized access to data (either directly or through our business partners), and other electronic security breaches that could lead to disruptions in critical systems, unauthorized release of confidential or otherwise protected information, and corruption of data. In addition, if any information about our customers and producers retained by us were the subject of a successful cybersecurity attack against us, we could be subject to litigation or other claims by the affected customers and producers. We could also encounter violations of applicable law or reputational damage from the disclosure of confidential information belonging to us or our employees, customers or suppliers. In addition, the disclosure of non-public information could lead to the loss of our intellectual property and/or diminished competitive advantages. Should any of the foregoing events occur, we may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future. In addition, evolving and expanding compliance and operational requirements under the privacy laws of the jurisdictions in which we operate, such as the EU General Data Protection Regulation, or GDPR, which took effect in May 2018, impose significant costs that are likely to

Table of Contents

increase over time. These events could damage our reputation and lead to financial losses from expenses related to remediation actions, loss of business or potential liability.

We depend on transportation assets, some of which we do not own, in order to deliver products to our customers.

Although we maintain a significant portfolio of owned and leased transportation assets, including trucks, trailers and railcars, we also rely on transportation and warehousing provided by third parties (including common carriers and rail companies) to deliver products to our customers. Our access to third party transportation is not guaranteed, and we may be unable to transport chemicals at economically attractive rates in certain circumstances, particularly in cases of adverse market conditions or disruptions to transportation infrastructure. We are also subject to increased costs that we may not always be able to recover from our customers, including fuel prices, as well as charges imposed by common carriers, leasing companies and other third parties involved in transportation. In particular, our US operations rely to a significant extent on rail shipments, and we are therefore required to pay rail companies' network access fees. We can also experience the availability of trucks and drivers tighten. We are also subject to the risks normally associated with product delivery, including inclement weather, disruptions in the transportation infrastructure, disruptions in our lease arrangements and the availability of fuel, as well as liabilities arising from accidents to the extent we are not adequately covered by insurance or misdelivery of products. Our failure to deliver products in a timely and accurate manner could harm our reputation and brand, which could adversely affect our business, financial condition and results of operations.

Our business exposes us to significant risks associated with hazardous materials and related activities, not all of which are covered by insurance.

Because we are engaged in the blending, managing, handling, storing, selling, transporting and disposing of chemicals, chemical waste products and other hazardous materials, product liability, health impacts, fire damage, safety and environmental risks are significant concerns for us. We maintain substantial reserves relating to remediation activities at our owned sites and third party sites, which are subject to federal and state clean-up requirements, as described below in "—We are subject to extensive general and product-specific environmental, health and safety laws and regulations. Compliance with and changes to these environmental, health and safety laws, including laws relating to the investigation and remediation of contamination, could have a material adverse effect on our business, financial condition and results of operations." We are exposed to present and future chemical exposure claims by employees, contractors on our premises, other persons located nearby, as well as related workers' compensation claims. In the United States, we are subject to federal legislation enforced by OSHA as well as to state safety and health laws. We carry insurance to protect us against many accident-related risks involved in the conduct of our business and we maintain environmental damage and pollution insurance coverage in accordance with our assessment of the risks involved, the ability to bear those risks and the cost and availability of insurance. Each of these insurance policies is subject to exclusions, deductibles and coverage limits we believe are generally in accordance with industry standards and practices. See "Business—Insurance" in Item 1 of this Annual Report on Form 10-K. We do not insure against all risks and may not be able to insure adequately against certain risks (whether relating to our or a third party's activities or other matters) and may not have insurance coverage that will pay any particular claim. We also may be unable to obtain at commercially reasonable rates in the future adequate insurance coverage for the risks we currently insure against, and certain risks are or could become completely uninsurable or eligible for coverage only to a reduced extent. In particular, more stringent environmental, health or safety regulations may increase our costs for, or impact the availability of, insurance against accident-related risks and the risks of environmental damage or pollution. Our business, financial condition and results of operations could be materially impaired by accidents and other environmental risks that substantially reduce our revenues, increase our costs or subject us to other liabilities in excess of available insurance.

Accidents, safety failures, environmental damage, product quality issues, major or systemic delivery failures involving our distribution network or the products we carry, or adverse health effects or other harm related to hazardous materials we blend, manage, handle, store, sell, transport or dispose of could damage our reputation and result in substantial damages or remedial obligations.

Our business depends to a significant extent on our customers' and producers' trust in our reputation for reliability, quality, safety and environmental responsibility. Actual or alleged instances of safety deficiencies, mistaken or

incorrect deliveries, inferior product quality, exposure to hazardous materials resulting in illness, injury or other harm to persons, property or natural resources, or of damage caused by us or our products, could damage our reputation and lead to customers and producers curtailing the volume of business they do with us. Also, there may be safety, personal injury or other environmental risks related to our products which are not known today. Any of these events, outcomes or allegations could also subject us to substantial legal claims, and we could incur substantial expenses, including legal fees and other costs, in defending such legal claims, which could materially impact our financial position and results of operations.

Actual or alleged accidents or other incidents at our facilities or that otherwise involve our personnel or operations could also subject us to claims for damages by third parties. Because many of the chemicals that we handle are dangerous, we are subject to the ongoing risk of hazards, including leaks, spills, releases, explosions and fires, which may cause property damage, illness, physical injury or death. We sell products used in hydraulic fracturing, a process that involves injecting water, sand and chemicals

Table of Contents

into subsurface rock formations to release and capture oil and natural gas. The use of such hydraulic fracturing fluids by our customers may result in releases that could impact the environment and third parties. Several of our distribution facilities, including our Los Angeles facility, one of our largest, are located near high-density population centers. If any such events occur, whether through our own fault, through preexisting conditions at our facilities, through the fault of a third party or through a natural disaster, terrorist incident or other event outside our control, our reputation could be damaged significantly. We could also become responsible, as a result of environmental or other laws or by court order, for substantial monetary damages or expensive investigative or remedial obligations related to such events, including but not limited to those resulting from third party lawsuits or environmental investigation and cleanup obligations on and off-site. The amount of any costs, including fines, damages and/or investigative and remedial obligations, that we may become obligated to pay under such circumstances could substantially exceed any insurance we have to cover such losses.

Any of these risks, if they materialize, could significantly harm our reputation, expose us to substantial liabilities and have a material adverse effect on our business, financial condition and results of operations.

International Market Risk

We generate a significant portion of our net sales internationally and intend to continue to expand our international operations. We face particular challenges in emerging markets. Our results of operations could suffer if we are unable to manage our international operations effectively or as a result of various risks related to our international activities.

During the year ended December 31, 2018, approximately 40% of our net sales were generated outside of the United States. We intend to continue to expand our penetration in certain foreign markets and to enter new and emerging foreign markets. Expansion of our international business will require significant management attention and resources. The profitability of our international operations will largely depend on our continued success in the following areas:

- securing key producer relationships to help establish our presence in international markets;
- hiring and training personnel capable of supporting producers and our customers and managing operations in foreign countries;
- localizing our business processes to meet the specific needs and preferences of foreign producers and customers, which may differ in certain respects from our experience in North America and Europe;
- building our reputation and awareness of our services among foreign producers and customers; and
- implementing new financial, management information and operational systems, procedures and controls to monitor our operations in new markets effectively, without causing undue disruptions to our operations and customer and producer relationships.

In addition, we are subject to risks associated with operating in foreign countries, including:

- varying and often unclear legal and regulatory requirements that may be subject to inconsistent or disparate enforcement, particularly regarding environmental, health and safety issues and security or other certification requirements, as well as other laws and business practices that favor local competitors, such as exposure to possible expropriation, nationalization, restrictions on investments by foreign companies or other governmental actions;
- less stable supply sources;
- competition from existing market participants that may have a longer history in and greater familiarity with the foreign markets where we operate;
- tariffs, export duties, quotas and other barriers to trade; as well as possible limitations on the conversion of foreign currencies into US dollars or remittance of dividends and other payments by our foreign subsidiaries;
- possible future changes to tariffs associated with imports and exports from the US;
- divergent labor regulations and cultural expectations regarding employment and agency;
- different cultural expectations regarding industrialization, international business and business relationships;
- foreign taxes and related regulations, including foreign taxes that we may not be able to offset against taxes imposed upon us in the United States, and foreign tax and other laws limiting our ability to repatriate earnings to the United States;
- possible changes in foreign and domestic taxes and related regulations;
- extended payment terms and challenges in our ability to collect accounts receivable;
- changes in a specific country’s or region’s political or economic conditions;

27

Table of Contents

- compliance with anti-bribery laws such as the US Foreign Corrupt Practices Act, the UK Bribery Act and similar anti-bribery laws in other jurisdictions, the violation of which could expose us to severe criminal or civil sanctions; and
- compliance with anti-boycott, privacy, economic sanctions, anti-dumping, antitrust, import and export laws and regulations by our employees or intermediaries acting on our behalf, the violation of which could expose us to significant fines, penalties or other sanctions.

If we fail to address the challenges and risks associated with international expansion, we may encounter difficulties implementing our strategy, thereby impeding our growth and harming our operating results.

Our operations in the Asia-Pacific region, Eastern Europe, Latin America and the Middle East and Africa are still developing. It may prove difficult to achieve our goals and take advantage of growth and acquisition opportunities in these or in other emerging markets due to a lack of comprehensive market knowledge and network and legal restrictions. Our growth in emerging markets may also be limited by other factors such as significant government influence over local economies, foreign investment restrictions, substantial fluctuations in economic growth, high levels of inflation and volatility in currency values, exchange controls or restrictions on expatriation of earnings, high domestic interest rates, wage and price controls, changes in governmental economic or tax policies, imposition of trade barriers, unexpected changes in regulation and overall political social and economic instability. In addition, the heightened exposure to terrorist attacks or acts of war or civil unrest in certain geographies, if they occur, could result in damage to our facilities, substantial financial losses or injuries to our personnel.

Although we exercise what we believe to be an appropriate level of central control and active supervision of our operations around the world, our local subsidiaries retain significant operational flexibility. There is a risk that our operations around the world will experience problems that could damage our reputation, or that could otherwise have a material adverse effect on our business, financial condition and results of operations.

We may be unable to effectively implement our strategies or achieve our business goals.

The breadth and scope of our business poses several challenges, such as:

- initiating or maintaining effective communication among and across all of our geographic business segments and industry groups;
- identifying new products and product lines and integrating them into our distribution network;
- allocating financial and other resources efficiently across all of our business segments and industry groups;
- aligning organizational structure with management’s vision and direction;
- communicating ownership and accounting over business activities and ensuring responsibilities are properly understood throughout the organization;
- ensuring cultural and organizational changes are executed smoothly and efficiently and ensuring personnel resources are properly allocated to effect these changes; and
- establishing standardized processes across geographic business segments and industry groups.

As a result of these and other factors such as these, we may be unable to effectively implement our strategies or achieve our business goals. Any failure to effectively implement our strategies may adversely impact our future prospects and our results of operations and financial condition.

Fluctuations in currency exchange rates may adversely affect our results of operations.

We sell products in over 130 countries and we generated approximately 40% of our 2018 net sales outside the United States. The revenues we receive from such foreign sales are often denominated in currencies other than the US dollar. We do not hedge our foreign currency exposure with respect to our investment in and earnings from our foreign businesses. Accordingly, we might suffer considerable losses if there is a significant adverse movement in exchange rates.

In addition, we report our consolidated results in US dollars. The results of operations and the financial position of our local operations are generally reported in the relevant local currencies and then translated into US dollars at the applicable exchange rates for inclusion in our consolidated financial statements, exposing us to currency translation risk. Consequently, any change in exchange rates between our foreign subsidiaries’ functional currencies and the US dollar will affect our consolidated income statement and balance sheet when the results of those operating companies are translated into US dollars for reporting purposes. Decreases in the value of our foreign subsidiaries’ functional

currencies against the US dollar will tend to reduce those operating companies' contributions in dollar terms to our financial condition and results of operations. In 2018, our most significant currency exposures were to the euro, the Canadian dollar and the British pound sterling versus the US dollar. The exchange rates between

Table of Contents

these and other foreign currencies and the US dollar may fluctuate substantially and such fluctuations have had a significant effect on our results in recent periods. For additional details on our currency exposure and risk management practices, see “Quantitative and Qualitative Disclosures About Market Risk” in Item 7A of this Annual Report on Form 10-K.

There is uncertainty surrounding the implementation and effect of Brexit, which may cause increased economic volatility and have a material adverse effect on our business, financial condition and results of operations.

On June 23, 2016, voters in the United Kingdom (“UK”) approved an advisory referendum to withdraw membership from the European Union (“EU”). The UK began the formal process for leaving the EU (referred to as “Brexit”) in March 2017 by serving notice to the European Council. Absent action by the UK to the contrary, Brexit is scheduled to take place on March 29, 2019. The long-term nature of the UK’s relationship with the EU is unclear and there is considerable uncertainty when any relationship will be agreed and implemented.

Approximately 2% and 21% of our net sales for the year ended December 31, 2018 were attributable to our operations in the UK and Continental Europe, respectively. Given our significant operations and presence in the UK and Continental Europe, there can be no assurance that Brexit will not have a material adverse effect on our business, financial condition and results of operations.

The political and economic instability created by Brexit has been widely reported in the press and financial media. Brexit may continue to cause volatility in global financial markets and uncertainty regarding the regulation of data protection in the UK. Brexit may also disrupt the free movement of goods, services and people between the UK, the EU and elsewhere. The effects of Brexit will depend on any agreements the UK makes to retain access to EU markets either during a transitional period or more permanently. Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the UK determines which EU laws to replace or replicate. Further, uncertainty around these and related issues could lead to adverse effects on the economy of the UK, the EU and the other economies in which we operate. All of these effects could cause disruptions and delays in importing products into the UK, uncertainty and potential increases in costs of importation (including duties) and increased credit risk due to adverse impacts on our customers. As a result, Brexit could have an adverse effect upon, and create uncertainty surrounding, our business in the UK and EU, our relationships with our existing and future customers, suppliers and employees and, ultimately, on our future business, financial results and operations.

While we are working with our customers and suppliers to anticipate and mitigate potential impacts of Brexit, we cannot predict whether our anticipation or efforts will prove adequate or that we will effectively execute any mitigation actions.

Litigation, Environmental and Tax Regulation Risk

Evolving environmental laws and regulations on hydraulic fracturing and other oil and gas production activities could have an impact on our financial performance.

Hydraulic fracturing is a common practice that is used to stimulate production of crude oil and/or natural gas from dense subsurface rock formations, and is primarily presently regulated by state agencies. Many states have adopted laws and/or regulations that require disclosure of the chemicals used in hydraulic fracturing, and are considering legal requirements that could impose more stringent permitting, disclosure and well construction requirements on oil and/or natural gas drilling activities as well as regulations relating to waste streams from such activities. The EPA is also moving forward with various related regulatory actions, including regulations requiring, among other matters, “green completions” of hydraulically-fractured wells. Similarly, existing and new regulations in the United States and elsewhere relating to oil and gas production could impact the sale of some of our products into these markets.

Our business exposes us to potential product liability claims and recalls, which could adversely affect our financial condition and performance.

The repackaging, blending, mixing, manufacture, sale and distribution of chemical products by us, including products used in hydraulic fracturing operations and products produced with food ingredients or with pharmaceutical and nutritional supplement applications, involve an inherent risk of exposure to product liability claims, product recalls, product seizures and related adverse publicity, including, without limitation, claims for exposure to our products, spills or escape of our products, personal injuries, food related claims and property damage or environmental claims. A product liability claim, judgment or recall against our customers could also result in substantial and unexpected

expenditures for us, affect consumer confidence in our products and divert management's attention from other responsibilities. Although we maintain product liability insurance, there can be no assurance that the type or level of coverage is adequate or that we will be able to continue to maintain our existing insurance or obtain comparable insurance at a reasonable cost, if at all. A product recall or a partially or completely uninsured judgment against us could have a material adverse effect on our business, financial condition and results of operation.

Table of Contents

We are subject to extensive general and product-specific environmental, health and safety laws and regulations. Compliance with and changes to these environmental, health and safety laws, including laws relating to the investigation and remediation of contamination, could have a material adverse effect on our business, financial condition and results of operations.

We are subject to extensive environmental, health and safety laws and regulations in multiple jurisdictions because we blend, manage, handle, store, sell, transport and arrange for the disposal of chemicals, hazardous materials and hazardous waste. These include laws and regulations governing our management, storage, transportation and disposal of chemicals; product regulation; air, water and soil contamination; and the investigation and cleanup of contaminated sites, including any spills or releases that may result from our management, handling, storage, sale, transportation of chemicals and other products. We hold a number of environmental permits and licenses. Compliance with these laws, regulations, permits and licenses requires that we expend significant amounts for ongoing compliance, investigation and remediation. If we fail to comply with such laws, regulations, permits or licenses we may be subject to fines and other civil, administrative or criminal sanctions, including the revocation of permits and licenses necessary to continue our business activities.

Previous operations, including those of acquired companies, have resulted in contamination at a number of current and former sites, which must be investigated and remediated. We are currently investigating and/or remediating contamination, or contributing to cleanup costs, at approximately 130 currently or formerly owned, operated or used sites or other sites impacted by our operations. We have spent substantial sums on such investigation and remediation and we expect to continue to incur such expenditures in the future. Based on current estimates, we believe that these ongoing investigation and remediation costs will not materially affect our business. There is no guarantee, however, that our estimates will be accurate, that new contamination will not be discovered or that new environmental laws or regulations will not require us to incur additional costs. Any such inaccuracies, discoveries or new laws or regulations, or the interpretation of existing laws and regulations, could have a material adverse effect on our business, financial condition and results of operations. As of December 31, 2018, we reserved approximately $83.5 million for probable and reasonably estimable losses associated with remediation at currently or formerly owned, operated or used sites or other sites impacted by our operations. We may incur losses in connection with investigation and remediation obligations that exceed our environmental reserve. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Estimates—Environmental Liabilities” in Item 7 of this Annual Report on Form 10-K for additional information. We also may incur substantial costs, including fines, damages, criminal or civil sanctions and investigation and remediation costs, or experience interruptions in our operations, for violations under environmental, health and safety laws or permit requirements.

We could be held liable for the costs to investigate, remediate or otherwise address contamination at any real property we have ever owned, leased, operated or used or other sites impacted by our operations. Some environmental laws could impose on us the entire cost of cleanup of contamination present at a site even though we did not cause all of the contamination. These laws often identify parties who can be strictly and jointly and severally liable for remediation. The discovery of previously unknown contamination at current or former sites or the imposition of other environmental liabilities or obligations in the future, including additional investigation or remediation obligations with respect to contamination that has impacted other properties, could lead to additional costs or the need for additional reserves that have a material adverse effect on our business, financial condition and results of operations. In addition, we may be required to pay damages or civil judgments related to third party claims, including those relating to personal injury (including exposure to hazardous materials or chemicals we blend, handle, store, sell, transport or dispose of), product quality issues, property damage or contribution to remedial obligations.

We have been identified as potentially responsible parties at various third party sites at which we have arranged for the disposal of our hazardous wastes. We may be identified as a potentially responsibility party at additional sites beyond those for which we currently have financial obligations. Such developments could have a material adverse effect on our business, financial condition and results of operations. See “Business—Regulatory Matters—Environmental, Health and Safety Matters” in Item 1 of this Annual Report on Form 10-K.

Certain agreements to which we are a party contain contractual provisions pursuant to which we agreed to indemnify other parties for contamination at certain real property. We have been, and may in the future be, subject to

environmental indemnity claims asserted by other parties with respect to contamination at sites we have ever owned, leased, operated or used. We could incur significant costs in addressing existing and future environmental indemnification claims.

Societal concerns regarding the safety of chemicals in commerce and their potential impact on the environment have resulted in a growing trend towards increasing levels of product safety and environmental protection regulations. These concerns have led to, and could continue to result in, stringent regulatory intervention by governmental authorities. In addition, these concerns could influence public perceptions, impact the commercial viability of the products we sell and increase the costs to comply with increasingly complex regulations, which could have a negative impact on our business, financial condition and results of operations. Additional findings by government agencies that chemicals pose significant environmental, health or safety risks may lead to their prohibition in some or all of the jurisdictions in which we operate.

Table of Contents

Environmental, health and safety laws and regulations vary significantly from country to country and change frequently. Future changes in laws and regulations, or the interpretation of existing laws and regulations, could have an adverse effect on us by adding restrictions, reducing our ability to do business, increasing our costs of doing business or reducing our profitability or reducing the demand for our products. See "Business—Regulatory Matters—Environmental, Health and Safety Matters" in Item 1 of this Annual Report on Form 10-K.
Current and future laws and regulations addressing greenhouse gas emissions enacted in the United States, Europe and other jurisdictions around the world could also have a material adverse effect on our business, financial condition and results of operation. Increased energy costs due to such laws and regulations, emissions associated with our customers' products or development of alternative products having lower emissions of greenhouse gases and other pollutants could materially affect demand for our customers' products and indirectly affect our business. Changes in and introductions of regulations have in the past caused us to devote significant management and capital resources to compliance programs and measures, and future regulations applicable to us would likely further increase these compliance costs and could have a material adverse effect on our business, financial condition and results of operations.

Our business is subject to additional general regulatory requirements and tax requirements, which increase our cost of doing business, could result in regulatory, unclaimed property or tax claims, and could restrict our business in the future.

Our general business operations are subject to a broad spectrum of general regulatory requirements, including antitrust regulations, food and drug regulations, human resources regulations, tax regulations, unclaimed property, banking and treasury regulations, among others. These regulations add cost to our conduct of business and could, in some instances, result in claims or enforcement actions or could reduce our ability to pursue business opportunities. Future changes could result in additional costs and restrictions to our business activities. We are currently undergoing a multi-state unclaimed property audit, the timing and outcome of which cannot be predicted; we will incur significant professional fees in connection with the audit and if we are found not to be in compliance the auditing states may seek significant remittances and other penalties and interest.

We are subject to asbestos claims.

In connection with our purchase of McKesson Chemical Company in 1986, our wholly-owned subsidiary Univar USA Inc. is obligated to indemnify McKesson for claims alleging injury from exposure to asbestos-containing products by McKesson Chemical Company. As of December 31, 2018, we are defending lawsuits by more than one hundred plaintiffs claiming asbestos related injuries, including a small number of which name us as a defendant. See "Business—Legal Proceedings—Asbestos Claims" in Item 1 of this Annual Report on Form 10-K. As of December 31, 2018, Univar USA has not recorded a liability related to the pending litigation as any potential loss is neither probable nor estimable. Although our costs of defense to date have not been material, we cannot predict the ultimate outcome of these lawsuits, which, if determined adversely to us, may result in liability that would have a material adverse effect on our business, financial condition and results of operations. Furthermore, if the number of asbestos claims for which we are obligated to indemnify McKesson, or the number of asbestos claims naming us, were to increase substantially, particularly if the increase were associated with a significant increase in the average cost per lawsuit, our business, financial condition and results of operations could be materially adversely affected.

Our business is subject to many operational risks for which we might not be adequately insured or prevail in any claim dispute.

We are exposed to risks including, but not limited to, accidents, contamination and environmental damage, safety claims, natural disasters, terrorism, acts of war and civil unrest and other events that could potentially interrupt our business operations and/or result in significant costs. Although we attempt to cover these risks with insurance to the extent that we consider appropriate, we may incur losses that are not covered by insurance or exceed the maximum amounts covered by our insurance policies. Even if our insurance coverage is appropriate, our insurers may contest, and prevail in litigation regarding, and claims. We have incurred environmental risks and losses, often from our historic activities, for which we have no available or remaining insurance.
Damage to a major facility, whether or not insured, could impair our ability to operate our business in a geographic region and cause loss of business and related expenses. From time to time, insurance for chemical risks have not been

available on commercially acceptable terms or, in some cases, not available at all. In the future we may not be able to maintain our current coverages. Due to the variable condition of the insurance market, we have experienced and may experience in the future, increased deductible retention levels and increased premiums. As we assume more risk through higher retention levels, we may experience more variability in our insurance reserves and expense. Increased insurance premiums or our incurrence of significant uncovered losses could have a material adverse effect on our business, financial condition and results of operations.

Table of Contents

We are exposed to ongoing litigation and other legal and regulatory actions and risks in the ordinary course of our business, and we could incur significant liabilities and substantial legal fees.
We are subject to the risk of litigation, other legal claims and proceedings, and regulatory enforcement actions in the ordinary course of our business. Also, there may be safety or personal injury risks related to our products which are not known today. The results of legal proceedings cannot be predicted with certainty. We cannot guarantee that the results of current or future legal proceedings against McKesson and a few claims asserted directly against Univar USA Inc. will not materially harm our business, reputation or brand, nor can we guarantee that we will not incur losses in connection with current or future legal proceedings that exceed any provisions we may have set aside in respect of such proceedings or that exceed any applicable insurance coverage. We also cannot guarantee that any tax assessment previously made against us by the Canada Revenue Agency will not result in a material tax liability or that the issues raised by Customs and Border Patrol will not result in a material liability. The occurrence of any of these events could have a material adverse effect on our business, financial condition or results of operations. See "Business—Legal Proceedings" in Item 1 of this Annual Report on Form 10-K.
Many of the products we sell have "long-tail" exposures, giving rise to liabilities many years after their sale and use. Insurance purchased at the time of sale may not be available when costs arise in the future and producers may no longer be available to provide indemnification.
Employee and Benefit Plan Risk
We depend on a limited number of key personnel who would be difficult to replace. If we lose the services of these individuals, or are unable to attract new talent, our business will be adversely affected.
We depend upon the ability and experience of a number of our executive management and other key personnel who have substantial experience with our operations, the chemicals and chemical distribution industries and the selected markets in which we operate. The loss of the services of one or a combination of our senior executives or key employees could have a material adverse effect on our results of operations. We also might suffer an additional impact on our business if one of our senior executives or key employees is hired by a competitor. Our success also depends on our ability to continue to attract, manage and retain other qualified management and technical and clerical personnel as we grow. We may not be able to continue to attract or retain such personnel in the future.
Negative developments affecting our pension plans and multi-employer pension plans in which we participate may occur.
We operate a number of pension plans for our employees and have obligations with respect to several multi-employer pension plans sponsored by labor unions in the United States. The terms of these plans vary from country to country. Generally, our defined benefit pension plans are funded with trust assets invested in a diversified portfolio of debt and equity securities and other investments. Among other factors, changes in interest rates, investment returns, the market value of plan assets and actuarial assumptions can (1) affect the level of plan funding; (2) cause volatility in the net periodic benefit cost; and (3) increase our future contribution requirements. In or following an economic environment characterized by declining investment returns and interest rates, we may be required to make additional cash contributions to our pension plans to satisfy our funding requirements and recognize further increases in our net periodic benefit cost. A significant decrease in investment returns or the market value of plan assets or a significant decrease in interest rates could increase our net periodic benefit costs and adversely affect our results of operations. Our pension plans in the United States and certain other countries are not fully funded. The funded status of our pension plans is equal to the difference between the value of plan assets and projected benefit obligations. At December 31, 2018, our pension plans had an underfunded status of $212.4 million. This amount could increase or decrease depending on factors such as those mentioned above. Changes to the funded status of our pension plans as a result of updates to actuarial assumptions and actual experience that differs from our estimates will be recognized as gains or losses in the period incurred under our "mark to market" accounting policy, and could result in a requirement for additional funding which would have a direct effect on our cash position. Based on current projections of minimum funding requirements, we expect to make cash contributions of $28.3 million to our defined benefit pension plans in 2019. The timing for any such requirement in future years is uncertain given the implicit uncertainty regarding the future developments of factors mentioned above. The union sponsored multi-employer pension plans in which we participate are also underfunded, including the substantially underfunded New England Teamsters and

Trucking Industry Pension Fund and Central States, Southeast and Southwest Areas Pension Plan, which have liabilities at a level twice that of its assets. This requires us to make often substantial withdrawal liability payments when we close a facility covered by one of these plans, which could hinder our ability to make otherwise appropriate management decisions to operate as efficiently as possible. As of December 31, 2018, we had approximately 250 employees in multi-employer pension plans.

Table of Contents

A portion of our workforce is unionized and labor disruptions could decrease our profitability.

As of December 31, 2018, we had approximately 590 employees in the United States subject to various collective bargaining agreements, most of which have a three-year term. In addition, in several of our international facilities, particularly those in Europe, employees are represented by works councils appointed pursuant to local law consisting of employee representatives who have certain rights to negotiate working terms and to receive notice of significant actions. As of December 31, 2018, approximately 26% of our labor force is covered by a collective bargaining agreement, including approximately 14% of our labor force in the United States, approximately 20% of our labor force in Canada and approximately 45% of our labor force in Europe, and approximately 2% of our labor force is covered by a collective bargaining agreement that will expire within one year. These arrangements grant certain protections to employees and subject us to employment terms that are similar to collective bargaining agreements. We cannot guarantee that we will be able to negotiate these or other collective bargaining agreements or arrangements with works councils on the same or more favorable terms as the current agreements or arrangements, or at all, and without interruptions, including labor stoppages at the facility or facilities subject to any particular agreement or arrangement. A prolonged labor dispute, which could include a work stoppage, could have a material adverse effect on our business, financial condition and results of operations.

Changes in legislation, regulation and government policy may have a material adverse effect on our business in the future.

Elections in the United States and other democracies in which we conduct business could result in significant changes in, and uncertainty with respect to, legislation, regulation and government policy directly affecting our business or indirectly affecting us because of impacts on our customers and producers. Legislative and regulatory proposals that could have a material direct or indirect impact on us include, but are not limited to, disallowances of income tax deductions, taxes or other restrictions repatriating foreign earnings, restrictions on imports and exports, modifications to international trade policy, including withdrawal from trade agreements, environmental regulation, changes to immigration policy, changes to health insurance legislation and the imposition of tariffs and other taxes on imports. We are currently unable to predict whether such changes will occur and, if so, the ultimate impact on our business. To the extent that such changes have a negative impact on us, our producers or our customers, including as a result of related uncertainty, these changes may materially and adversely impact our business, financial condition, results of operations and cash flows.

Risks Related to Our Indebtedness

We and our subsidiaries may incur additional debt in the future, which could substantially reduce our profitability, limit our ability to pursue certain business opportunities and reduce the value of your investment.

As of December 31, 2018, we had $1,747.8 million of debt outstanding under our $2,283.5 million US dollar term loan facility (the “New Senior Term Loan Facility”), $134.7 million of debt outstanding under our $1,300.0 million Senior ABL credit facility, $58.5 million of debt outstanding under our €200.0 million senior European ABL facility (the “Euro ABL Facility”) with approximately $620.3 million available for additional borrowing under these facilities and $399.5 million outstanding under Univar USA Inc.’s 6.75% senior notes due 2023 (the “Unsecured Notes”). Subject to certain limitations set forth in the agreements that govern these facilities and notes, we or our subsidiaries may incur additional debt in the future, or other obligations that do not constitute indebtedness, which could increase the risks described below and lead to other risks. The amount of our debt or such other obligations could have important consequences for holders of our common stock, including, but not limited to:

- our ability to satisfy obligations to lenders or noteholders may be impaired, resulting in possible defaults on and acceleration of our indebtedness;
- our ability to obtain additional financing for refinancing of existing indebtedness, working capital, capital expenditures, including costs associated with our international expansion, product and service development, acquisitions, general corporate purposes and other purposes may be impaired;
- our assets that currently serve as collateral for our debt may be insufficient, or may not be available, to support future financings;
- a substantial portion of our cash flow from operations could be used to repay the principal and interest on our debt;
- we may be increasingly vulnerable to economic downturns and increases in interest rates;

- our flexibility in planning for and reacting to changes in our business and the markets in which we operate may be limited; and
- we may be placed at a competitive disadvantage relative to other companies in our industry with less debt or comparable debt at more favorable interest rates.

Table of Contents

The agreements governing our indebtedness contain operating covenants and restrictions that limit our operations and could lead to adverse consequences if we fail to comply with them.

The agreements governing our indebtedness contain certain operating covenants and other restrictions relating to, among other things, limitations on indebtedness (including guarantees of additional indebtedness) and liens, mergers, consolidations and dissolutions, sales of assets, investments and acquisitions, dividends and other restricted payments, repurchase of shares of capital stock and options to purchase shares of capital stock and certain transactions with affiliates. In addition, our Senior ABL Facility and European ABL Facility include certain financial covenants.

The restrictions in the agreements governing our indebtedness may prevent us from taking actions that we believe would be in the best interest of our business, and may make it difficult for us to successfully execute our business strategy or effectively compete with companies that are not similarly restricted. We may also incur future debt obligations that might subject us to additional restrictive covenants that could affect our financial and operational flexibility.

Failure to comply with these financial and operating covenants could result from, among other things, changes in our results of operations, the incurrence of additional indebtedness, the pricing of our products, our success at implementing cost reduction initiatives, our ability to successfully implement our overall business strategy or changes in general economic conditions, which may be beyond our control. The breach of any of these covenants or restrictions could result in a default under the agreements that govern these facilities that would permit the lenders to declare all amounts outstanding thereunder to be due and payable, together with accrued and unpaid interest. If we are unable to repay such amounts, lenders having secured obligations could proceed against the collateral securing these obligations. The collateral includes the capital stock of our domestic subsidiaries, 65% of the capital stock of our foreign subsidiaries and substantially all of our and our subsidiaries' other tangible and intangible assets, subject in each case to certain exceptions. This could have serious consequences on our financial condition and results of operations and could cause us to become bankrupt or otherwise insolvent. In addition, these covenants may restrict our ability to engage in transactions that we believe would otherwise be in the best interests of our business and stockholders.

Increases in interest rates would increase the cost of servicing our debt and could reduce our profitability.

Our debt outstanding under the Senior Term Loan Facility, Senior ABL Facility and European ABL Facility bears interest at variable rates. As a result, increases in interest rates would increase the cost of servicing our debt and could materially reduce our profitability and cash flows. Some or all of the combined company's variable-rate indebtedness may use the LIBOR as a benchmark for establishing the rate. LIBOR is the subject of recent national, international and other regulatory guidance and proposals for reform. These reforms and other pressures may cause LIBOR to disappear entirely or to perform differently than in the past. The consequence of these developments cannot be entirely predicted, but could include an increase in the cost of our variable rate indebtedness. For additional information on our indebtedness, debt service obligations and sensitivity to interest rate fluctuations, see "Qualitative and Quantitative Disclosures About Market Risk" in Item 7A of this Annual Report on Form 10-K.

We may have future capital needs and may not be able to obtain additional financing on acceptable terms, or at all.

We have historically relied on debt financing to fund our operations, capital expenditures and expansion. The market conditions and the macroeconomic conditions that affect the markets in which we operate could have a material adverse effect on our ability to secure financing on acceptable terms, if at all. We may be unable to secure additional financing on favorable terms or at all and our operating cash flow may be insufficient to satisfy our financial obligations under the indebtedness outstanding from time to time. The terms of additional financing may limit our financial and operating flexibility. Our ability to satisfy our financial obligations will depend upon our future operating performance, the availability of credit generally, economic conditions and financial, business and other factors, many of which are beyond our control. Furthermore, if financing is not available when needed, or is not available on acceptable terms, we may be unable to take advantage of business opportunities or respond to competitive pressures, any of which could have a material adverse effect on our business, financial condition and results of operations.

If we raise additional funds through further issuances of equity, convertible debt securities or other securities convertible into equity, our existing stockholders could suffer significant dilution in their percentage ownership of our

company, and any new securities we issue could have rights, preferences and privileges senior to those of holders of our common stock, including shares of common stock sold in this offering. If we are unable to obtain adequate financing or financing on terms satisfactory to us, if and when we require it, our ability to grow or support our business and to respond to business challenges could be significantly limited.

Table of Contents

Risks Related to Our Common Stock

If securities or industry analysts do not publish research or publish misleading or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock may depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of these analysts downgrades our stock or publishes misleading or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock may decrease, which could cause our stock price or trading volume to decline.

Future sales of shares by existing stockholders could cause our stock price to decline.

Sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur, could cause the market price of our common stock to decline. All of the 40,250,000 shares sold pursuant to our IPO in June 2015, the 4,500,000 shares we registered on July 29, 2016, the 20,943,741 shares we registered on August 15, 2016, the 12,500,000 shares we registered on December 12, 2016, the 15,000,000 shares we registered on January 31, 2017 and the 10,000,000 shares we registered on December 14, 2017 are immediately tradable without restriction under the Securities Act of 1933, as amended (the "Securities Act"), unless held by "affiliates", as that term is defined in Rule 144 under the Securities Act. The remaining shares of outstanding common stock are restricted securities within the meaning of Rule 144 under the Securities Act, but will be eligible for resale subject, in certain cases, to applicable volume, means of sale, holding period and other limitations of Rule 144 or pursuant to an exception from registration under Rule 701 under the Securities Act, subject to the terms of the lock-up agreements entered into by the Significant Stockholders, our directors and certain of our key executive officers. The underwriter may, at any time, release all or any portion of the shares subject to lock-up agreements entered into in connection with this offering.

We have also filed a registration statement under the Securities Act to register the shares of common stock to be issued under our equity compensation plans and, as a result, all shares of common stock acquired upon exercise of stock options granted under our plans are also freely tradable under the Securities Act, unless purchased by our affiliates. In addition, certain of our significant stockholders may distribute the shares that they hold to their investors who themselves may then sell into the public market. Such sales may not be subject to the volume, manner of sale, holding period and other limitations of Rule 144. As resale restrictions end, the market price of our common stock could decline if the holders of those shares sell them or are perceived by the market as intending to sell them. In the future, we may also issue additional shares of common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement or employee arrangement or otherwise. Any of these issuances could result in substantial dilution to our existing stockholders and could cause the trading price of our common stock to decline.

Significant stockholders have the right to nominate members of our Board of Directors and may exercise significant control over the direction of our business. To the extent ownership of our common stock continues to be held by stockholders with these rights, it could prevent you and other stockholders from influencing significant corporate decisions.

Investment funds associated with Clayton, Dubilier & Rice, LLC ("CD&R") beneficially own approximately 8.2% of the outstanding shares of our common stock. CD&R continues to exercise significant influence over all matters requiring stockholder approval for the foreseeable future, including approval of significant corporate transactions, which may reduce the market price of our common stock.

Under the Fourth Amended and Restated Stockholders' Agreement of Univar Inc. (the "Amended and Restated Stockholders' Agreement"), CD&R is entitled to nominate up to three sponsor directors and three independent directors under certain circumstances related to continued ownership of the shares they hold. CD&R continues to hold 11,561,039 shares, which allows them to continue to nominate members to our board of directors.

These provisions allow CD&R to continue to exercise significant control over our corporate decisions, including over matters which our other stockholders have a right to vote. Our Certificate of Incorporation and our Bylaws also include a number of provisions that may discourage, delay or prevent a change in our management or control for so long as CD&R owns specified percentages of our common stock. See "— Anti-takeover provisions in our charter documents and Delaware law could discourage, delay or prevent a change in control of our company and may affect

the trading price of our common stock." These provisions not only could have a negative impact on the trading price of our common stock, but could also allow the Significant Stockholders to delay or prevent a corporate transaction that the public stockholders might approve.

Our Certificate of Incorporation provides that we will waive any interest or expectancy in corporate opportunities presented to CD&R.

Our Certificate of Incorporation provides that we, on our behalf and on behalf of our subsidiaries, renounce and waive any interest or expectancy in, or in being offered an opportunity to participate in, corporate opportunities that are from time to time presented to CD&R, or their respective officers, directors, agents, stockholders, members, partners, affiliates or subsidiaries, even if the opportunity is one that we or our subsidiaries might reasonably be deemed to have pursued or had the ability or desire to pursue if granted the opportunity to do so. None of CD&R or its respective agents, stockholders, members, partners, affiliates or subsidiaries will generally be liable to us or any of our subsidiaries for breach of any fiduciary or other duty, as a director or otherwise, by reason of the fact that such person pursues, acquires or participates in such corporate opportunity, directs such corporate opportunity to another person or fails to present such corporate opportunity, or information regarding such corporate opportunity, to us or our subsidiaries unless, in the case of any such person who is a director or officer, such corporate opportunity is expressly offered to such director or officer in writing solely in his or her capacity as a director or officer. Stockholders will be deemed to have notice of and consented to this provision of our Certificate of Incorporation. This will allow CD&R to compete with us. Strong competition for investment opportunities could result in fewer such opportunities for us. We likely will not always be able to compete successfully with our competitors and competitive pressures or other factors may also result in significant price competition, particularly during industry downturns, which could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

Fulfilling our obligations incident to being a public company, including with respect to the requirements of and related rules under the Sarbanes-Oxley Act of 2002, is expensive and time-consuming, and any delays or difficulties in satisfying these obligations could have a material adverse effect on our future results of operations and our stock price.

We are subject to the reporting and corporate governance requirements, the listing standards of the NYSE and the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”), which apply to issuers of listed equity, which impose certain compliance costs and obligations upon us. Meeting these standards requires a significant commitment of additional resources and management oversight, which increases our operating costs. These requirements also place additional demands on our finance and accounting staff and on our financial accounting and information systems. Other expenses associated with being a public company include increases in auditing, accounting and legal fees and expenses, investor relations expenses, increased directors’ fees and director and officer liability insurance costs, registrar and transfer agent fees and listing fees, as well as other expenses. As a public company, we are required, among other things, to:

- prepare and file periodic reports, and distribute other stockholder communications, in compliance with the federal securities laws and the NYSE rules;
- define and expand the roles and the duties of our Board of Directors and its committees; and
- institute more comprehensive compliance, investor relations and internal audit functions.

The Sarbanes-Oxley Act requires us to document and test the effectiveness of our internal control over financial reporting in accordance with an established internal control framework, and to report on our conclusions as to the effectiveness of our internal controls. Likewise, our independent registered public accounting firm will be required to provide an attestation report on the effectiveness of our internal control over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act. In addition, we are required under the Securities Exchange Act of 1934, as amended, (the “Exchange Act”), to maintain disclosure controls and procedures and internal control over financial reporting. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to meet our reporting obligations. If we or our independent auditors are unable to conclude that we have effective internal control over financial reporting, investors could lose confidence in the reliability of our financial statements. This could result in a decrease in the value of our common stock. Failure to comply with the Sarbanes-Oxley Act could potentially subject us to sanctions or investigations by the SEC, the NYSE or other regulatory authorities, which would require additional financial and management resources.

Our ability to successfully implement our business plan and comply with Section 404 requires us to be able to prepare timely and accurate financial statements. Any delay in the implementation of, or disruption in the transition to, new or

enhanced systems, procedures or controls, may cause our operations to suffer and we may be unable to conclude that our internal control over financial reporting is effective and to obtain an unqualified report on internal controls from our auditors. Moreover, we cannot be certain that these measures would ensure that we implement and maintain adequate controls over our financial processes and reporting in the future. Even if we were to conclude, and our auditors were to concur, that our internal control over financial reporting provided reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, because of its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. This, in turn, could have an adverse impact on trading prices for our shares of common stock, and could adversely affect our ability to access the capital markets.

Table of Contents

Anti-takeover provisions in our charter documents and Delaware law could discourage, delay or prevent a change in control of our company and may affect the trading price of our common stock.

Our Certificate of Incorporation and By-laws include a number of provisions that may discourage, delay or prevent a change in our management or control over us that stockholders may consider favorable. For example, our Certificate of Incorporation and By-laws currently:

- authorize the issuance of "blank check" preferred stock that could be issued by our Board of Directors to thwart a takeover attempt;
- limit the ability of stockholders to remove directors; and
- establish advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted upon by stockholders at stockholder meetings.

These provisions may prevent our stockholders from receiving the benefit from any premium to the market price of our common stock offered by a bidder in a takeover context. Even in the absence of a takeover attempt or before our Board becomes fully declassified, the existence of these provisions may adversely affect the prevailing market price of our common stock if the provisions are viewed as discouraging takeover attempts in the future. See "Description of Capital Stock—Anti-Takeover Effects of our Certificate of Incorporation and By-laws." Our Certificate of Incorporation and By-laws may also make it difficult for stockholders to replace or remove our management. These provisions may facilitate management entrenchment that may delay, deter, render more difficult or prevent a change in our control, which may not be in the best interests of our stockholders.

Our Certificate of Incorporation includes provisions limiting the personal liability of our directors for breaches of fiduciary duty under the General Corporation Law of the State of Delaware and we have entered into Indemnification Agreements, which provide further protections to our directors.

Our Certificate of Incorporation contains provisions permitted under the General Corporation Law of the State of Delaware (the "DGCL") relating to the liability of directors. These provisions eliminate a director's personal liability to the fullest extent permitted by the DGCL for monetary damages resulting from a breach of fiduciary duty, except in circumstances involving:

- any breach of the director's duty of loyalty;
- acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of the law;
- under Section 174 of the DGCL (unlawful dividends); or
- any transaction from which the director derives an improper personal benefit.

The principal effect of the limitation on liability provision is that a stockholder will be unable to prosecute an action for monetary damages against a director unless the stockholder can demonstrate a basis for liability for which indemnification is not available under the DGCL. These provisions, however, should not limit or eliminate our rights or any stockholder's rights to seek non-monetary relief, such as an injunction or rescission, in the event of a breach of a director's fiduciary duty. These provisions will not alter a director's liability under federal securities laws. The inclusion of this provision in our Certificate of Incorporation may discourage or deter stockholders or management from bringing a lawsuit against directors for a breach of their fiduciary duties, even though such an action, if successful, might otherwise have benefited us and our stockholders.

We have entered into indemnification agreements with each of our directors and certain of our executive officers. The indemnification agreements provide our directors and certain of our executive officers with contractual rights to the indemnification and expense advancement rights provided under our By-laws, as well as contractual rights to additional indemnification as provided in the indemnification agreements.

Our Certificate of Incorporation designates the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

Our Certificate of Incorporation provides that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed to us or our stockholders by any of our directors, officers, employees or agents, (iii) any action asserting a claim against us arising under the DGCL, or (iv) any action asserting a claim against us that is governed by the internal affairs doctrine. By becoming a stockholder in our company, you will be deemed to have

notice of and have consented to the provisions of our Certificate of Incorporation related to choice of forum. The choice of forum provision in our Certificate of Incorporation may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

Table of Contents

We do not currently intend to pay cash dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We do not currently intend to declare and pay cash dividends on our common stock. We currently intend to invest our future earnings, if any, to fund our growth and repay outstanding indebtedness. Therefore, you are unlikely to receive any dividends on your common stock in 2019 and we have no current plans to pay dividends in future periods. The success of an investment in shares of our common stock will therefore depend entirely upon any future appreciation in their value. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares. See "Dividend Policy."

Risks Related to the Nexeo Acquisition

The Nexeo Acquisition is subject to the approval of our shareholders as to our share issuance. Failure to obtain this approval would prevent completion of the Nexeo Acquisition.

Before the Nexeo Acquisition can be completed, our shareholders must approve our share issuance. There can be no assurance that this approval will be obtained. Failure to obtain the required approval may result in a material delay in, or the abandonment of, the acquisition. Any delay in completing the acquisition may materially adversely affect the timing and amount of cost savings and other benefits that are expected to be achieved from the acquisition.

Uncertainties associated with the Nexeo Acquisition may cause a loss of management personnel and other key employees which could adversely affect our future business and operations following the Nexeo Acquisition.

We are dependent on the experience and industry knowledge of our officers and other key employees to execute our business plans. Our success after the acquisition will depend in part upon our ability to retain key management personnel and other key employees. Current and prospective employees may experience uncertainty about their roles following the acquisition or other concerns regarding the timing and completion of the acquisition or our operations following the acquisition, any of which may have an adverse effect on our ability to attract or retain key management and other key personnel. Accordingly, no assurance can be given that following the Nexeo Acquisition we will be able to attract or retain key management personnel and other key employees to the same extent that we have previously been able to attract or retain our employees.

The business relationships of Univar and Nexeo may be subject to disruption due to uncertainty associated with the Nexeo Acquisition, which could have a material adverse effect on our results of operations, cash flows and financial position following the acquisition.

Parties with which Univar or Nexeo do business may experience uncertainty associated with the Nexeo Acquisition, including with respect to current or future business relationships with Univar or Nexeo following the acquisition. Univar's and Nexeo's business relationships may be subject to disruption as customers, distributors, suppliers, vendors and others may attempt to negotiate changes in existing business relationships or consider entering into business relationships with parties other than Univar or Nexeo following the acquisition. These disruptions could have an adverse effect on our results of operations, cash flows and financial position, including an adverse effect on our ability to realize the expected cost savings and other benefits of the acquisition. The risk, and adverse effect, of any disruption could be exacerbated by a delay in completion of the acquisition or termination of the Business Combination Agreement.

Failure to complete the Nexeo Acquisition could negatively impact our stock price and have a material adverse effect on our results of operations, cash flows and financial position.

If the Nexeo Acquisition is not completed for any reason, including as a result of Univar or Nexeo stockholders failing to approve the applicable proposals, our ongoing business may be materially adversely affected and, without realizing any of the benefits of having completed the acquisition, we would be subject to a number of risks, including the following:

- we may experience negative reactions from the financial markets, including negative impacts on our stock price;
- we may experience negative reactions from customers, distributors, regulators and employees;
- we will still be required to pay certain significant costs relating to the Nexeo Acquisition, such as legal, accounting, financial advisor and printing fees;
- we may be required to pay one or more cash termination fees as required by the Business Combination Agreement;
-

matters relating to the Nexeo Acquisition (including integration planning) require substantial commitments of our time and resources, which could have resulted in the distraction of our management from ongoing business operations and pursuing other opportunities that could have been beneficial to us; and

Table of Contents

- litigation related to any failure to complete the Nexeo Acquisition or related to any enforcement proceeding commenced against us to perform our obligations under the Business Combination Agreement.

If the Nexeo Acquisition is not completed, the risks described above may materialize and they may have a material adverse effect on our results of operations, cash flows, financial position and stock prices.

Our current stockholders will generally have a reduced ownership and voting interest after the Nexeo Acquisition.

We expect to issue to Nexeo stockholders (or reserve for issuance) approximately 37 million shares of our common stock in the acquisition (including shares of our common stock issuable in connection with outstanding Nexeo stock options, restricted stock awards, performance share unit awards and restricted share unit awards and assuming the conversion of all the outstanding Nexeo warrants into shares of Nexeo common stock entitled to receive the consideration). As a result of these issuances, our stockholders will generally have less voting power after the acquisition than they now have.

The exchange ratio is fixed and will not be adjusted in the event of any change in our stock price. Because the market price of our common stock may fluctuate, the value of the consideration we will pay is uncertain.

As consideration for the Nexeo Acquisition, each share of Nexeo common stock (other than dissenters' shares or treasury shares held by Nexeo and any shares of Nexeo common stock owned by any Nexeo subsidiary, Univar or Univar subsidiary) will be converted into the right to receive and exchanged for (1) 0.305 of a fully paid and non-assessable share of Univar common stock plus (2) $3.29 in cash. The cash consideration is subject to reduction by up to $0.41 per share based on the closing price of Univar common stock on the day prior to the completion of the acquisition. The cash consideration will be reduced on a linear basis from $3.29 to $2.88 per share of Nexeo common stock to the extent that the closing price of Univar common stock is between $25.34 and $22.18. If the closing price of Univar common stock is $22.18 per share or lower, the cash consideration will be $2.88 per share of Nexeo common stock. If the closing price of Univar common stock is $25.34 per share or higher, the cash consideration will be $3.29 per share of Nexeo common stock. Nexeo stockholders will receive cash in lieu of any fractional shares.

The exchange ratio will not be adjusted for changes in the market price of our common stock. Because the exchange ratio is fixed, the value of the stock portion of the consideration will depend on the market price of our common stock at the completion of the acquisition. The value of the stock portion of the consideration has fluctuated since the date of the announcement of the Business Combination Agreement and will continue to fluctuate from the date of this 10-K to the completion of the acquisition and thereafter.

We may be unable to integrate the business of Nexeo successfully or realize the anticipated benefits of the acquisition.

The Nexeo Acquisition involves the combination of two companies that currently operate as independent public companies. We will be required to devote significant management attention and resources to integrating the business practices and operations of Nexeo and Univar. Potential difficulties that we may encounter as part of the integration process include the following:

- the inability to successfully combine the business of Nexeo in a manner that permits us to achieve, on a timely basis, or at all, the enhanced revenue opportunities and cost savings and other benefits anticipated to result from the Nexeo Acquisition;
- complexities associated with managing the combined businesses, including difficulty addressing possible differences in corporate cultures and management philosophies and the challenge of integrating complex systems, technology, networks and other assets of each of the companies in a seamless manner that minimizes any adverse impact on customers, suppliers, employees and other constituencies; and
- potential unknown liabilities, including shareholder lawsuits and other potential legal actions, and unforeseen increased expenses or delays associated with the Nexeo Acquisition.

Any of these issues could adversely affect our ability to maintain relationships with customers, suppliers, employees and other constituencies or achieve the anticipated benefits of the acquisition, or could reduce our earnings or otherwise adversely affect our business and financial results following the acquisition.

Our future results following the Nexeo Acquisition will suffer if we do not effectively manage our expanded operations.

Following the acquisition, the size of our business will increase significantly beyond its current size. Our future success will depend, in part, upon our ability to manage this expanded business, which will pose substantial

challenges for us, including challenges related to the management and monitoring of new operations and associated increased costs and complexity. There can be no assurances that we will be successful or that we will realize the expected operating efficiencies, cost savings, revenue enhancements or other benefits currently anticipated from the acquisition.

Table of Contents

In connection with the Nexeo Acquisition, we will incur additional indebtedness and may also assume certain of Nexeo's outstanding indebtedness. Additional indebtedness would amplify the risks associated with our current indebtedness by increasing our interest expense and potentially reducing our flexibility to respond to changing business and economic conditions, which could have a material adverse effect on our results of operations, cash flows and financial position.

The increased indebtedness would increase our interest expense which could have the effect, among other things, of reducing our flexibility to respond to changing business and economic conditions. We will also incur various costs and expenses associated with the financing of the Nexeo Acquisition. The amount of cash required to pay interest on our increased indebtedness levels following completion of the Nexeo Acquisition and thus the demands on our cash resources will be greater than the amount of cash flows required to service our indebtedness prior to the Nexeo Acquisition. The increased levels of indebtedness following completion of the Nexeo Acquisition could also reduce funds available for working capital, capital expenditures, acquisitions and other general corporate purposes and may create competitive disadvantages for us relative to other companies with lower debt levels. If we do not achieve the expected benefits and cost savings from the Nexeo Acquisition, or if the financial performance of the combined company does not meet current expectations, then our ability to service our indebtedness may be adversely impacted. See "Risks Related to Our Indebtedness" above.

We may not successfully divest Nexeo's plastics distribution business.

On February 8, 2019, Univar and Nexeo announced an agreement for Nexeo to divest its plastics distribution business to an affiliate of One Rock Capital Partners, LLC for an enterprise value of $640.0 million, subject to customary closing adjustments. The Company can provide no assurance this divestiture will occur timely or at all. If the divestiture of the plastics distribution business is delayed or unsuccessful, the Company could experience:

- a loss of management personnel and other key employees of the plastics business;
- disruption in the business relationships of the plastics business;
- additional challenges and delays in successfully integrating the business of Nexeo, managing our newly-expanded operations or realizing the anticipated benefits of the Nexeo Acquisition; and
- incurring larger amounts of indebtedness than anticipated.

Any of these risks, alone or in combination, could have a material adverse effect on our stock price and otherwise adversely affect our business and financial results following the acquisition.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES

Our principal executive office is located in Downers Grove, Illinois under a lease expiring in June 2024. As of December 31, 2018, we had 278 locations in the United States in 47 states. Of these locations, approximately 265 are warehouse facilities responsible for storing and shipping of products and 13 are dedicated office space. Our warehouse facilities are nearly equally comprised of owned, leased and third party warehouses and our office space is generally leased. Our facilities focus on the storing, repackaging and blending of chemicals and ingredients for distribution. Such facilities do not require substantial investments in equipment, can be opened fairly quickly and replaced with little disruption. As such, we believe that none of our facilities on an individual basis is principal to the operation of our business. We select locations for our warehouses based on proximity to producers and our customers to maintain efficient distribution networks. We believe that our facilities are adequate and suitable for our current operations. We hold a relatively small number of surplus sites for potential disposition. In some instances, our larger owned sites have been mortgaged under our secured credit facilities.

We have 354 locations outside of the United States in 30 countries. These facilities are focused on storing and shipping of products. Approximately half are owned or leased and half are third party warehouses. The majority of the facilities outside of the United States are found in the following countries:

- Canada (126 facilities)
- China (13 facilities)
- France (22 facilities)
- Germany (7 facilities)

- Italy (8 facilities)

Table of Contents

- Mexico (26 facilities)
- Netherlands (19 facilities)
- Spain (7 facilities)
- Sweden (17 facilities)
- Turkey (9 facilities)
- United Kingdom (40 facilities)

ITEM 3. LEGAL PROCEEDINGS

"Legal Proceedings" in Item 1 of this Annual Report on Form 10-K and Note 20, entitled "Commitments and contingencies" in Item 8 of this Annual Report on Form 10-K, are incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

Table of Contents

PART II

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

Market Information for Common Stock

Our common stock is listed on the New York Stock Exchange under the symbol "UNVR".

Holders of Record

As of December 31, 2018, there were 2 stockholders of record of our common stock, and the closing price of our common stock was $17.74 per share as reported on the New York Stock Exchange.

Stock Performance

The following graph shows a comparison of cumulative total shareholder return, calculated on a dividend reinvested basis, for the Company, the S&P 500 and the S&P 500 Chemical Index for the period beginning on June 17, 2015 through year ended December 31, 2018. The graph assumes $100 was invested in each of the Company's common stock, the S&P 500 and S&P 500 Chemical Index as of the market close on June 17, 2015. Note that historic stock price performance is not necessarily indicative of future stock price performance.

Dividend Policy

We have never declared or paid any cash dividend on our common stock. We currently intend to retain any future earnings and we have no current plans to pay dividends in future periods. In addition, our credit facilities contain restrictions on our ability to pay dividends.

Table of Contents

ITEM 6. SELECTED FINANCIAL DATA

The following table presents our summary consolidated financial data as of and for the periods indicated. The selected consolidated financial data as of December 31, 2018 and 2017 and for the years ended December 31, 2018, 2017 and 2016 have been derived from our audited consolidated financial statements included in Item 8 of this Annual Report on Form 10-K. The selected consolidated financial data as of December 31, 2016, 2015 and 2014 and for the years ended December 31, 2015 and 2014 are derived from our audited consolidated financial statements which are not included in this Annual Report on Form 10-K. Our historical consolidated financial data may not be indicative of our future performance.

This “Selected Financial Data” should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7 of this Annual Report on Form 10-K and our audited consolidated financial statements and related notes included in Item 8 of this Annual Report on Form 10-K.

	Fiscal year ended December 31,				
	2018	2017	2016	2015	2014
(in millions, except per share data)					
Consolidated Statements of Operations					
Net sales	$8,632.5	$8,253.7	$8,073.7	$8,981.8	$10,373.9
Operating income	387.4	338.0	138.4	259.3	315.7
Net income (loss)	172.3	119.8	(68.4)	16.5	(20.1)
Income (loss) per common share – diluted	1.21	0.85	(0.50)	0.14	(0.20)
Consolidated Balance Sheet					
Cash and cash equivalents	$121.6	$467.0	$336.4	$188.1	$206.0
Total assets	5,272.4	5,732.7	5,389.9	5,612.4	6,067.7
Long-term liabilities	2,746.1	3,223.2	3,240.5	3,502.2	4,300.7
Stockholders’ equity	1,191.7	1,090.1	809.9	816.7	248.1
Other Financial Data					
Cash provided by operating activities	$289.9	$282.6	$450.0	$356.0	$126.3
Cash used by investing activities	(99.0)	(79.1)	(136.0)	(294.4)	(148.2)
Cash (used) provided by financing activities	(518.3)	(112.4)	(166.5)	(19.8)	84.1
Capital expenditures	94.6	82.7	90.1	145.0	113.9
Adjusted EBITDA [1]	640.4	593.8	547.4	573.3	624.8
Adjusted EBITDA margin [1]	7.4%	7.2%	6.8%	6.4%	6.0%

(1) For a complete discussion of the method of calculating Adjusted EBITDA and its usefulness, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7 of this Annual Report on Form 10-K. We define Adjusted EBITDA margin as Adjusted EBITDA divided by net sales.

43

Table of Contents

The following is a quantitative reconciliation of Adjusted EBITDA to the most directly comparable GAAP financial performance measure, which is net income (loss):

	Fiscal year ended December 31,				
(in millions)	2018	2017	2016	2015	2014
Net income (loss)	$172.3	$119.8	$(68.4)	$16.5	$(20.1)
Impairment charges [1]	—	—	133.9	—	0.3
Pension mark to market loss	34.2	3.8	68.6	21.1	117.8
Pension curtailment and settlement gains	—	(9.7)	(1.3)	(4.0)	—
Non-operating retirement benefits	(11.0)	(9.9)	(15.3)	(26.8)	(16.9)
Stock-based compensation expense	20.7	19.7	10.4	7.5	12.1
Business transformation costs	—	23.4	5.4	—	—
Restructuring charges	4.8	5.5	6.5	33.8	46.2
Other employee termination costs	16.4	8.1	1.5	—	—
Loss (gain) on sale of property, plant and equipment and other assets	2.0	(11.3)	(0.7)	(2.8)	3.4
Acquisition and integration related expenses	22.0	3.1	5.5	7.1	3.7
Other operating expenses	7.6	6.9	8.6	14.4	8.0
Other non-operating items	3.1	3.5	0.1	4.1	2.9
Foreign currency transactions	6.7	4.6	0.6	0.8	0.6
Foreign currency denominated loans revaluation	0.8	17.9	13.7	(8.9)	(8.3)
Undesignated foreign currency derivative instruments	(1.1)	(0.3)	1.8	4.8	3.9
Undesignated interest rate swap contracts	—	2.2	(10.1)	(2.0)	—
Ineffective portion of cash flow hedges	—	—	—	0.4	(0.2)
Loss due to discontinuance of cash flow hedges	—	—	—	7.5	—
Debt refinancing costs	—	5.3	—	16.5	—
Loss on extinguishment of debt	0.1	3.8	—	12.1	1.2
Advisory fees to CVC and CD&R	—	—	—	2.8	5.9
Contract termination fee to CVC and CD&R	—	—	—	26.2	—
Depreciation and amortization	179.5	200.4	237.9	225.0	229.5
Interest expense, net	132.4	148.0	159.9	207.0	250.6
Tax expense (benefit)	49.9	49.0	(11.2)	10.2	(15.8)
Adjusted EBITDA	$640.4	$593.8	$547.4	$573.3	$624.8

(1) The 2016 impairment charges primarily related to impairment of intangible assets and property, plant and equipment. See “Note 14: Impairment charges” in Item 8 of this Annual Report on Form 10-K for further information regarding the fiscal year ended December 31, 2018. The 2014 impairment charges primarily related to impairments of idle properties and equipment. The 2013 impairment charges primarily related to the write-off of goodwill related to the Rest of World segment as well as the write-off of capitalized software costs related to a global ERP system.

Table of Contents

The defined benefit pension and other postretirement benefit plan's mark to market loss (gain) is measured and recognized in its entirety within the statement of operations annually on December 31. The adjustment primarily includes the difference between the expected return on plan assets and the actual return on plan assets as well as differences resulting from assumption changes and changes in plan experience between the prior pension measurement date and the current pension measurement date. For details of pension expense both within and excluded from Adjusted EBITDA, see the table below:

	Fiscal year ended December 31,				
(in millions)	2018	2017	2016	2015	2014
Service cost included in Adjusted EBITDA	$2.7	$2.5	$2.5	$5.5	$7.1
Pension expense included in Adjusted EBITDA	$2.7	$2.5	$2.5	$5.5	$7.1
Interest cost	$42.7	$47.2	$50.4	$51.1	$55.2
Expected return on plan assets	(56.4)	(56.9)	(61.2)	(66)	(60.2)
Amortization of unrecognized prior service cost (credits)	2.7	(0.2)	(4.5)	(11.9)	(11.9)
Net pension benefit	$(11.0)	$(9.9)	$(15.3)	$(26.8)	$(16.9)
Mark to market loss (gain) due to difference in asset returns	$116.0	$(60.5)	$(45.2)	$67.3	$(76.3)
Mark to market (gain) loss due to assumption changes	(81.2)	60.8	103.9	(39.3)	196.5
Mark to market (gain) loss due to plan experience	(0.6)	3.5	9.9	(6.9)	(2.4)
Mark to market loss	$34.2	$3.8	$68.6	$21.1	$117.8
Settlement	$—	$(9.7)	$—	$(1.4)	$—
Curtailment	—	—	(1.3)	(2.6)	—
Pension curtailment and settlement gains	$—	$(9.7)	$(1.3)	$(4.0)	$—
Pension expense (income) excluded from Adjusted EBITDA	$23.2	$(15.8)	$52.0	$(9.7)	$100.9
Total pension expense (income)	$25.9	$(13.3)	$54.5	$(4.2)	$108.0

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

Overview

We are a leading global chemical and ingredients distributor and provider of specialty services. We purchase chemicals from thousands of chemical producers worldwide and warehouse, repackage, blend, dilute, transport and sell those chemicals to more than 100,000 customer locations across approximately 130 countries. Our specialized services include digital promotion or e-marketing of chemicals for our producers, chemical waste removal and ancillary services, on-site storage of chemicals for our customers, and support services for the agricultural end market. We derive competitive advantage from our scale, broad product offering, technical expertise, specialized services, long-standing relationships with leading chemical producers and our industry leading safety record.

Our operations are structured into four operating segments that represent the geographic areas under which we operate and manage our business. These segments are Univar USA, Univar Canada, Univar Europe and the Middle East and Africa, and Rest of World, which includes developing businesses in Latin America (including Brazil and Mexico) and the Asia-Pacific region.

We monitor the results of our operating segments separately for the purposes of making decisions about resource allocation and performance assessment. We evaluate performance on the basis of gross profit, which we define as net sales less cost of goods sold (exclusive of depreciation), delivered gross profit, which we define as gross profit less outbound freight and handling expense, gross margin, which we define as gross profit divided by external net sales, delivered gross margin, which we define as delivered gross profit divided by external net sales as well as Adjusted EBITDA, which we define as our consolidated net income (loss), plus the sum of interest expense, net of interest

income, income tax expense (benefit), depreciation, amortization, loss on

45

extinguishment of debt, other operating expenses, net (which primarily consists of acquisition and integration related expenses, employee stock-based compensation expense, restructuring charges, other employee termination costs, business optimization, and other unusual or non-recurring expenses), impairment charges, and other expense, net (which primarily consists of pension mark to market adjustments, gains and losses on foreign currency transactions and undesignated derivative instruments, ineffective portion of cash flow hedges, debt refinancing costs, non-operating retirement benefits, and other non-operating activity). We believe that Adjusted EBITDA is an important indicator of operating performance because:

- we report Adjusted EBITDA to our lenders as required under the covenants of our credit agreements;
- we consider gains (losses) on the acquisition, disposal and impairment of assets as resulting from investing decisions rather than ongoing operations;
- Adjusted EBITDA excludes the effects of income taxes, as well as the effects of financing and investing activities by eliminating the effects of interest, depreciation and amortization expenses and therefore more closely measures our operational performance;
- we use Adjusted EBITDA in setting performance incentive targets in order to align performance measurement with operational performance; and
- other significant items, while periodically affecting our results, may vary significantly from period to period and have a disproportionate effect in a given period, which affects comparability of our results.

We set transfer prices between operating segments on an arms-length basis in a similar manner to transactions with third parties. We allocate corporate operating expenses that directly benefit our operating segments on a basis that reasonably approximates our estimates of the use of these services.

Other/Eliminations represents the elimination of inter-segment transactions as well as unallocated corporate costs consisting of costs specifically related to parent company operations that do not directly benefit segments, either individually or collectively. In the analysis of our results of operations, we discuss operating segment results for the current reporting period following our consolidated results of operations period-to-period comparison.

The following is management’s discussion and analysis of the financial condition and results of operations for the years ended December 31, 2018, 2017 and 2016. Information included in this section for reported sales volumes and pricing utilize an average price at the consolidated level and respective reporting segment levels. In certain reporting segments we utilized country and revenue stream information to provide a more accurate representation of changes to the business. This discussion should be read in conjunction with the consolidated financial statements, including the related notes, see Item 8 “Financial Statements” of this Annual Report on Form 10-K.

For reconciliations of Adjusted EBITDA to net income (loss), see “Selected Financial Data Selected” in Item 6 of this Annual Report on Form 10-K.

Key Factors Affecting Operating Results and Financial Condition

Key factors impacting our operating results and financial condition include the following:

- Economic conditions, industry trends and relationships with customers and suppliers
- Chemical availability and prices, including volume-based pricing
- Acquisitions, dispositions and strategic investments
- Operating efficiencies
- Working capital requirements, interest rates and credit risk
- Foreign currencies

For a description of our business and how the above factors impact us, refer to Item 1 “Business” and Item 1A “Risk Factors” of this Annual Report on Form 10-K.

In addition to the factors listed above, seasonal changes may affect our business and results of operations. Our net sales are affected by the level of industrial production, which tends to decline in the fourth quarter of each year. Certain of our end markets experience seasonal fluctuations, which also affect our net sales and results of operations. For example, our sales to the agricultural end market, particularly in Canada, tend to peak in the second quarter in each year, depending in part on weather-related variations in demand for agricultural chemicals. Sales to other end markets such as paints and coatings may also be affected by changing seasonal weather conditions.

46

Table of Contents

Non-GAAP Financial Measures

We believe that certain financial measures that do not comply with US GAAP provide relevant and meaningful information concerning the ongoing operating results of the Company. These financial measures include gross profit, gross margin, delivered gross profit and delivered gross margin (all exclusive of depreciation) and Adjusted EBITDA. Such non-GAAP financial measures are used from time to time herein but should not be viewed as a substitute for GAAP measures of performance.

We evaluate our results of operations on both an as reported and a constant currency basis. The constant currency presentation is a non-GAAP financial measure, which excludes the impact of fluctuations in foreign currency exchange rates. We believe providing constant currency information provides valuable supplemental information regarding our results of operations, consistent with how we evaluate our performance. We calculate constant currency percentages by converting our financial results in local currency for a period using the average exchange rate for the prior period to which we are comparing. This calculation may differ from similarly-titled measures used by other companies.

Results of Operations

Executive Summary

During 2018, we strengthened our financial condition through the generation of strong operating cash flow which reduced our leverage. We continued to make progress in the implementation of our key strategic initiatives of Commercial Greatness, Operational Excellence, and One Univar, strengthened our management team and furthered the development of a performance-driven culture. From an operations standpoint, we advanced on each of our priorities which form the framework for our strategy to grow the long-term value of Univar for our equity and debt holders. As a result, in 2018 we:

- expanded our consolidated Adjusted EBITDA margins;
- grew Adjusted EBITDA and Adjusted EBITDA margin in all operating segments, with the exception of Canada, which was impacted by persistent weather challenges in agriculture;
- improved USA sales force execution resulted in USA volume growth for the first time since 2014;
- acquired Kemetyl and Earthoil, expanding our leading position in the pharmaceutical industry and strengthening our existing global natural beauty and personal care product line;
- strengthened our balance sheet and lowered our leverage ratio; and
- announced the acquisition of Nexeo Solutions, Inc., accelerating transformation and growth.

Advances in our business were partially offset by:

- lower volumes and revenue in the Canada segment as a result of the weather-impacted agriculture market and lower demand from the Canadian energy sector.

The following tables set forth, for the periods indicated, certain statements of operations data first on the basis of reported data and then as a percentage of total net sales for the relevant period. The financial data set forth below is not necessarily indicative of the results of future operations and should be read in conjunction with our historical consolidated financial statements and accompanying notes included elsewhere herein.

Table of Contents

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

(in millions)	Year Ended December 31, 2018		December 31, 2017		Favorable (unfavorable)	% Change	Impact of currency*
Net sales	$8,632.5	100.0 %	$8,253.7	100.0 %	$ 378.8	4.6 %	0.5 %
Cost of goods sold (exclusive of depreciation)	6,732.4	78.0 %	6,448.2	78.1 %	(284.2)	4.4 %	(0.4)%
Operating expenses:							
Outbound freight and handling	328.3	3.8 %	292.0	3.5 %	(36.3)	12.4 %	(0.7)%
Warehousing, selling and administrative	931.4	10.8 %	919.7	11.1 %	(11.7)	1.3 %	(0.5)%
Other operating expenses, net	73.5	0.9 %	55.4	0.7 %	(18.1)	32.7 %	(0.2)%
Depreciation	125.2	1.5 %	135.0	1.6 %	9.8	(7.3)%	(0.4)%
Amortization	54.3	0.6 %	65.4	0.8 %	11.1	(17.0)%	0.2 %
Total operating expenses	$1,512.7	17.5 %	$1,467.5	17.8 %	$ (45.2)	3.1 %	(0.5)%
Operating income	$387.4	4.5 %	$338.0	4.1 %	$ 49.4	14.6 %	0.3 %
Other (expense) income:							
Interest income	3.2	— %	4.0	— %	(0.8)	(20.0)%	(5.0)%
Interest expense	(135.6)	(1.6)%	(152.0)	(1.8)%	16.4	(10.8)%	0.1 %
Loss on extinguishment of debt	(0.1)	— %	(3.8)	— %	3.7	(97.4)%	— %
Other expense, net	(32.7)	(0.4)%	(17.4)	(0.2)%	(15.3)	87.9 %	2.9 %
Total other expense	$(165.2)	(1.9)%	$(169.2)	(2.0)%	$ 4.0	(2.4)%	0.3 %
Income before income taxes	222.2	2.6 %	168.8	2.0 %	53.4	31.6 %	0.9 %
Income tax expense	49.9	0.6 %	49.0	0.6 %	(0.9)	1.8 %	0.9 %
Net income	$172.3	2.0 %	$119.8	1.5 %	$ 52.5	43.8 %	1.6 %

* Foreign currency translation is included in the percentage change. Unfavorable impacts from foreign currency translation are designated with parentheses.

Net sales

Net sales percentage change due to:	
Acquisitions	0.6 %
Reported sales volumes	(2.3)%
Sales pricing and product mix	5.8 %
Foreign currency translation	0.5 %
Total	4.6 %

Net sales were $8,632.5 million in the year ended December 31, 2018, an increase of $378.8 million, or 4.6%, from the year ended December 31, 2017. On a constant currency basis, net sales increased due to sales pricing and product mix improvements in all segments, partially offset by lower reported sales volumes in all segments except the USA for the year ended December 31, 2018 compared to the year ended December 31, 2017. Net sales also increased from the January 2018 Kemetyl and May 2018 Earthoil acquisitions in EMEA and the September 2017 Tagma acquisition in the Rest of World segment. Refer to the “Segment results” for the year ended December 31, 2018 discussion for additional information.

Table of Contents

Gross profit (exclusive of depreciation)

Gross profit percentage change due to:	
Acquisitions	0.7 %
Reported sales volumes	(2.3)%
Sales pricing, product costs and other adjustments	6.4 %
Foreign currency translation	0.4 %
Total	5.2 %

Gross profit increased $94.6 million, or 5.2%, to $1,900.1 million for the year ended December 31, 2018. The increase in gross profit is attributable to higher average selling prices resulting from changes in market and product mix and sales force execution. The increase in gross profit from acquisitions was driven by the January 2018 Kemetyl and May 2018 Earthoil acquisitions in EMEA and the September 2017 Tagma acquisition in the Rest of World segment. Gross margin, which we define as gross profit divided by external net sales, increased to 22.0% in the year ended December 31, 2018 from 21.9% in the year ended December 31, 2017, primarily due to favorable product mix and focused margin management efforts. Refer to the "Segment results" for the year ended December 31, 2018 discussion for additional information.

Outbound freight and handling

Outbound freight and handling expenses increased $36.3 million, or 12.4%, to $328.3 million for the year ended December 31, 2018. On a constant currency basis, outbound freight and handling expenses increased $34.2 million, or 11.7%, primarily due to higher delivery costs resulting from market capacity constraints and higher fuel costs, partially offset by lower reported sales volumes. Refer to the "Segment results" for the year ended December 31, 2018 discussion for additional information.

Warehousing, selling and administrative

Warehousing, selling and administrative expenses increased $11.7 million, or 1.3%, to $931.4 million for the year ended December 31, 2018. On a constant currency basis, the $7.2 million increase is primarily due to focused investments in resources and capabilities to meet our sales force and digital initiative objectives and higher salary expense. These costs were partially offset by cost containment efforts across all of our segments, lower variable compensation expense and lower employee health care costs in the current year. Refer to the "Segment results" for the year ended December 31, 2018 discussion for additional information.

Other operating expenses, net

Other operating expenses, net increased $18.1 million, or 32.7%, to $73.5 million for the year ended December 31, 2018. The increase was primarily attributable to higher acquisition and integration related expenses, the absence of gain on sale of property, plant and equipment and higher other employee termination costs. The increase was partially offset by the reduction in costs incurred to support the transformation of the US business and lower restructuring charges. Refer to "Note 4: Other operating expenses, net" in Item 8 of this Annual Report on Form 10-K for additional information.

Depreciation and amortization

Depreciation expense decreased $9.8 million, or 7.3%, to $125.2 million for the year ended December 31, 2018. On a constant currency basis, the decrease of $10.4 million, or 7.7%, was primarily due to assets reaching the end of their useful lives.

Amortization expense decreased $11.1 million, or 17.0%, to $54.3 million for the year ended December 31, 2018. On a constant currency basis, the decrease of $11.0 million, or 16.8%, was primarily attributable to intangibles reaching the end of their useful lives.

Interest expense

Interest expense decreased $16.4 million, or 10.8%, to $135.6 million for the year ended December 31, 2018 primarily due to lower average outstanding borrowings. Refer to "Note 16: Debt" in Item 8 of our Annual Report on Form 10-K for additional information.

Loss on extinguishment of debt

Loss on extinguishment of debt decreased $3.7 million for the year ended December 31, 2018. The $0.1 million loss on extinguishment of debt for the year ended December 31, 2018 related to the amended Euro ABL Credit facility

agreement. The $3.8 million loss on extinguishment of debt in the year ended December 31, 2017 related to the write off of unamortized debt

Table of Contents

discount and debt issuance costs related to the January 2017 and November 2017 debt amendments of the Senior Term B loan agreement. Refer to "Note 16: Debt" in Item 8 of our Annual Report on Form 10-K for additional information.

Other expense, net

Other expense, net increased $15.3 million, or 87.9%, to $32.7 million for the year ended December 31, 2018. The increase was primarily related to the increase in pension mark to market loss and the absence of pension curtailment and settlement gains. The increase was partially offset by the reduced exposure to exchange movements on foreign currency denominated loans due to the Euro Term B loan repayment in November 2017. Also contributing to the decrease was the absence of debt amendment fees for the January 2017 and November 2017 amendments of the Senior Term B loan agreement. Refer to "Note 6: Other expense, net" in Item 8 of this Annual Report on Form 10-K for additional information.

Income tax expense

Income tax expense increased $0.9 million, or 1.8%, to $49.9 million in the year ended December 31, 2018. The Company's effective tax rate for the year ended December 31, 2018 of 22.5% was higher than the recently reduced US federal statutory rate of 21.0%, primarily due to the addition of state taxes and the higher tax rates incurred on the company's earnings outside the US, including the expected net impact of the 2017 US Tax Cuts and Jobs Act (the "Tax Act") on foreign net earnings. These increases in the effective tax rate were partially offset by the release of valuation allowances on certain tax attributes. Included in the $49.9 million of tax expense for year ended December 31, 2018 was a $15.3 million benefit related to the release of valuation allowance on foreign tax attributes, a $2.7 million benefit in recognition of previously unrecognized tax benefits due to the statute of limitation expiration, $6.8 million of adjustments to provisional amounts for certain enactment-date effects of the Tax Act, and a $1.6 million net benefit related to prior year estimates of the impact from the 2017 US Tax Cuts and Jobs Act.

Table of Contents

Segment results

Our Adjusted EBITDA and gross profit (exclusive of depreciation) by operating segment and in aggregate is summarized in the following tables:

(in millions)	USA	Canada	EMEA	Rest of World	Other/ Elimin- ations[1]	Consolidated
	Year ended December 31, 2018					
Net sales:						
External customers	$4,961.0	$1,302.3	$1,975.7	$393.5	$—	$ 8,632.5
Inter-segment	126.6	9.3	4.0	0.2	(140.1)	—
Total net sales	$5,087.6	$1,311.6	$1,979.7	$393.7	$(140.1)	$ 8,632.5
Cost of goods sold (exclusive of depreciation)	3,959.3	1,080.1	1,525.6	307.5	(140.1)	6,732.4
Outbound freight and handling	215.6	42.5	62.4	7.8	—	328.3
Warehousing, selling and administrative	536.3	84.3	240.5	45.1	25.2	931.4
Adjusted EBITDA	$376.4	$104.7	$151.2	$33.3	$(25.2)	$ 640.4
Other operating expenses, net						73.5
Depreciation						125.2
Amortization						54.3
Interest expense, net						132.4
Loss on extinguishment of debt						0.1
Other expense, net						32.7
Income tax expense						49.9
Net income						$ 172.3

(in millions)	USA	Canada	EMEA	Rest of World	Other/ Elimin-ations[1]	Consolidated
	Year ended December 31, 2018					
Gross profit:						
Net sales	$5,087.6	$1,311.6	$1,979.7	$ 393.7	$(140.1)	$ 8,632.5
Cost of goods sold (exclusive of depreciation)	3,959.3	1,080.1	1,525.6	307.5	(140.1)	6,732.4
Gross profit (exclusive of depreciation)	$1,128.3	$231.5	$454.1	$ 86.2	$—	$ 1,900.1

Table of Contents

(in millions)	USA	Canada	EMEA	Rest of World	Other/ Elimin- ations[(1)]	Consolidated
	Year ended December 31, 2017					
Net sales:						
External customers	$4,657.1	$1,371.5	$1,821.2	$403.9	$—	$ 8,253.7
Inter-segment	121.9	9.1	4.5	0.5	(136.0)	—
Total net sales	$4,779.0	$1,380.6	$1,825.7	$404.4	$(136.0)	$ 8,253.7
Cost of goods sold (exclusive of depreciation)	3,706.8	1,143.0	1,411.7	322.7	(136.0)	6,448.2
Outbound freight and handling	192.8	37.3	55.7	6.2	—	292.0
Warehousing, selling and administrative	529.4	86.2	229.1	46.8	28.2	919.7
Adjusted EBITDA	$350.0	$114.1	$129.2	$28.7	$(28.2)	$ 593.8
Other operating expenses, net						55.4
Depreciation						135.0
Amortization						65.4
Interest expense, net						148.0
Loss on extinguishment of debt						3.8
Other expense, net						17.4
Income tax expense						49.0
Net income						$ 119.8

(in millions)	USA	Canada	EMEA	Rest of World	Other/ Elimin-ations[(1)]	Consolidated
	Year ended December 31, 2017					
Gross profit:						
Net sales	$4,779.0	$1,380.6	$1,825.7	$ 404.4	$(136.0)	$ 8,253.7
Cost of goods sold (exclusive of depreciation)	3,706.8	1,143.0	1,411.7	322.7	(136.0)	6,448.2
Gross profit (exclusive of depreciation)	$1,072.2	$237.6	$414.0	$ 81.7	$—	$ 1,805.5

(1) Other/Eliminations represents the elimination of intersegment transactions as well as unallocated corporate costs consisting of costs specifically related to parent company operations that do not directly benefit segments, either individually or collectively.

USA.

Net sales percentage change due to:		Gross profit percentage change due to:	
Reported sales volumes	0.9%	Reported sales volumes	0.9%
Sales pricing and product mix	5.6%	Sales pricing, product costs and other adjustments	4.3%
Total	6.5%	Total	5.2%

External sales in the USA segment were $4,961.0 million, an increase of $303.9 million, or 6.5%, in the year ended December 31, 2018, primarily due to higher average selling prices resulting from chemical price inflation on certain products and the Company's efforts to improve its sales force effectiveness as well as higher reported sales volumes, primarily in bulk commodity chemicals.

Gross profit increased $56.1 million, or 5.2%, to $1,128.3 million in the year ended December 31, 2018. Gross profit increased due to changes in product mix, higher sales volumes and a net benefit from miscellaneous operating items. Gross margin decreased from 23.0% in the year ended December 31, 2017 to 22.7% during the year ended December 31, 2018 due to product mix.

Table of Contents

Outbound freight and handling expenses increased $22.8 million, or 11.8%, to $215.6 million in the year ended December 31, 2018 primarily due to higher delivery costs resulting from market capacity constraints and higher fuel costs.
Operating expenses increased $6.9 million, or 1.3%, to $536.3 million in the year ended December 31, 2018 primarily due to focused investments in resources and capabilities to meet our sales force and digital initiative objectives, higher environmental remediation expense and higher bad debt charges. These costs were partially offset by lower employee health care costs, lower variable compensation expense and strong cost containment. Operating expenses as a percentage of external sales decreased from 11.4% in the year ended December 31, 2017 to 10.8% in the year ended December 31, 2018.
Adjusted EBITDA increased by $26.4 million, or 7.5%, to $376.4 million in the year ended December 31, 2018. Adjusted EBITDA margin increased from 7.5% in the year ended December 31, 2017 to 7.6% in the year ended December 31, 2018 primarily as a result of lower operating expenses as a percentage of sales, partially offset by lower gross margin and higher outbound freight and handling expenses as a percentage of sales.
Canada.

Net sales percentage change due to:		Gross profit percentage change due to:	
Reported sales volumes	(8.9)%	Reported sales volumes	(6.4)%
Sales pricing and product mix	3.7 %	Sales pricing, product costs and other adjustments	3.7 %
Foreign currency translation	0.2 %	Foreign currency translation	0.1 %
Total	(5.0)%	Total	(2.6)%

External sales in the Canada segment were $1,302.3 million, a decrease of $69.2 million, or 5.0%, in the year ended December 31, 2018. On a constant currency basis, external net sales decreased due to lower sales volumes attributable to the weather-impacted agriculture market as well as volume reductions in the industrial chemical business due to lower demand from Canada's energy sector in the second half of the year. Average selling prices increased as a result of chemical price inflation in certain products, changes in market and product mix and sales force execution for the year ended December 31, 2018 to the year ended December 31, 2017.
Gross profit decreased $6.1 million, or 2.6%, to $231.5 million in the year ended December 31, 2018. On a constant currency basis, gross profit decreased due to lower sales volumes in agriculture and the industrial chemical business. Gross margin increased from 17.3% in the year ended December 31, 2017 to 17.8% in the year ended December 31, 2018 due to the lower contribution from agriculture sales in 2018 and margin management efforts.
Outbound freight and handling expenses increased $5.2 million, or 13.9%, to $42.5 million primarily due to higher delivery costs per ton resulting from tight market conditions.
Operating expenses decreased by $1.9 million, or 2.2%, to $84.3 million in the year ended December 31, 2018 and increased as a percentage of external sales from 6.3% in the year ended December 31, 2017 to 6.5% in the year ended December 31, 2018. On a constant currency basis, operating expenses decreased $2.0 million, or 2.3%, primarily due to lower variable compensation expense and cost containment efforts.
Adjusted EBITDA decreased by $9.4 million, or 8.2%, to $104.7 million in the year ended December 31, 2018. On a constant currency basis, Adjusted EBITDA decreased $9.6 million, or 8.4%, attributable to reduced demand resulting from a weather-impacted agriculture market, partially offset by growth in the industrial chemical business. Adjusted EBITDA margin decreased from 8.3% in the year ended December 31, 2017 to 8.0% in the year ended December 31, 2018, reflecting the lower contribution from agriculture sales in 2018.

Table of Contents

EMEA.

Net sales percentage change due to:		Gross profit percentage change due to:	
Acquisitions	2.3 %	Acquisitions	2.0 %
Reported sales volumes	(7.1)%	Reported sales volumes	(7.1)%
Sales pricing and product mix	10.2 %	Sales pricing, product costs and other adjustments	11.4 %
Foreign currency translation	3.1 %	Foreign currency translation	3.4 %
Total	8.5 %	Total	9.7 %

External sales in the EMEA segment were $1,975.7 million, an increase of $154.5 million, or 8.5%, in the year ended December 31, 2018. On a constant currency basis, external net sales increased primarily due to higher average selling prices from chemical price inflation, mix improvement and sales force execution. Lower volumes are largely attributable to certain product shortages and a reduction of direct commodity sales. The increase in external net sales from acquisitions was due to the January 2018 Kemetyl and May 2018 Earthoil acquisitions.

Gross profit increased $40.1 million, or 9.7%, to $454.1 million in the year ended December 31, 2018. On a constant currency basis, gross profit increased from higher average selling prices attributable to favorable product mix and margin management initiatives. The increase in gross profit from acquisitions was due to the January 2018 Kemetyl and May 2018 Earthoil acquisitions. Gross margin increased from 22.7% in the year ended December 31, 2017 to 23.0% in the year ended December 31, 2018 primarily due to the change in product mix and price inflation.

Outbound freight and handling expenses increased $6.7 million, or 12.0%, to $62.4 million primarily due to incremental expenses related to our Kemetyl acquisition and overall higher costs to deliver.

Operating expenses increased $11.4 million, or 5.0%, to $240.5 million in the year ended December 31, 2018, and decreased as a percentage of external sales from 12.6% in the year ended December 31, 2017 to 12.2% in the year ended December 31, 2018. On a constant currency basis, operating expenses increased $3.9 million, or 1.7%, which was primarily due to incremental expenses related to our Kemetyl acquisition and higher salary expense, partially offset by lower environmental remediation expenses and lower bad debt charges.

Adjusted EBITDA increased by $22.0 million, or 17.0%, to $151.2 million in the year ended December 31, 2018. On a constant currency basis, Adjusted EBITDA increased $17.9 million, or 13.9%, primarily due to increased gross margin and lower operating expenses as a percentage of sales, partially offset by higher outbound freight and handling expenses as a percentage of sales. The pharmaceutical finished goods product line represented approximately 30% of Adjusted EBITDA in the EMEA segment for the year ended December 31, 2018. Adjusted EBITDA margin increased from 7.1% in the year ended December 31, 2017 to 7.7% in the year ended December 31, 2018.

Rest of World.

Net sales percentage change due to:		Gross profit percentage change due to:	
Acquisitions	2.6 %	Acquisitions	6.0 %
Reported sales volumes	(18.5)%	Reported sales volumes	(17.0)%
Sales pricing and product mix	18.6 %	Sales pricing, product costs and other adjustments	24.0 %
Foreign currency translation	(5.3)%	Foreign currency translation	(7.5)%
Total	(2.6)%	Total	5.5 %

External sales in the Rest of World segment were $393.5 million, a decrease of $10.4 million, or 2.6%, in the year ended December 31, 2018. External sales increased from higher average selling prices attributable to market price inflation, shortages on certain products, changes in product mix and improved sales force effectiveness. Reported sales volumes were lower due to certain product shortages as well as the Company’s continued focus on margin management efforts. The increase in external net sales from acquisitions was due to the September 2017 Tagma acquisition.

Gross profit increased $4.5 million, or 5.5%, to $86.2 million in the year ended December 31, 2018 due to higher average selling prices resulting from higher chemical prices discussed above. The increase in gross profit from acquisitions was due to the September 2017 Tagma acquisition. Gross margin increased from 20.2% in the year ended December 31, 2017 to 21.9% in the

Table of Contents

year ended December 31, 2018 primarily due to the factors discussed above and a shift towards higher margin products and services.

Outbound freight and handling expenses increased $1.6 million, or 25.8%, to $7.8 million in the year ended December 31, 2018.

Operating expenses decreased $1.7 million, or 3.6% to $45.1 million in the year ended December 31, 2018 and decreased as a percentage of external sales from 11.6% in the year ended December 31, 2017 to 11.5% in the year ended December 31, 2018. On constant currency basis, operating expenses increased $1.4 million, or 3.0%, primarily due to higher variable compensation expense.

Adjusted EBITDA increased by $4.6 million, or 16.0%, to $33.3 million in the year ended December 31, 2018. On a constant currency basis, Adjusted EBITDA increased $7.2 million, or 25.1%, primarily due to a shift towards higher margin products and services and market price inflation, partially offset by higher outbound freight and handling expenses as a percentage of sales. Adjusted EBITDA margin increased from 7.1% in the year ended December 31, 2017 to 8.5% in the year ended December 31, 2018.

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

(in millions)	Year ended December 31, 2017		December 31, 2016		Favorable (unfavorable)	% Change	Impact of currency*
Net sales	$8,253.7	100.0 %	$8,073.7	100.0 %	$ 180.0	2.2 %	0.5 %
Cost of goods sold (exclusive of depreciation)	6,448.2	78.1 %	6,346.6	78.6 %	(101.6)	1.6 %	(0.5)%
Operating expenses:							
Outbound freight and handling	292.0	3.5 %	286.6	3.5 %	(5.4)	1.9 %	(0.6)%
Warehousing, selling and administrative	919.7	11.1 %	893.1	11.1 %	(26.6)	3.0 %	(0.6)%
Other operating expenses, net	55.4	0.7 %	37.2	0.5 %	(18.2)	48.9 %	0.8 %
Depreciation	135.0	1.6 %	152.3	1.9 %	17.3	(11.4)%	(0.4)%
Amortization	65.4	0.8 %	85.6	1.1 %	20.2	(23.6)%	(0.3)%
Impairment charges	—	— %	133.9	1.7 %	133.9	(100.0)%	— %
Total operating expenses	$1,467.5	17.8 %	$1,588.7	19.7 %	$ 121.2	(7.6)%	(0.5)%
Operating income	$338.0	4.1 %	$138.4	1.7 %	$ 199.6	144.2 %	1.7 %
Other (expense) income:							
Interest income	4.0	— %	3.9	— %	0.1	2.6 %	2.6 %
Interest expense	(152.0)	(1.8)%	(163.8)	(2.0)%	11.8	(7.2)%	0.1 %
Loss on extinguishment of debt	(3.8)	— %	—	— %	(3.8)	100.0 %	— %
Other expense, net	(17.4)	(0.2)%	(58.1)	(0.7)%	40.7	(70.1)%	0.9 %
Total other expense	$(169.2)	(2.0)%	$(218.0)	(2.7)%	$ 48.8	(22.4)%	0.4 %
Income (loss) before income taxes	168.8	2.0 %	(79.6)	(1.0)%	248.4	NM	3.9 %
Income tax expense (benefit)	49.0	0.6 %	(11.2)	(0.1)%	(60.2)	NM	0.9 %
Net income (loss)	$119.8	1.5 %	$(68.4)	(0.8)%	$ 188.2	NM	4.7 %

* Foreign currency translation is included in the percentage change. Unfavorable impacts from foreign currency translation are designated with parentheses.

Table of Contents

Net sales

Net sales percentage change due to:	
Acquisitions	0.1 %
Reported sales volumes	(5.8)%
Sales pricing and product mix	7.4 %
Foreign currency translation	0.5 %
Total	2.2 %

Net sales were $8,253.7 million in the year ended December 31, 2017, an increase of $180.0 million, or 2.2%, from the year ended December 31, 2016. The increase in net sales from acquisitions was driven by the September 2017 Tagma acquisition in the Rest of World segment, the March 2016 Nexus Ag acquisition in Canada, and the March 2016 Bodine acquisition in the USA. The decrease in net sales from reported sales volumes was driven by the USA, EMEA, and Rest of World segments, partially offset by higher sales volumes in the Canada segment. The increase in net sales from changes in sales pricing and product mix was driven by all of our segments. Foreign currency translation increased net sales due to the US dollar weakening against the Canadian dollar, euro, and Brazilian real, partially offset by the strengthening of the US dollar against the British pound and the Mexican peso. Refer to the "Segment results" for the year ended December 31, 2017 discussion for additional information.

Gross profit (exclusive of depreciation)

Gross profit percentage change due to:	
Acquisitions	0.2 %
Reported sales volumes	(5.8)%
Sales pricing, product costs and other adjustments	9.5 %
Foreign currency translation	0.6 %
Total	4.5 %

Gross profit increased $78.4 million, or 4.5%, to $1,805.5 million for the year ended December 31, 2017. The increase in gross profit from acquisitions was driven by the September 2017 Tagma acquisition in the Rest of World segment, the March 2016 Bodine acquisition in the USA, and the March 2016 Nexus Ag acquisition in Canada. The decrease in gross profit from reported sales volumes was driven by the USA, EMEA, and Rest of World segments, partially offset by higher sales volumes in the Canada segment. The increase in gross profit from changes in sales pricing, product costs and other adjustments was driven by the USA, EMEA, and Rest of World segments, partially offset by a decrease in the Canada segment. Foreign currency translation increased gross profit due to the weakening of the US dollar against the Canadian dollar, euro, and Brazilian real, partially offset by the strengthening of the US dollar against the British pound and the Mexican peso. Gross margin, which we define as gross profit divided by external net sales, increased to 21.9% in the year ended December 31, 2017 from 21.4% in the year ended December 31, 2016, primarily due to favorable product mix and focused margin management efforts. Refer to the "Segment results" for the year ended December 31, 2017 discussion for additional information.

Outbound freight and handling

Outbound freight and handling expenses increased $5.4 million, or 1.9%, to $292.0 million for the year ended December 31, 2017. Foreign currency translation increased outbound freight and handling expense by 0.6% or $1.7 million. On a constant currency basis, outbound freight and handling expenses increased 1.3% or $3.7 million, primarily due to higher delivery costs resulting from changes in product mix, market capacity constraints, and increasing fuel prices, partially offset by lower reported sales volumes. Refer to the "Segment results" for the year ended December 31, 2017 discussion for additional information.

Warehousing, selling and administrative

Warehousing, selling and administrative expenses increased $26.6 million, or 3.0%, to $919.7 million for the year ended December 31, 2017. Foreign currency translation decreased warehousing, selling and administrative expenses by 0.6% or $5.2 million. On a constant currency basis, the $21.4 million increase is primarily due to higher personnel costs of $28.8 million primarily driven by higher variable compensation expense and higher environmental remediation expense of $4.6 million, partially offset by $3.8 million in lower lease expense, $2.4 million in lower bad debt charges, $1.0 million in lower legal expenses and $0.6 million in lower insurance expense. The remaining $4.2

million decrease related to several insignificant components. Refer to the “Segment results” for the year ended December 31, 2017 discussion for additional information.

Table of Contents

Other operating expenses, net

Other operating expenses, net increased $18.2 million, or 48.9%, to $55.4 million for the year ended December 31, 2017. The increase in other operating expenses, net was related to $18.0 million of costs incurred to support the transformation of the US business, $9.3 million of higher stock-based compensation, and $6.6 million of higher other employee termination costs. The increase was partially offset by a higher gain on sale of property, plant and equipment of $10.6 million driven by the sale and subsequent leaseback of an operating facility in the Canada segment, $2.4 million in lower acquisition and integration related expenses and $1.0 million in lower restructuring charges. The remaining $1.7 million decrease related to several insignificant components. Foreign currency translation decreased other operating expenses, net by $0.3 million, or 0.8%. Refer to “Note 4: Other operating expenses, net” in Item 8 of this Annual Report on Form 10-K for additional information.

Depreciation and amortization

Depreciation expense decreased $17.3 million, or 11.4%, to $135.0 million for the year ended December 31, 2017. Foreign currency translation increased depreciation expense by $0.6 million, or 0.4%. On a constant currency basis, the decrease of $17.9 million, or 11.8%, was primarily due to assets reaching the end of their useful lives and due to the second quarter 2016 reassessment of useful lives of certain internally developed software which were fully depreciated by May 2017.

Amortization expense decreased $20.2 million, or 23.6%, to $65.4 million for the year ended December 31, 2017. Amortization expense increased $0.3 million, or 0.3%, due to foreign currency translation. On a constant currency basis, the decrease of $20.5 million, or 23.9%, was primarily driven by the third quarter 2016 impairment charge which reduced the intangible asset base along with lower expense related to intangibles reaching the end of their useful life.

Impairment charges

There were no impairment charges in the year ended December 31, 2017. Impairment charges of $133.9 million were recorded in the year ended December 31, 2016 of which $133.6 million was due to the impairment of certain intangible assets and fixed assets related to the upstream oil and gas customers in the USA segment. The Company also recorded a non-cash, long-lived asset impairment charge of $0.3 million related to assets held-for-sale. Refer to “Note 14: Impairment charges” in Item 8 of this Annual Report on Form 10-K for additional information.

Interest expense

Interest expense decreased $11.8 million, or 7.2%, to $152.0 million for the year ended December 31, 2017 primarily due to lower average outstanding borrowings, as well as lower interest rates related to the January 2017 and November 2017 amendments of the Senior Term B loan agreement. Foreign currency translation decreased interest expense by 0.1% or $0.2 million. Refer to “Note 16: Debt” in Item 8 of this Annual Report on Form 10-K for additional information.

Loss on extinguishment of debt

Loss on extinguishment of debt increased $3.8 million for the year ended December 31, 2017. The $3.8 million loss on extinguishment of debt in the year ended December 31, 2017 related to the write off of unamortized debt discount and debt issuance costs related to the January 2017 and November 2017 debt amendments of the Senior Term B loan agreement. Refer to “Note 16: Debt” in Item 8 of this Annual Report on Form 10-K for additional information.

Other expense, net

Other expense, net decreased $40.7 million, or 70.1%, to $17.4 million for the year ended December 31, 2017. The decrease was primarily related to the $64.8 million decrease in pension mark to market loss, the $8.4 million increase in pension curtailment and settlement gains driven by a $9.7 million settlement gain in the year ended December 31, 2017 related to a lump sum offering in a US defined benefit plan, and offset by a $5.4 million decrease in other non-operating retirement benefits. The decrease was partially offset by an increase of $12.3 million change in mark to market for interest rate swaps resulting from a gain of $10.1 million during the year ended December 31, 2016 compared to a $2.2 million loss in the year ended December 31, 2017. Also offsetting the decrease was $5.3 million in fees related to the January 2017 and November 2017 amendments of the Senior Term B loan agreement, $4.2 million in higher foreign currency denominated loan revaluation losses and $4.0 million in higher foreign currency transactions. The remaining $1.3 million change is related to several insignificant components. Refer to “Note 16: Debt”

and “Note 18: Derivatives” in Item 8 of this Annual Report on Form 10-K for additional information. Refer to “Note 6: Other expense, net” in Item 8 of this Annual Report on Form 10-K for additional information.

Income tax expense (benefit)

Income tax expense increased $60.2 million from an income tax benefit of $11.2 million in the year ended December 31, 2016 to an income tax expense of $49.0 million in the year ended December 31, 2017. The increase in income tax expense was

---

Table of Contents

primarily the result of an increase in overall earnings before income taxes from a loss of $79.6 million incurred for the year ended December 31, 2016, as compared to an income of $168.8 million for the year ended December 31, 2017. The direct and indirect impacts from the Tax Cuts and Jobs Act (the "Tax Act") also contributed to the total expense by $36.6 million. The increase in income tax expense was partially offset by a release of valuation allowances based on current estimated earnings and future profitability of $25.9 million for the year ended December 31, 2017.

Segment results

Our Adjusted EBITDA and gross profit (exclusive of depreciation) by operating segment and in aggregate is summarized in the following tables:

(in millions)	USA	Canada	EMEA	Rest of World	Other/ Elimin-ations[(1)]	Consolidated
	Year ended December 31, 2017					
Net sales:						
External customers	$4,657.1	$1,371.5	$1,821.2	$403.9	$—	$ 8,253.7
Inter-segment	121.9	9.1	4.5	0.5	(136.0)	—
Total net sales	$4,779.0	$1,380.6	$1,825.7	$404.4	$(136.0)	$ 8,253.7
Cost of goods sold (exclusive of depreciation)	3,706.8	1,143.0	1,411.7	322.7	(136.0)	6,448.2
Outbound freight and handling	192.8	37.3	55.7	6.2	—	292.0
Warehousing, selling and administrative	529.4	86.2	229.1	46.8	28.2	919.7
Adjusted EBITDA	$350.0	$114.1	$129.2	$28.7	$(28.2)	$ 593.8
Other operating expenses, net						55.4
Depreciation						135.0
Amortization						65.4
Interest expense, net						148.0
Loss on extinguishment of debt						3.8
Other expense, net						17.4
Income tax expense						49.0
Net income						$ 119.8

(in millions)	USA	Canada	EMEA	Rest of World	Other/ Elimin-ations[(1)]	Consolidated
	Year ended December 31, 2017					
Gross profit:						
Net sales	$4,779.0	$1,380.6	$1,825.7	$ 404.4	$(136.0)	$ 8,253.7
Cost of goods sold (exclusive of depreciation)	3,706.8	1,143.0	1,411.7	322.7	(136.0)	6,448.2
Gross profit (exclusive of depreciation)	$1,072.2	$237.6	$414.0	$ 81.7	$—	$ 1,805.5

Table of Contents

(in millions)	USA	Canada	EMEA	Rest of World	Other/ Elimin- ations[1]	Consolidated
	Year ended December 31, 2016					
Net sales:						
External customers	$4,706.7	$1,261.0	$1,704.2	$401.8	$—	$ 8,073.7
Inter-segment	104.4	8.3	4.5	—	(117.2)	—
Total net sales	$4,811.1	$1,269.3	$1,708.7	$401.8	$(117.2)	$ 8,073.7
Cost of goods sold (exclusive of depreciation)	3,769.7	1,047.4	1,324.6	322.1	(117.2)	6,346.6
Outbound freight and handling	191.5	34.1	54.9	6.1	—	286.6
Warehousing, selling and administrative	523.5	85.4	219.3	46.8	18.1	893.1
Adjusted EBITDA	$326.4	$102.4	$109.9	$26.8	$(18.1)	$ 547.4
Other operating expenses, net						37.2
Depreciation						152.3
Amortization						85.6
Impairment charges						133.9
Interest expense, net						159.9
Other expense, net						58.1
Income tax benefit						(11.2)
Net loss						$ (68.4)

(in millions)	USA	Canada	EMEA	Rest of World	Other/ Elimin-ations[1]	Consolidated
	Year ended December 31, 2016					
Gross profit:						
Net sales	$4,811.1	$1,269.3	$1,708.7	$ 401.8	$(117.2)	$ 8,073.7
Cost of goods sold (exclusive of depreciation)	3,769.7	1,047.4	1,324.6	322.1	(117.2)	6,346.6
Gross profit (exclusive of depreciation)	$1,041.4	$221.9	$384.1	$ 79.7	$—	$ 1,727.1

(1) Other/Eliminations represents the elimination of intersegment transactions as well as unallocated corporate costs consisting of costs specifically related to parent company operations that do not directly benefit segments, either individually or collectively.

USA.

Net sales percentage change due to:		Gross profit percentage change due to:	
Acquisitions	0.1 %	Acquisitions	0.1 %
Reported sales volumes	(7.1)%	Reported sales volumes	(7.1)%
Sales pricing and product mix	5.9 %	Sales pricing, product costs and other adjustments	10.0 %
Total	(1.1)%	Total	3.0 %

External sales in the USA segment were $4,657.1 million, a decrease of $49.6 million, or 1.1%, in the year ended December 31, 2017 due to lower sales volumes, partially offset by higher average selling prices resulting from the Company's efforts to improve its sales force effectiveness, favorable changes in product mix and increases in certain chemical prices. The increase in external net sales from acquisitions was due to the March 2016 Bodine acquisition. Gross profit increased $30.8 million, or 3.0%, to $1,072.2 million in the year ended December 31, 2017. Gross profit increased from sales pricing, product costs and other adjustments primarily due to higher average selling prices and changes in product mix to higher margin products. The increase in gross profit from acquisitions was due to the March 2016 Bodine acquisition. Gross margin increased from 22.1% in the year

Table of Contents

ended December 31, 2016 to 23.0% during the year ended December 31, 2017 primarily due to the factors impacting gross profit discussed above.

Outbound freight and handling expenses increased $1.3 million, or 0.7%, to $192.8 million in the year ended December 31, 2017 primarily due to higher delivery costs resulting from market capacity constraints and increasing fuel prices. Operating expenses increased $5.9 million, or 1.1%, to $529.4 million in the year ended December 31, 2017 of which $19.5 million is attributable to higher personnel costs primarily driven by higher variable compensation expense partially offset by lower salaries expense. Additionally, the increase in operating expenses is also due to higher environmental remediation expense of $3.0 million. These increases were partially offset by $3.8 million of lower lease expenses, $3.8 million in lower bad debt charges and $2.3 million in lower maintenance and repair expenses. The remaining $6.7 million decrease related to several insignificant components. Operating expenses as a percentage of external sales increased from 11.1% in the year ended December 31, 2016 to 11.4% in the year ended December 31, 2017.

Adjusted EBITDA increased by $23.6 million, or 7.2%, to $350.0 million in the year ended December 31, 2017. Adjusted EBITDA margin increased from 6.9% in the year ended December 31, 2016 to 7.5% in the year ended December 31, 2017 primarily as a result of higher gross margin, partially offset by increased operating expenses as a percentage of sales.

Canada.

Net sales percentage change due to:			Gross profit percentage change due to:		
Acquisitions	0.3	%	Acquisitions	0.3	%
Reported sales volumes	4.8	%	Reported sales volumes	4.8	%
Sales pricing and product mix	1.5	%	Sales pricing, product costs and other adjustments	(0.2	)%
Foreign currency translation	2.2	%	Foreign currency translation	2.2	%
Total	8.8	%	Total	7.1	%

External sales in the Canada segment were $1,371.5 million, an increase of $110.5 million, or 8.8%, in the year ended December 31, 2017. Foreign currency translation increased external sales dollars as the US dollar weakened against the Canadian dollar comparing the year ended December 31, 2017 to the year ended December 31, 2016. On a constant currency basis, external sales dollars increased $82.9 million or 6.6%. The increase in external net sales from acquisitions was due to the March 2016 Nexus Ag acquisition. The increase in external net sales was driven by higher reported sales volumes across all regions. The increase in external net sales from changes in sales pricing and product mix was primarily driven by higher average selling prices in key industrial chemical products. Gross profit increased $15.7 million, or 7.1%, to $237.6 million in the year ended December 31, 2017. The increase in gross profit from acquisitions was due to the March 2016 Nexus Ag acquisition. Gross profit decreased from sales pricing, product costs, and other adjustments due to change in market and product mix, partially offset by margin management efforts during the year ended December 31, 2017. Gross margin decreased from 17.6% in the year ended December 31, 2016 to 17.3% in the year ended December 31, 2017.

Outbound freight and handling expenses increased $3.2 million, or 9.4%, to $37.3 million primarily due to higher reported sales volumes and higher delivery costs resulting from changes in product mix. Operating expenses increased by $0.8 million, or 0.9%, to $86.2 million in the year ended December 31, 2017 and decreased as a percentage of external sales from 6.8% in the year ended December 31, 2016 to 6.3% in the year ended December 31, 2017. Foreign currency translation increased operating expenses by $1.8 million, or 2.1%. On a constant currency basis, operating expenses decreased $1.0 million, or 1.2%, primarily related to several insignificant components.

Adjusted EBITDA increased by $11.7 million, or 11.4%, to $114.1 million in the year ended December 31, 2017. Foreign currency translation increased Adjusted EBITDA by $2.2 million, or 2.1%. On a constant currency basis,

Adjusted EBITDA increased $9.5 million, or 9.3%, primarily due to increased gross profit. Adjusted EBITDA margin increased from 8.1% in the year ended December 31, 2016 to 8.3% in the year ended December 31, 2017 primarily as a result of lower operating expenses as a percentage of sales, partially offset by lower gross margin.

Table of Contents

EMEA.

Net sales percentage change due to:		Gross profit percentage change due to:	
Reported sales volumes	(5.4)%	Reported sales volumes	(5.4)%
Sales pricing and product mix	12.0 %	Sales pricing, product costs and other adjustments	12.5 %
Foreign currency translation	0.3 %	Foreign currency translation	0.7 %
Total	6.9 %	Total	7.8 %

External sales in the EMEA segment were $1,821.2 million, an increase of $117.0 million, or 6.9%, in the year ended December 31, 2017 primarily due to higher average selling prices driven by mix improvement, margin management initiatives and chemical price inflation for certain products, partially offset by lower volumes. Foreign currency translation increased external sales dollars as the US dollar weakened against the euro, partially offset by the US dollar strengthening against the British pound, when comparing the year ended December 31, 2017 to the year ended December 31, 2016. Gross profit increased $29.9 million, or 7.8%, to $414.0 million in the year ended December 31, 2017. Gross profit increased due to changes in sales pricing, product costs and other adjustments primarily due to increased sales of higher margin pharmaceutical finished goods as well as the continued impact of favorable product and end market mix. Gross margin increased from 22.5% in the year ended December 31, 2016 to 22.7% in the year ended December 31, 2017 primarily due to the factors impacting gross profit discussed above.

Outbound freight and handling expenses increased $0.8 million, or 1.5%, to $55.7 million primarily due to higher delivery costs per ton due to lower bulk volume sales. Operating expenses increased $9.8 million, or 4.5%, to $229.1 million in the year ended December 31, 2017, and decreased as a percentage of external sales from 12.9% in the year ended December 31, 2016 to 12.6% in the year ended December 31, 2017. Foreign currency translation increased operating expenses by 1.0% or $2.1 million. On a constant currency basis, operating expenses increased $7.7 million, or 3.5%, which was driven by higher personnel costs of $5.4 million primarily due to higher variable compensation expense, higher environmental remediation expense of $1.8 million, and $1.4 million in higher bad debt charges. The increase was partially offset by a decrease of $1.0 million in lease expenses. The remaining offsetting $0.1 million increase related to several other insignificant components.

Adjusted EBITDA increased by $19.3 million, or 17.6%, to $129.2 million in the year ended December 31, 2017. Foreign currency translation decreased Adjusted EBITDA by 0.1% or $0.2 million. On a constant currency basis, Adjusted EBITDA increased $19.5 million, or 17.7%, which can be attributed to increased gross profit due to improved sales force execution and margin management initiatives together with increased sales of pharmaceutical finished goods compared to the year ended December 31, 2016. The pharmaceutical finished goods product line represented approximately 30% of Adjusted EBITDA in the EMEA segment for the year ended December 31, 2017. Adjusted EBITDA margin increased from 6.4% in the year ended December 31, 2016 to 7.1% in the year ended December 31, 2017 primarily due to higher gross margin and lower outbound freight and handling expenses and operating expenses as a percentage of sales.

Rest of World.

Net sales percentage change due to:		Gross profit percentage change due to:	
Acquisitions	1.0 %	Acquisitions	2.6 %
Reported sales volumes	(16.3)%	Reported sales volumes	(16.3)%
Sales pricing and product mix	13.9 %	Sales pricing, product costs and other adjustments	13.2 %
Foreign currency translation	1.9 %	Foreign currency translation	3.0 %
Total	0.5 %	Total	2.5 %

External sales in the Rest of World segment were $403.9 million, an increase of $2.1 million, or 0.5%, in the year ended December 31, 2017. Foreign currency translation increased external sales dollars primarily due to the US dollar weakening against the Brazilian real, partially offset by the US dollar strengthening against the Mexican peso in the year ended December 31, 2017 as compared to the year ended December 31, 2016. The increase in external net sales from acquisitions was due to the September 2017 Tagma acquisition. The decrease in external net sales from reported sales volumes was due to weak industrial demand and in particular lower demand in upstream oil and gas products

and solvents in Mexico. The increase in external net sales from changes in sales pricing and product mix was primarily due to favorable product mix and higher average selling prices resulting from the Company's efforts to improve its sales force effectiveness and higher chemical prices due to product shortages. Gross profit increased $2.0 million, or 2.5%, to $81.7 million in the year ended December 31, 2017. The increase in gross profit from acquisitions

61

---

was due to the September 2017 Tagma acquisition. Gross profit increased from sales pricing, product costs and other adjustments primarily due to favorable product mix and higher average selling prices, offset by lower volumes across the region for the year ended December 31, 2017. Gross margin increased from 19.8% in the year ended December 31, 2016 to 20.2% in the year ended December 31, 2017 primarily due to the factors discussed above.
Outbound freight and handling expenses increased $0.1 million, or 1.6%, to $6.2 million in the year ended December 31, 2017. Foreign currency translation increased outbound freight and handling expenses by 1.6% or $0.1 million. On a constant currency basis, outbound freight and handling expenses remained flat compared to prior year primarily due to lower reported sales volumes. Operating expenses remained flat at $46.8 million and 11.6% as a percentage of external sales when comparing the year ended December 31, 2017 to the year ended December 31, 2016. Foreign currency translation increased operating expenses by 2.8% or $1.3 million. On constant currency basis, operating expenses decreased $1.3 million, or 2.8% due to several insignificant components.
Adjusted EBITDA increased by $1.9 million, or 7.1%, to $28.7 million in the year ended December 31, 2017. Foreign currency translation increased Adjusted EBITDA by 3.7% or $1.0 million. On a constant currency basis, Adjusted EBITDA increased $0.9 million, or 3.4%, primarily due to increased gross profit. Adjusted EBITDA margin increased from 6.7% in the year ended December 31, 2016 to 7.1% in the year ended December 31, 2017 primarily due to higher gross margin.

Liquidity and Capital Resources

Our primary source of liquidity is cash generated from our operations as well as borrowings under our credit facilities. As of December 31, 2018, our total liquidity was approximately $734.7 million, comprised of $613.1 million available under our credit facilities and $121.6 million of cash and cash equivalents. Our primary liquidity and capital resource needs are to service our debt and to finance working capital, capital expenditures, other liabilities, cost of acquisitions and general corporate purposes. We believe that funds provided by these sources will be adequate to meet our liquidity and capital resource needs for at least the next 12 months under current operating conditions. We have significant working capital needs, although we have implemented several initiatives to improve our working capital and reduce the related financing requirements. The nature of our business, however, requires that we maintain inventories that enable us to deliver products to fill customer orders. As of December 31, 2018, we maintained inventories of $803.3 million, equivalent to approximately 47.2 days of sales (which we calculate on the basis of cost of goods sold for the trailing 90-day period).
The funded status of our defined benefit pension plans is the difference between our plan assets and projected benefit obligations. Our pension plans in the US and certain other countries had an underfunded status of $212.4 million, $226.7 million and $271.8 million at December 31, 2018, 2017 and 2016, respectively. During 2018, we made contributions of $38.7 million. Based on current projections of minimum funding requirements, we expect to make cash contributions of $28.3 million to our defined benefit pension plans in 2019. The timing for any such requirement in future years is uncertain given the implicit uncertainty regarding the future developments of factors described in "Risk Factors" in Item 1A of this Annual Report on Form 10-K and "Note 9: Employee benefit plans" in Item 8 of this Annual Report on Form 10-K.
As a result of the US Tax Act, the Company recorded provisional amounts in 2017 including a one-time repatriation tax of $76.5 million. The Company elected to pay this repatriation tax in cash over eight years in accordance with the laws prescribed under US Tax Reform. See also "Note 7: Income taxes" in Item 8 of this Annual Report on Form 10-K for more information.
We may from time to time repurchase our debt or take other steps to reduce our debt. These actions may include open market repurchases, negotiated repurchases or opportunistic refinancing of debt. The amount of debt, if any, that may be repurchased or refinanced will depend on market conditions, trading levels of our debt, our cash position, compliance with debt covenants and other considerations. Our affiliates may also purchase our debt from time to time, through open market purchases or other transactions. During the years ended December 31, 2016 and December 31, 2017, we restructured a significant portion of our long-term debt obligations. These debt amendments extended our debt maturity profile and reduced our future interest payments. Refer to "Note 16: Debt" in Item 8 of this Annual Report on Form 10-K for further information.

In connection with the Nexeo Acquisition, the Company intends to finance the cash portion of the transaction and refinance Nexeo's existing debt with a combination of available cash and debt financing, for which the Company has received commitments. The Company entered into a commitment letter, dated September 17, 2018, with Goldman Sachs Bank USA, pursuant to which Goldman committed to provide $1.3 billion of incremental term loans.

Univar and Nexeo have announced an agreement for Nexeo to divest its plastics distribution business to an affiliate of One Rock Capital Partners, LLC for an enterprise value of $640.0 million, subject to customary closing adjustments. If this divestiture is successful, the Company anticipates using the net proceeds to reduce our indebtedness.

While additional indebtedness would increase our interest expense and cash outflow and, at least in the short term, increase our leverage ratio, the Company believes our increased revenues from the Nexeo Acquisition and any proceeds received from the

Table of Contents

divestiture of Nexeo's plastics business, will be at least sufficient to adequately service our debt and reduce our leverage ratio nearly to 2018 levels.

In February 2019, S&P Global Ratings raised their corporate credit rating on Univar to BB from BB- with a "stable" outlook and Moody's Investors Service, Inc. raised their corporate credit rating on Univar to Ba3 from B1 with a "stable" outlook. In addition, Fitch initiated a corporate credit rating on Univar of BB with a "positive" outlook.

Cash Flows

The following table presents a summary of our cash flow activity for the periods set forth below:

	Fiscal Year Ended December 31,		
(in millions)	2018	2017	2016
Net cash provided by operating activities	$289.9	$282.6	$450.0
Net cash used by investing activities	(99.0)	(79.1)	(136.0)
Net cash used by financing activities	(518.3)	(112.4)	(166.5)

Cash Provided by Operating Activities

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

Cash provided by operating activities increased $7.3 million from $282.6 million for the year ended December 31, 2017 to $289.9 million for the year ended December 31, 2018. The increase is primarily due to a net increase in the change in net working capital, net income, exclusive of non-cash items, and pensions and other postretirement benefit liabilities, partially offset by increased cash outflows related to other operating activities.

The Company adopted ASC 606 as of January 1, 2018, and although there was no impact to total operating cash flows, there were a certain number of presentation changes to specific line items in the consolidated balance sheet and within operating activities in the consolidated statement of cash flows. See "Note 2: Significant accounting policies," for the impact to the consolidated balance sheet and statement of operations as of December 31, 2018.

Excluding the presentation changes from the adoption of ASC 606, the change in trade working capital, which includes trade accounts receivable, net, inventories, and trade accounts payable, was a cash inflow of $43.8 million (or a cash inflow of $14.2 million including the impacts of ASC 606) for the period ended December 31, 2018 compared to the period ended December 31, 2017. Inventory cash inflows are primarily related to prior year cash outflows that produced higher inventories as a result of drought conditions in Canada that led to a soft agriculture season. Cash inflows related to trade accounts receivable, net are primarily due to prior year cash outflows as result of higher sales and the timing of customer payments. The trade accounts payable cash outflows primarily related to prior year cash inflows due to higher purchases and timing of payments.

The change in pensions and other postretirement benefit liabilities provided cash of $36.4 million primarily due to reductions in the return on plan assets and increases in actuarial losses when comparing the year ended December 31, 2018 to the year ended December 31, 2017. Refer to "Note 9: Employee benefit plans" in Item 8 of this Annual Report on Form 10-K for additional information.

The remaining cash outflow associated with operating activities of $109.1 million (or a cash outflow of $80.6 million including the impacts of ASC 606) is primarily related to reductions in current year customer prepayments in the Company's agriculture business, higher compensation payments during the prior year, and prior year changes in the fair value of interest rate swaps.

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

Cash provided by operating activities decreased $167.4 million from $450.0 million for the year ended December 31, 2016 to $282.6 million for the year ended December 31, 2017.

Cash provided by operating activities increased by $66.4 million due to an increase in net income exclusive of non-cash items in the year ended December 31, 2017 compared to the year ended December 31, 2016. Refer to "Results of Operations" above for additional information.

The change in trade working capital; which includes trade accounts receivable, net, inventories and trade accounts payable; resulted in an increased use of cash of $176.8 million. Trade accounts receivable, net used cash of $58.5 million in the year ended December 31, 2017 and provided cash of $70.2 million in the year ended December 31,

2016. The increase in current year cash outflows is due to higher sales and the timing of customer payments compared to the prior year ended December 31, 2016.

Table of Contents

Inventories used cash of $47.7 million in the year ended December 31, 2017 and provided cash of $42.0 million in the year ended December 31, 2016. The current year use of cash is primarily due to higher inventories as a result of drought conditions in Canada that led to a soft agriculture season. Trade accounts payable provided cash inflows of $53.6 million and $12.0 million for the years ended December 31, 2017 and December 31, 2016, respectively. The cash inflows related to trade accounts payable are primarily due to higher purchases and timing of payments.

Cash provided by operating activities related to pensions and other postretirement benefit liabilities decreased $78.7 million, which consisted of cash outflows of $51.8 million for the year ended December 31, 2017 and cash inflows of $26.9 million for the year ended December 31, 2016. The difference in the cash flows between the two respective periods is primarily due to reductions in the actuarial losses and increases in the return on plan assets when comparing the year ended December 31, 2017 to the year ended December 31, 2016. Refer to “Note 9: Employee benefit plans” in Item 8 of this Annual Report on Form 10-K for additional information. The decrease in cash provided by operating activities was also due to a $48.8 million decrease from changes in prepaid expenses and other current assets. In the year ended December 31, 2017, prepaid expenses and other current assets used cash of $8.7 million primarily due to increases in supplier prepayments and sales tax receivables. In the year ended December 31, 2016, prepaid expenses and other current assets provided cash of $40.1 million primarily due to reductions in prepaid expenses related to rebates, deposits and several other insignificant components and the realization of an income tax refund in the amount of $14.1 million.

The remaining cash inflow associated with operating activities of $70.5 million is related to other, net, which consists of cash inflows of $44.6 million for the year ended December 31, 2017 and cash outflows of $25.9 million for the year ended December 31, 2016. The cash inflows for the year ended December 31, 2017 were primarily related to increases in accrued compensation, debt refinancing costs and several other insignificant components. The cash outflows for the year ended December 31, 2016 were primarily related to reductions in restructuring reserves, reductions in environmental reserves, increases in derivative assets and reductions in miscellaneous other liabilities, which were partially offset by increases in customer prepayments, sales taxes payable and several other insignificant components.

Cash Used by Investing Activities

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

Cash used by investing activities increased $19.9 million from $79.1 million for the year ended December 31, 2017 to $99.0 million for the year ended December 31, 2018. The increase primarily relates to lower proceeds from the sale of property, plant and equipment of $14.7 million, primarily attributable to the prior year sale and subsequent leaseback of an operating facility within the Canadian business segment. Capital expenditures increased by $11.9 million in the year ended December 31, 2018 compared to the year ended December 31, 2017. The increase in capital expenditures is primarily due to a land purchase within the Canadian business segment.

Partially offsetting the increase in cash used by investing activities were lower acquisition costs of $5.8 million. In 2017, cash outflows of $24.4 million were related to the acquisitions of Tagma Brazil, certain assets of PVS, and Nexus Ag purchase accounting adjustments. The 2018 net cash outflows of $18.6 million were related to cash outflows from the Earthoil and Kemetyl acquisitions, partially offset by cash inflows due to Tagma purchase accounting adjustments.

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

Cash used by investing activities decreased $56.9 million from $136.0 million for the year ended December 31, 2016 to $79.1 million for the year ended December 31, 2017. The decrease primarily relates to lower acquisition costs of $29.2 million in the year ended December 31, 2017 compared to the year ended December 31, 2016. We completed two acquisitions in each of the years ended December 31, 2017 and December 31, 2016. Refer to “Note 19: Business combinations” in Item 8 of this Annual Report on Form 10-K for additional information. Proceeds from the sale of property, plant and equipment increased by $19.8 million in the year ended December 31, 2017 compared to the year ended December 31, 2016, which was primarily due to the sale and subsequent leaseback of an operating facility within the Canadian business segment. In addition, capital expenditures decreased by $7.4 million in the year ended December 31, 2017 compared to the year ended December 31, 2016. The decrease in capital expenditures is primarily due to timing of capital projects. The remaining decrease in cash used by investing activities of $0.5 million did not contain any significant activity.

Cash Used by Financing Activities

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

Cash used by financing activities increased $405.9 million from $112.4 million for the year ended December 31, 2017 to $518.3 million for the year ended December 31, 2018. The increase in cash used by financing activities is primarily due to an early repayment of $530.0 million on the Company’s Senior Term B Loan during the period ended December 31, 2018. The

Table of Contents

early repayment of the Company's Senior Term B Loan was partially offset by increased borrowings on the ABL facilities to fund the early payments and address seasonal working capital needs.

Cash used by financing activities also increased by $30.6 million due to fewer stock option exercises for the period ended December 31, 2018 compared to the period ended December 31, 2017. Partially offsetting the increased use of cash due to the exercise of stock options was cash provided of $4.4 million related to taxes paid for the net share settlements of stock-based compensation awards.

The change in short-term financing, net resulted in cash inflows of $22.7 million primarily due to repayments during the period ended December 31, 2017.

Additionally, there were cash inflows of $3.3 million pertaining to acquisition related contingent consideration payments, which primarily related to cash outflow of $3.7 million for the period ended December 31, 2017. The Company reclassified the 2017 contingent consideration payments due to the adoption of ASU 2016-15 "Statement of Cash Flows" (Topic 230) - "Classification of Certain Cash Receipts and Cash Payments." Refer to "Note 2: Significant accounting policies" in Item 8 of this Form 10-K for additional information.

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

Cash used by financing activities decreased $54.1 million from $166.5 million for the year ended December 31, 2016 to $112.4 million for the year ended December 31, 2017. A decrease in cash used by financing activities of $79.0 million was due to a net change in the cash used by the ABL facilities of $63.6 million and $142.6 million for the years ended December 31, 2017 and December 31, 2016, respectively. The change in the outstanding ABL facilities is due to changes in borrowings related to working capital funding requirements. Partially offsetting the decrease in cash used by financing activities are $13.3 million of cash outflows due to repayments of term debt; primarily inclusive of the Term B Loan and Euro Tranche Term Loan. The January 19, 2017 and November 28, 2017 agreements to amend the Senior Term B loan resulted in a net cash outflow of $4.4 million and $3.3 million of financing fees, respectively. Refer to "Note 16: Debt" in Item 8 of this Annual Report on Form 10-K for additional information. Increased payments related to capital leases resulted in increased cash usage due to financing activities of $3.1 million.

Cash used by financing activities also decreased by $19.6 million due to a net increase in stock option exercises of $36.5 million and $16.9 million for the years ended December 31, 2017 and December 31, 2016, respectively. Partially offsetting the increase in cash due to the exercise of stock options was cash used for taxes paid related to net share settlements of stock-based compensation awards of $8.5 million, which was related to the year ended December 31, 2017. The change in short-term financing, net resulted in an increased usage of cash related to financing activities of $17.6 million due to increased repayments. Short-term financing, net used cash of $22.2 million and $4.6 million for the years ended December 31, 2017 and December 31, 2016, respectively. The remaining increase in cash used by financing activities of $2.0 million did not contain any significant activity.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations that require us to make future cash payments as of December 31, 2018. The future contractual requirements include payments required for our operating and capital leases, indebtedness and other long-term liabilities reflected on our balance sheet.

	Payment Due by Period				
(in millions)	Total	2019	2020 - 2021	2022 - 2023	Thereafter
Short-term financing [1]	$8.1	$8.1	$—	$—	$—
Capital leases [1]	54.8	21.7	21.6	10.4	1.1
Long-term debt, including current maturities [1]	2,340.5	—	134.7	458.0	1,747.8
Interest [2]	581.3	110.3	220.8	209.0	41.2
Minimum operating lease payments	196.2	54.9	70.4	40.9	30.0
Estimated environmental liability payments [3]	88.6	32.1	19.1	13.5	23.9
Total [4][5]	$3,269.5	$227.1	$466.6	$731.8	$1,844.0

(1) See “Note 16: Debt” in Item 8 of this Annual Report on Form 10-K for additional information.

(2) Interest payments on debt are calculated for future periods using interest rates in effect as of December 31, 2018. Projected interest payments include the related effects of interest rate swap agreements. Certain of these projected interest payments may differ in the future based on changes in floating interest rates, foreign currency fluctuations or other factors or events. The projected interest payments only pertain to obligations and agreements outstanding at December 31, 2018. See “Note 16: Debt” and “Note 18: Derivatives” in Item 8 of this Annual Report on Form 10-K for further discussion regarding our debt instruments and related interest rate agreements, respectively.

Table of Contents

(3) Included in the less than one year category is $11.4 million related to environmental liabilities for which the timing is uncertain. The timing of payments is unknown and could differ based on future events. For more information see “Note 20: Commitments and contingencies” in Item 8 of this Annual Report on Form 10-K.

(4) Due to the high degree of uncertainty related to the timing of future cash outflows associated with unrecognized income tax benefits, we are unable to reasonably estimate beyond one year when settlement will occur with the respective taxing authorities and have excluded such liabilities from this table. At December 31, 2018, we reported a liability for unrecognized tax benefits of $0.4 million. For more information see “Note 7: Income taxes” in Item 8 of this Annual Report on Form 10-K.

(5) This table excludes our pension and postretirement medical benefit obligations. Based on current projections of minimum funding requirements, we expect to make cash contributions of $28.3 million to our defined benefit pension plans in the year ended December 31, 2019. The timing for any such requirement in future years is uncertain given the implicit uncertainty regarding the future developments of factors described in “Risk Factors” in Item 1A of this Annual Report on Form 10-K and “Note 9: Employee benefit plans” in Item 8 of this Annual Report on Form 10-K.

We expect that we will be able to fund our remaining obligations and commitments with cash flow from operations. To the extent we are unable to fund these obligations and commitments with cash flow from operations; we intend to fund these obligations and commitments with proceeds from available borrowing capacity under our Senior ABL Facility or under future financings.

Off-Balance Sheet Arrangements

We have few off-balance sheet arrangements. In recent years, our principal off-balance sheet arrangements have consisted primarily of operating leases for facility space, rail cars and some equipment leasing. As of January 1, 2019, operating leases will be recognized on the balance sheet due to the adoption of ASU 2016-02, refer to “Note 2: Significant accounting policies” in Item 8 of this Annual Report on Form 10-K. For additional information regarding operating leases, see “Note 20: Commitments and contingencies” in Item 8 of this Annual Report on Form 10-K. We do not use special purpose entities that would create off-balance sheet financing.

Critical Accounting Estimates

General

Preparation of our financial statements in accordance with GAAP requires management to make a number of significant estimates and assumptions that form the basis for our determinations as to the carrying values of assets and liabilities and the reported amounts of revenues and expenses that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We consider an accounting estimate to be critical if that estimate requires that we make assumptions about matters that are highly uncertain at the time we make that estimate and if different estimates that we could reasonably have used or changes in accounting estimates that are reasonably likely to occur could materially affect our consolidated financial statements. We believe that the following critical accounting estimates reflect our more significant estimates and assumptions used in the preparation of our consolidated financial statements. Our significant accounting policies are described in “Note 2: Significant accounting policies” in Item 8 of this Annual Report on Form 10-K.

Revenue Recognition

We recognize revenue when performance obligations under the terms of the contract are satisfied, which generally occurs when goods are transferred to a customer or as services are provided to a customer. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring goods or providing services to customers. Net sales includes product sales, billings for freight and handling charges and fees earned for services provided, net of discounts, expected returns, customer rebates, variable consideration and sales or other revenue-based taxes. We recognize product sales and billings for freight and handling charges when products are considered delivered to the customer under the terms of the sale.

We are required to estimate variable consideration and customer returns related to revenue transactions, which limits reported revenues to the amount of consideration that is ultimately expected to be collected from customers. Specific to the crop sciences revenue stream, transaction prices may move during an agricultural growing season and changes

may affect the amount of consideration the Company will receive. We estimates the revenue deferral related to variable consideration, transaction price, and customer returns based on the combination of historical experience, current market conditions and the impact of weather on the current agriculture season.

Goodwill

Goodwill is tested for impairment annually, or between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Goodwill is tested for impairment at a reporting unit level using either a qualitative assessment, commonly referred to as a "step zero" test, or a quantitative assessment,

Table of Contents

commonly referred to as a “step one” test. For each of the reporting units, the Company has the option to perform either the step zero or the step one test.

The step zero goodwill impairment test utilizes qualitative factors to determine whether it is more likely than not that the fair value of the reporting units is less than its carrying value. Qualitative factors include: macroeconomic conditions; legal and regulatory environment; industry and market considerations; overall financial performance and cost factors to determine whether a reporting unit is at risk for goodwill impairment. In the event a reporting unit fails the step zero goodwill impairment test, it is necessary to perform the step one goodwill impairment test.

The step one goodwill impairment test compares the estimated fair value of each reporting unit with the reporting unit’s carrying value (including goodwill). If the fair value of the reporting unit is less than its carrying value, the reporting unit will recognize an impairment for the lesser of either the amount by which the reporting unit's carrying amount exceeds the fair value of the reporting unit or the reporting unit’s goodwill carrying value. See “Note 13: Goodwill and intangible assets” in Item 8 of this Annual Report on Form 10-K for additional information related to goodwill.

At October 1, 2018, we performed our annual impairment review via step one and concluded the fair value exceeded the carrying value for all reporting units with goodwill balances. There were no events or circumstances from the date of assessment through December 31, 2018 that would affect this conclusion.

Determining the fair value of a reporting unit requires judgment and involves the use of significant estimates and assumptions by management. The inputs that create the most sensitivity in our goodwill valuation model are the discount rate, terminal growth rate, estimated cash flow projections and market multiples. We can provide no assurance that a material impairment charge will not occur in a future period. Our estimates of future cash flows may differ from actual cash flows that are subsequently realized due to many factors, including future worldwide economic conditions and the expected benefits of our initiatives. Any of these potential factors, or other unexpected factors, may cause us to re-evaluate the carrying value of goodwill.

Environmental Liabilities

As more fully described in “Note 2: Significant accounting policies” and “Note 20: Commitments and contingencies” in Item 8 of this Annual Report on Form 10-K, we recognize environmental contingency liabilities for probable and reasonably estimable losses associated with environmental remediation. The estimated environmental contingency liability includes incremental direct costs of investigations, remediation efforts and post-remediation monitoring. The total environmental reserve at December 31, 2018, and 2017 was $83.5 million and $89.2 million, respectively.

Our environmental reserves are subject to numerous uncertainties that affect our ability to accurately estimate our costs, or our share of costs if multiple parties are responsible. These uncertainties involve the legal, regulatory and enforcement parameters governing environmental assessment and remediation, the nature and extent of contamination at these sites, the extent and cost of assessment and remediation efforts required, the choice of remediation and, in the case of sites with multiple responsible parties, the number and financial strength of other potentially responsible parties. In addition, our determination as to whether a loss is probable may change, particularly as new facts emerge as to the nature or extent of any non-compliance with environmental laws and the costs of assessment and remediation. Our revisions to the environmental reserve estimates have ranged between $12.3 million to $12.6 million between 2017 and 2018.

Defined Benefit Pension and Other Postretirement Obligations

As described more fully in “Note 2: Significant accounting policies” and “Note 9: Employee benefit plans” in Item 8 of this Annual Report on Form 10-K, we sponsor defined benefit pension plans in the US and various other countries. We determine these pension costs and obligations using actuarial methodologies that use several statistical and judgmental factors. These assumptions include discount rates, rates for expected return on assets, mortality rates, retirement rates and for some plans rates for compensation increases, as determined by us within certain guidelines. Actual experience different from those estimated and changes in assumptions can result in the recognition of gains and losses in earnings as our accounting policy is to recognize changes in the fair value of plan assets or each plan’s projected benefit obligation in the fourth quarter of each year (the “mark to market” adjustment), unless an earlier remeasurement is required.

For the year ended December 31, 2018, we increased our average pension discount rate by 46 basis points, resulting in a decrease in our pension plan benefit obligation of $81.1 million. For the year ended December 31, 2017, our average pension discount rate decreased by 42 basis points, resulting in an increase in our pension plan benefit obligation of $63.2 million. Our expected long-term rate of return on pension plan assets is 5.54% and 6.02% for 2018 and 2017, respectively. Actual returns can vary from the expected long-term rate each year. Actual (losses) returns for 2018 and 2017 were ($59.6) million, or (5.4)%, and $117.4 million or 11.7%, respectively. Our expected return on plan assets is calculated using the actual fair value of plan assets. Due to the phasing out of benefits under our postretirement benefit plan, changes in assumptions have an immaterial effect on that obligation.

Table of Contents

The following table demonstrates the impact of a 25 basis point reduction in the average pension discount rate on our pension plan benefit obligation as of the year ended December 31, 2018.

(in millions)	2018 Pension Benefit Obligation
25 basis point decrease in discount rate	$ 40.8

The following table demonstrates the impact of a 25 basis point decrease in our assumed discount rate and separately a 100 basis point decrease in our expected return on plan assets on our 2019 defined benefit pension cost (credit).

(in millions)	2019 Net Benefit Cost (Credit)
25 basis point decrease in assumed discount rate	$ (1.3)
100 basis point decrease in expected return on plan assets	9.0

Income Taxes

The Company is subject to income taxes in the jurisdictions in which it sells products and earn revenues, including the United States, Canada and various Latin American, Asian-Pacific and European jurisdictions. By their nature, a number of the Company's tax positions require significant judgment in order to properly evaluate and quantify tax positions and to determine the provision for income taxes. GAAP sets forth a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained upon examination, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement. GAAP specifically prohibits the use of a valuation allowance as a substitute for derecognition of tax positions and also requires expanded disclosures. See “Note 7: Income taxes” in Item 8 of this Annual Report on Form 10-K.

Although the Company believes it has adequately reserved for uncertain tax positions, the final outcome of these tax matters may be different than the provision. The Company adjusts its reserves for tax positions in light of changing facts and circumstances, such as the closing of a tax audit, the refinement of an estimate or changes in tax laws. To the extent that the final tax outcome of these matters is different than the amounts recorded, the differences are recorded as adjustments to the provision for income taxes in the period in which such determination is made. The provision for income taxes includes the impact of reserve provisions and changes to reserves that are considered appropriate. The interest and penalties related to these reserves are recorded as a component of interest expense and warehousing, selling and administrative expenses, respectively.

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act. The legislation significantly changes US tax law by, among other things, lowering corporate income tax rates, implementing a territorial tax system and imposing a repatriation tax on deemed repatriated earnings of foreign subsidiaries. The Tax Act permanently reduced the US corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. The SEC staff issued Staff Accounting Bulletin No. 118 (“SAB 118”) to address the application of US GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. The SAB 118 measurement period ends when a company has obtained, prepared, and analyzed the information needed to complete the accounting requirements under ASC 740, “Income Taxes”, but no later than one year from the enactment date of December 22, 2017. In 2017 and the first nine months of 2018, the Company recorded provisional amounts for certain enactment-date effects of the Act by applying the guidance in SAB 118 because the Company had not yet completed its enactment-date accounting for these effects. At December 31, 2018, the Company has now completed its accounting for all the enactment-date income tax effects of the Act. During 2018, the Company recognized adjustments of $6.8 million related to the provisional amounts recorded at December 31, 2017 and included these adjustments as a component of income tax expense from continuing operations.

Effective in 2018, the Company is subject to global intangible low tax income (“GILTI”) which is a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. Due to the complexity of the GILTI tax rules, companies are allowed to make an accounting policy choice of either (1) treating taxes due on future US

inclusions in taxable income related to GILTI as a current-period expense when incurred or (2) factoring such amounts into a company's measurement of its deferred taxes. The Company is electing to treat taxes due on future US inclusions in taxable income related to GILTI as a current-period expense when incurred and, therefore, there is no impact to the deferred tax rate in 2018.

The Company's future effective tax rates could be adversely affected by changes in the valuation of our deferred tax assets or liabilities, or changes in tax laws, regulations, accounting principles or interpretations thereof. In addition, the Company is subject to examination of income tax returns by various tax authorities. The Company regularly assesses the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of its provisions for income taxes.

Table of Contents

The Company recognizes deferred tax assets and liabilities for the expected tax consequences of temporary differences between the tax bases of assets and liabilities and their reported amounts using enacted tax rates in effect for the year the differences are expected to reverse. Significant judgment in the forecasting of taxable income using historical and projected future operating results is required in determining our provision for income tax and the related asset and liabilities.

In the event that the actual outcome of future tax consequences differs from our estimates and assumptions due to changes or future events such as tax legislation, geographic mix of the earnings, completion of tax audits or earnings repatriation plans, the resulting change to the provision for income taxes could have a material effect on the consolidated statements of operations and consolidated balance sheets.

The Company recorded a valuation allowance on certain deferred tax assets, including certain of its foreign net operating loss carry forwards, foreign tax credits and deferred interest expense.

In evaluating the Company’s ability to realize its deferred tax assets, in full or in part, the Company considered all available positive and negative evidence, including its past operating results, forecast of future market growth, forecasted earnings, future taxable income and prudent and feasible tax planning strategies.

The assumptions utilized in determining future taxable income require significant judgment and are consistent with the plans and estimates the Company is using to manage the underlying businesses. The Company believes it is more likely than not that the remaining deferred tax assets recorded on the balance sheet will ultimately be realized. In the event the Company determined that it would not be able to realize all or part of its net deferred tax assets in the future, an adjustment to the deferred tax assets would be charged to earnings in the period in which the Company makes such determination.

Recently Issued and Adopted Accounting Pronouncements

See “Note 2: Significant accounting policies” in Item 8 of this Annual Report on Form 10-K.

Accounting Pronouncements Issued But Not Yet Adopted

See “Note 2: Significant accounting policies” in Item 8 of this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Financial Risk Management Objectives and Policies

Our principal financial instruments, other than derivatives, comprise credit facilities and other long-term debt as well as cash and cash equivalents. We have various other financial instruments, such as accounts receivable and accounts payable, which arise directly from our operations. We make use of various financial instruments under a financial policy. We use derivative financial instruments to reduce exposure to fluctuations in foreign exchange rates and interest rates in certain limited circumstances described below. While these derivative financial instruments are subject to market risk, principally based on changes in currency exchange and interest rates, the impact of these changes on our financial position and results of operations is generally offset by a corresponding change in the financial or operating items we are seeking to hedge. We follow a strict policy that prohibits trading in financial instruments other than to acquire and manage these hedging positions. We do not hold or issue derivative or other financial instruments for speculative purposes, or to hedge translation risk.

The principal risks arising from our financial instruments are interest rate risk, product price risk, foreign currency risk and credit risk. Our board of directors reviews and approves policies designed to manage each of these risks, which are summarized below. We also monitor the market-price risk arising from all financial instruments. The interest rate risk to which we are subject at year end is discussed below. Our accounting policies for derivative financial instruments are set out in our summary of significant accounting policies at “Note 2: Significant accounting policies” in Item 8 of this Annual Report on Form 10-K.

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our long-term debt obligations. Under our hedging policy, we seek to maintain an appropriate amount of fixed-rate debt obligations, either directly or effectively through interest rate derivative contracts that fix the interest rate payable on all or a portion of our floating rate debt obligations. We assess the anticipated mix of the fixed versus floating amount of debt once a year, in connection with our annual budgeting process, with the purpose of hedging variability of interest expense and interest payments on our variable rate bank debt and maintaining a mix of both fixed and floating rate debt. As of December 31, 2018,

approximately 81% of our debt was fixed rate after consideration of interest rate swap contracts.

Table of Contents

The interest rates related to our long-term debt decreased since December 31, 2016 due to the January 2017 and November 2017 debt amendments. Refer to "Note 16: Debt" in Item 8 of this Annual Report on Form 10-K for additional information. As a result, the impact on our earnings before taxes has materially changed when considering a change in variable interest rates.

Below is a chart showing the sensitivity of both a 100 basis point and 200 basis point increase in interest rates (including the impact of derivatives), with other variables held constant on our earnings before tax.

(in millions)	Year Ended December 31, 2018
100 basis point increase in variable interest rates	$ 4.4
200 basis point increase in variable interest rates	9.0

Foreign Currency Risk

Because we conduct our business on an international basis in multiple currencies, we may be adversely affected by foreign exchange rate fluctuations. Although we report financial results in US dollars, a substantial portion of our net sales and expenses are denominated in currencies other than the US dollar, particularly the euro, the Canadian dollar and European currencies other than the euro, including the British pound sterling. Fluctuations in exchange rates could therefore significantly affect our reported results from period to period as we translate results in local currencies into US dollars. We have not used derivative instruments to hedge the translation risk related to earnings of foreign subsidiaries.

Additionally, our investments in EMEA, Canada and Rest of World are subject to foreign currency risk. Currency fluctuations result in non-cash gains and losses that do not impact income before income taxes, but instead are recorded as accumulated other comprehensive loss in equity in our consolidated balance sheet. We do not hedge our investment in non-US entities because those investments are viewed as long-term in nature.

The majority of our currency risk arising on cash, accounts receivable, accounts payable and loan balances denominated in currencies other than those which we record the financial results for a business operation stem from exposures to the US dollar, euro or British pound sterling. The following table illustrates the sensitivity of our 2018 consolidated earnings before income taxes (including the impact of foreign currency derivative instruments), to a 10% increase in the value of the US dollar, euro, and, British pound sterling with all other variables held constant.

(in millions)	Year ended December 31, 2018
10% strengthening of US dollar	$ (1.8)
10% strengthening of Euro	0.6
10% strengthening of British pound	(0.3)

Product Price Risk

Our business model is to buy and sell at "spot" prices in quantities approximately equal to estimated customer demand. We do not take significant "long" or "short" positions in the products we sell in an attempt to speculate on changes in product prices. As a result, we are not significantly exposed to changes in product selling prices or costs and our exposure to product price risk is not material. Because we maintain inventories in order to serve the needs of our customers, we are subject to the risk of reductions in market prices for chemicals we hold in inventory, but we actively manage this risk and have reduced our exposure by improving sales forecasting and reducing the period of projected sales for which inventories are held, as well as incorporating low working capital targets within employee incentive plans.

Credit Risk

We have a credit policy in place and monitor exposure to credit risk on an ongoing basis. We perform credit evaluations on all customers requesting credit above a specified exposure level. In the normal course of business, we provide credit to our customers, perform ongoing credit evaluations of these customers and maintain reserves for potential credit losses. In certain situations, we will require upfront cash payment, collateral and/or personal guarantees based on the credit worthiness of the customers. We typically have limited risk from a concentration of credit risk as no individual customer represents greater than 10% of the outstanding accounts receivable balance.

Table of Contents

Investments, if any, are only in liquid securities and only with counterparties with appropriate credit ratings. Transactions involving derivative financial instruments are with counterparties with which we have a signed netting agreement and which have appropriate credit ratings. We do not expect any counterparty to fail to meet its obligations.

Table of Contents

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

	Page
Reports of Independent Registered Public Accounting Firm	73
Consolidated Statements of Operations for the years ended December 31, 2018, 2017 and 2016	75
Consolidated Statements of Comprehensive Loss for the years ended December 31, 2018, 2017 and 2016	76
Consolidated Balance Sheets as of December 31, 2018 and 2017	77
Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016	78
Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2018, 2017 and 2016	79
Notes to the Consolidated Financial Statements	80

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Univar Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Univar Inc. as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive income (loss), changes in stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2018 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, 2018 and 2017, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, 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, 2018, 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 21, 2019 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.

/s/ Ernst & Young LLP
We have served as the Company’s auditor since 2010.
Chicago, Illinois
February 21, 2019

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Univar Inc.

Opinion on Internal Control over Financial Reporting
We have audited Univar Inc.'s internal control over financial reporting as of December 31, 2018, 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, Univar Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, 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 2018 consolidated financial statements of Univar Inc. and our report dated February 21, 2019, 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 the effectiveness of internal control over financial reporting included in the accompanying Management's Assessment of Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and applicable rules and regulation 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 Limitation 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 21, 2019

Table of Contents

UNIVAR INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

		Year ended December 31,		
(in millions, except per share data)	Note	2018	2017	2016
Net sales		$8,632.5	$8,253.7	$8,073.7
Cost of goods sold (exclusive of depreciation)		6,732.4	6,448.2	6,346.6
Operating expenses:				
Outbound freight and handling		328.3	292.0	286.6
Warehousing, selling and administrative		931.4	919.7	893.1
Other operating expenses, net	4	73.5	55.4	37.2
Depreciation		125.2	135.0	152.3
Amortization		54.3	65.4	85.6
Impairment charges	14	—	—	133.9
Total operating expenses		$1,512.7	$1,467.5	$1,588.7
Operating income		$387.4	$338.0	$138.4
Other (expense) income:				
Interest income		3.2	4.0	3.9
Interest expense		(135.6)	(152.0)	(163.8)
Loss on extinguishment of debt	16	(0.1)	(3.8)	—
Other expense, net	6	(32.7)	(17.4)	(58.1)
Total other expense		$(165.2)	$(169.2)	$(218.0)
Income (loss) before income taxes		222.2	168.8	(79.6)
Income tax expense (benefit)	7	49.9	49.0	(11.2)
Net income (loss)		$172.3	$119.8	$(68.4)
Income (loss) per common share:				
Basic	8	$1.22	$0.85	$(0.50)
Diluted	8	1.21	0.85	(0.50)
Weighted average common shares outstanding:				
Basic	8	141.2	140.2	137.8
Diluted	8	142.2	141.4	137.8

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

Table of Contents

UNIVAR INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

		Year ended December 31,		
(in millions)	Note	2018	2017	2016
Net income (loss)		$172.3	$119.8	$(68.4)
Other comprehensive income (loss), net of tax:				
Impact due to adoption of ASU 2017-12 (1)		0.5	—	—
Foreign currency translation	11	(97.0)	107.1	36.3
Pension and other postretirement benefits adjustment	11	0.1	(2.4)	(1.8)
Derivative financial instruments	11	1.7	6.7	—
Total other comprehensive (loss) income, net of tax		$(94.7)	$111.4	$34.5
Comprehensive income (loss)		$77.6	$231.2	$(33.9)

(1) Adjusted due to the adoption of Accounting Standards Update ("ASU") 2017-12 "Targeted Improvements to Accounting for Hedging Activities" on January 1, 2018. Refer to "Note 2: Significant accounting policies" for more information.

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

Table of Contents

UNIVAR INC.
CONSOLIDATED BALANCE SHEETS

(in millions, except per share data)	Note	December 31, 2018	2017
Assets			
Current assets:			
Cash and cash equivalents		$121.6	$467.0
Trade accounts receivable, net		1,094.7	1,062.4
Inventories		803.3	839.5
Prepaid expenses and other current assets		169.1	149.6
Total current assets		$2,188.7	$2,518.5
Property, plant and equipment, net	12	955.8	1,003.0
Goodwill	13	1,780.7	1,818.4
Intangible assets, net	13	238.1	287.7
Deferred tax assets	7	24.8	22.8
Other assets		84.3	82.3
Total assets		$5,272.4	$5,732.7
Liabilities and stockholders' equity			
Current liabilities:			
Short-term financing	16	$8.1	$13.4
Trade accounts payable		925.4	941.7
Current portion of long-term debt	16	21.7	62.0
Accrued compensation		93.6	100.7
Other accrued expenses	15	285.8	301.6
Total current liabilities		$1,334.6	$1,419.4
Long-term debt	16	2,350.4	2,820.0
Pension and other postretirement benefit liabilities	9	254.4	257.1
Deferred tax liabilities	7	42.9	35.4
Other long-term liabilities		98.4	110.7
Total liabilities		$4,080.7	$4,642.6
Stockholders' equity:			
Preferred stock, 200.0 million shares authorized at $0.01 par value with no shares issued or outstanding as of December 31, 2018 and 2017		—	—
Common stock, 2.0 billion shares authorized at $0.01 par value with 141.7 million and 141.1 million shares issued and outstanding at December 31, 2018 and December 31, 2017, respectively		1.4	1.4
Additional paid-in capital		2,325.0	2,301.3
Accumulated deficit		(761.5)	(934.1)
Accumulated other comprehensive loss	11	(373.2)	(278.5)
Total stockholders' equity		$1,191.7	$1,090.1
Total liabilities and stockholders' equity		$5,272.4	$5,732.7

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

Table of Contents

UNIVAR INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Note	Year ended December 31, 2018	2017	2016
Operating activities:				
Net income (loss)		$172.3	$119.8	$(68.4)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:				
Depreciation and amortization		179.5	200.4	237.9
Impairment charges	14	—	—	133.9
Amortization of deferred financing fees and debt discount		7.6	7.9	7.9
Amortization of pension cost (credits) from accumulated other comprehensive loss	9	2.7	(0.2)	(4.5)
Loss on extinguishment of debt	16	0.1	3.8	—
Loss (gain) on sale of property, plant and equipment and other assets	4	2.0	(11.3)	(0.7)
Deferred income taxes	7	2.8	11.7	(31.6)
Stock-based compensation expense	10	20.7	19.7	10.4
Other		0.7	(0.7)	(0.2)
Changes in operating assets and liabilities:				
Trade accounts receivable, net		(62.1)	(58.5)	70.2
Inventories		14.4	(47.7)	42.0
Prepaid expenses and other current assets		(19.3)	(8.7)	40.1
Trade accounts payable		9.3	53.6	12.0
Pensions and other postretirement benefit liabilities		(15.4)	(51.8)	26.9
Other, net		(25.4)	44.6	(25.9)
Net cash provided by operating activities		$289.9	$282.6	$450.0
Investing activities:				
Purchases of property, plant and equipment		$(94.6)	$(82.7)	$(90.1)
Proceeds from sale of property, plant and equipment and other assets		14.5	29.2	9.4
Purchases of businesses, net of cash acquired	19	(18.6)	(24.4)	(53.6)
Other		(0.3)	(1.2)	(1.7)
Net cash used by investing activities		$(99.0)	$(79.1)	$(136.0)
Financing activities:				
Proceeds from the issuance of long-term debt	16	$41.7	$4,477.8	$—
Payments on long-term debt and capital lease obligations	16	(561.9)	(4,585.7)	(178.2)
Short-term financing, net	16	0.5	(22.2)	(4.6)
Financing fees paid	16	(1.1)	(7.7)	—
Taxes paid related to net share settlements of stock-based compensation awards		(4.1)	(8.5)	—
Stock option exercises	10	5.9	36.5	16.9
Contingent consideration payments		(0.4)	(3.7)	(0.4)
Other		1.1	1.1	(0.2)
Net cash used by financing activities		$(518.3)	$(112.4)	$(166.5)
Effect of exchange rate changes on cash and cash equivalents		$(18.0)	$39.5	$0.8
Net (decrease) increase in cash and cash equivalents		(345.4)	130.6	148.3
Cash and cash equivalents at beginning of period		467.0	336.4	188.1
Cash and cash equivalents at end of period		$121.6	$467.0	$336.4
Supplemental disclosure of cash flow information:				
Cash paid during the period for:				
Income taxes		$65.0	$29.9	$14.9

Interest, net of capitalized interest	128.2	140.2	148.9
Non-cash activities:			
Additions of property, plant and equipment included in trade accounts payable and other accrued expenses	$14.6	$7.4	$11.5
Additions of property, plant and equipment under a capital lease obligation	23.6	19.9	29.6

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

Table of Contents

UNIVAR INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(in millions, except per share data)	Common stock (shares)	Common stock	Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive income (loss)	Total
Balance, January 1, 2016	138.0	$ 1.4	$2,224.7	$(985.0)	$ (424.4)	$816.7
Net loss	—	—	—	(68.4)	—	(68.4)
Foreign currency translation adjustment, net of tax $23.9	—	—	—	—	36.3	36.3
Pension and other postretirement benefits adjustment, net of tax $1.5	—	—	—	—	(1.8)	(1.8)
Stock option exercises	0.8	—	16.9	—	—	16.9
Stock-based compensation	—	—	10.4	—	—	10.4
Other	—	—	(0.2)	—	—	(0.2)
Balance, December 31, 2016	138.8	$ 1.4	$2,251.8	$(1,053.4)	$ (389.9)	$809.9
Impact due to adoption of ASU, net of tax $0.2 (1)	—	—	0.7	(0.5)	—	0.2
Net income	—	—	—	119.8	—	119.8
Foreign currency translation adjustment, net of tax ($2.1)	—	—	—	—	107.1	107.1
Pension and other postretirement benefits adjustment, net of tax $0.6	—	—	—	—	(2.4)	(2.4)
Derivative financial instruments, net of tax ($4.3)	—	—	—	—	6.7	6.7
Restricted stock units vested	0.8	—	—	—	—	—
Tax withholdings related to net share settlements of stock-based compensation awards	(0.3)	—	(8.5)	—	—	(8.5)
Stock option exercises	1.8	—	36.5	—	—	36.5
Employee stock purchase plan (2)	—	—	1.1	—	—	1.1
Stock-based compensation	—	—	19.7	—	—	19.7
Balance, December 31, 2017	141.1	$ 1.4	$2,301.3	$(934.1)	$ (278.5)	$1,090.1
Impact due to adoption of ASU, net of tax ($0.3) (3)	—	—	—	0.3	0.5	0.8
Net income	—	—	—	172.3	—	172.3
Foreign currency translation adjustment, net of tax $2.4	—	—	—	—	(97.0)	(97.0)
Pension and other postretirement benefits adjustment, net of tax ($0.1)	—	—	—	—	0.1	0.1
Derivative financial instruments, net of tax ($0.4)	—	—	—	—	1.7	1.7
Restricted stock units vested	0.4	—	—	—	—	—
Tax withholdings related to net share settlements of stock-based compensation awards	(0.1)	—	(4.1)	—	—	(4.1)
Stock option exercises	0.3	—	5.9	—	—	5.9
Employee stock purchase plan	—	—	1.1	—	—	1.1
Stock-based compensation	—	—	20.7	—	—	20.7
Other	—	—	0.1	—	—	0.1
Balance, December 31, 2018	141.7	$ 1.4	$2,325.0	$(761.5)	$ (373.2)	$1,191.7

(1) Adjusted due to the adoption of ASU 2016-09 “Improvement to Employee Share-Based Payment Accounting” on January 1, 2017.

(2) During November 2016, our Board of Directors approved the Univar Employee Stock Purchase Plan, or ESPP, authorizing the issuances of up to 2.0 million shares of the Company's common stock effective January 1, 2017. The total number of shares issued under the plan for the first two offering periods from January through December 2017 was 39,418 shares.

(3) Adjusted due to the adoption of ASU 2014-09 “Revenue from Contracts with Customers” and ASU 2017-12 “Targeted Improvements to Accounting for Hedging Activities” on January 1, 2018. Refer to “Note 2: Significant accounting policies” for more information.

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

Table of Contents

UNIVAR INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2018 AND 2017 AND
FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016

1. Nature of operations

Headquartered in Downers Grove, Illinois, Univar Inc. ("Company" or "Univar") is a leading global chemical and ingredients distributor and provider of specialty services. The Company's operations are structured into four operating segments that represent the geographic areas under which the Company manages its business:

- Univar USA ("USA")
- Univar Canada ("Canada")
- Univar Europe, the Middle East and Africa ("EMEA")
- Rest of the World ("Rest of World")

Rest of World includes certain developing businesses in Latin America (including Brazil and Mexico) and the Asia-Pacific region.

2. Significant accounting policies

Basis of presentation

The consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP"). Unless otherwise indicated, all financial data presented in these consolidated financial statements are expressed in US dollars.

Basis of consolidation

The consolidated financial statements include the financial statements of the Company and its subsidiaries. Subsidiaries are consolidated if the Company has a controlling financial interest, which may exist based on ownership of a majority of the voting interest, or based on the Company's determination that it is the primary beneficiary of a variable interest entity ("VIE"). The Company did not have any material interests in VIEs during the years presented in these consolidated financial statements. All intercompany balances and transactions are eliminated in consolidation.

Use of estimates

The preparation of consolidated financial statements in conformity with US GAAP requires management to make estimates and assumptions affecting the amounts reported and disclosed in the financial statements and accompanying notes. Actual results could differ materially from these estimates.

Recently issued and adopted accounting pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU 2014-09, "Revenue from Contracts with Customers" (Topic 606). On January 1, 2018, the Company adopted the new Accounting Standards Codification ("ASC") Topic 606, Revenue from Contracts with Customers and all the related amendments ("new revenue standard") to all contracts using the modified retrospective method. The Company recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of accumulated deficit. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

In August 2017, the FASB issued ASU 2017-12 "Derivatives and Hedging" (Topic 815) - "Targeted Improvements to Accounting for Hedging Activities." The ASU better aligns hedge accounting with the Company's risk management activities, simplifies the application of hedge accounting, and improves transparency as to the scope and results of hedging programs. The Company early adopted the new pronouncement effective January 1, 2018, using the modified retrospective approach by recognizing the cumulative effect of initially applying the new pronouncement as an adjustment to the opening balance of accumulated deficit. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

Table of Contents

The cumulative effect of the changes made to the January 1, 2018 consolidated balance sheet for the adoption of ASU 2014-09 “Revenue from Contracts with Customers” (Topic 606) and ASU 2017-12 “Derivatives and Hedging” (Topic 815) - “Targeted Improvements to Accounting for Hedging Activities” is as follows:

(in millions)	Balance at December 31, 2017	Adjustments due to ASU 2014-09	Adjustments due to ASU 2017-12	Balance at January 1, 2018
Assets				
Trade accounts receivable, net	$1,062.4	$ 41.3	$ —	$1,103.7
Inventories	839.5	(2.1)	—	837.4
Prepaid expenses and other current assets	149.6	1.8	—	151.4
Liabilities				
Trade accounts payable	$941.7	$ 7.0	$ —	$948.7
Other accrued expenses	301.6	33.2	—	334.8
Equity				
Accumulated deficit	$(934.1)	$ 0.8	$ (0.5)	$(933.8)
Accumulated other comprehensive loss	(278.5)	—	0.5	(278.0)

The following tables summarize the impact of adopting the new revenue standard upon the Company’s consolidated balance sheet and statement of operations as of and for the year ended December 31, 2018:

(in millions)	Year ended December 31, 2018		
	As reported	Balances without adoption of ASC 606	Effect of change higher/(lower)
Net sales	$8,632.5	$8,626.4	$ 6.1
Cost of goods sold (exclusive of depreciation)	6,732.4	6,726.7	5.7
Income tax expense	$49.9	$49.8	$ 0.1
Net income	172.3	172.0	0.3

(in millions)	December 31, 2018		
	As reported	Balances without adoption of ASC 606	Effect of change higher/(lower)
Assets			
Trade accounts receivable, net	$1,094.7	$1,047.8	$ 46.9
Inventories	803.3	814.4	(11.1)
Prepaid expenses and other current assets	169.1	163.9	5.2
Liabilities			
Trade accounts payable	$925.4	$919.2	$ 6.2
Other accrued expenses	285.8	252.1	33.7
Equity			
Accumulated deficit	$(761.5)	$(762.6)	$ 1.1

In March 2017, the FASB issued ASU 2017-07 “Compensation - Retirement Benefits” (Topic 715) - “Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost.” On January 1, 2018, the Company adopted the amendments to ASC Topic 715 that improves the presentation of net periodic pension and postretirement benefit costs, by separating the presentation of service costs from other components of net periodic costs. The interest cost, expected return on assets, and amortization of prior service costs have been reclassified from

warehousing, selling, and administrative expenses to other expense, net. The mark to market, curtailment, and settlement expenses have been reclassified from other operating expenses, net to other expense, net.

Table of Contents

Adoption of ASU 2017-07 resulted in a retrospective presentation change to the net periodic cost for the defined benefit pension and other postretirement employee benefits ("OPEB") plans within the consolidated income statement as follows:

	Year ended December 31, 2017		
(in millions)	As revised	Previously reported	Effect of change higher/(lower)
Warehousing, selling and administrative	$919.7	$ 909.8	$ 9.9
Other operating expenses, net	55.4	49.5	5.9
Other expense, net	(17.4)	(33.2)	(15.8)

In August 2016, the FASB issued ASU 2016-15 "Statement of Cash Flows" (Topic 230) - "Classification of Certain Cash Receipts and Cash Payments." The ASU clarifies and provides specific guidance on eight cash flow classification issues that were not addressed within the previous guidance. The Company adopted the ASU as of January 1, 2018 and accordingly restated the consolidated statement of cash flows for the year ended December 31, 2017 to conform with the current period presentation under this new guidance. As a result of the adoption, the Company reclassified $3.7 million of cash outflows previously reported as operating activities to financing activities within the consolidated statement of cash flows related to contingent consideration payments for the year ended December 31, 2017.

The Company also adopted the following standards during 2018, none of which had a material impact to the financial statements or financial statement disclosures:

Standard		Effective date
2018-07	Compensation - Stock Compensation (Topic 718) - Improvements to Nonemployee Share-Based Payment Accounting	July 1, 2018
2017-09	Compensation - Stock Compensation - Scope of Modification Accounting	January 1, 2018
2017-04	Intangibles - Goodwill and Other - Simplifying the Test for Goodwill Impairment	January 1, 2018
2017-01	Business Combinations - Clarifying the Definition of a Business	January 1, 2018
2016-18	Statement of Cash Flows - Restricted Cash	January 1, 2018
2016-16	Income Taxes - Intra-Entity Transfers of Assets Other Than Inventory	January 1, 2018
2016-01	Financial Instrument - Recognition and Measurement of Financial Assets and Financial Liabilities	January 1, 2018

Accounting pronouncements issued but not yet adopted

In February 2016, the FASB issued ASU 2016-02 "Leases" (Topic 842), which supersedes the lease recognition requirements in ASC Topic 840, "Leases." The core principal of the guidance is that an entity should recognize assets and liabilities arising from a lease for both financing and operating leases, along with additional qualitative and quantitative disclosures. The standard will be effective for fiscal years beginning after December 15, 2018, including interim periods within such fiscal years. The guidance is to be applied using a modified retrospective transition method with the option to elect a package of practical expedients. The Company has established a project team to evaluate and implement the standard. The project team is in the final stages of implementing the standard to meet the ASU's reporting and disclosure requirements.

Upon the January 1, 2019 adoption of this standard, the consolidated balance sheet will include a right of use asset and liability related to certain operating lease arrangements. The Company has elected to apply the transition requirements at the January 1, 2019, effective date rather than at the beginning of the earliest comparative period presented. This approach allows for a cumulative effect adjustment in the period of adoption, and prior periods will not be restated. The Company will elect the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allows us to carryforward the historical lease classification. The Company will

make an accounting policy election to keep leases with an initial term of 12 months or less off of the balance sheet. The Company will recognize those lease payments in the consolidated statements of operations on a straight-line basis over the lease term. The Company estimates the impact of the additional lease assets and liabilities to range from $140 million to $190 million.

In January 2018, the FASB issued ASU 2018-02 “Income Statement - Reporting Comprehensive Income” (Topic 220) “Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income” (“AOCI”), which gives entities the option to reclassify certain tax effects, that the FASB refers to as having been stranded, resulting from the Tax Cuts and Jobs Act from AOCI to retained earnings. The new guidance may be applied retrospectively to each period in which the effect of the Tax Cuts and Jobs Act is recognized, or in the period of adoption. The Company must adopt this guidance for fiscal years beginning

Table of Contents

after December 15, 2018 and interim periods within those fiscal years. The Company expects to record an adjustment to the accumulated deficit and accumulated other comprehensive loss financial statement line items in the range of $3.0 million to $4.0 million on the January 1, 2019 adoption of the ASU.

In August 2018, the FASB issued ASU 2018-13 “Fair Value Measurement” (Topic 820) - “Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement.” The ASU amends the requirements related to fair value disclosures to include new disclosure requirements and eliminates or modifies certain historic disclosures. The ASU amendment was part of the FASB’s disclosure framework project that is designed to increase the effectiveness of companies’ disclosures to the users of the financial statements and footnotes. This guidance will be effective for fiscal years beginning after December 15, 2019, including interim periods within such fiscal years. Early adoption is permitted. The Company is currently determining the impact to the Company’s disclosure requirements, which will be reflected in the footnote disclosures subsequent to the ASU adoption on January 1, 2020.

In August 2018, the FASB issued ASU 2018-14 “Compensation - Retirement Benefits - Defined Benefit Plans - General” (Subtopic 715-20) - “Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans.” The ASU amends the requirements related to defined benefit pension and other postretirement plan disclosures to include new disclosure requirements and eliminates or clarifies certain historic disclosures. The ASU amendment was part of the FASB’s disclosure framework project that is designed to increase the effectiveness of companies’ disclosures to the users of the financial statements and footnotes. This guidance will be effective for fiscal years beginning after December 15, 2020. Early adoption is permitted. The Company is currently determining the impact to the Company’s disclosure requirements, which will be reflected in the footnote disclosures subsequent to the ASU adoption on January 1, 2021.

The Company has not yet adopted the following standards, none of which is expected to have a material impact to the financial statements or financial statement disclosures:

Standard		Expected adoption date
2018-18	Collaborative Arrangements (Topic 808) - Clarifying the Interaction between Topic 808 and Topic 606	January 1, 2020
2018-17	Consolidation (Topic 810) - Targeted Improvements to Related Party Guidance for Variable Interest Entities	January 1, 2020
2018-16	Derivatives and Hedging (Topic 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes	January 1, 2019
2018-15	Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force)	January 1, 2020
2016-13	Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments	January 1, 2020

Cash and cash equivalents

Cash and cash equivalents include highly-liquid investments with an original maturity of three months or less that are readily convertible into known amounts of cash. Cash at banks earn interest at floating rates based on daily bank deposit rates.

Trade accounts receivable, net

Trade accounts receivable are stated at the invoiced amount, net of an allowance for doubtful accounts.

In the normal course of business, the Company provides credit to its customers, performs ongoing credit evaluations of these customers and maintains reserves for potential credit losses. In certain situations, the Company will require up-front cash payment, collateral and/or personal guarantees based on the credit worthiness of the customer.

The allowance for doubtful accounts was $11.2 million and $13.0 million at December 31, 2018 and 2017, respectively. The allowance for doubtful accounts is estimated based on an individual assessment of collectability based on factors that include current ability to pay, bankruptcy and payment history, as well as a general reserve related to prior experience.

Inventories

Inventories consist primarily of products purchased for resale and are stated at the lower of cost or net realizable value. Inventory cost is determined based on the weighted average cost method. Inventory cost includes purchase price from producers net of rebates received, inbound freight and handling, and direct labor and other costs incurred to blend and repackage product and excludes depreciation expense. The Company recognized $1.9 million, $3.3 million and $6.6 million of lower of cost or net

realizable value adjustments to certain of its inventories in the years ended December 31, 2018, 2017 and 2016, respectively. The expense related to these adjustments is included in cost of goods sold in the consolidated statements of operations.

Producer incentives

The Company has arrangements with certain producers that provide discounts when certain measures are achieved, generally related to purchasing volume. Volume rebates are generally earned and realized when the related products are purchased during the year. The reduction in cost of goods sold is recorded when the related products, on which the rebate was earned, are sold. As the right to receive discount incentives is contingent on purchases during the entire year, the Company's accounting estimates for producer incentives is dependent on the ability to accurately forecast annual purchases. Discretionary rebates are recorded when received. The unpaid portion of rebates from producers is recorded in prepaid expenses and other current assets in the consolidated balance sheets.

Property, plant and equipment, net

Property, plant and equipment are carried at historical cost, net of accumulated depreciation. Expenditures for improvements that add functionality and/or extend useful life are capitalized. The Company capitalizes interest costs on significant capital projects, as an increase to property, plant and equipment. Repair and maintenance costs are expensed as incurred. Depreciation is recorded on a straight-line basis over the estimated useful life of each asset from the time the asset is ready for its intended purpose, with consideration of expected residual values. Depreciation expense is recorded to depreciation within the consolidated statement of operations.

The estimated useful lives of property, plant and equipment are as follows:

Buildings	10-50 years
Main components of tank farms	5-40 years
Containers	2-15 years
Machinery and equipment	5-20 years
Furniture, fixtures and others	5-20 years
Information technology	3-10 years

The Company evaluates the useful life and carrying value of property, plant and equipment for impairment if an event occurs or circumstances change that would indicate the carrying value may not be recoverable. If an asset is tested for possible impairment, the Company compares the carrying amount of the related asset group to future undiscounted net cash flows expected to be generated by that asset group. If the carrying amount of the asset group is not recoverable on an undiscounted cash flow basis, an impairment loss is recognized to the extent that the carrying amount exceeds its estimated fair value.

Leasehold improvements are capitalized and amortized over the lesser of the term of the applicable lease, including renewable periods if reasonably assured, or the useful life of the improvement.

Assets under capital leases where ownership transfers to the Company at the end of the lease term or the lease agreement contains a bargain purchase option are depreciated over the useful life of the asset. For remaining assets under capital leases, the assets are depreciated over the lesser of the term of the applicable lease, including renewable periods if reasonably assured, or the useful life of the asset with consideration of any expected residual value.

Refer to “Note 12: Property, plant and equipment, net” for further information.

Goodwill and intangible assets

Goodwill represents the excess of the aggregate purchase price over the fair value of the net assets acquired in business combinations.

Goodwill is tested for impairment annually on October 1, or between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Goodwill is tested for impairment at a reporting unit level using either a qualitative assessment, commonly referred to as a “step zero” test, or a quantitative assessment, commonly referred to as a “step one” test. For each of the reporting units, the Company has the option to perform either the step zero or the step one test. The Company’s reporting units are identical to the identified four operating segments: USA, Canada, EMEA, and Rest of World.

The Company elected the step one test to evaluate goodwill for impairment for each of the reporting units during 2018 and the step zero test in 2017. The step one goodwill impairment test compares the estimated fair value of each

reporting unit with the reporting unit’s carrying value (including goodwill). If the fair value of the reporting unit is less than its carrying value, the reporting

84

unit will recognize an impairment for the lesser of either the amount by which the reporting unit's carrying amount exceeds the fair value of the reporting unit or the reporting unit's goodwill carrying value.

The step zero goodwill impairment test utilizes qualitative factors to determine whether it is more likely than not that the fair value of the reporting units is less than its carrying value. Qualitative factors include: macroeconomic conditions; legal and regulatory environment; industry and market considerations; overall financial performance and cost factors to determine whether a reporting unit is at risk for goodwill impairment. In the event a reporting unit fails the step zero goodwill impairment test, it is necessary to perform the step one goodwill impairment test.

Intangible assets consist of customer and producer relationships and contracts, intellectual property trademarks, trade names, non-compete agreements and exclusive distribution rights. Intangible assets have finite lives and are amortized over their respective useful lives of 2 to 20 years. Amortization of intangible assets is based on the pattern in which the economic benefits of the intangible assets are consumed or otherwise used up; which is based on the undiscounted cash flows, or when not reliably determined, on a straight-line basis. Intangible assets are tested for impairment if an event occurs or circumstances change that indicates the carrying value may not be recoverable. Refer to "Note 14: Impairment charges" for further information.

Customer relationship intangible assets represent the fair value allocated in purchase price accounting for the ongoing relationships with an existing customer base acquired in a business combination. The fair value of customer relationships is determined using the excess earnings methodology, an income based approach. The excess earnings methodology provides an estimate of the fair value of customer relationship assets by deducting economic costs, including operating expenses and contributory asset charges, from revenue expected to be generated by the assets. These estimated cash flows are then discounted to the present value equivalent.

Refer to "Note 13: Goodwill and intangible assets" for further information.

Short-term financing

Short-term financing includes bank overdrafts and short-term lines of credit. Refer to "Note 16: Debt" for further information.

Long-term debt

Long-term debt consists of loans with original maturities greater than one year. Fees paid in connection with the execution of line-of-credit arrangements are included in other assets and fees paid in connection with the execution of a recognized debt liability as a direct deduction from the carrying amount of that debt liability. These fees are amortized using the effective interest method over the term of the related debt or expiration of the line-of-credit arrangement. Refer to "Note 16: Debt" for further information.

Income taxes

The Company is subject to income taxes in the US and numerous foreign jurisdictions. Significant judgment in the forecasting of taxable income using historical and projected future operating results is required in determining the Company's provision for income taxes and the related assets and liabilities. The provision for income taxes includes income taxes paid, currently payable or receivable and those deferred.

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act (the "Tax Act"). The legislation significantly changes US tax law by, among other things, lowering corporate income tax rates, implementing a territorial tax system and imposing a repatriation tax on deemed repatriated earnings of foreign subsidiaries. The Tax Act permanently reduces the US corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. The SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of US GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. The SAB 118 measurement period ends when a company has obtained, prepared, and analyzed the information needed to complete the accounting requirements under ASC 740, "Income Taxes", but no later than one year from the enactment date of December 22, 2017. In 2017 and the first nine months of 2018, the Company recorded provisional amounts for certain enactment-date effects of the Act by applying the guidance in SAB 118 because the Company had not yet completed its enactment-date accounting for these effects. At December 31, 2018, the Company has now completed its accounting for all the enactment-date income tax effects of the Act. As further discussed in "Note 7: Income taxes", during 2018 the Company recognized adjustments of $6.8 million to the

provisional amounts recorded at December 31, 2017 and included these adjustments as a component of income tax expense from continuing operations.

Effective in 2018, the Company is subject to global intangible low tax income (“GILTI”) which is a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. Due to the complexity of the GILTI tax rules, companies are allowed to make an accounting policy choice of either (1) treating taxes due on future US inclusions in taxable income related to GILTI as a current-period expense when incurred or (2) factoring such amounts into a company’s measurement of its deferred

taxes. The Company is electing to treat taxes due on future US inclusions in taxable income related to GILTI as a current-period expense when incurred and, therefore, there is no impact to the deferred tax rate in 2018.

In the event that the actual outcome of future tax consequences differs from the Company's estimates and assumptions due to changes or future events such as tax legislation, geographic mix of the earnings, completion of tax audits or earnings repatriation plans, the resulting change to the provision for income taxes could have a material effect on the consolidated statement of operations and consolidated balance sheets.

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax basis of assets and liabilities and are measured using enacted tax rates and laws that are expected to be in effect when the differences reverse. Deferred tax assets are also recognized for the estimated future effects of tax loss carryforwards. The effect on deferred taxes of changes in tax rates is recognized in the period in which the revised tax rate is enacted. The Company records valuation allowances to reduce deferred tax assets to the extent it believes it is more likely than not that a portion of such assets will not be realized. In making such determinations, the Company considers all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies and the ability to carry back losses to prior years. Realization is dependent upon generating sufficient taxable income prior to expiration of tax attribute carryforwards. Although realization is not assured, management believes it is more likely than not that all of the deferred tax assets will be realized, or if not, a valuation allowance has been recorded. The Company continues to monitor the value of its deferred tax assets, as the amount of the deferred tax assets considered realizable, could be reduced in the near term if estimates of future taxable income during the carryforward periods are reduced, or current tax planning strategies are not implemented.

US GAAP prescribes a recognition threshold and measurement attribute for the accounting and financial statement disclosure of tax positions taken or expected to be taken in a tax return. The evaluation of a tax position is a two-step process. The first step requires the Company to determine whether it is more likely than not that a tax position will be sustained upon examination based on the technical merits of the position. The second step requires the Company to recognize in the financial statements each tax position that meets the more likely than not criteria, measured at the amount of benefit that has a greater than fifty percent likelihood of being realized.

The Company recognizes interest and penalties related to unrecognized tax benefits within interest expense and warehousing, selling and administrative, respectively, in the accompanying consolidated statements of operations. Accrued interest and penalties are included within either other accrued expenses or other long-term liabilities in the consolidated balance sheets.

Refer to "Note 7: Income taxes" for further information.

Pension and other postretirement benefit plans

The Company sponsors several defined benefit and defined contribution plans. The Company's contributions to defined contribution plans are charged to income during the period of the employee's service.

The benefit obligation and cost of defined benefit pension plans and other postretirement benefits are calculated based on actuarial valuations, which involves making assumptions about discount rates, expected rates of return on assets, future salary increases, future health care costs, mortality rates and future pension increases. Due to the long-term nature of these plans, such estimates are subject to significant uncertainty.

The projected benefit obligation is calculated separately for each plan based on the estimated future benefit employees have earned in return for their service based on the employee's expected date of retirement. Those benefits are discounted to determine the present value of the benefit obligations using the projected unit-credit method. A liability is recognized on the balance sheet for each plan to the extent the projected benefit obligation is in excess of the fair value of plan assets. An asset is recorded for each plan to the extent the fair value of plan assets is in excess of the projected benefit obligation.

The Company recognizes actuarial gains or losses, known as "mark to market" adjustments, at each December 31. The mark to market adjustments primarily include gains and losses resulting from changes in discount rates and the difference between the expected rate of return on plan assets and actual plan asset returns. Curtailment losses must be recognized in the statement of operations when it is probable that a curtailment will occur and its effects are reasonably estimable. However, a curtailment gain is recognized in the statement of operations when the related employees terminate or the plan suspension or amendment is adopted, whichever is applicable. Settlement gains and

losses are recognized in the period in which the settlement occurs, regardless of how probable it is at an earlier date that the settlement will occur and despite the fact that the probable gain or loss may be reasonably estimable before the settlement actually takes place. The Company recognizes prior service costs or credits in other comprehensive loss during the period of occurrence, and subsequently amortizes these items over the remaining service period as components of net periodic benefit cost within other expense, net in the consolidated statement of operations.

Table of Contents

Service costs are recognized within warehousing, selling, and administrative expenses in the consolidated statement of operations. All other components of net periodic benefit cost are classified as other expense, net.
The fair value of plan assets is used to calculate the expected return on assets component of the net periodic benefit cost.
Refer to "Note 9: Employee benefit plans" for further information.
Leases
All leases that are determined not to meet any of the capital lease criteria are classified as operating leases. Operating lease costs are recognized as an expense in the statement of operations on a straight-line basis over the lease term.
The Company leases certain vehicles and equipment that qualify for capital lease classification. Assets under capital leases are carried at historical cost, net of accumulated depreciation and are included in property, plant and equipment, net in the consolidated balance sheets. Depreciation expense related to the capital lease assets is included in depreciation expense in the consolidated statement of operations. Refer to "Note 12: Property, plant and equipment, net" for further information.
The present value of minimum lease payments under a capital lease is included in current portion of long-term debt and long-term debt in the consolidated balance sheets. The capital lease obligation is accreted utilizing the effective interest method and interest expense related to the capital lease obligation is included in interest expense in the consolidated statement of operations. Refer to "Note 20: Commitments and contingencies" for further information.
Contingencies
A loss contingency is recorded if it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated. The Company evaluates, among other factors, the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of the ultimate loss. Changes in these factors and related estimates could materially affect the Company's financial position and results of operations. Legal expenses are recorded as legal services are provided. Refer to "Note 20: Commitments and contingencies" for further information.
Environmental liabilities
Environmental contingencies are recognized for probable and reasonably estimable losses associated with environmental remediation. Incremental direct costs of the investigation, remediation effort and post-remediation monitoring are included in the estimated environmental contingencies. Expected cash outflows related to environmental remediation for the next 12 months and amounts for which the timing is uncertain are reported as current within other accrued expenses in the consolidated balance sheets. The long-term portion of environmental liabilities is reported within other long-term liabilities in the consolidated balance sheets on an undiscounted basis, except for sites for which the amount and timing of future cash payments are fixed or reliably determinable.
Environmental remediation expenses are included within warehousing, selling and administrative expenses in the consolidated statements of operations, unless associated with disposed operations, in which case such expenses are included in other operating expenses, net.
Environmental costs are capitalized if the costs extend the life of the property, increase its capacity and/or mitigate or prevent contamination from future operations.
Refer to "Note 20: Commitments and contingencies" for further information.
Revenue recognition
Revenue is recognized when performance obligations under the terms of the contract are satisfied, which generally occurs when goods are transferred to a customer or as services are provided to a customer. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring goods or providing services to customers. Net sales includes product sales, billings for freight and handling charges and fees earned for services provided, net of discounts, expected returns, customer rebates, variable consideration and sales or other revenue-based taxes. The Company recognizes product sales and billings for freight and handling charges when products are considered delivered to the customer under the terms of the sale.
Refer to "Note 3: Revenue" for further information.

Table of Contents

Foreign currency translation

The functional currency of the Company's subsidiaries is the local currency, unless the primary economic environment requires the use of another currency. Transactions denominated in foreign currencies are recorded in the functional currency of each subsidiary at the rate of exchange on the date of the transactions. Monetary assets and liabilities denominated in foreign currencies are remeasured into the functional currency of each subsidiary at period-end exchange rates. These foreign currency transaction gains and losses are recognized in other (expense) income, net in the consolidated statements of operations.

Foreign currency gains and losses relating to intercompany borrowings that are considered a part of the Company's investment in a foreign subsidiary are reflected as a component of currency translation within accumulated other comprehensive loss in stockholders' equity. The following table provides information pertaining to total foreign currency gains or losses related to such intercompany borrowings:

(in millions)	Foreign Currency Gains / (Losses)
Year ended December 31, 2018	$ —
Year ended December 31, 2017	4.8
Year ended December 31, 2016	(34.8)

Assets and liabilities of foreign subsidiaries are translated into US dollars at period-end exchange rates. Income and expense accounts of foreign subsidiaries are translated into US dollars at the average exchange rates for the period. The net exchange gains and losses arising on this translation are reflected as a component of currency translation within accumulated other comprehensive loss in stockholders' equity. Refer to "Note 11: Accumulated other comprehensive loss" for further information.

Stock-based compensation plans

The Company measures the total amount of employee stock-based compensation expense for a grant based on the grant date fair value of each award and recognizes the stock-based compensation expense for each separately vesting tranche of an award on a straight-line basis over the requisite service period. Stock-based compensation is based on unvested outstanding awards. The Company has elected to recognize forfeitures when realized. Stock-based compensation expense is classified within other operating expenses, net in the consolidated statements of operations. Refer to "Note 10: Stock-based compensation" for further information.

Share repurchases

The Company does not hold any treasury shares, as all shares of common stock are retired upon repurchase. Furthermore, when share repurchases occur and the common stock is retired, the excess of the repurchase price over par is allocated between additional paid-in capital and accumulated deficit such that the portion allocated to additional paid-in-capital is limited to the additional paid-in-capital created from that particular share issuance (i.e. the book value of those shares) plus any resulting leftover additional paid-in-capital from previous share repurchases in instances where the repurchase price was lower than the original issuance price.

Fair value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. US GAAP specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. These two types of inputs have created the following fair-value hierarchy:

Level 1	Quoted prices for identical instruments in active markets.
Level 2	Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuation in which all significant inputs and significant value drivers are observable in active markets.

Level 3	Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

When available, the Company uses quoted market prices to determine fair value and classifies such items as Level 1. In cases where a market price is not available, the Company will make use of observable market-based inputs to calculate fair value, in which case the items are classified as Level 2. If quoted or observable market prices are not available, fair value is based on internally developed valuation techniques that use, where possible, current market-based or independently sourced market

information. Items valued using internally generated valuation techniques are classified according to the lowest level input that is significant to the valuation, and may be classified as Level 3 even though there may be significant inputs that are readily observable. Refer to “Note 17: Fair value measurements” for further information.

Certain financial instruments, such as derivative financial instruments, are required to be measured at fair value on a recurring basis. Other financial instruments, such as the Company’s own debt, are not required to be measured at fair value on a recurring basis. The Company elected to not make an irrevocable election to measure financial instruments and certain other items at fair value.

Derivatives

The Company uses derivative financial instruments, such as foreign currency contracts, interest rate swaps and interest rate caps, to manage its risks associated with foreign currency and interest rate fluctuations. Derivative financial instruments are recorded in either prepaid expenses and other current assets, other assets, other accrued expenses or other long-term liabilities in the consolidated balance sheets at fair value. The fair value of forward currency contracts is calculated by reference to current forward exchange rates for contracts with similar maturity profiles. The fair value of interest rate swaps is determined by estimating the net present value of amounts to be paid under the agreement offset by the net present value of the expected cash inflows based on market rates and associated yield curves. For derivative contracts with the same counterparty where the Company has a master netting arrangement with the counterparty, the fair value of the asset/liability is presented on a net basis within the consolidated balance sheets. Refer to “Note 17: Fair value measurements” for additional information relating to the gross and net balances of derivative contracts. Changes in the fair value of derivative financial instruments are recognized in the consolidated statements of operations, unless specific hedge accounting criteria are met. Cash flows associated with derivative financial instruments are recognized in the operating section of the consolidated statements of cash flows.

For the purpose of hedge accounting, derivatives are classified as either fair value hedges, where the instrument hedges the exposure to changes in the fair value of a recognized asset or liability; or cash flow hedges, where the instrument hedges the exposure to variability in cash flows that are either attributable to a particular risk associated with a recognized asset or liability or a highly probable forecasted transaction. Gains and losses on derivatives that meet the conditions for fair value hedge accounting are recognized immediately in the consolidated statements of operations, along with the offsetting gain or loss on the related hedged item. For derivatives that meet the conditions for cash flow hedge accounting, the effective and ineffective portion of the gain or loss on the derivative is recognized in accumulated other comprehensive loss on the consolidated balance sheets. Amounts in accumulated other comprehensive loss are reclassified to the consolidated statement of operations in the same period in which the hedged transactions affect earnings. For both fair value hedges and cash flow hedges, the gains and losses related to the derivative instruments are recognized within the same financial statement line item within the consolidated statement of operations as the gains and losses associated with the hedged items.

For derivative instruments designated as hedges, the Company formally documents the hedging relationship to the hedged item and its risk management strategy. The Company assesses the effectiveness of its hedging instruments at inception and on an ongoing basis. Hedge accounting is discontinued when the hedging instrument is sold, expired, terminated or exercised, or no longer qualifies for hedge accounting.

Refer to “Note 18: Derivatives” for further information.

Earnings per share

Basic earnings per share is based on the weighted average number of common shares outstanding during each period, which excludes non-vested restricted stock units, non-vested restricted stock and stock options. Diluted earnings per share is based on the weighted average number of common shares and dilutive common share equivalents outstanding during each period. The Company reflects common share equivalents relating to stock options, non-vested restricted stock and non-vested restricted stock units in its computation of diluted weighted average shares outstanding, unless the effect of inclusion is anti-dilutive. The effect of dilutive securities is calculated using the treasury stock method.

The Company has issued certain restricted stock awards, which are unvested stock-based payment awards that contain non-forfeitable rights to dividends or dividend equivalents. These restricted shares are considered participating securities. Accordingly, the Company calculates net income applicable to common stock using the two-class method, whereby net income is allocated between common stock and participating securities.

Refer to “Note 8: Earnings per share” for further information.

3. Revenue

On January 1, 2018, the Company adopted the new revenue standard using the modified retrospective method applied to those contracts which were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018

are presented under the new revenue standard, while prior period amounts are not adjusted and continue to be reported in accordance with historic accounting under ASC Topic 605. The Company recorded a net decrease to the opening accumulated deficit of $0.8 million as of January 1, 2018 due to the cumulative impact of adopting the new revenue standard.

The Company disaggregates revenues from contracts with customers by both geographic segments and revenue contract types. Geographic reportable segmentation is pertinent to understanding Univar's revenues, as it aligns to how the Company reviews the financial performance of its operations. Revenue contract types are differentiated by the type of good or service Univar offers customers, since the contractual terms necessary for revenue recognition are unique to each of the identified revenue contract types.

The following table disaggregates external customer net sales by major stream:

(in millions)	USA	Canada	EMEA	Rest of World	Consolidated
	Year Ended December 31, 2018				
Chemical Distribution	$4,775.2	$877.6	$1,974.4	$383.8	$ 8,011.0
Crop Sciences	—	381.6	—	—	381.6
Services	185.8	43.1	1.3	9.7	239.9
Total external customer net sales	$4,961.0	$1,302.3	$1,975.7	$393.5	$ 8,632.5

Revenue is recognized when performance obligations under the terms of the contract are satisfied, which generally occurs when goods or services are transferred to a customer. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring goods or providing services. Payment terms and conditions vary by regions where the Company performs business and contract types. The term between invoicing and when payment is due is generally one year or less. As of December 31, 2018, none of the Company's contracts contained a significant financing component.

Revenue for bill-and-hold arrangements is recognized if the Company has a substantive customer request, the materials are properly segregated and designated as belonging to the customer, materials are ready to be transferred to the customer and Univar is unable to direct the materials to service another customer. The Company has certain contractual relationships designated as an agency relationship, which requires the Company to recognize revenues on a net basis.

Chemical Distribution

The Company generates revenue when control for products is transferred to customers. Certain customers may receive discounts off the transaction price, primarily due to price and volume incentives, or return product for non-conformance, which are accounted for as variable consideration. The Company estimates the change in the transaction price that is expected to be provided to customers based on historical experience, which impacts revenues recognized.

Crop Sciences

The Company generates revenue when control for products is transferred to customers. The amount of consideration recorded varies due to price movements and rights granted to customers to return product. Customer payment terms often extend through a growing season, which may be up to six months.

Transaction prices may move during an agricultural growing season and changes may affect the amount of consideration the Company will receive. Transaction prices are also affected by special offers or volume discounts. The Company estimates the expected changes in the transaction price based on the combination of historical experience and the impact of weather on the current agriculture season. The adjustments to the transaction price are recognized as variable consideration and impacts revenues recognized.

When customers are provided rights to return eligible products, the Company estimates the expected returns based on the combination of historical experience and the impact of weather on the current agriculture season, which affects the revenues recognized.

Services

The Company generates revenue from services as they are performed and economic value is transferred to customers. Univar's services provided to customers are primarily related to waste management services and warehousing services. Waste management services is primarily related to plant maintenance, environmental contracting, environmental consulting and the collection and disposal of both hazardous and non-hazardous waste products. Warehousing services is primarily inclusive of blending, warehousing, logistics and distribution services for customers. Waste management and warehousing services are recognized over time as the performance obligations are satisfied.

Table of Contents

Costs to obtain or fulfill contracts with customers

Univar expenses costs to obtain contracts when the contract term and benefit period is expected to be one year or less. Contract costs where the contract term and benefit period is expected to be more than a year are capitalized and amortized over the performance obligation period. Capitalized contract costs of $1.2 million and $5.9 million are included in other current assets and other assets as of December 31, 2018.

Deferred revenue

Deferred revenues are recognized as a contract liability when customers provide Univar with consideration prior to the Company satisfying a performance obligation. The following table provides information pertaining to the deferred revenue balance and account activity:

(in millions)		
Deferred revenue as of January 1, 2018	$	100.9
Deferred revenue as of December 31, 2018	45.6	
Revenue recognized that was included in the deferred revenue balance at the beginning of the period	100.3	

The deferred revenue balances are all expected to have a duration of one year or less and are recorded within the other accrued expenses line item of the consolidated balance sheet.

4. Other operating expenses, net

Other operating expenses, net consisted of the following items:

	Year ended December 31,		
(in millions)	2018	2017	2016
Stock-based compensation expense	$20.7	$19.7	$10.4
Business transformation costs	—	23.4	5.4
Restructuring charges	4.8	5.5	6.5
Other employee termination costs	16.4	8.1	1.5
Loss (gain) on sale of property, plant and equipment and other assets	2.0	(11.3)	(0.7)
Acquisition and integration related expenses	22.0	3.1	5.5
Other	7.6	6.9	8.6
Total other operating expenses, net	$73.5	$55.4	$37.2

5. Restructuring charges

Restructuring charges relate to the implementation of several regional strategic initiatives aimed at streamlining the Company’s cost structure and improving its operations. These actions primarily resulted in workforce reductions, lease termination costs and other facility rationalization costs. Restructuring charges are recorded in other operating expenses, net in the consolidated statement of operations.

2018 Restructuring

During the year ended December 31, 2018, the Company recorded restructuring charges of $3.2 million in USA, consisting of $3.1 million in employee termination costs and $0.1 million in other exit costs for employees impacted by a decision to consolidate departments. Additionally, the Company recorded restructuring charges of $0.9 million in Other, relating to employee termination costs. The Company expects to incur approximately $4.7 million of additional employee termination and other exit costs over the next two years and expects this program to be substantially completed by 2020.

Also during the year ended December 31, 2018, the Company recorded restructuring charges of $0.9 million in EMEA relating to employee termination costs. The Company does not expect to incur material costs in the future related to this restructuring program. The actions associated with this program are expected to be completed by the end of 2019.

During the year ended December 31, 2018, the Company recorded restructuring charges of $0.7 million for the Rest of World segment, consisting of $0.4 million in employee termination costs, $0.2 million in facility exit costs and $0.1 million in other exit costs. The actions associated with this program were completed as of December 31, 2018.

Table of Contents

The cost information above does not contain any estimates for programs that may be developed and implemented in future periods.

2014 to 2017 Restructuring

Between 2014 through 2017, management implemented several regional strategic initiatives aimed at streamlining the Company's cost structure and improving its operations. Total cumulative charges recorded through December 31, 2018 for USA related to these restructuring programs were $39.5 million, which included $16.5 million in employee termination costs, $21.3 million in facility exit costs, and $1.7 million in other exit costs. The Company did not record restructuring charges for the programs during 2018. The actions associated with the restructuring programs were completed as of June 30, 2018, although administratively cash payments will be made into the future. During the year ended December 31, 2018, the Company reduced its estimate in the amount of $0.9 million within facility exit costs relating to a favorable lease buyout for USA.

Total cumulative charges recorded through December 31, 2018 for Canada were $5.7 million related to employee termination costs. There were no restructuring charges recorded for the programs during 2018. As of June 30, 2018, the actions associated with the restructuring programs were completed.

Total cumulative charges recorded through December 31, 2018 for EMEA were $32.8 million, which included $22.5 million in employee termination costs, $3.7 million in facility exit costs, and $6.6 million in other exit costs. During 2018, the Company did not record restructuring charges for the programs. The actions associated with the restructuring programs were completed as of June 30, 2018.

Total cumulative charges recorded through December 31, 2018 for ROW were $6.4 million, which included $6.2 million in employee termination costs and $0.2 million in facility exit costs. The Company did not record restructuring charges for these programs during 2018. As of June 30, 2018, the Company completed this program.

Total cumulative charges recorded through December 31, 2018 for Other were $6.6 million, which included $5.8 million in employee termination costs and $0.8 million in other exit costs. There were no restructuring charges recorded for these programs during 2018. As of June 30, 2018, the Company completed this program.

The following tables summarize activity related to accrued liabilities associated with redundancy and restructuring:

(in millions)	January 1, 2018	Charge to earnings	Cash paid	Non-cash and other	December 31, 2018
Employee termination costs	$ 3.0	$ 5.3	$ (3.4)	$ (0.7)	$ 4.2
Facility exit costs	10.2	(0.7)	(4.4)	(0.1)	5.0
Other exit costs	(0.5)	0.2	(0.1)	0.6	0.2
Total	$ 12.7	$ 4.8	$ (7.9)	$ (0.2)	$ 9.4

(in millions)	January 1, 2017	Charge to earnings	Cash paid	Non-cash and other	December 31, 2017
Employee termination costs	$ 6.9	$ 2.9	$ (7.2)	$ 0.4	$ 3.0
Facility exit costs	13.2	2.8	(5.5)	(0.3)	10.2
Other exit costs	—	(0.2)	(0.3)	—	(0.5)
Total	$ 20.1	$ 5.5	$ (13.0)	$ 0.1	$ 12.7

Restructuring liabilities of $5.9 million and $5.8 million were classified as current in other accrued expenses in the consolidated balance sheets as of December 31, 2018 and 2017, respectively. The long-term portion of restructuring liabilities of $3.5 million and $6.9 million were recorded in other long-term liabilities in the consolidated balance sheets as of December 31, 2018 and 2017, respectively and primarily consists of facility exit costs that are expected to be paid within the next five years.

While the Company believes the recorded restructuring liabilities are adequate, revisions to current estimates may be recorded in future periods based on new information as it becomes available.

Table of Contents

6. Other expense, net

Other expense, net consisted of the following (losses) gains:

	Year ended December 31,		
(in millions)	2018	2017	2016
Pension mark to market loss [1][2]	$(34.2)	$(3.8)	$(68.6)
Pension curtailment and settlement gains [1]	—	9.7	1.3
Non-operating retirement benefits [1]	11.0	9.9	15.3
Foreign currency transactions	(6.7)	(4.6)	(0.6)
Foreign currency denominated loans revaluation	(0.8)	(17.9)	(13.7)
Undesignated foreign currency derivative instruments [3]	1.1	0.3	(1.8)
Undesignated interest rate swap contracts [3]	—	(2.2)	10.1
Debt refinancing costs [4]	—	(5.3)	—
Other	(3.1)	(3.5)	(0.1)
Total other expense, net	$(32.7)	$(17.4)	$(58.1)

(1) Refer to “Note 9: Employee benefit plans” for more information.
(2) Includes mark to market loss related to defined benefit pension plans and other postretirement benefit plan.
(3) Refer to “Note 18: Derivatives” for more information.
(4) Refer to “Note 16: Debt” for more information.

7. Income taxes

Current income tax expense represents the amounts expected to be reported on the Company’s income tax returns, and deferred tax expense or benefit represents the change in net deferred tax assets and liabilities. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities as measured by the enacted tax rates that will be in effect when these differences reverse. Valuation allowances are recorded as appropriate to reduce deferred tax assets to the amount considered likely to be realized.

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act (the “Tax Act”). The legislation significantly changes US tax law by, among other things, lowering corporate income tax rates, implementing a territorial tax system and imposing a repatriation tax on deemed repatriated earnings of foreign subsidiaries. The Tax Act permanently reduces the US corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. The SEC staff issued Staff Accounting Bulletin No. 118 (“SAB 118”) to address the application of US GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. The SAB 118 measurement period ends when a company has obtained, prepared, and analyzed the information needed to complete the accounting requirements under ASC 740, "Income Taxes", but no later than one year from the enactment date of December 22, 2017. In 2017 and the first nine months of 2018, the Company recorded provisional amounts for certain enactment-date effects of the Act by applying the guidance in SAB 118 because the Company had not yet completed its enactment-date accounting for these effects. At December 31, 2018, the Company has now completed its accounting for all the enactment-date income tax effects of the Act. As further discussed below, during 2018 the Company recognized adjustments of $6.8 million related to the provisional amounts recorded at December 31, 2017 and included these adjustments as a component of income tax expense from continuing operations. The main components of the SAB 118 adjustment of $6.8 million are increases due to additional transition tax of $13.0 million and deemed dividends of $9.2 million (tax) offset by a benefit for additional foreign tax credits utilized of $1.3 million (increase in foreign tax credit generated of $26.3 million offset by an increase in valuation allowance of $25.0 million), and a decrease in the valuation allowance on deferred interest expense of $13.8 million due to an increase in interest expense deduction.

Table of Contents

Effective in 2018, the Company is subject to global intangible low tax income (“GILTI”) which is a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. Due to the complexity of the GILTI tax rules, companies are allowed to make an accounting policy choice of either (1) treating taxes due on future US inclusions in taxable income related to GILTI as a current-period expense when incurred or (2) factoring such amounts into a company’s measurement of its deferred taxes. The Company is electing to treat taxes due on future US inclusions in taxable income related to GILTI as a current-period expense when incurred and, therefore, there is no impact to the deferred tax rate in 2018.

For financial reporting purposes, income (loss) before income taxes includes the following components:

	Year ended December 31,		
(in millions)	2018	2017	2016
Income (loss) before income taxes			
United States	$36.6	$1.5	$(131.3)
Foreign	185.6	167.3	51.7
Total income (loss) before income taxes	$222.2	$168.8	$(79.6)

The expense (benefit) for income taxes is summarized as follows:

	Year ended December 31,		
(in millions)	2018	2017	2016
Current:			
Federal	$13.8	$6.8	$(0.1)
State	2.1	2.0	0.1
Foreign	31.2	28.5	20.4
Total current	$47.1	$37.3	$20.4
Deferred:			
Federal	$6.5	$26.5	$(15.1)
State	(0.5)	—	(3.0)
Foreign	(3.2)	(14.8)	(13.5)
Total deferred	$2.8	$11.7	$(31.6)
Total income tax expense (benefit)	$49.9	$49.0	$(11.2)

Table of Contents

The reconciliation between the US statutory tax rate and the Company's effective tax rate is presented as follows:

	Year ended December 31,		
(in millions)	2018	2017	2016
US federal statutory income tax expense (benefit) applied to income (loss) before income taxes	$46.7	$59.1	$(27.8)
State income taxes, net of federal benefit	1.1	1.4	(2.9)
Foreign tax rate differential	8.1	(18.0)	(5.8)
Non-taxable interest income	(0.7)	(11.4)	(10.8)
Valuation allowance, net	(11.6)	(18.1)	(24.7)
Expiration of tax attributes	—	0.1	4.4
Foreign losses not benefited	—	0.7	8.0
Effect of flow-through entities	(0.6)	8.9	(9.0)
Net stock-based compensation	—	(3.7)	1.7
Non-deductible expense	4.8	3.5	3.4
Unrecognized tax benefits	(2.7)	(1.7)	(1.4)
Change in statutory income tax rates	—	(17.5)	2.7
Deemed dividends from foreign subsidiaries	9.0	17.6	1.4
Global intangible low-taxed income	19.9	—	—
Non-deductible interest expense	—	0.1	2.6
Revaluation due to Section 987 tax law change	—	—	45.0
Section 965 repatriation tax	13.0	76.5	—
Foreign tax credit	(38.3)	(47.6)	—
Other	1.2	(0.9)	2.0
Total income tax expense (benefit)	$49.9	$49.0	$(11.2)

Table of Contents

The consolidated deferred tax assets and liabilities are detailed as follows:

	December 31,	
(in millions)	2018	2017
Deferred tax assets:		
Net operating loss carryforwards	$49.4	$68.6
Environmental reserves	22.9	25.3
Interest	25.9	35.7
Tax credit and capital loss carryforwards	57.8	37.2
Pension	66.3	68.2
Flow-through entities	2.7	2.5
Compensation	12.2	13.7
Inventory	4.5	4.2
Property, plant and equipment, net	4.8	3.3
Other temporary differences	17.0	15.1
Gross deferred tax assets	$263.5	$273.8
Valuation allowance	(106.3)	(117.2)
Deferred tax assets, net of valuation allowance	$157.2	$156.6
Deferred tax liabilities:		
Property, plant and equipment, net	$(102.3)	$(98.7)
Intangible assets	(63.6)	(64.6)
Other temporary differences	(9.4)	(5.9)
Deferred tax liabilities	$(175.3)	$(169.2)
Net deferred tax liability	$(18.1)	$(12.6)

The changes in the valuation allowance were as follows:

	December 31,	
(in millions)	2018	2017
Beginning balance	$117.2	$167.9
Change related to current net operating losses generated	—	0.7
Change related to current utilization of net operating loss carryforwards	(3.7)	(12.3)
Change related to future utilization of net operating loss carryforwards	(17.4)	(17.8)
Change related to generation/expiration of tax attributes	21.3	29.9
Change related to foreign currency	(1.3)	7.1
Change related to utilization of deferred interest expense	(9.7)	(26.3)
Change related to tax rate change	0.1	(31.6)
Change related to other items	(0.2)	(0.4)
Ending balance	$106.3	$117.2

As of December 31, 2018, the total remaining tax benefit of available federal, state and foreign net operating loss carryforwards recognized on the balance sheet amounted to $33.4 million (tax benefit of operating losses of $49.4 million reduced by a valuation allowance of $16.0 million). Total net operating losses at December 31, 2018 and 2017 amounted to $186.4 million and $261.9 million, respectively. If not utilized, $19.0 million of the available loss carryforwards will expire between 2019 and 2023; subsequent to 2023, $0.1 million will expire. The remaining losses of $167.3 million have an unlimited life. As of December 31, 2018, the Company also has foreign tax credit carryforwards of $55.3 million that if not utilized will expire in 2027.

The Tax Act provided for a one-time deemed mandatory repatriation of post-1986 undistributed foreign subsidiary earnings and profits (“E&P”) through the year ended December 31, 2017. The Company reported $577.2 million of undistributed foreign E&P subject to the deemed mandatory repatriation and recognized $89.5 million of income tax expense in the 2017 US Company tax return. As a result of the one-time deemed mandatory repatriation, the Company generated foreign income tax credit (“FTC”) previously paid and allocable to the deemed repatriated foreign source income of $166.4 million. These income taxes were required to be reduced in the same proportion as the foreign

source income generating the deemed income taxes paid as required under the

96

Table of Contents

Tax Act, resulting in a net deemed income tax paid of $73.7 million. In addition, $0.3 million of withholding taxes incurred during the period were creditable. As such, the Company is eligible to claim a foreign tax credit relating to the foreign source income that generated the deemed income taxes paid and, accordingly, reported $74.0 million as a deferred tax asset generated at filing of the 2017 US tax return.
The FTC of $74.0 million generated in 2017 was not fully utilized due to adjustments required to be made against the foreign source income and an overall domestic loss, which limited the amount of the overall FTC utilization to $14.9 million in 2017. After the utilization of a net operating loss carry forward, general business credits and $14.9 million of foreign tax credits, the Company will pay additional US federal cash tax of approximately $14.9 million on the deemed mandatory repatriation, payable over eight years. At year ended December 31, 2018, the provisional FTC carryforward and related valuation allowance is estimated to be $55.3 million down from $59.1 million ($74.0 million generated in 2017 less $14.9 million utilization in 2017) reported with the filing of 2017 US tax return. The net change of $3.8 million in FTC balance is a combination of 2018 FTC utilization of $5.4 million (overall domestic loss recapture) less $1.6 million increase in FTC due to additional cash tax payments support collected from foreign tax authorities. The Company does not expect future earnings of the appropriate character of taxable income which would allow it to utilize its excess FTC balance in future tax years, in addition to other required adjustments which reduce the amount of future foreign source income available to be offset by an FTC. Therefore, the Company will maintain a valuation allowance on the remaining provisional $55.3 million FTC.

Difference Attributable to Foreign Investments

As a result of the deemed mandatory repatriation provisions in the Tax Act, the Company has $493.2 million of undistributed earnings that has either been previously taxed or would qualify for the 100 percent dividends received deduction provided for in the Tax Act, and earnings that would not result in any significant foreign taxes. As a result, the Company does not intend to distribute earnings in a taxable manner. Therefore, the Company has not recognized a deferred tax liability on its investment in foreign subsidiaries.

Tax Contingencies

The changes in unrecognized tax benefits included in other long-term liabilities, excluding interest and penalties, are as follows:

	Year ended December 31,	
(in millions)	2018	2017
Beginning balance	$ 3.1	$ 4.3
Increase for tax positions of prior years	—	—
Reductions due to the statute of limitations expiration	(2.7)	(1.5)
Foreign exchange	—	0.3
Ending balance	$ 0.4	$ 3.1

The Company has net $0.4 million and $3.1 million of unrecognized tax benefits at December 31, 2018 and 2017, respectively. As of December 31, 2018, the total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate for continuing operations was $0.4 million. No remaining unrecognized tax benefits relate to tax positions for which ultimate deductibility is highly certain, but for which there is uncertainty as to the timing of such deductibility. Recognition of these tax benefits, if any, would not have an impact on the effective tax rate.
The total liability included in other long-term liabilities associated with the interest and penalties was $0.5 million and $0.4 million at December 31, 2018 and 2017, respectively. The Company recorded $0.1 million, $0.4 million and $0.3 million in interest expense related to unrecognized tax benefits in the consolidated statements of operations for the years ended December 31, 2018, 2017 and 2016, respectively.
The Company files income tax returns in the US and various state and foreign jurisdictions. As of December 31, 2018, the Company is subject to various local or foreign examinations by the tax authorities.

Table of Contents

8. Earnings per share

The following table presents the basic and diluted earnings per share computations:

(in millions, except per share data)	Year ended December 31, 2018	2017	2016
Basic:			
Net income (loss)	$172.3	$119.8	$(68.4)
Less: earnings allocated to participating securities	0.3	0.2	—
Earnings allocated to common shares outstanding	$172.0	$119.6	$(68.4)
Weighted average common shares outstanding	141.2	140.2	137.8
Basic income (loss) per common share	$1.22	$0.85	$(0.50)
Diluted:			
Net income (loss)	$172.3	$119.8	$(68.4)
Less: earnings allocated to participating securities	—	—	—
Earnings allocated to common shares outstanding	$172.3	$119.8	$(68.4)
Weighted average common shares outstanding	141.2	140.2	137.8
Effect of dilutive securities:			
Stock compensation plans [1]	1.0	1.2	—
Weighted average common shares outstanding – diluted	142.2	141.4	137.8
Diluted income (loss) per common share [2]	$1.21	$0.85	$(0.50)

(1) Stock options to purchase approximately 1.6 million, 0.8 million, and 3.3 million shares of common stock were outstanding during the years ended December 31, 2018, 2017 and 2016, respectively, but were not included in the calculation of diluted income (loss) per share as the impact of these stock options would have been anti-dilutive.

(2) As a result of changes in the number of shares outstanding during the year and rounding, the sum of the quarters' earnings per share may not equal the earnings per share for any year-to-date period.

9. Employee benefit plans

Defined benefit pension plans

The Company sponsors defined benefit plans that provide pension benefits for employees upon retirement in certain jurisdictions including the US, Canada, United Kingdom and several other European countries.

The US, Canada and United Kingdom defined benefit pension plans are closed to new entrants. On July 1, 2015, the accrual of future service credits ceased in Canada although future salary increases continue for remaining participants. Benefits accrued by participants in the United Kingdom plan were frozen as of December 1, 2010 and benefits accrued by participants in the US plans were frozen as of December 31, 2009. These amendments to freeze benefits were made in conjunction with a benefit plan review which provides for enhanced benefits under defined contribution plans available to all employees in the US, Canada and United Kingdom.

Table of Contents

The following summarizes the Company's defined benefit pension plans' projected benefit obligations, plan assets and funded status:

	Domestic Year ended December 31,		Foreign Year ended December 31,		Total Year ended December 31,	
(in millions)	2018	2017	2018	2017	2018	2017
Change in projected benefit obligations:						
Actuarial present value of benefit obligations at beginning of year	$721.9	$719.7	$612.0	$555.5	$1,333.9	$1,275.2
Service cost	—	—	2.7	2.5	2.7	2.5
Interest cost	27.3	30.8	15.4	16.2	42.7	47.0
Benefits paid	(37.5)	(34.2)	(26.7)	(27.9)	(64.2)	(62.1)
Plan amendments	—	—	2.5	2.7	2.5	2.7
Settlement	(38.5)	(44.3)	—	—	(38.5)	(44.3)
Actuarial (gain) loss	(47.5)	49.9	(33.6)	13.3	(81.1)	63.2
Foreign exchange and other	—	—	(34.8)	49.7	(34.8)	49.7
Actuarial present value of benefit obligations at end of year	$625.7	$721.9	$537.5	$612.0	$1,163.2	$1,333.9
Change in the fair value of plan assets:						
Plan assets at beginning of year	$532.3	$509.1	$574.9	$494.3	$1,107.2	$1,003.4
Actual (loss) return on plan assets	(39.9)	80.0	(19.7)	37.4	(59.6)	117.4
Contributions by employer	12.2	12.1	26.5	26.1	38.7	38.2
Benefits paid	(37.5)	(34.2)	(26.7)	(27.9)	(64.2)	(62.1)
Settlement	(38.5)	(34.7)	—	(1.3)	(38.5)	(36.0)
Foreign exchange and other	—	—	(32.8)	46.3	(32.8)	46.3
Plan assets at end of year	$428.6	$532.3	$522.2	$574.9	$950.8	$1,107.2
Funded status at end of year	$(197.1)	$(189.6)	$(15.3)	$(37.1)	$(212.4)	$(226.7)

Net amounts related to the Company's defined benefit pension plans recognized in the consolidated balance sheets consist of:

	Domestic December 31,		Foreign December 31,		Total December 31,	
(in millions)	2018	2017	2018	2017	2018	2017
Overfunded net benefit obligation in other assets	$—	$—	$46.1	$33.9	$46.1	$33.9
Current portion of net benefit obligation in other accrued expenses	(3.5)	(3.5)	(2.0)	(2.1)	(5.5)	(5.6)
Long-term portion of net benefit obligation in pension and other postretirement benefit liabilities	(193.6)	(186.1)	(59.4)	(68.9)	(253.0)	(255.0)
Net liability recognized at end of year	$(197.1)	$(189.6)	$(15.3)	$(37.1)	$(212.4)	$(226.7)

The following table summarizes defined benefit pension plans with accumulated benefit obligations in excess of plan assets:

	Domestic December 31,		Foreign December 31,		Total December 31,	
(in millions)	2018	2017	2018	2017	2018	2017
Accumulated benefit obligation	$625.7	$721.9	$187.7	$211.4	$813.4	$933.3
Fair value of plan assets	428.6	532.3	147.7	169.3	576.3	701.6

Table of Contents

The following table summarizes defined benefit pension plans with projected benefit obligations in excess of plan assets:

	Domestic		Foreign		Total	
	December 31,		December 31,		December 31,	
(in millions)	2018	2017	2018	2017	2018	2017
Projected benefit obligation	$625.7	$721.9	$209.1	$240.3	$834.8	$962.2
Fair value of plan assets	428.6	532.3	147.7	169.3	576.3	701.6

The total accumulated benefit obligation for domestic defined benefit pension plans as of December 31, 2018 and 2017 was $625.7 million and $721.9 million, respectively, and for foreign defined benefit pension benefit plans as of December 31, 2018 and 2017 was $187.7 million and $211.4 million, respectively.

The following table summarizes the components of net periodic benefit cost (income) recognized in the consolidated statements of operations related to defined benefit pension plans:

	Domestic			Foreign			Total		
	Year ended			Year ended			Year ended		
	December 31,			December 31,			December 31,		
(in millions)	2018	2017	2016	2018	2017	2016	2018	2017	2016
Service cost [1]	$—	$—	$—	$2.7	$2.5	$2.5	$2.7	$2.5	$2.5
Interest cost [2]	27.3	30.8	32.0	15.4	16.2	18.3	42.7	47.0	50.3
Expected return on plan assets [2]	(31.3)	(30.9)	(32.5)	(25.1)	(26.0)	(28.7)	(56.4)	(56.9)	(61.2)
Amortization of unrecognized prior service cost (credits) [2]	—	—	—	2.7	(0.2)	—	2.7	(0.2)	—
Settlement [3]	—	(9.7)	—	—	—	—	—	(9.7)	—
Curtailment [3]	—	—	—	—	—	(1.3)	—	—	(1.3)
Actuarial loss [2]	23.7	0.8	20.3	11.2	3.2	48.5	34.9	4.0	68.8
Net periodic benefit cost (income)	$19.7	$(9.0)	$19.8	$6.9	$(4.3)	$39.3	$26.6	$(13.3)	$59.1

(1) Service cost is included in warehouse, selling and administrative expenses.
(2) These amounts are included in other expense, net.
(3) In 2017, the settlement gain is related to a lump sum offering accepted by participants in the USA segment. In 2016, the curtailment gain is a result of the restructuring activities in the EMEA segment. Settlement and curtailment gains are included in other expense, net.

The following summarizes pre-tax amounts included in accumulated other comprehensive loss at December 31, 2018 related to pension plan amendments:

(in millions)	Defined benefit pension plans
Net prior service cost	$ (1.2)

The following table summarizes the amounts in accumulated other comprehensive loss at December 31, 2018 that are expected to be amortized as components of net periodic benefit cost (income) during the next fiscal year related to pension amendments:

(in millions)	Defined benefit pension plans
Prior service cost	$ (0.1)

Other postretirement benefit plan

Other postretirement benefits relate to a health care plan for retired employees in the US. In 2009, the Company approved a plan to phase out the benefits provided under this plan by 2020. As a result of this change, the benefit obligation was reduced by $76.8 million and a curtailment gain of $73.1 million was recognized in accumulated other comprehensive loss and was being amortized to the consolidated statements of operations over the average future service period, which was fully amortized as of December 31, 2016.

Table of Contents

The following summarizes the Company's other postretirement benefit plan's accumulated postretirement benefit obligation, plan assets and funded status:

(in millions)	Other postretirement benefits Year ended December 31, 2018	2017
Change in accumulated postretirement benefit obligations:		
Actuarial present value of benefit obligations at beginning of year	$ 2.5	$ 2.8
Service cost	—	—
Interest cost	—	0.2
Contributions by participants	0.5	0.4
Benefits paid	(0.5)	(0.7)
Actuarial gain	(0.7)	(0.2)
Actuarial present value of benefit obligations at end of year	$ 1.8	$ 2.5
Change in the fair value of plan assets:		
Plan assets at beginning of year	$ —	$ —
Contributions by employer	—	0.3
Contributions by participants	0.5	0.4
Benefits paid	(0.5)	(0.7)
Plan assets at end of year	$ —	$ —
Funded status at end of year	$ (1.8)	$ (2.5)

Net amounts related to the Company's other postretirement benefit plan recognized in the consolidated balance sheets consist of:

(in millions)	Other postretirement benefits December 31, 2018	2017
Current portion of net benefit obligation in other accrued expenses	$ (0.4)	$ (0.4)
Long-term portion of net benefit obligation in pension and other postretirement benefit liabilities	(1.4)	(2.1)
Net liability recognized at end of year	$ (1.8)	$ (2.5)

The following table summarizes the components of net periodic benefit income recognized in the consolidated statements of operations related to other postretirement benefit plans:

(in millions)	Other postretirement benefits Year ended December 31, 2018	2017	2016
Service cost [1]	$ —	$ —	$ —
Interest cost [2]	—	0.2	0.1
Amortization of unrecognized prior service credits [2]	—	—	(4.5)
Actuarial gain [2]	(0.7)	(0.2)	(0.2)
Net periodic benefit income	$ (0.7)	$ —	$ (4.6)

(1) Service cost is included in warehouse, selling and administrative expenses.
(2) These amounts are included in other expense, net.

Table of Contents

Actuarial assumptions

Defined benefit pension plans

The significant weighted average actuarial assumptions used in determining the benefit obligations and net periodic benefit cost (income) for the Company's defined benefit plans are as follows:

	Domestic		Foreign	
	December 31,		December 31,	
	2018	2017	2018	2017
Actuarial assumptions used to determine benefit obligations at end of period:				
Discount rate	4.47%	3.87%	2.92%	2.61%
Expected annual rate of compensation increase	N/A	N/A	2.85%	2.87%

	Domestic			Foreign		
	Year ended December 31,			Year ended December 31,		
	2018	2017	2016	2018	2017	2016
Actuarial assumptions used to determine net periodic benefit cost (income) for the period:						
Discount rate	3.87 %	4.39 %	4.74 %	2.61 %	2.84 %	3.65 %
Expected rate of return on plan assets	6.75 %	7.00 %	7.50 %	4.43 %	5.01 %	6.18 %
Expected annual rate of compensation increase	N/A	N/A	N/A	2.87 %	2.87 %	2.86 %

Discount rates are used to measure benefit obligations and the interest cost component of net periodic benefit cost (income). The Company selects its discount rates based on the consideration of equivalent yields on high-quality fixed income investments at each measurement date. Discount rates are based on a benefit cash flow-matching approach and represent the rates at which the Company's benefit obligations could effectively be settled as of the measurement date. For domestic defined benefit plans, the discount rates are based on a hypothetical bond portfolio approach. The hypothetical bond portfolio is constructed to comprise AA-rated corporate bonds whose cash flow from coupons and maturities match the expected future plan benefit payments.

The discount rate for the foreign defined benefit plans are based on a yield curve approach. For plans in countries with a sufficient corporate bond market, the expected future benefit payments are matched with a yield curve derived from AA-rated corporate bonds, subject to minimum amounts outstanding and meeting other selection criteria. For plans in countries without a sufficient corporate bond market, the yield curve is constructed based on prevailing government yields and an estimated credit spread to reflect a corporate risk premium.

The expected long-term rate of return on plan assets reflects management's expectations on long-term average rates of return on funds invested to provide for benefits included in the benefit obligations. The long-term rate of return assumptions are based on the outlook for equity and fixed income returns, with consideration of historical returns, asset allocations, investment strategies and premiums for active management when appropriate. Assumptions reflect the expected rates of return at the beginning of the year.

Other postretirement benefit plan

For the other postretirement benefit plan, the discount rate used to determine the benefit obligation at December 31, 2018 and 2017 was 4.63% and 3.98%, respectively. The discount rate used to determine net periodic benefit credit for the year ended December 31, 2018, 2017 and 2016 was 3.98%, 4.37% and 4.54%, respectively. Health care cost increases did not have a significant impact on the Company's postretirement benefit obligations in the years presented as a result of the 2009 plan to phase out the health care benefits provided under the US plan.

Plan assets

Plan assets for defined benefit plans are invested in global equity and debt securities through professional investment managers with the objective to achieve targeted risk adjusted returns and to maintain liquidity sufficient to fund current benefit payments. Each funded defined benefit plan has an investment policy that is administered by plan trustees with the objective of meeting targeted asset allocations based on the circumstances of that particular plan. The investment strategy followed by the Company varies by country

102

Table of Contents

depending on the circumstances of the underlying plan. Less mature plan benefit obligations are funded by using more equity securities as they are expected to achieve long-term growth while exceeding inflation. More mature plan benefit obligations are funded using a higher allocation of fixed income securities as they are expected to produce current income with limited volatility. The Company has adopted a dynamic investment strategy whereby as the plan funded status improves, the investment strategy is migrated to more liability matching assets, and return seeking assets are reduced. Risk management practices include the use of multiple asset classes for diversification purposes. Specific guidelines for each asset class and investment manager are implemented and monitored.

The weighted average target asset allocation for defined benefit pension plans in the year ended December 31, 2018 is as follows:

	Domestic		Foreign	
Asset category:				
Equity securities	50.0	%	28.2	%
Debt securities	45.0	%	66.1	%
Other	5.0	%	5.7	