

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549
FORM 10-K

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

For the fiscal year ended **September 30, 2021**

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 001-37884

VALVOLINE INC.



Kentucky
(State or other jurisdiction of incorporation or organization)

30-0939371
(I.R.S. Employer Identification No.)

100 Valvoline Way,
Lexington, Kentucky 40509
Telephone Number (859) 357-7777

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

<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
Common stock, par value \$0.01 per share	VVV	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 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 No

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

Large Accelerated Filer	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-Accelerated Filer	<input type="checkbox"/>	Smaller Reporting Company	<input type="checkbox"/>
		Emerging Growth Company	<input type="checkbox"/>

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

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

The aggregate market value of voting common stock held by non-affiliates at March 31, 2021 was approximately \$4.7 billion. At November 15, 2021, there were 180,039,902 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its 2022 Annual Meeting of Shareholders (the "Proxy Statement") are incorporated by reference into Part III of this Annual Report on Form 10-K and will be filed within 120 days of the registrant's fiscal year end.

TABLE OF CONTENTS

		Page
PART I		
Item 1.	Business	4
Item 1A.	Risk Factors	17
Item 1B.	Unresolved Staff Comments	29
Item 2.	Properties	29
Item 3.	Legal Proceedings	29
Item 4.	Mine Safety Disclosures	29
PART II		
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	30
Item 6.	Selected Financial Data	31
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operation	32
Item 7A.	Quantitative and Qualitative Disclosures about Market Risk	52
Item 8.	Financial Statements and Supplementary Data	54
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	104
Item 9A.	Controls and Procedures	104
Item 9B.	Other Information	106
PART III		
Item 10.	Directors, Executive Officers and Corporate Governance	107
Item 11.	Executive Compensation	107
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	107
Item 13.	Certain Relationships and Related Transactions and Director Independence	107
Item 14.	Principal Accountant Fees and Services	107
PART IV		
Item 15.	Exhibits and Financial Statement Schedules	108
Item 16.	Form 10-K Summary	112

Forward-Looking Statements

Certain statements in this Annual Report on Form 10-K, other than statements of historical fact, including estimates, projections, statements related to the Company's business plans and operating results are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Valvoline has identified some of these forward-looking statements with words such as "anticipates," "believes," "expects," "estimates," "is likely," "predicts," "projects," "forecasts," "may," "will," "should" and "intends" and the negative of these words or other comparable terminology. These forward-looking statements are based on Valvoline's current expectations, estimates, projections and assumptions as of the date such statements are made and are subject to risks and uncertainties that may cause results to differ materially from those expressed or implied in the forward-looking statements. Factors that might cause such differences include, but are not limited to, those discussed under the headings "Risk Factors" in Item 1A of Part I of this Annual Report on Form 10-K, "Management's Discussion and Analysis of Financial Condition and Results of Operation" in Item 7 of Part II of this Annual Report on Form 10-K and "Quantitative and Qualitative Disclosures about Market Risk" in Item 7A of Part II of this Annual Report on Form 10-K. Valvoline assumes no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future, unless required by law.

PART I

ITEM 1. BUSINESS

Overview

Valvoline Inc. is a global vehicle and engine care company that continuously powers the future of mobility through innovative services and products for electric, hybrid, and internal combustion powertrains. The terms “Valvoline,” the “Company,” “we,” “us,” “management,” and “our” as used herein refer to Valvoline Inc., its predecessors and its consolidated subsidiaries, except where the context indicates otherwise.

Established in 1866, Valvoline’s heritage spans over 15 decades, during which it has developed powerful recognition across multiple channels for its superior levels of service and original, high quality products. Valvoline has consistently led the way in innovating and reinventing its services and products for changing technologies and customer needs, including leading the world’s supply of battery fluids to electric vehicle manufacturers. Valvoline operates a fast-growing, best-in-class network of service center stores, which are well positioned to serve evolving vehicle maintenance needs with Valvoline’s iconic products. In addition to its quick, easy, and trusted quick lube oil change services and the legendary Valvoline-branded passenger car motor oils, Valvoline provides a wide array of lubricants, chemicals, fluids, and other complementary products and services designed to improve vehicle and engine performance and lifespan.

Valvoline provides vehicle and engine care solutions to a range of customers, including end consumers, original equipment manufacturers (“OEM”), mass market and automotive parts retailers, small to large installers, vehicle fleets, and distributors. Valvoline operates and franchises approximately 1,600 service center locations and is the second and third largest chain in the United States (“U.S.”) and Canada, respectively, by number of stores. With sales in more than 140 countries and territories, Valvoline’s solutions are available for every engine and powertrain, including high-mileage and heavy-duty applications, and are offered at more than 80,000 locations worldwide.

Company background

Valvoline has a 155-year history of innovation that began in 1866 when Dr. John Ellis founded Valvoline by discovering the lubricating properties of distilled crude oil and formulated the world’s first petroleum-based lubricant. Valvoline was trademarked seven years later in 1873, making it the first trademarked motor oil brand in the United States. Soon thereafter, as vehicle ownership rapidly grew, Valvoline became widely known in the automotive world through racing victories and as a recommended oil for the iconic Ford Model T, while expanding its product offerings and global reach through its innovative automotive maintenance and heavy-duty engine applications.

Valvoline was acquired by Ashland (currently doing business as Ashland Global Holdings Inc. and referred to herein as “Ashland,” together with its predecessors and consolidated subsidiaries) in 1950 and continued accelerating through the development of all-climate and racing motor oils, in addition to notable automobile racing victories by some of the biggest legends of the sport. By the late 1980s, Valvoline began operating and franchising Valvoline Instant Oil Change (“VIOC”) service center stores, expanding into consumer-focused automotive preventive maintenance and quick lube services. In the late 1990s, Valvoline began its strategic relationship that continues today for co-branding products in heavy duty applications with Cummins Inc. (“Cummins”), a leading supplier of heavy-duty engines. Valvoline maintained its focus on innovating for evolving vehicle technologies and the needs of customers through the late 1990s and early 2000s by introducing synthetic and high-mileage motor oils.

Valvoline was incorporated in May 2016 as a subsidiary of Ashland, followed by the transfer of the Valvoline business and certain other legacy Ashland assets and liabilities from Ashland to Valvoline (the “Contribution”). Valvoline completed its initial public offering (the “IPO”) of common stock in September 2016, and Ashland distributed its remaining interest in Valvoline in May 2017 (the “Distribution”). Today Valvoline operates as an independent global corporation that trades on the New York Stock Exchange (“NYSE”) under the symbol “VVV,” focused on further accelerating its growth and powering the future of mobility.

On October 12, 2021, Valvoline announced that it is accelerating its continued transformation by pursuing a separation of its two business segments, Retail Services and Global Products. Valvoline is evaluating the alternatives to accomplish the separation, and no timetable has currently been established for its completion.

Valvoline's services and products

Valvoline's service offerings are designed to provide superior customer service utilizing Valvoline's product portfolio to deliver quick, easy and trusted preventive maintenance to its consumers. Valvoline offers the following services at its service center stores:

– Oil changes	– Wiper blade replacement	– Serpentine belt service
– Radiator and cooling system service	– Filter (oil, air, cabin) replacement	– Fuel and air services (gas and diesel)
– Brake fluid service	– Differential and transfer case (gearbox) fluid service	– Power steering service
– Transmission system service	– Tire rotation	– Engine cleaning service
– Battery replacement	– Air conditioning service	

Valvoline's product portfolio is designed to deliver quality solutions to meet the demands of its diverse customer base with varying needs. Valvoline has a history of leading innovation as the original motor oil brand, with ground-breaking products such as its all climate motor oil, the world's first high mileage motor oil, and the first synthetic blend in the U.S. and the world's number one supplier of battery fluids to electric vehicle manufacturers. In addition to the iconic Valvoline-branded premium and conventional passenger car motor oils and other co-branded and private label automotive lubricant products, Valvoline provides a wide array of lubricants used in heavy duty equipment, as well as automotive coolants and chemicals designed to improve engine performance and lifespan. Valvoline is powering the future of mobility through innovative products for vehicles with electric, hybrid, and internal combustion powertrains. Valvoline products are used in a broad range of vehicles and engines, including light-duty (passenger cars, light trucks and two wheelers), heavy duty (heavy trucks, agricultural, mining and construction equipment), and electric vehicles.

Categories	Description
Lubricants	
Passenger car / Light duty	Comprehensive assortment of lubricants meeting the needs of passenger car (including electric vehicles), motorcycle and other light duty vehicles, including motor oil, transmission fluid, greases, and gear oil
Heavy duty	Lubricating solutions for a wide range of heavy-duty engine types (diesel, natural gas and gasoline) and applications ranging from on-road (Class 4 – Class 8 vehicles) to off-road construction, mining, agricultural, and power generation equipment
Antifreeze / Coolants	Antifreeze / coolants for original equipment manufacturers (“OEMs”); full assortment of additive technologies and chemistries to meet virtually all light-duty and heavy-duty engine applications and heat transfer requirements of batteries and fuel cells used to power electric vehicles
Chemicals	
Maintenance chemicals	Functional and maintenance chemicals ranging from brake fluids and power steering fluids to chemicals specifically designed to clean and maintain optimal performance of fuel, cooling, and drive train systems
Coatings	Specialty coatings designed to target rust prevention and sound absorption for automotive and industrial applications
Filters	Oil and air filters meeting the needs of light-duty vehicles
Other complementary products and royalties	Batteries, windshield wiper blades, light bulbs, serpentine belts, drain plugs, other complementary products and franchisee royalties

Industry overview

Demand for preventive automotive maintenance in both the automotive aftermarket services and the finished lubricants markets benefits from ongoing improvements in miles driven and the growing number and age of vehicles in operation, in addition to increasing vehicle complexity.

The North American automotive aftermarket services total addressable market is highly fragmented which creates a significant opportunity for the non-cyclical, essential nature of Valvoline's preventive-maintenance business. Retail Services is well-positioned to continue to increase its market share by leveraging its world-class service model and executing its three-pillar growth strategy of 1) expanding its footprint through new company-operated locations, acquisition opportunities, and franchise development, 2) leveraging proprietary data analytics and technology to drive effective marketing and a best-in-class customer experience, and 3) evolving its service offerings to capture growing opportunities in the market.

Global lubricant demand is estimated to be approximately 12 billion gallons, which has stabilized during fiscal 2021 from the temporary decline during the depths of the coronavirus ("COVID-19") pandemic. Demand for passenger car motor oil and motorcycle oil is estimated to account for approximately 20% of global lubricant demand. Heavy-duty oil and other transport lubricants account for another 40%, while the remaining 40% of global lubricant demand is comprised of non-transport lubricants such as hydraulic oil, gear oil, process oil and greases. The United States has historically accounted for the largest portion of lubricant demand, but has recently been surpassed by China, with India third. The international lubricants market is more than three-and-a-half times the size of the North American market, creating significant opportunity for growth. The lubricants market is impacted by the following key drivers and trends:

- Global transportation lubricants market demand is shifting towards higher performance finished lubricants, largely driven by advancements in vehicle and engine design as well as more rigorous OEM and regulatory requirements for improved efficiency, optimized fuel consumption along with reduced carbon footprints and toxic emissions.
- Despite a recent decline in demand, which Valvoline believes was primarily the result of COVID-19 restrictions reducing miles driven, recent multiyear trends indicate that the North American transport lubricants market has experienced relatively flat to slightly declining average annual volumes due in part to an increase in oil change intervals, the result of a shift towards higher performance lubricants, offset by an increase in the number of automobiles on the road and miles driven.
- Continued growth in the number of vehicles on the road has led to expansion of passenger vehicle lubricant sales in developing regions.

Reportable segments

During the third quarter of fiscal 2021, the Company realigned its global operations to support its strategic initiatives to transition to a services-driven business. As a result of the realignment, Valvoline's reporting structure is composed of two reportable segments: Retail Services and Global Products. Additionally, to reconcile to consolidated results, certain corporate and other non-operational matters are included in Corporate. Each reportable segment is described below:

Retail Services

The Retail Services segment serves the passenger car and light truck aftermarket through company-operated, independent franchises, and independent Express Care stores that service vehicles with Valvoline products. Valvoline operates the second largest quick lube service chain by number of stores in the United States with Valvoline Instant Oil ChangeSM and the third largest quick lube service chain in Canada with the Valvoline Great Canadian Oil Change brand. Valvoline's service center stores offer customers a quick, easy and trusted way to maintain their vehicles, utilizing highly-trained technicians who have access to a proprietary service process that sets forth rigorous protocols for both the steps that must be followed in the service of vehicles and for interactions with customers. The Express CareTM platform supports smaller North American independent operators that do not fit Valvoline's current franchise model and generally offer other services in addition to quick lubes, such as automotive repairs and car washes.

As of September 30, 2021, the Retail Services system consisted of 1,594 service center stores, 719 company-operated and 875 franchised locations, that operate in 47 states in the U.S. and five provinces in Canada. Additionally, Retail Services serves Express Care™ locations throughout the U.S. and Canada and has invested in a domestic battery supply chain joint venture. Retail Services is focused on expanding its footprint and driving a best-in-class customer experience, while evolving its service offerings to capture growing opportunities in the market by growing non-oil change services, services for the future of mobility, and pursuing fleet service solutions to address medium and heavy-duty vehicles that require comprehensive maintenance needs.

Global Products

The Global Products segment sells Valvoline™ and other branded and private label engine and automotive preventive maintenance products in more than 140 countries and territories to mass market and automotive parts retailers, installers, and commercial customers, including distributors and licensees, as well as OEMs, to service light- and heavy-duty vehicles and equipment. Global Products operates across four primary regions that include North America (comprised of the United States and Canada); Europe, Middle East, and Africa ("EMEA"); Latin America (which includes Mexico, Central and South America); and Asia Pacific (Australia and Asia, including India and China). Global Products has a growing presence in emerging and growth markets, such as China, India, and Latin America and has 50/50 joint ventures with Cummins in India, China and Argentina, as well as joint ventures with other partners in Latin America.

Sales of Valvoline products for consumers to perform their own automotive and engine maintenance are referred to as "Do-It-Yourself" or "DIY" consumers, and sales of Valvoline products for consumers to have their vehicles and equipment serviced are referred to as "Do-It-For-Me" or "DIFM" consumers. Sales for DIY consumers are primarily branded products sold through the DIY retail channel to customers such as retail automotive parts stores, as well as to leading mass merchandisers, independent automotive part stores, convenience stores, dollar stores, farm stores, grocers, and online retailers. Sales through the DIY retail channel also include non-branded packaged products sold to warehouse distributors that resell to both DIY consumers and to installers for DIFM consumers. Sales for DIFM consumers are generally sold through the installer channel to customers such as car dealers, general repair shops, third-party quick lube locations directly, as well as through a network of distributors and licensees. Valvoline also has a strategic relationship with Cummins for co-branding products for heavy duty customers, which include heavy-duty fleet customers, such as on-highway fleets and construction companies served primarily through the distributor network.

Business and growth strategies

Building on the momentum in fiscal 2021, Valvoline's business and growth strategic initiatives include:

- Executing the strategic separation of Valvoline's two business segments, Retail Services and Global Products, to create sustainable value for the Company's stakeholders and best position the segments for continued long-term success by allowing Retail Services to continue its growth and focus on leveraging its world class service model and providing Global Products with the opportunity to focus and allocate capital to its own strategic priorities;
- Aggressively growing Retail Services through organic service center expansion, opportunistic acquisitions, and franchisee growth, while rapidly diversifying and expanding retail service offerings and capabilities through a quick, easy, and trusted customer experience delivered by hands-on experts;
- Accelerating Global Products market share growth through continued development of and investment in key global emerging and high value markets by fully leveraging brand equity and product platforms to drive speed, efficiency, and value across the business and customer interactions, while increasing penetration of Valvoline's full product portfolio;
- Expanding capabilities to serve future transport vehicles by continuing to develop relationships with electric vehicle OEMs and leveraging innovation in the delivery of future services and products in direct and adjacent markets; and
- Building a strong foundation enabled by data and technology to make Valvoline easy to do business with.

COVID-19 impact

Refer to Management's Discussion and Analysis included in Item 7, as well as Risk Factors included in Item 1A of this Annual Report on Form 10-K for information regarding the impact of COVID-19 on the Company and its business.

Retail Services store development

Valvoline continues to build its market share by leveraging its world class stay-in-your-car service model by providing each customer with superior service through its hands-on-expertise and the highest quality lubricants and complementary products. The SuperPro™ system for executing Valvoline's retail services is built upon providing consistent quick, easy, and trusted preventive maintenance to build a high degree of customer loyalty. Valvoline's three-pronged growth strategy for its retail services is to grow through 1) opportunistic acquisitions, 2) new company-operations store development, and 3) franchisee expansion. The summary below highlights the unit growth within the Retail Services system over the last five years, in addition to its annual same-store sales growth in each of those years:

	System-wide stores ^{(a) (b)}				
	For the years ended September 30				
	2021	2020	2019	2018	2017
Beginning of period	1,462	1385	1,242	1,127	1,068
Opened	69	72	93	45	41
Acquired	69	12	55	76	29
Closed	(6)	(7)	(5)	(6)	(11)
End of period	1,594	1,462	1,385	1,242	1,127

	Number of stores at end of period				
	For the years ended September 30				
	2021	2020	2019	2018	2017
Company-operated	719	584	519	462	384
Franchised ^{(b) (c)}	875	878	866	780	743

	Same store sales growth ^(a)				
	For the years ended September 30				
	2021	2020	2019	2018	2017
System-wide	21.2 %	2.3 %	10.1 %	8.3 %	7.4 %
Company-operated	19.6 %	2.6 %	9.7 %	8.7 %	7.0 %
Franchised	22.4 %	2.1 %	10.4 %	8.0 %	7.5 %

(a) Refer to "Key Business Measures" in Item 7 of Part II of this Annual Report on Form 10-K for a description of management's use and determination of key metrics, including store counts and same-store sales.

(b) System-wide store count includes franchised service center stores. Valvoline's franchisees are distinct independent legal entities and Valvoline does not consolidate the results of operations of its franchisees.

(c) As of September 30, 2020, one franchised service center store included in the store count was temporarily closed at the discretion of the respective independent operator due to the impacts of COVID-19.

The Retail Services network of stores delivered its 15th consecutive year of system-wide same-store sales growth in fiscal 2021, demonstrating the system's operational excellence. Valvoline operated, either directly or through its franchisees, 1,594 service center stores as of September 30, 2021.

The Retail Services system grew by nearly 50% over the last five years, the result of 285 net new openings and 241 acquired stores, which combined to add 526 net new stores from the beginning of 2017. Organic growth was driven by 108 net new company-operated service center store openings and franchisee expansion in key markets

for 177 net new store openings. During this period, Valvoline became the franchisor of 116 retail stores through acquisition, which included the expansion of its service centers internationally into Canada, with the balance of stores acquired through single and multi-store acquisitions that also included the conversion of 144 stores within the system from franchises to company-operated service center stores.

Competition

The industry is highly competitive and Valvoline faces competition in all product and service categories and subcategories. Competition is based on several key criteria, including brand recognition, product performance, quality, price, availability, positioning, security of supply, customer service, as well as the ability to bring innovative products or services to the marketplace.

The Retail Services segment competes for consumers and franchisees with other major franchised brands that offer a turn-key operations management system, such as Jiffy Lube, Grease Monkey, Take 5 Oil Change, Express Oil Change, and Mr. Lube in Canada. Retail Services competes for consumers and Express Care operators with national branded companies that offer a professional signage program with limited business model support, similar to Valvoline's Express Care™ network. Regional players that are not directly affiliated with a major brand and automotive dealerships and service centers, which provide quick lube and other preventive maintenance services, are also competitors for Retail Services consumers. Valvoline believes there are more than 10,000 quick lube stores operating within the U.S. and Canada market, which is highly fragmented and primarily comprised of independent operators that operate a small number of locations and a small number of larger brands that comprise a significant portion of the overall market. Valvoline has the second and third largest chain in the U.S. and Canada, respectively, by number of stores.

In the Global Products segment, Valvoline's principal competitors for DIY automotive parts retailers are global integrated oil brands, such as Shell, which produces Pennzoil and Quaker State; BP, which produces Castrol; Exxon Mobil, which produces Mobil 1; as well as mid-tier brands and private label producers. Valvoline currently ranks as the number three passenger car motor oil brand in the U.S. DIY market by volume. With respect to installer customers, major competitors vary by region. Valvoline competes with these same major global integrated oil brands that have a strong presence in North America, Europe, and Asia. In certain international markets, Valvoline also competes with regional brands, including brands produced by national oil companies, such as Sinopec in China and Indian Oil in India.

Marketing and sales

Valvoline places a high priority on sales and marketing and focuses marketing efforts on areas expected to yield the highest rate of return. Valvoline has a centralized marketing services group as well as dedicated marketing resources in both reportable segments to reach target customers. Valvoline uses a variety of marketing techniques to build awareness of, and create demand for, Valvoline products and services. Valvoline advertises through social and digital media, as well as traditional media outlets such as radio. Valvoline selectively sponsors teams in high performance racing, including a current National Association for Stock Car Auto Racing ("NASCAR") sponsorship of Hendrick Motorsports, featuring the 2021 NASCAR Cup Series champion, Kyle Larson, and drivers, Chase Elliott, William Byron and Alex Bowman. In addition, Valvoline sponsors other teams and players, including 2020 Europa League champion, Sevilla Fútbol Club, which plays in La Liga and the Toronto Blue Jays of Major League Baseball.

Trained Retail Services technicians utilize Valvoline's proprietary SuperPro™ system to share what services customers need based on their vehicle service history and OEM recommendations to drive customer loyalty and trust. The Company's strengths in digital marketing and data analytics are leveraged to attract new customers and retain current ones, including tailored marketing campaigns targeted at specific customers when they are expected to need service.

The majority of Valvoline's large customers are supported by direct sales representatives with a number of key customers having dedicated Valvoline teams. Valvoline's solutions are available for every engine and powertrain and are offered at more than 80,000 locations worldwide, including approximately 1,600 service center stores and nearly 300 independent Express Care™ locations. Valvoline serves its customer base through its sales force and technical support organization, leveraging the Company's technology portfolio and customer relationships globally, while meeting customer demands locally. Valvoline also utilizes its digital infrastructure and technology to more

efficiently interact with customers, driving customer engagement to deliver growth, customer retention and acquisition.

Research and development

Valvoline's research and development focuses on new, unique, and innovative products and services to meet current and future customer needs. These products and services are discovered using Valvoline's unique "Hands on Expertise" innovation approach, which promotes a deep insight of customer requirements, resulting in a high innovation success rate. Novel ideas are vetted using mathematical modeling from first principles when applicable, and the technology team works with the business through commercialization to ensure a positive customer experience. Regional technology centers in the Americas, EMEA, and Asia Pacific regions also locally develop appropriate solutions for vehicle and equipment maintenance and manufacturing in their markets. In addition to its own research and development initiatives, Valvoline also conducts testing for other entities, which partially offsets its research and development costs by increasing asset utilization. Valvoline will continue funding research and development to continue deploying innovative, high-quality products and services, which enhances Valvoline's competitive position.

Intellectual property

Valvoline is continually seeking to develop new technology and enhance its existing technology. Valvoline has been issued approximately 60 U.S. and 90 international patents and has nearly 20 U.S. and 50 international patent applications pending or published. Valvoline's patent portfolio evolves as new patents are awarded and as older patents expire. These patents expire at various dates up to 15 years or more from their original filing dates.

Valvoline holds over 2,500 trademarks in over 140 countries across the world, including the Valvoline and "V" brand logo trademarks. These trademarks have a perpetual life, are generally subject to renewal every ten years, and are among Valvoline's most protected and valuable assets. Valvoline owns approximately 900 domain names that are used to promote Valvoline services and products and provide information about the Company.

Valvoline uses various trade names and service marks in its business and for key products, including ValvolineTM and Valvoline Instant Oil ChangeSM, among others. Valvoline also has a variety of intellectual property licensing agreements that vary in scope and duration, including those that cross-license and provide access to other intellectual property and license intellectual property to others in return for revenues.

Raw material supply and prices

The key raw materials used in Valvoline's business are base oils, additives, packaging materials (high density polyethylene bottles, corrugated packaging and steel drums) and ethylene glycol. Valvoline continuously monitors global supply and cost trends of these key raw materials and obtains these raw materials from a diversified network of large global suppliers and regional providers. Valvoline's sourcing strategy is to ensure supply through contracting with a diversified supply base while leveraging market conditions to take advantage of spot opportunities whenever such conditions are available. Valvoline leverages worldwide spend to pursue favorable contract terms from global suppliers and utilizes regional providers to ensure market competitiveness and reliability in its supply chain. Valvoline also utilizes the Company's research and development resources to develop alternative product formulations, which provide flexibility in the event of supply interruptions. Valvoline closely monitors the Company's supply chain and conducts periodic supply risk assessments of its critical suppliers to reduce risk.

Valvoline has a large manufacturing and distribution footprint in the United States, with seven lubricant blending and packaging plants and several packaging and warehouse locations. Additional blending and packaging plants are located in Australia, Canada, the Netherlands, Serbia and China. The blending and packaging plant in China began production in fiscal 2021 and is currently producing most of the Company's lubricant volume for the China market. Valvoline also uses numerous third-party toll manufacturers and warehouses both in the U.S. and internationally and is part of joint ventures that operate blending and packaging facilities in Ecuador and India.

Valvoline seeks to actively manage fluctuations in supply costs, product selling prices and the timing thereof to preserve margins. The prices of many of Valvoline's products fluctuate based on the price of base oil, which represents a large percentage of Valvoline's cost of sales. Given that base oil, a derivative of crude, is highly correlated to the global oil market, there can be variability in base oil prices related to the world crude price as well

as the global supply and demand balance of base oil. Base oil prices generally follow crude prices, but the lag period between changes in the price of crude oil and changes in the price of base oil is influenced by whether there is an excess of or shortness in the supply of base oil. As part of the strategy to mitigate the impact of base oil price variability, Valvoline seeks to negotiate supply contracts with terms that minimize the impact of changes in the base oil market on Valvoline's financial results.

Valvoline works diligently to adjust product selling prices to react to changes in base oil costs and to preserve its margins. The customer value proposition in Retail Services focuses on convenience and quality service which provides the ability to leverage pricing power to raise prices while maintaining customer loyalty. The Company's contracts in several of its sales channels establish the timing of adjustments to selling prices in response to changes in raw material prices. Pricing adjustments to products sold to Valvoline's larger installer customers, including Valvoline's franchisees, are made pursuant to their contracts and are generally based on movements in published base oil indices. Pricing adjustments for product sold to automotive parts retailers and smaller installer customers, in addition to private label products in the United States, are generally market-driven and based on negotiations in light of base oil costs and the pricing strategies of Valvoline's competitors.

Seasonality

Overall, there is little seasonality in Valvoline's business. Valvoline's services, and to a lesser extent its product sales in North America, experience slightly higher volumes in the summer months and during the periods of time leading into holidays due to increased miles driven from vacation and holiday travel. Sales within North America can also slow modestly from October to February due to inclement weather. Outside of North America, Valvoline experiences little seasonality due to geographic diversity and the high proportion of commercial and industrial product sales that are less influenced by weather.

Environmental and regulatory matters

Valvoline is subject to numerous federal, state, local and non-U.S. environmental health and safety ("EHS") laws and regulations. These laws and regulations govern matters such as safe working conditions; product stewardship; air emissions; discharges to the land and surface waters; generation, handling, storage, transportation, recycling, treatment and disposal of hazardous substances and waste materials; and the registration and evaluation of chemicals. Valvoline maintains policies and procedures to control EHS risks and monitor compliance with applicable EHS laws and regulations. These laws and regulations also require Valvoline to obtain and comply with permits, registrations or other authorizations issued by governmental authorities. These authorities can modify or revoke the Company's permits, registrations or other authorizations and can enforce compliance through fines and injunctions. Valvoline expects to incur ongoing costs to comply with existing and future EHS requirements, including the cost of dedicated EHS resources who are responsible for ensuring its business maintains compliance with applicable laws and regulations.

The Company is also subject to regulation by various U.S. federal regulatory agencies and by the applicable regulatory authorities in countries in which Valvoline's products are manufactured and sold. Such regulations principally relate to the ingredients, classification, labeling, manufacturing, packaging, transportation, advertising and marketing of Valvoline's products. Additionally, as a U.S. entity operating through subsidiaries in non-U.S. jurisdictions, the Company is subject to foreign exchange control, transfer pricing and customs laws that regulate the import and export of goods as well as the flow of funds between Valvoline and its subsidiaries. The Company is also required to be in compliance with transfer pricing, securities laws and other statutes and regulations, such as the Foreign Corrupt Practices Act (the "FCPA") and other countries' anti-corruption and anti-bribery regimes.

In addition, Valvoline is subject to laws relating to information security, privacy, cashless payments and consumer credit, protection and fraud. An increasing number of governments and industry groups worldwide have established data privacy laws and standards for the protection of personal information, including financial information (e.g., credit card numbers), social security numbers, and health information. The Company is also subject to labor and employment laws, including regulations established by the U.S. Department of Labor and other local regulatory agencies, which sets laws governing working conditions, paid leave, workplace safety, wage and hour standards, and hiring and employment practices.

Valvoline understands the significant impact it can have on the environment. Through greenhouse initiatives such as striving to reduce the Company's carbon emissions and supporting and servicing environmentally friendly

alternatives such as hybrid and electric vehicles, Valvoline is committed to operating in a manner that supports sustainability. Valvoline's global corporate carbon reduction strategy focuses on avoiding carbon emissions, reducing emissions within its own operations, and then looking to mitigate the remaining emissions. This strategy is implemented by seeking out opportunities through operational efficiencies, product development, additive power purchase agreements ("PPA"), and renewable energy credits ("REC"). The Company surpassed its goal to reduce its operation's carbon emissions by five percent over five years from a 2016 baseline by achieving this target in 2020. Valvoline's near term carbon initiatives include expanding its REC purchases, executing a PPA, and targeting carbon reductions at sites identified with high carbon emitting electric sources. Based upon these efforts and strategies, Valvoline is well positioned to further reduce carbon emission. Valvoline will continue to build on this progress and develop longer term goals. With 2020 as the new baseline, a short-term goal has been established for a ten percent reduction in carbon intensity of Valvoline's global plants and warehouses by fiscal year 2022.

While there are no current environmental or regulatory matters that Valvoline expects to be material to its results of operations, financial position, or cash flows, there can be no assurances that existing or future environmental laws or other regulations applicable to the Company's operations or products will not lead to a material adverse impact on Valvoline's results of operations, financial position or cash flows.

Human capital

"It all starts with our people" is one of Valvoline's core values, and the Company endeavors to create an environment that promotes safety, fosters diversity, encourages creativity, rewards performance, and challenges each employee. In order to recruit and retain the most qualified team members in the industry, Valvoline focuses on treating team members well by paying competitive wages, offering attractive benefit packages and robust training and development opportunities, in addition to providing a strong operational support infrastructure with opportunities for upward mobility. Valvoline is committed to actively creating an environment where each team member is empowered to learn, grow, and maximize their personal contribution.

Valvoline conducts business in more than 140 countries and territories, and employees operate across cultures, functions and languages to solve the technical and logistical challenges created by a worldwide customer base. The table below provides the Company's approximate global distribution of employees worldwide (excluding contract employees) as of September 30, 2021:

Region	Number of employees
North America	8,800
Asia Pacific	685
Europe, Middle East and Africa ("EMEA")	285
Latin America	30
Total	9,800

Valvoline routinely surveys team members to focus on continuous improvement and track employee engagement levels. The Company's recent company-wide survey results included a total employee engagement score that exceeded third party benchmark targets. Drivers of employee engagement include culture and work environment, leadership trust, management support, meaningful work, and opportunities to grow, and Valvoline scored above the benchmark score in all five of these dimensions as well. In response to feedback gathered in its employee engagement survey, a cross-functional team is developing additional resources and communications to increase the visibility and clarity of development and growth opportunities for employees. Valvoline believes the employee engagement survey results are meaningful from a recruitment and overall business perspective as employee recommendations and satisfaction are important to recruit top talent. The Company also believes satisfied employees are more productive, are more likely to have a positive impact on employees around them, and are more likely to deliver great customer service.

There are several ways in which Valvoline seeks to attract, develop, and retain highly qualified talent as summarized further below.

Talent acquisition

Valvoline fosters a workplace culture that attracts and retains top, diverse talent at every level. Valvoline's talent acquisition is based on qualifications and experiences of target employees, including "building block" traits and capabilities that support strong development early in an employee's career with the Company. Valvoline utilizes innovative technology and structured processes intended to attract qualified candidates, including engaging job descriptions designed to reach a larger audience, a quick and mobile-friendly application process, online chat features to proactively address applicant questions, and video storytelling that offers a view of Valvoline's culture through the lens of its own employees. These tools have been created to convey what makes Valvoline unique as an employer to better attract diverse and ideal candidates, and these strong branding and sourcing efforts allow Valvoline to select among the very best.

In addition to needs across Valvoline's business, the Company's focus on aggressively growing the Retail Services system that included the addition of 132 net new system-wide stores in fiscal 2021, creates a critical need for talent to operate those stores. Valvoline utilizes its tools and processes to attract qualified candidates within its Retail Services system, including providing support to franchise sourcing efforts. Franchisees are able to take advantage of Valvoline's recruiting and marketing programs, in addition to sharing hiring experiences and best practices across the system to ensure company-operated and franchised locations attract and hire the best candidates to deliver consistent and superior service to Valvoline's customers.

Valvoline is committed to delivering an original experience for its candidates and was named a 2021 Talent Board Candidate Experience ("CandE") Award Winner in North America for the third consecutive year. The CandE Awards recognize companies with the highest positive candidate ratings in Talent Board's comprehensive benchmark research. Valvoline ranked 16th overall and third in the services industry.

Training and development

The opportunity to develop and advance, regardless of job role or geographical location is critical to the success of Valvoline as a global organization, and a key component of Valvoline's talent development approach is to provide each team member with the necessary tools and training opportunities to develop "Hands-On Expertise" within their area of subject matter knowledge. Valvoline offers voluntary and compulsory regulatory and compliance training programs across the organization based on job role and function. Formal education opportunities are delivered via virtual or in-person classes and e-learning. Topics range from safety, compliance, customer service, sales and product training, as well as management and leadership skills and professional effectiveness. Valvoline also offers approximately 20 hours of live training and development for its new managers and has many partnerships to deliver quality development opportunities, including those with leading universities, research organizations, companies, and industry and professional organizations. In addition, employees may attend seminars and training programs provided by industry trade and professional organizations. Valvoline also provides tuition assistance for employees enrolled in higher education programs directed at improving their performance or helping them prepare for a future role within the Company.

Within the Valvoline Instant Oil ChangeSM system of company-operated and franchised service center stores, employees are provided regular training. New employees receive 270 hours of training that is generally completed within the first 60 days of employment leading to their first certification and another 225 hours of training in the next 140 days that leads to a promotion. This structured early learning follows the detailed training plan of SuperProTM, an internal management system for executing Valvoline's retail services, which is supported by a proprietary digital learning platform. Employees are trained, tested and certified on these standards as they support and encourage the proper and safe use of personal protective equipment, tools and system practices to drive superior engagement, performance and customer service. Each day may include manager-led training, hands-on learning activities, checklists, virtual learning, and certifications, all of which provide employees with a solid foundation for long-term careers with Valvoline. By engaging team members early, Valvoline provides them with the necessary tools to learn and acquire new skills which increases their value as an employee and, most importantly, affords them the opportunity to advance their careers.

Valvoline Instant Oil ChangeSM also provides an Introduction to Management program that occurs multiple times during the year where assistant managers who qualify as potential store managers meet for three days to interact with leadership team members and peers from other stores to learn about Valvoline's culture, share best practices, and receive management training to prepare them for career advancement. The combination of these efforts enable

Valvoline to continue a promote-from-within strategy which has led to 100% of service center managers, area managers, and market manager promotions in the last year being earned by team members who started in hourly positions at Valvoline Instant Oil ChangeSM.

Valvoline received 2021 BEST Award winner recognition from the Association for Talent Development. The BEST Award recognizes organizations that are Building talent, Enterprise-wide and Strategically driving a Talent development culture that delivers results. Valvoline placed 7th globally in 2021, which is its fourth top ten finish in the last five years.

Total Rewards

Valvoline believes that happy and well-cared-for team members bring their best selves to work. The Company provides a wide variety of benefits to eligible full-time and part-time employees. These benefits help support Valvoline's strategy to provide competitive programs in each country, aligning to the changing business environment and meeting employee needs. This includes attraction, retention, inclusion, motivation, development, promotion, engagement, and well-being (mental, financial, and personal health).

The Company's benefits offered to its employees in most of the countries where Valvoline does business consist of defined contribution matching, tuition reimbursement, and paid time off, including holiday pay, paid family leave and other leave programs. Valvoline's benefits also include progressive and affordable healthcare plans and life, disability, and accident insurance coverage. In addition, the Company provides a variety of physical, financial, and mental health resources to support taking care of the whole employee.

Health and safety

One of Valvoline's top priorities is protecting the health and safety of its team members, known as its "Vamily." Valvoline offers employer-sponsored health and wellness benefits to all of its full-time U.S. employees and their families. Valvoline also provides market competitive benefits in all countries in which the Company operates. In addition, Valvoline strives to create workplaces and practices in all environments that team members work in to help foster a safe and secure environment for every employee and customer. Valvoline emphasizes that "safety is always our priority" through one of its core values.

During the early stages of the COVID-19 pandemic, Valvoline formed a COVID-19 Steering Team that has been leading and coordinating the Company's overall response. This team leads efforts to develop and monitor mitigation and business continuity plans; track all relevant country, state and local government guidelines, directives and regulations; develop and adopt flexible work-from-home options for non-production and non-store team members; maintain safe working protocols for production and service center store teams; assess and implement appropriate return-to-office protocols; and provide timely and transparent communications to global employees and key stakeholders. One of the guiding principles this team continues to rely upon in forming its decisions is protecting the safety and well-being of Valvoline's global teams. Valvoline provided benefits to its employees to cover the cost of COVID-19 testing, offered on and off-site COVID-19 vaccinations and flu shots, promoted its telehealth benefits, expanded its employee assistance and well-being plans, implemented a new remote work policy, and offered individual paid time off and family leave, including paid sick or pandemic leave for quarantined employees.

Diversity and inclusion

The Company believes in an inclusive workforce, where diverse backgrounds are represented, engaged and empowered to inspire innovative ideas and decisions. Valvoline does business in more than 140 countries and territories, and its employees operate across cultures, functions, language barriers and time zones to solve the technical and logistical challenges presented by its worldwide customer base. Valvoline is focused on (1) promoting a culture of diversity and inclusion that leverages the talents of all employees, (2) implementing practices that attract, recruit and retain diverse top talent, and (3) demonstrating an investment in diversity and inclusion through diverse supplier spend, depositing cash in federally-insured minority depository institutions ("MDIs") and through the Company's charitable giving. Valvoline supports employee-led networking groups that are open to all employees and provide a forum to communicate and exchange ideas, build a network of relationships across the Company, and pursue personal and professional development, such as Valvoline Women's International Network. The Company also actively sponsors events that promote diversity and utilizes its Diversity, Equity and Inclusion Council, a working committee to help steer diversity and inclusion efforts across the business and its operations. As

part of the Company's commitment to deposit cash in MDIs, Valvoline has invested approximately \$2 million of its cash equivalents as of September 30, 2021 with MDIs and is actively working to identify additional MDIs to invest with on an ongoing basis.

Citizenship

Valvoline's citizenship efforts extend across the globe and support social and educational needs. At various times throughout the year, Valvoline supports its employees in volunteering their time and talents to give back to their communities. Valvoline employees support the United Way, Red Cross, Children's Miracle Network, Habitat for Humanity, Big Brothers Big Sisters, Building Homes for Heroes, and many more local and global institutions and organizations.

Valvoline's Charitable Giving Program encourages its team members to support the communities in which they live and in which the Company operates, through hands-on service, focused generosity and the continuous pursuit of innovative and sustainable solutions. Yearly, a major focus of Valvoline's charitable giving programs is the annual employee giving campaign where employees are encouraged to give monthly donations through payroll deduction to the charity of their choice. Valvoline's matching program will match the donations given to the organizations that align with the Company's giving pillars: (1) disadvantaged families and children, (2) education, (3) the environment, and/or (4) diversity and inclusion. Additionally, Valvoline's Grant Program offers non-profits the opportunity to submit proposals once a year for specific needs within their organization. Valvoline's Charitable Giving Committee awards the grants based on the Company's giving pillars.

Available information

More information about Valvoline is available on the Company's website at <http://www.valvoline.com>. On this website, Valvoline makes available, free of charge, its annual reports 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 any beneficial ownership reports of officers and directors filed on Forms 3, 4 and 5. All such reports are available as soon as reasonably practicable after they are electronically filed with, or electronically furnished to, the Securities and Exchange Commission (the "SEC"). Valvoline also makes available, free of charge on its website, its Amended and Restated Articles of Incorporation, By-Laws, Corporate Governance Guidelines, Board Committee Charters, Director Independence Standards and the Global Standards of Business Conduct that apply to Valvoline's directors, officers and employees. These documents are also available in print to any shareholder who requests them. The information contained on Valvoline's website is not part of this Annual Report on Form 10-K and is not incorporated by reference in this document. References to website addresses are provided as inactive textual references only. The SEC also maintains a website (<http://www.sec.gov>) that contains reports, proxy and other information and statements regarding issuers, including Valvoline, that file electronically with the SEC.

Executive officers of Valvoline

The following is a list of Valvoline's executive officers, their ages, positions and experience:

SAMUEL J. MITCHELL, JR. (age 60) is Chief Executive Officer and Director of Valvoline. Mr. Mitchell was appointed as a director and Chief Executive Officer in May 2016 and September 2016, respectively. He served as Senior Vice President of Ashland from 2011 to September 2016 and as President of Valvoline from 2002 to September 2016.

MARY E. MEIXELSPERGER (age 61) is Chief Financial Officer of Valvoline since June 2016. Prior to joining Valvoline, Ms. Meixelsperger was Senior Vice President and Chief Financial Officer of DSW Inc. from April 2014 to June 2016 and held the roles of Chief Financial Officer, Controller and Treasurer at Shopko Stores from 2006 to 2014.

JULIE M. O'DANIEL (age 54) is Senior Vice President, Chief Legal Officer and Corporate Secretary of Valvoline since January 2017. Ms. O'Daniel served as General Counsel and Corporate Secretary of Valvoline from September 2016 to January 2017. She served as Lead Commercial Counsel of Valvoline from April 2014 to September 2016 and as Litigation Counsel of Valvoline from July 2007 to April 2014.

JONATHAN L. CALDWELL (age 44) is Senior Vice President and Chief People Officer of Valvoline since April 2020. Mr. Caldwell served as Senior Director, Human Resources of Valvoline from March 2018 to April 2020 and as Senior Director, Global Talent Management of Valvoline from October 2016 to March 2018. Prior to joining Valvoline, Mr. Caldwell was Vice President and Director, Talent Management and Development at Fifth Third Bank from March 2012 to October 2016.

THOMAS A. GERRALD II (age 57) is Senior Vice President, Chief Supply Chain Officer of Valvoline since October 2021. Previously, Mr. Gerrald served as Senior Vice President, Global Products - North America of Valvoline from May 2021 to October 2021, as Senior Vice President, Core North America of Valvoline from September 2016 to May 2021, and as Senior Vice President, U.S. Installer Channel, of Valvoline from June 2012 to September 2016.

HEIDI J. MATHEYS (age 49) is Senior Vice President, Chief Marketing & Transformation Officer of Valvoline since October 2021. Previously, Ms. Matheys served as Senior Vice President, Chief Marketing Officer of Valvoline from September 2016 to October 2021, as Senior Vice President, Do-It-Yourself ("DIY") Channels, of Valvoline from August 2013 to September 2016, and as Vice President, Global Brands, of Valvoline from September 2012 to August 2013.

JAMAL K. MUASHSHER (age 46) is Senior Vice President and President, Global Products of Valvoline since October 2021. Previously, Mr. Muashsher served as Senior Vice President, Global Products - International of Valvoline from May 2021 to October 2021, as Senior Vice President, International, of Valvoline from March 2019 to May 2021, and as Vice President, Marketing, Digital and Customer Experience of Core North America from June 2016 to March 2019 and as Director of Marketing, DIY, of Valvoline from August 2014 to June 2016.

MICHAEL S. RYAN (age 54) is Chief Accounting Officer and Controller of Valvoline since September 2019. Prior to joining Valvoline, Mr. Ryan was Senior Vice President, Financial Operations and Chief Accounting Officer at Utz Quality Foods, LLC from 2017 to 2019. Prior to that role, Mr. Ryan was Interim Chief Financial Officer at SolAero Technologies Corporation from 2016 to 2017. Mr. Ryan also held the role of Senior Vice President, Chief Accounting Officer and Controller, at Hanesbrands, Inc. from 2012 to 2015.

ITEM 1A. RISK FACTORS

The following “risk factors” could materially and adversely affect Valvoline’s business, operations, financial position or future financial performance. This information should be considered when reading the rest of this Annual Report on Form 10-K, including Management’s Discussion and Analysis and the consolidated financial statements and related notes. These factors could cause future results to differ from those in forward-looking statements and from historical trends.

Risks related to the industries in which Valvoline operates

Because of the concentration of Valvoline’s sales to a small number of customers, the loss of one or more, or a significant reduction in orders from, its top customers could adversely affect its financial results, as could the loss of one of its distributor relationships.

Valvoline’s Global Products segment’s sales represented approximately 59% of Valvoline’s total sales in fiscal 2021. Five key DIY retail channel customers together accounted for 28% of Global Products’ fiscal 2021 sales and 43% of the Company’s outstanding trade accounts receivable as of September 30, 2021. One of these key customers accounted for approximately 11% of Global Products’ fiscal 2021 sales. Valvoline’s volume of sales to these customers fluctuates and can be influenced by many factors, including product pricing, competition for shelf space, purchasing patterns and promotional activities. For example, Valvoline has had mixed results with its DIY retail channel customers shifting shelf distribution towards private label lubricant products, which has negative impacts on Global Products’ retail channel DIY branded lubricant sales. Additionally, many of Valvoline’s retail customers have changed their promotional strategies, increasing the frequency and number of brands promoted at any given time, including private label, which has further negatively impacted branded lubricant sales within the retail channel. In response to these market dynamics, Valvoline has strengthened its consumer messaging, optimized pricing in relation to these promotional strategies and focused its efforts on increasing synthetic lubricant sales; however, if those strategies are not effective, or if Valvoline is unable to adapt to changing market dynamics, Valvoline’s results of operations could be negatively affected. The loss of, or significant reduction in orders from, one of Valvoline’s top five retail customers or any other significant customer could have a material adverse effect on its business, financial condition, results of operations or cash flows, as could customer disputes regarding shipments, fees, merchandise condition or related matters. Valvoline’s inability to collect accounts receivable from one of its major customers, or a significant deterioration in the financial condition of one of these customers, including a bankruptcy filing or a liquidation, could also have a material adverse effect on Valvoline’s financial condition, results of operations or cash flows.

Valvoline also relies on independent distributors to sell and deliver its products. The consolidation of distributors, loss of a relationship with a distributor, significant disagreement with a distributor, or significant deterioration in the financial condition of a distributor could also have a material adverse effect on Valvoline’s financial condition, results of operations or cash flows.

Valvoline faces significant competition from other companies, which places downward pressure on prices and margins and may adversely affect Valvoline’s business and results of operations.

Valvoline operates in highly competitive markets, competing against a number of domestic and international companies. Competition is based on several key criteria, including brand recognition, product performance and quality, product price, product availability and security of supply, ability to develop products in cooperation with customers and customer service, as well as the ability to bring innovative products or services to the marketplace. Certain key competitors, including Shell/Pennzoil, BP/Castrol and Exxon/Mobil, are significantly larger than Valvoline and have greater financial resources and more diverse portfolios of products and services, leading to greater operating and financial flexibility. As a result, these competitors may be better able to withstand adverse changes in conditions within the relevant industry, retail market dynamics, the prices of raw materials and energy or general economic conditions. In addition, competitors’ pricing decisions could compel Valvoline to decrease its prices, which could negatively affect Valvoline’s margins and profitability.

Valvoline continues to see increasing competition from private label competitors, which has negatively impacted branded lubricant sales in the retail channel as price gaps between private label and branded products has grown. Further competition from private label competitors, including the entry of new private label competitors, or additional

competition in markets served by Valvoline, could adversely affect margins and profitability and could lead to a reduction in market share. Also, Valvoline competes in certain markets that are relatively flat to declining, such as the U.S. passenger car motor oil market. If Valvoline's strategies for dealing with these markets and leveraging market opportunities are not successful, its results of operations could be negatively affected.

Rising and volatile raw material costs and supply-chain constraints or disruptions could adversely affect Valvoline's results of operations.

Increases in raw material prices, including those from inflationary pressures or from supply chain constraints such as those experienced in fiscal 2021 for base oils and additives, have in the past and may continue in the future to adversely impact Valvoline's costs, results of operations and the valuation of its inventory. In fiscal 2021, results were impacted by significant rising raw material costs, a substantial portion of which were passed through to customers through a series of price increases. Pricing actions generally lag material cost increases as many customer contracts are negotiated, with a smaller but meaningful portion indexed to accommodate changes in base oil prices. Although Valvoline expects lingering price-cost lag to impact the first half of 2022, the Company is making progress passing these cost increases through and expects to execute additional pricing actions in the first half of fiscal 2022. Valvoline may not always be able to raise prices in response to increased costs of raw materials or may experience a lag in passing through such cost increases, as the ability to pass on the costs of such price increases is largely dependent upon market conditions. Likewise, reductions in the valuation of Valvoline's inventory due to market volatility may not be recovered and could result in losses.

Valvoline purchases certain products and raw materials from suppliers, often pursuant to written supply contracts. If those suppliers are unable to meet Valvoline's orders in a timely manner or choose to terminate or otherwise avoid contractual arrangements, Valvoline may not be able to make alternative supply arrangements or may face increased costs from alternative suppliers. For base oils, Valvoline's suppliers are primarily large oil producers, many of whom operate oil lubricant production and sales businesses as part of their enterprise. There are risks inherent in obtaining important raw materials from actual or potential competitors, including the risk that applicable antitrust laws may be inadequate to mitigate Valvoline's exposure to these risks. Valvoline purchases substantially all of its lubricant additives from four key suppliers. Because the industry is characterized by a limited number of lubricant additives suppliers, there are a limited number of alternative suppliers with whom Valvoline could transact in the event of a disruption to its existing supply relationships; for example, due to disruptions to its suppliers' operations caused by natural disasters, severe weather conditions, climate change, significant changes in trade regulations, increases in costs, or any deterioration in the financial viability of or relationships with its key suppliers.

In fiscal 2021, certain of Valvoline's suppliers began to experience disruptions in their supply chain as demand overwhelmed supply related partially to pandemic shutdowns and adverse weather events along the Gulf Coast, notably the unprecedented freezing in Texas, that impacted many chemical suppliers in those areas. Valvoline worked with its key suppliers to manage through the challenges and is continuing to monitor the constraints, expecting some lingering impacts in the first half of fiscal 2022. Should conditions such as supply chain congestion or availability related to severe weather or climate conditions worsen, become more severe or last for an extended period of time, Valvoline's supply of raw materials or other products could impact its ability to meet customer demands.

Also, domestic and global government regulations related to the manufacture or transport of certain raw materials may impede Valvoline's ability to obtain those raw materials on commercially reasonable terms. If Valvoline is unable to obtain and retain qualified suppliers under commercially acceptable terms, its ability to manufacture and deliver products in a timely, competitive and profitable manner or grow its business successfully could be adversely affected.

Demand for Valvoline's products and services could be adversely affected by consumer spending trends, declining economic conditions, industry trends and a number of other factors, all of which are beyond its control.

Demand for Valvoline's products and services may be affected by a number of factors it cannot control, including the number and age of vehicles in current service, regulation and legislation, technological advances in the automotive industry and changes in engine technology, including the adoption rate of electric or other alternative engine technologies, changing automotive OEM specifications and longer recommended intervals between oil changes. In addition, during periods of declining economic conditions, consumers may defer vehicle maintenance.

Similarly, increases in energy prices or other factors may cause miles driven to decline, resulting in less vehicle wear and tear and lower demand for maintenance, which may lead to consumers deferring purchases of Valvoline's products and services. All of these factors, which impact metrics such as drain intervals and oil changes per day, could result in a decline in the demand for Valvoline's products and services and adversely affect its sales, cash flows and overall financial condition.

Failure to develop and market new products, services and production technologies could impact Valvoline's competitive position and have an adverse effect on its business and results of operations.

The lubricants industry is subject to periodic technological change and ongoing product improvements. To maintain margins and remain competitive, Valvoline must successfully innovate and introduce new products, improvements or services that appeal to its customers and global consumers. Changes in additive technologies, base oil production techniques and sources, and the demand for improved performance by OEMs and consumers place particular pressure on Valvoline to continue to improve its product offerings. In addition, the adoption of electric vehicles is increasing and is expected to increase at a faster pace in future years as certain states and international governments implement limits on the sale of vehicles with internal combustion engines, which reduces demand for lubricants, but expands the opportunity for other products and services required by electric vehicles, including coolants, fluids and greases. If Valvoline is unable to develop and market products and services for electric vehicles, its business and results of operations could be adversely impacted. As automotive technologies evolve, Valvoline could be required to comply with any new or stricter laws or regulations, which could require additional expenditures by Valvoline or its suppliers and could adversely impact business results.

Valvoline's efforts to respond to changes in consumer demand in a timely and cost-efficient manner to drive growth could be adversely affected by difficulties or delays in product development and service innovation, including the inability to identify viable new products, successfully complete research and development, obtain regulatory approvals, obtain intellectual property protection or gain market acceptance of new products or service techniques. Due to the lengthy development process, technological challenges and intense competition, there can be no assurance that any of the products or services Valvoline is currently developing, or could develop in the future, will achieve substantial commercial success. The time and expense invested in product development may not result in commercial products or provide revenues. Valvoline could be required to write-off its investments related to a new product that does not reach commercial viability. Moreover, Valvoline may experience operating losses after new products are introduced and commercialized because of high start-up costs, unexpected manufacturing costs or problems, or lack of demand.

Damage to Valvoline's brand and reputation could have an adverse effect on its business.

Maintaining Valvoline's strong reputation with both consumers and customers is a key component of its business. Product liability claims, false advertising claims, product or service complaints or recalls, its inability to ship, sell or transport affected products and governmental investigations could result in substantial and unexpected expenditures and affect consumer or customer confidence in Valvoline's products and services, which may materially and adversely affect its business operations, decrease sales and increase costs. Additionally, as consumers are shifting to more environmentally-conscious electric and hybrid vehicles, the inability of Valvoline to continue its development of new products and services to adapt to those changing demands could affect the Company's reputation as an environmentally friendly choice for vehicle care and could reduce demand for its products. Further, legislators, consumers, investors and other stakeholders are increasingly focusing on environmental, social and governance policies of companies. This focus could result in new or increased legislation or disclosure requirements. In the event that such requirements result in increased costs or a negative perception of the Company, there could be an adverse effect on the business or its results of operations.

Valvoline manufactures and markets a variety of products, such as automotive and industrial lubricants and automotive coolants and chemicals, and provides automotive maintenance services. If allegations are made that some of Valvoline's products have failed to perform up to consumers' or customers' expectations or have caused damage or injury to individuals or property, or that Valvoline's services were not provided in a manner consistent with its vision and values, the public may develop a negative perception of Valvoline and its brands. In addition, if Valvoline's franchisees, Express Care and joint venture operators experience service failures or do not successfully operate their quick lube service centers in a manner consistent with Valvoline's standards, its brand, image and reputation could be harmed, which in turn could negatively impact its business and operating results. In addition, if

any party with whom Valvoline has a sponsorship relationship were to generate negative publicity, Valvoline's brand image could be harmed. A negative public perception of Valvoline's brands, whether justified or not, could impair its reputation, involve it in litigation, damage its brand equity and have a material adverse effect on its business. In addition, damage to the reputation of Valvoline's competitors or others in its industry could negatively impact Valvoline's reputation and business.

Risks related to executing Valvoline's strategy

The proposed separation of Valvoline's two business segments, Retail Services and Global Products, could be disruptive to Valvoline's business and operations, and there can be no assurance that it will provide business benefits or that it will be consummated within any specified time period or at all.

On October 12, 2021, Valvoline announced that, following a comprehensive review of strategic alternatives by Valvoline's Board of Directors (the "Board") and executive management, it is pursuing the separation of its two business segments, Retail Services and Global Products (the "Proposed Separation"). Valvoline is working with its outside advisors on determining the best way to accomplish the Proposed Separation. No timetable has been established for the completion of the Proposed Separation, and Valvoline does not intend to disclose further developments with respect to this process, unless and until the Board approves a specific transaction or action. There are many factors that could impact the structure or timing of, or Valvoline's determination to proceed with, the Proposed Separation, including global economic conditions, tax considerations, market conditions and changes in the regulatory or legal environment, any of which could adversely impact the value of the Proposed Separation to Valvoline's shareholders.

The Proposed Separation, if consummated, involves risks, including potential difficulties associated with the separation of operations, services and personnel, potential disruption in Valvoline's operations or businesses, the potential loss of, or inability to recruit, key employees and potential adverse effects on relationships with key customers and other business counterparties. In addition, Valvoline will incur significant expense in connection with pursuing the Proposed Separation. Pursuing the Proposed Separation will require significant amounts of management time and effort, which may divert management's attention from other aspects of Valvoline's business operations. If Valvoline does not successfully manage these risks, Valvoline's business, financial condition and results of operations could be adversely affected.

The Proposed Separation may not achieve the intended results, or results may take longer to realize than expected. Unanticipated developments could delay, prevent or otherwise adversely affect the Proposed Separation, including disruptions in general market conditions, the capital markets or other developments. The anticipated benefits of the Proposed Separation are based on a number of assumptions, some of which may prove incorrect. In addition, Valvoline cannot assure that it will be able to complete the Proposed Separation within any specified timeline, or at all. Delays or failure to consummate the Proposed Separation could negatively affect Valvoline's business, financial condition and results of operations.

Valvoline has set aggressive growth goals for its business, including increasing sales, cash flow, market share, margins and number of Retail Services stores, to achieve its long-term strategic objectives. Execution of Valvoline's growth strategies and business plans to facilitate that growth involves a number of risks.

Valvoline has set aggressive growth goals for its business to meet its long-term strategic objectives and improve shareholder value by aggressively growing Retail Services organically and through acquisitions, and developing Global Products with the goal of becoming a more service-driven business. Valvoline's failure to meet one or more of these goals or objectives could negatively impact its business and is one of the most important risks that Valvoline faces. Aspects of that risk include, among others, changes to the global economy, failure to identify acquisition targets or real estate for new stores to grow Retail Services, construction costs or delays limiting new store growth, failure to develop products or services for electric vehicles, changes to the competitive landscape, including those related to automotive maintenance recommendations and consumer preferences, continued private label growth, entry of new competitors, failure to grow the Valvoline brand internationally, attraction and retention of skilled employees, failure to successfully develop and implement digital platforms to support the Company's growth initiatives, the potential failure of product innovation plans, failure to comply with existing or new regulatory

requirements, failure to maintain a competitive cost structure and other risks outlined in greater detail in this “Risk Factors” section.

Valvoline's performance is highly dependent on attracting and retaining appropriately qualified employees in its service center stores, manufacturing plants and distribution centers, research and development facilities, and corporate offices. A tight labor market in fiscal 2021 and continuing into fiscal 2022, has led to challenges in staffing service center stores due to labor shortages as a number of trends conflate reflecting changing demographics, governmental policies, employee sentiment, and technological change. In response, Valvoline made labor investments and enhanced its recruiting programs to attract new employees. As trends in the labor market evolve, the Company may experience future challenges in recruiting and retaining talent in various locations. Valvoline operates in a competitive labor market, and failure to recruit or retain qualified employees in the future, or the Company's inability to implement corresponding adjustments to its labor model, including compensation and benefit packages, could impair the Company's ability to grow and meet its strategic goals.

Valvoline may be unable to execute its growth strategy, and acquisitions, joint ventures, strategic alliances and investments could result in operating difficulties, dilution and other harmful consequences that may adversely impact Valvoline's business and results of operations.

Acquisitions, particularly for the Retail Services business segment, are an important element of Valvoline's overall growth strategy. Valvoline had strong acquisition growth in fiscal 2021, and has developed a pipeline of future viable targets expected to complement the segment's strong growth initiatives. An insufficient quantity of strategic acquisition targets in the marketplace, or the inability of Valvoline to successfully acquire those targets, may have a negative impact on Valvoline's future results. In addition, building strategic alliances for distribution and manufacturing, particularly in international markets, including through joint venture partnerships, product distribution and toll manufacturing arrangements, are also an important element of Valvoline's overall growth strategy. Valvoline expects to continue to evaluate and enter into discussions regarding a wide array of potential strategic transactions, and to continue to grow its Retail Services business organically and through acquisitions. An inability to execute these plans could have a material adverse impact on Valvoline's financial condition and results of operations. In addition, the anticipated benefits of Valvoline's acquisitions may not be realized and the process of integrating an acquired company, business, or product may create unforeseen operating difficulties or expenditures.

Valvoline's acquisitions, investments and strategic alliances could also result in dilutive issuances of its equity securities, the incurrence of debt, contingent liabilities or amortization expenses, impairment of goodwill or purchased long-lived assets and restructuring charges, any of which could harm its financial condition, results of operations and cash flows.

The business model for Valvoline's Retail Services business, including its relationships with franchisees, presents a number of risks.

The Retail Services business is made up of a network of both company-operated and franchised stores. Valvoline's success relies in part on the financial success and cooperation of its franchisees. However, Valvoline has limited influence over their operations. Valvoline's franchisees manage their businesses independently and are responsible for the day-to-day operations of approximately 55% of Retail Services stores as of September 30, 2021. Valvoline's royalty, product, and other revenues from franchised stores are largely dependent on franchisee sales. Valvoline's revenues and margins could be negatively affected should franchisees experience limited or no sales growth, or if the franchisee fails to fulfill its obligations under negotiated business development, franchise, or supply agreements with Valvoline. If sales or business performance trends worsen for franchisees, their financial results may deteriorate, which could result in, among other things, store closures, delayed or reduced royalties and purchases and reduced growth in the number of Retail Services stores.

Valvoline's success also depends on the willingness and ability of its independent franchisees to implement major initiatives, which may require additional investment by them, and to remain aligned with Valvoline on operating, promotional and capital-intensive reinvestment plans. The ability of Valvoline's franchisees to contribute to the achievement of Valvoline's overall plans is dependent in large part on the availability of funding to its franchisees at reasonable interest rates and may be negatively impacted by the financial markets in general or the creditworthiness of individual franchisees. The size of Valvoline's largest franchisees creates additional risk due to their importance to Retail Services' growth strategy, requiring their cooperation and alignment with Valvoline's initiatives.

Valvoline is the primary supplier of products to all Retail Services stores. The growth and performance of Valvoline's lubricants and other product lines depends in large part on the performance of its Retail Services business, potentially amplifying the negative effect of the other risks related to the Retail Services business model.

Valvoline shares in ownership of joint ventures, which may limit its ability to manage third-party risks associated with these projects.

For financial or strategic reasons, Valvoline conducts a portion of its business through joint ventures. Valvoline's joint ventures, particularly its existing 50/50 joint ventures with Cummins in India, China and Argentina, are an important part of the Company's international growth strategy. In its joint ventures, while Valvoline shares influence over the operation of the joint venture and its assets, it does not have a controlling interest or vote. Therefore, joint ventures may involve risks such as the possibility that a joint venture partner in an investment might become bankrupt, be unable to meet its capital contribution obligations, have economic or business interests or goals that are inconsistent with Valvoline's business interests or goals, or take actions that are contrary to Valvoline's direction or to applicable laws and regulations.

Further, Valvoline is a supplier to certain of its joint venture partners that sell to their end customers. If Valvoline's relationship with one or more of its partners were to deteriorate, it could negatively impact Valvoline's ability to reach and penetrate certain global markets and achieve its growth goals. In addition, joint venture partners could take actions that violate the terms of its investment agreements with Valvoline, or Valvoline may be unable to gain concurrence with its joint venture partners to take desired actions with its investments. Additionally, actions by joint ventures, joint venture partners or other third-parties could expose Valvoline to claims for damages, financial penalties and reputational harm, any of which could have an adverse effect on its business and operations. Although joint ventures may generate positive cash flows, in some cases they may be unable or unwilling to make distributions to the joint venture partners.

Risks related to operating Valvoline's business

Valvoline's significant global operations subject it to risks, which could adversely affect its business, financial condition and results of operations.

Valvoline expects its non-U.S. sales to continue to grow as the Company continues to invest in international markets. Sales outside of the U.S. represented 26% of the Company's consolidated sales in fiscal 2021. The Company has multiple manufacturing locations outside of the United States, which includes its blending and packaging plant in China that began production in fiscal 2021. Accordingly, its business is subject to risks related to the differing legal, political, cultural, social and regulatory requirements and economic conditions of many jurisdictions.

The global nature of Valvoline's business presents difficulties in hiring and maintaining a workforce in certain countries. Fluctuations in exchange rates could affect product demand and may adversely affect the cost of transacting in other countries. In addition, other countries may impose additional withholding taxes or otherwise tax Valvoline's income, or adopt other restrictions on trade or investment, including currency exchange controls. The imposition of new or additional tariffs or other significant changes in trade regulations are also risks that could impair Valvoline's financial performance and increase operating costs which Valvoline may not be able to recapture.

Certain legal and political risks are also inherent in the operation of a company with Valvoline's global scope. For example, it may be more difficult for Valvoline to enforce its agreements or collect receivables through other legal systems. There is a risk that non-U.S. governments may nationalize private enterprises in certain countries where Valvoline operates. Social and cultural standards in certain countries may not support compliance with Valvoline's corporate policies including those that require compliance with substantive laws and regulations. Also, changes in general economic and political conditions in countries where Valvoline operates are a risk to Valvoline's financial performance and future growth. As Valvoline continues to operate its business globally, its success will depend, in part, on its ability to anticipate and effectively manage these and other related risks. There can be no assurance that the consequences of these and other factors relating to Valvoline's global operations will not have an adverse effect on its business, financial condition or results of operations.

Adverse developments in the global economy or in regional economies and potential disruptions of financial markets could negatively impact Valvoline's customers and suppliers, and therefore have a negative impact on its results of operations.

A global or regional economic downturn may reduce customer demand or inhibit Valvoline's ability to produce and sell products. Valvoline's business and operating results are sensitive to global and regional economic downturns, credit market tightness, declining consumer and business confidence, fluctuating commodity prices, volatile exchange rates, changes in interest rates, sovereign debt defaults and other challenges, including those related to international sanctions and acts of aggression or threatened aggression that can affect the global economy. With 76% of Valvoline's sales coming from North America in fiscal 2021, Valvoline is particularly sensitive to the risk of an economic slowdown or downturn in that region. In the event of adverse developments or stagnation in the economy or financial markets, Valvoline's customers may experience deterioration of their businesses, reduced demand for their products, cash flow shortages and difficulty obtaining financing. As a result, existing or potential customers might delay or cancel plans to purchase products and may not be able to fulfill their obligations to Valvoline in a timely fashion. Further, suppliers may experience similar conditions, which could impact their ability to fulfill their obligations to Valvoline. A weakening or reversal of the global economy or a substantial part of it could negatively impact Valvoline's business, results of operations, financial condition and ability to grow.

Pandemics, epidemics or disease outbreaks, such as the novel coronavirus, may disrupt Valvoline's business and operations, which could materially affect Valvoline's financial condition, results of operations and forward-looking expectations.

Disruptions caused by pandemics, epidemics or disease outbreaks, such as COVID-19, in the United States or globally, could materially affect Valvoline's results of operations, financial condition and forward-looking expectations. The ongoing COVID-19 pandemic continues to impact Valvoline's business, particularly as it relates to congestion in the supply chain and related cost and sourcing challenges, as well as the disruption in the labor market. The extent to which the pandemic will continue to impact Valvoline's business results and operations remains uncertain considering the rapidly evolving environment, duration and severity of the spread of COVID-19, emerging variants, vaccine and booster effectiveness, public acceptance of safety protocols, and government measures, including vaccine mandates, implemented at the local and federal levels designed to slow and contain the spread of COVID-19, among others.

Valvoline has seen a marked improvement in miles driven and demand in the Company's key markets during fiscal 2021 compared to the prior year lows at the peak of COVID-19 restrictions. However, the spread of new or worsening COVID-19 variants could result in the resurgence of lockdowns or stay-at-home guidelines which would continue to place pressure on Valvoline's business, results of operations, liquidity, financial condition, and forward-looking expectations, particularly if these impacts continue for an extended period of time. Valvoline has also experienced uneven recovery within its international markets in fiscal 2021 as COVID-19 outbreaks exhibit patterns of improvement and resurgence worldwide, particularly in southeast Asia. As this uneven recovery continues, and depending on the severity and duration of additional outbreaks, Valvoline may voluntarily elect or be required to temporarily close or reduce operations at its lubricant blending and packaging plants as well as its service center stores.

Worsening conditions in the severity and spread of COVID-19, or other pandemics, epidemics, or disease outbreaks, could adversely affect Valvoline's ability to implement its growth plans, including, without limitation, delay the construction or acquisition of new Retail Services service center stores, or negatively impact Valvoline's ability to successfully execute plans to enter into new markets; reduce demand for Valvoline's products and services; cause Valvoline to experience further inefficiencies in the supply chain, including but not limited to, the delivery of products and services to Valvoline's customers, receipt of raw materials from suppliers or increased costs of raw materials; reduce sales or profitability; negatively impact Valvoline's ability to maintain operations; or lead to significant disruption of global financial markets, which may reduce the Company's ability to access capital and, in the future, negatively affect the Company's liquidity.

Valvoline uses information technology systems to conduct business, and a cyber security threat, privacy/data breach, or failure of a key information technology system could adversely affect Valvoline's business and reputation.

Valvoline relies on its information technology systems, including systems which are managed or provided by third-party service providers, to conduct its business. Despite employee training and other measures to mitigate them, cyber-security threats to its information technology systems, and those of its third-party service providers, are increasing and becoming more advanced and breaches could occur as a result of denial-of-service attacks or other cyber-attacks, hacking, phishing, viruses, malicious software, ransomware, computer malware, social engineering, break-ins, security breaches or due to error or misconduct by its employees, contractors or third-party service providers. A breach of or failure of Valvoline's information technology systems, including systems in which data is stored in or may be transferred across third-party platforms, could lead to the loss and destruction of trade secrets, confidential information, proprietary data, intellectual property, customer and supplier data, and employee personal information, and could disrupt business operations which could adversely affect Valvoline's relationships with business partners and harm its brands, reputation and financial results. Valvoline's customer and vendor data may include names, addresses, phone numbers, email addresses and payment account information, among other information. Depending on the nature of the customer data that is compromised, Valvoline may also have obligations to notify users, law enforcement or payment companies about the incident and may need to provide some form of remedy, such as refunds for the individuals affected by the incident. Valvoline could also face fines and penalties should it fail to adequately notify affected parties pursuant to new and evolving privacy laws in various jurisdictions in which it does business, as outlined in greater detail in the "Regulatory, legal, and financial risks" section below.

Business disruptions from natural, operational and other catastrophic risks could seriously harm Valvoline's operations and financial performance. In addition, a catastrophic event at one of Valvoline's facilities or involving its products or employees could lead to liabilities that could further impair its operations and financial performance.

Business disruptions, including those related to operating hazards inherent in the production of lubricants, natural disasters, severe weather conditions, climate change, supply or logistics disruptions, increasing costs for energy, temporary plant and/or power outages, information technology systems and network disruptions, cyber-security breaches, terrorist attacks, armed conflicts, war, pandemic diseases, fires, floods or other catastrophic events, could seriously harm Valvoline's operations, as well as the operations of Valvoline's customers and suppliers, and may adversely impact Valvoline's financial performance. Although it is impossible to predict the occurrence or consequences of any such events, they could result in reduced demand for Valvoline's products; make it difficult or impossible for Valvoline to manufacture its products, deliver products and services to its customers, or receive raw materials from suppliers; lead to increased costs of raw materials; or create delays and inefficiencies in the supply chain. In addition to leading to a serious disruption of Valvoline's businesses, a catastrophic event at one of Valvoline's facilities or involving its products or employees could lead to substantial legal liability to or claims by parties allegedly harmed by the event.

While Valvoline maintains business continuity plans that are intended to allow it to continue operations or mitigate the effects of events that could disrupt its business, Valvoline cannot provide assurances that its plans would fully protect it from all such events. In addition, insurance maintained by Valvoline to protect against property damage, loss of business and other related consequences resulting from catastrophic events is subject to significant retentions and coverage limitations, depending on the nature of the risk insured. This insurance may not be sufficient to cover all of Valvoline's damages or damages to others in the event of a catastrophe. In addition, insurance related to these types of risks may not be available now or, if available, may not be available in the future at commercially reasonable rates.

Regulatory, legal, and financial risks

Data protection requirements could increase operating costs and requirements and a breach in information privacy or other related risks could negatively impact operations.

Valvoline is subject to federal, state, and non-U.S. laws, directives, and regulations relating to the collection, use, retention, disclosure, security and transfer of personal data relating to its customers and employees. These laws,

directives and regulations, and their interpretation and enforcement continue to evolve and may be inconsistent from jurisdiction to jurisdiction. For example, the General Data Protection Regulation ("GDPR") applies to all of Valvoline's activities conducted from an establishment in the European Union ("EU") and may also apply to related products and services that Valvoline offers to customers in the EU. In addition, the California Consumer Privacy Act ("CCPA") applies to Valvoline's activities conducted in the state of California. Complying with the GDPR, CCPA, and similar emerging and changing privacy and data protection requirements may cause Valvoline to incur substantial costs or disruption to its operations.

Noncompliance with these legal obligations relating to privacy and data protection could damage Valvoline's reputation and affect its ability to retain and attract customers. Additionally, any failure or perceived failure by Valvoline or any third parties with which it does business, to comply with these privacy and data protection laws, rules and regulations, or with respect to similar obligations to which Valvoline may be or become subject, may result in actions against Valvoline by governmental entities, private claims and litigation, fines, penalties or other liabilities. Any such action would be expensive to defend, damage Valvoline's reputation and adversely affect business, operating results, financial position and cash flows.

The impact of changing laws or regulations or the manner of interpretation or enforcement of existing laws or regulations could adversely impact Valvoline's financial performance and restrict its ability to operate its business or execute its strategies.

New laws or regulations, or changes in existing laws or regulations or the manner of their interpretation or enforcement, could increase Valvoline's cost of doing business and restrict its ability to operate its business or execute its strategies. This risk includes, among other things, compliance with a myriad of U.S. and non-U.S. tax laws and regulations; anti-competition laws and regulations; product compliance regulations, including the EU's Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") regulation; anti-corruption and anti-bribery laws, including FCPA and the U.K. Bribery Act; anti-money-laundering laws; economic sanctions and export control laws and regulations, including those administered by the U.S. Treasury Department's Office of Foreign Assets Control ("OFAC"); customs laws; and other laws governing Valvoline's operations.

Although Valvoline has implemented policies and procedures to ensure compliance with these laws and regulations, it cannot be sure that its policies and procedures are sufficient or that directors, officers, employees, representatives, distributors, consultants and agents have not engaged and will not engage in conduct for which Valvoline may be held responsible, nor can Valvoline be sure that its business partners have not engaged and will not engage in conduct that could materially affect their ability to perform their contractual obligations to Valvoline or even result in its being held liable for such conduct. Violations of these laws or regulations may result in severe criminal or civil sanctions or penalties, or significant changes in existing laws and regulations may subject Valvoline to other liabilities, which could have a material adverse effect on its business, financial condition, cash flows and results of operations.

Valvoline's substantial indebtedness may adversely affect its business, results of operations and financial condition.

Valvoline has substantial indebtedness and financial obligations. As of September 30, 2021, Valvoline had outstanding indebtedness of \$1.7 billion, with a borrowing capacity remaining under its existing credit facilities of \$586 million. Valvoline may incur substantial additional debt from time to time to finance working capital, capital expenditures, investments or acquisitions, or for other general corporate purposes.

Valvoline's substantial indebtedness could adversely affect its business, results of operations and financial condition by, among other things: requiring Valvoline to dedicate a substantial portion of its cash flows to pay principal and interest on its debt, which would reduce the availability of its cash flow to fund working capital, capital expenditures, acquisitions, execution of its growth strategy and other general corporate purposes; limiting Valvoline's ability to borrow additional amounts to fund working capital, capital expenditures, acquisitions, debt service requirements, execution of its growth strategy and other general corporate purposes; making Valvoline more vulnerable to adverse changes in general economic, industry and regulatory conditions and in its business by limiting its flexibility in planning for or reacting to changing conditions; placing Valvoline at a competitive disadvantage compared with its competitors that have less debt and lower debt service requirements; making Valvoline more vulnerable to increases in interest rates since some of its indebtedness is subject to variable rates of interest; and making it more difficult for Valvoline to satisfy its financial obligations.

In addition, Valvoline may not be able to generate sufficient cash flows to repay its indebtedness when it becomes due and to meet its other cash needs. If Valvoline is not able to pay its debts as they become due, it could be in default under the terms of its indebtedness. Valvoline might also be required to pursue one or more alternative strategies to repay indebtedness, such as selling assets, refinancing or restructuring its indebtedness or selling additional debt or equity securities. Valvoline may not be able to refinance its debt or sell additional debt or equity securities or its assets on favorable terms, if at all, and if it must sell its assets, it may negatively affect Valvoline's ability to generate revenues.

Valvoline's pension and other postretirement benefit plan obligations are currently underfunded, and Valvoline may have to make significant cash payments to some or all of these plans, which would reduce the cash available for its business.

In connection with Valvoline's separation from Ashland, Valvoline assumed certain of Ashland's historical pension and other postretirement benefit plans and related liabilities. The most significant of these plans, the U.S. qualified pension plans, are estimated to be underfunded by \$37 million as of September 30, 2021. The funded status of Valvoline's pension plans is dependent upon many factors, including returns on invested assets, the level of certain market interest rates and the discount rate used to determine pension obligations. Valvoline has taken a number of actions to reduce the risk and volatility associated with the U.S. pension plans, however, changing market conditions or laws and regulations could require material increases in the expected cash contributions to these plans in future years. Specifically, unfavorable returns on plan assets or unfavorable changes in applicable laws or regulations could materially change the timing and amount of required plan funding. In addition, a decrease in the discount rate used to determine pension obligations could result in an increase in the valuation of pension obligations, which could affect the reported funded status of Valvoline's U.S. pension plans and future contributions. Similarly, an increase in discount rates could increase the periodic pension cost in subsequent fiscal years. If any of these events occur, Valvoline may have to make cash payments to its U.S. pension plans, which would reduce the cash available for its business. Finally, Valvoline's policy to recognize changes in the fair value of the pension assets and liabilities annually and as otherwise required through mark to market accounting could result in volatility in Valvoline's earnings, which could be material.

Valvoline may fail to adequately protect its intellectual property rights or may be accused of infringing the intellectual property rights of third parties.

Valvoline relies heavily upon its trademarks, domain names and logos, as well as upon trade secrets, to market its brands and to build and maintain brand loyalty and recognition. Valvoline also relies on a combination of laws and contractual restrictions with employees, customers, suppliers, affiliates and others, to establish and protect its various intellectual property rights. For example, Valvoline has generally registered and continues to register and renew, or secure by contract where appropriate, trademarks and service marks as they are developed and used, and reserve, register and renew domain names as appropriate. Effective trademark protection may not be available or may not be sought in every country in which Valvoline's products are made available and contractual disputes may affect the use of marks governed by private contract. Similarly, not every variation of a domain name may be available to or be registered by Valvoline, even if available.

Valvoline generally seeks to apply for patents or for other similar statutory protections as and if it deems appropriate, based on then-current facts and circumstances, and will continue to do so in the future. No assurances can be given that any patent application Valvoline has filed or will file will result in a patent being issued, or that any existing or future patents will afford adequate or meaningful protection against competitors or against similar technologies. In addition, no assurances can be given that third parties will not create new products or methods that achieve similar results without infringing upon patents Valvoline owns. Furthermore, the terms of patents are finite and the patents that Valvoline owns will eventually expire after the statutory term of patent protection ends in the jurisdiction where such patents are issued.

Despite these measures, Valvoline's intellectual property rights may still not be protected in a meaningful manner, challenges to contractual rights could arise and third parties could copy or otherwise obtain and use Valvoline's intellectual property without authorization, including its trade secrets and other confidential intellectual property. The occurrence of any of these events could result in the erosion of Valvoline's brands and limit its ability to market its brands using its various trademarks, cause Valvoline to lose such trade secrets, as well as impede its ability to

effectively compete against competitors with similar products and services, any of which could adversely affect its business, financial condition and results of operations.

From time to time, Valvoline has been subject to legal proceedings and claims, including claims of alleged infringement of trademarks, copyrights, patents and other intellectual property rights held by third parties. In the future, third parties may sue Valvoline for alleged infringement of their proprietary or intellectual property rights. Valvoline may not be aware of whether its products do or will infringe existing or future patents or other intellectual property rights of others. In addition, litigation may be necessary to enforce Valvoline's intellectual property rights, protect its trade secrets or determine the validity and scope of proprietary rights claimed by others. Any litigation or other intellectual property proceedings of this nature, regardless of outcome or merit, could result in substantial costs and diversion of management and technical resources, or loss of rights in Valvoline's intellectual property, any of which could adversely affect Valvoline's business, financial condition and results of operations.

Valvoline has incurred, and will continue to incur, costs as a result of EHS and hazardous substances liabilities and related compliance requirements. These costs could adversely impact Valvoline's cash flow, its results of operations or financial condition.

Valvoline is subject to extensive federal, state, local and non-U.S. laws, regulations, rules and ordinances relating to pollution, protection of the environment and human health and safety, as well as the generation, storage, handling, treatment, disposal and remediation of hazardous substances and waste materials. Valvoline has incurred, and will continue to incur, costs and capital expenditures to comply with these laws and regulations.

EHS regulations change frequently, and such regulations and their enforcement have tended to become more stringent over time. Accordingly, changes in EHS laws and regulations and the enforcement of such laws and regulations could interrupt Valvoline's operations, require modifications to its facilities or cause it to incur significant liabilities, costs or losses that could adversely affect its profitability. Actual or alleged violations of EHS laws and regulations could result in restrictions or prohibitions on plant operations as well as substantial damages, penalties, fines, civil or criminal sanctions and remediation costs.

Valvoline's business involves the production, storage and transportation of hazardous substances. Under some environmental laws, Valvoline may be strictly liable and/or jointly and severally liable for environmental damages caused by releases of hazardous substances and waste materials into the environment. For instance, under relevant laws and regulations Valvoline may be deemed liable for soil and/or groundwater contamination at sites it currently owns and/or operates even though the contamination was caused by a third party such as a former owner or operator, and at sites it formerly owned and operated if the release of hazardous substances or waste materials was caused by it or by a third party during the period it owned and/or operated the site. Valvoline also may be deemed liable for soil and/or groundwater contamination at sites to which it sent hazardous wastes for treatment or disposal, notwithstanding that the original treatment or disposal activity accorded with all applicable regulatory requirements.

The Company's Amended and Restated Articles of Incorporation (the "Articles") designate the Fayette County Circuit Court of the Commonwealth of Kentucky as the sole and exclusive forum for substantially all disputes between the Company and its shareholders, which may limit a shareholder's ability to bring a claim in a favorable judicial forum for disputes with the Company and its directors, officers or employees.

The Company's Articles specify that the Fayette County Circuit Court of the Commonwealth of Kentucky shall be the sole and exclusive forum for any derivative action or proceeding brought on behalf of the Company, any action asserting a breach of a fiduciary duty, any action asserting a claim arising pursuant to the Kentucky Business Corporation Act, or any action asserting a claim governed by the internal affairs doctrine. This exclusive forum provision does not apply to suits brought to enforce any duty or liability created by the Exchange Act or by the Securities Act of 1933, as amended.

The Company believes that the exclusive forum provision in the Articles benefits the Company by providing increased consistency in the application of Kentucky law for the specified types of actions and may benefit the Company by preventing it from having to litigate claims in multiple jurisdictions (and incur additional expenses) and be subject to potential inconsistent or contrary rulings by different courts, among other considerations. The exclusive forum provision in the Articles, however, may have the effect of discouraging lawsuits against Valvoline's

directors, officers or employees as it could increase a shareholder's cost to bring a claim or limit a shareholder's ability to bring a claim in a judicial forum that it finds favorable for such claims. In connection with any applicable action brought against the Company, it is possible that a court could find the forum selection provisions contained in the Articles to be inapplicable or unenforceable in such action. If a court were to render such a finding, the Company may incur additional costs to resolve the action in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

Risks related to Valvoline's separation from Ashland

The Distribution could result in significant tax liability to Ashland, and in certain circumstances, Valvoline could be required to indemnify Ashland for material taxes pursuant to indemnification obligations.

Ashland obtained a written opinion of counsel to the effect that the Distribution should qualify for non-recognition of gain and loss under Section 355 of the Internal Revenue Code of 1986, as amended (the "Code"). The opinion of counsel does not address any U.S. state, local or non-U.S. tax consequences of the Distribution. The opinion assumes that the Distribution is completed according to the terms of the agreement entered into between Ashland and Valvoline (the "Separation Agreement") and relies on the facts as described in the Separation Agreement, the Tax Matters Agreement, other ancillary agreements, the information statement distributed to Ashland's shareholders in connection with the Distribution and a number of other documents. In addition, the opinion is based on certain representations as to factual matters from, and certain covenants by, Ashland and Valvoline. The opinion cannot be relied on if any of the assumptions, representations or covenants is incorrect, incomplete or inaccurate or is violated in any material respect.

The opinion of counsel is not binding on the Internal Revenue Service (the "IRS") or the courts, and thus there can be no assurance that the IRS or a court will not take a contrary position. Ashland has not requested, and to the best of Valvoline's knowledge does not intend to request, a ruling from the IRS regarding the U.S. federal income tax consequences of the Distribution.

If the Distribution were determined not to qualify for non-recognition of gain and loss, then Ashland would recognize a gain as if it had sold its Valvoline common stock in a taxable transaction in an amount up to the fair market value of the common stock it distributed in the Distribution. In addition, certain reorganization transactions undertaken in connection with the separation and the Distribution could be determined to be taxable, which could result in additional taxable gain. Under certain circumstances set forth in the Tax Matters Agreement, Valvoline could have joint and several liability for gain recognition relating to the separation from Ashland, and/or a substantial indemnification obligation to Ashland with respect to the tax associated with some or all of such gain, which could have a material adverse impact on Valvoline's financial condition.

Valvoline's inability to resolve favorably any disputes that arise between Valvoline and Ashland with respect to their past relationship may adversely affect its operating results.

Valvoline may not be able to resolve disputes with Ashland, and even if it does, the resolution may not be favorable and could adversely affect Valvoline's operating results. Disputes between Ashland and Valvoline could relate to a number of areas relating to their past relationship, including labor; tax; employee benefits, including pension liabilities; indemnification; services provided to one another; and other matters arising from Valvoline's separation from Ashland.

Ashland has agreed to indemnify Valvoline for certain liabilities. However, there can be no assurance that the indemnity will be sufficient to insure Valvoline against the full amount of such liabilities, or that Ashland's ability to satisfy its indemnification obligation will not be impaired in the future.

Pursuant to the terms of the Separation Agreement and certain other agreements with Ashland, Ashland agreed to indemnify Valvoline for certain liabilities. However, third parties could also seek to hold Valvoline responsible for any of the liabilities that Ashland agreed to retain, and there can be no assurance that the indemnity from Ashland will be sufficient to protect Valvoline against the full amount of such liabilities, or that Ashland will be able to fully satisfy its indemnification obligations in the future. Even if Valvoline ultimately succeeded in recovering from Ashland any

amounts for which Valvoline is held liable, Valvoline may be temporarily required to bear these losses. Each of these risks could negatively affect Valvoline's business, financial position, results of operations and cash flows.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Valvoline is headquartered in Lexington, Kentucky, where the Company leases and owns over 230,000 square feet of office, research and development and warehouse space to support operations across its business. Valvoline owns and leases several additional facilities throughout North America, Europe, Australia, and Asia that comprise over 4 million square feet of blending, warehouse, office, and research and development space. In addition, Valvoline owns or leases the property associated with 719 company-operated retail service center stores under the Valvoline Instant Oil ChangeSM and Valvoline Great Canadian Oil Change brands throughout the United States and Canada, respectively. The properties leased by Valvoline generally have expiration dates ranging from less than one year to more than 20 years, with certain renewal options available.

In addition, Valvoline contracts with third parties to provide blending, packaging, warehousing, and distribution services. Valvoline believes its physical properties are suitable and adequate for the Company's business, and none of the property owned by Valvoline is subject to any major known encumbrances. Additional information regarding lease obligations may be found in Note 5 of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Annual Report on Form 10-K.

ITEM 3. LEGAL PROCEEDINGS

From time to time, Valvoline is party to lawsuits, claims and other legal proceedings that arise in the ordinary course of business. For a description of Valvoline's legal proceedings, refer to Note 11 of the Notes to Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Market information

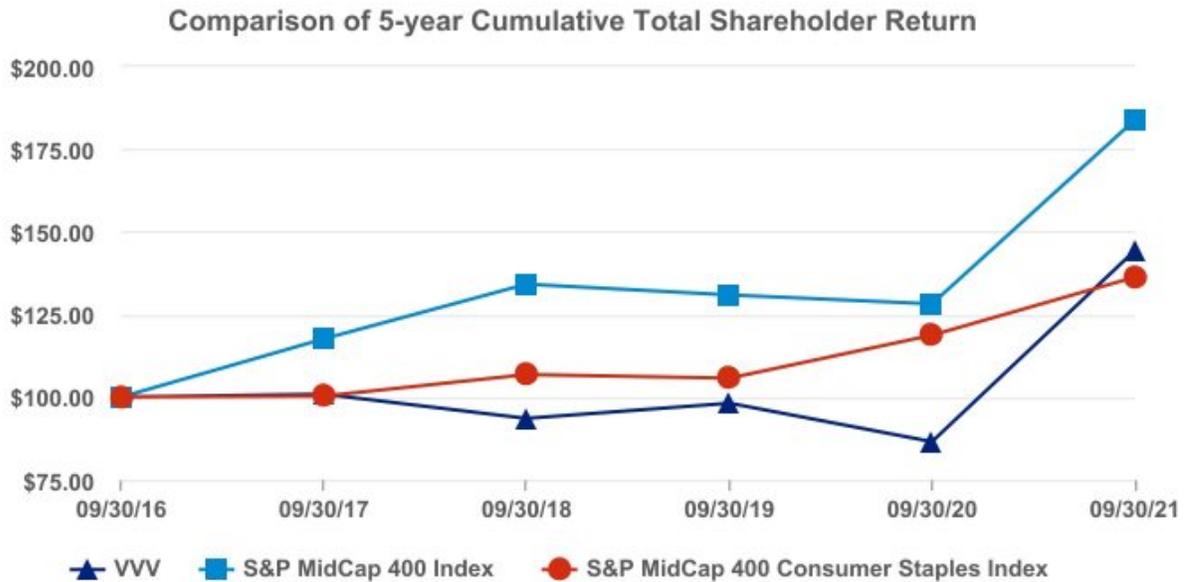
Valvoline common stock is listed on the NYSE and trades under the symbol "VVV." As of November 15, 2021, there were approximately 9,000 registered holders of Valvoline common stock.

Dividend policy

Valvoline expects to continue to pay quarterly cash dividends to the holders of its common stock; however, the declaration and payment of dividends to holders of Valvoline common stock will be at the discretion of Valvoline's Board of Directors (the "Board") in accordance with applicable law after taking into account various factors, including Valvoline's financial condition, operating results, current and anticipated cash needs, cash flows, impact on Valvoline's effective tax rate, indebtedness, legal requirements and other factors that the Board considers relevant. In addition, the instruments governing Valvoline's indebtedness may limit its ability to pay dividends. Therefore, no assurance is given that Valvoline will pay any dividends to its stockholders, or as to the amount of any such dividends if the Board determines to do so.

Stock performance graph

The following graph compares the cumulative total stockholder return on a \$100 investment in Valvoline common stock, the S&P MidCap 400 Index, and the S&P MidCap 400 Consumer Staples Index for the period from September 30, 2016 to September 30, 2021. This graph assumes an investment in Valvoline common stock and each index were \$100 on September 30, 2016 and that all dividends were reinvested.



Comparison of cumulative total returns	09/30/2017	09/30/2018	09/30/2019	09/30/2020	09/30/2021
Valvoline Inc.	\$ 100.74	\$ 93.65	\$ 98.00	\$ 86.60	\$ 144.42
S&P MidCap 400 Index	\$ 117.52	\$ 134.21	\$ 130.87	\$ 128.04	\$ 183.97
S&P MidCap 400 Consumer Staples Index	\$ 100.34	\$ 106.69	\$ 105.60	\$ 118.69	\$ 136.27

Purchases of Company common stock

During the three months ended September 30, 2021, the Company repurchased nearly 1 million shares of its common stock for \$27 million pursuant to the May 17, 2021 Board authorization to repurchase up to \$300 million of common stock through September 30, 2024. As of September 30, 2021, \$273 million remains available for share repurchases under this authorization.

Share repurchase activity during the three months ended September 30, 2021 was as follows:

Fiscal Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs (in millions)
July 1, 2021 - July 31, 2021	361,822	\$ 31.12	361,822	\$ 289
August 1, 2021 - August 31, 2021	281,457	\$ 30.59	281,457	\$ 280
September 1, 2021- September 30, 2021	225,487	\$ 31.33	225,487	\$ 273
Total	<u>868,766</u>	\$ 31.00	<u>868,766</u>	

ITEM 6. SELECTED FINANCIAL DATA

Not applicable as the Company applied the amendment of Regulation S-K Item 301, which became effective for the fiscal year ended September 30, 2021.

Index to Management’s Discussion and Analysis of Financial Condition and Results of Operations

Page

Business Overview	32
Results of Operations - Consolidated Review	37
Results of Operations - Reportable Segment Review	40
Financial Position, Liquidity and Capital Resources	44
New Accounting Pronouncements	47
Critical Accounting Estimates	47

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

The following discussion should be read in conjunction with the consolidated financial statements and the accompanying Notes to Consolidated Financial Statements included in Item 8 of Part II of this Annual Report on Form 10-K.

BUSINESS OVERVIEW AND PURPOSE

Valvoline Inc. is a global vehicle and engine care company that continuously powers the future of mobility through innovative services and products for electric, hybrid, and internal combustion powertrains. Valvoline has consistently led the way innovating and reinventing its services and products for changing technologies and customer needs throughout its 155-year history. Valvoline operates a fast-growing, best-in-class network of service center stores, which are well positioned to serve evolving vehicle maintenance needs with Valvoline’s iconic products. In addition to its quick, easy, and trusted quick lube oil change services and the legendary Valvoline-branded passenger car motor oils, Valvoline provides a wide array of lubricants, chemicals, fluids, and other complementary products and services, including leading the world’s supply of battery fluids to electric vehicle manufacturers, with each solution tailored to help extend vehicle and engine range and efficiency.

Valvoline provides vehicle and engine care solutions to a range of customers, including end consumers, original equipment manufacturers (“OEM”), mass market and automotive parts retailers, small to large installers, vehicle fleets, and distributors, among others. Valvoline operates and franchises approximately 1,600 service center locations and is the second and third largest chain in the United States (“U.S.”) and Canada, respectively, by number of stores. With sales in more than 140 countries and territories, Valvoline’s solutions are available for every engine and powertrain, including high-mileage and heavy-duty applications, and are offered at more than 80,000 locations worldwide.

Valvoline’s fiscal year ends on September 30 of each year and Valvoline has two reportable segments: Retail Services and Global Products with certain corporate and non-operational items included in Corporate to reconcile to consolidated results. Refer to Item 1 included in Part I of this Annual Report on Form 10-K for a description of Valvoline’s reportable segments.

RECENT DEVELOPMENTS

On October 12, 2021, Valvoline announced that it is accelerating its continued transformation by pursuing a separation of its two reportable segments, Retail Services and Global Products. Valvoline is evaluating the alternatives to accomplish the separation, and no timetable has currently been established for its completion. The separation is expected to provide both businesses with the opportunity to pursue their respective strategic priorities, allocate capital to drive success, and create significant and sustainable value for the Company’s shareholders.

FISCAL 2021 OVERVIEW

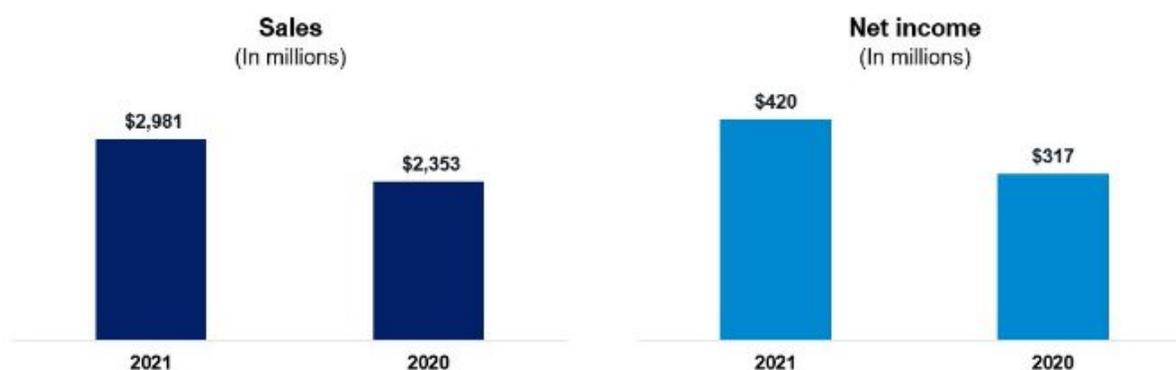
Fiscal 2021 was a remarkable year for growth and transformation at Valvoline. The strategy to shift to a more services-driven business was strengthened as Retail Services increased its contribution to total profitability. Key operating highlights are presented below, each of which is discussed more fully in this Annual Report on Form 10-K:

27% Growth in sales	32% Increase in net income	36% Growth in diluted EPS
21.2% Retail Services growth in system-wide SSS	9% Retail Services growth in system-wide units	16% Global Products volume growth
28% Growth in adjusted EBITDA	\$218 million Returned to shareholders through dividends and share repurchases	\$404 million Cash flows from operations

In addition to these results in fiscal 2021, the following key events occurred during the year:

- Completed the issuance of the 3.625% senior unsecured notes due 2031 (the "2031 Notes") with an aggregate principal amount of \$535 million and used the net proceeds, together with \$312 million in cash and cash equivalents on hand, to redeem its 4.375% senior unsecured notes due 2025 (the "2025 Notes") with an aggregate principal amount of \$800 million and pay related expenses and fees.
- Realigned the Company's global operations into two reportable segments, accelerating the strategic shift to a services-driven business.
- Began production at the blending and packaging plant in China, which is currently producing most of the Company's lubricant volume for the China market.

Summarized below are Valvoline's trends in consolidated sales and net income over the last two fiscal years:



Retail Services

Retail Services marked its 15th consecutive year for system-wide same-store-sales ("SSS") growth and added 132 net new stores to the system. The table below highlights the exceptional growth in Retail Services over the last two years:

(In millions, except store count)	Fiscal Year 2021	Growth vs. 2020	Growth vs. 2019
Segment sales	\$ 1,221	38 %	49 %
System-wide store sales	\$ 1,970	30 %	39 %
System-wide store count	1,594	9 %	15 %
Operating income	\$ 321	54 %	57 %
Adjusted EBITDA	\$ 382	55 %	60 %
	Years ended September 30		
	2021	2020	2019
System-wide SSS growth	21.2 %	2.3 %	10.1 %

Global Products

Global Products continued to gain share in key international markets and expanded distribution in North America, leveraging the strength of Valvoline's brand and technology. Global Products has exhibited steady growth as shown in below:

(In millions)	Fiscal Year 2021	Growth vs. 2020	Growth vs. 2019
Segment sales	\$ 1,760	20 %	12 %
Operating income	\$ 298	5 %	11 %
Adjusted EBITDA	\$ 327	6 %	10 %
Lubricant sales (gallons)	160.9	16 %	7 %

COVID-19 UPDATE

Valvoline has been able to substantially maintain its operations, demonstrating growth and strong results while managing through the effects of the COVID-19 global pandemic. Management is unable to reasonably quantify the

impact of COVID-19 on its current year results due to their breadth and variability given the current stage and duration of the pandemic. During fiscal 2021, demand has been strong amid uneven global recoveries as miles driven and volumes have improved from the depths of the pandemic restrictions in fiscal 2020. Volumes across the business are ahead of pre-COVID trends and though certain of the cost benefits experienced in the prior year that were in part believed to have been prolonged due to or as a result of the pandemic, have inverted with supply chain challenges and overwhelming demand, in addition to a tightening labor market, in fiscal 2021, Valvoline has and continues to focus on these challenges in order to minimize impacts on the business and its results. In the face of these pressures, Valvoline delivered exceptional results in fiscal 2021 and will continue to focus on passing through price increases and managing supply chain bottlenecks during the first half of fiscal 2022.

Valvoline's wholly-owned lubricant blending and packaging plants and retail service center stores have remained operational during fiscal 2021, while managing through the lingering effects of the pandemic. The Company's priority remains the safe operation of its facilities to protect its employees, customers and business partners. The drive-through, stay-in-your-car service experience and masking requirements continue to minimize contact between store teams and customers. Procedures in Valvoline's global plants and offices also continue to promote social distancing and masking requirements. Valvoline has established a return-to-office protocol for its corporate headquarters in Lexington, Kentucky, allowing employees that have been vaccinated to voluntarily return-to-office beginning in July 2021, with global offices following similar protocols. Management is continually monitoring the circumstances surrounding the pandemic and following government guidelines supported by COVID-19 trend data to make decisions regarding the safe operation of its offices and facilities.

The COVID-19 pandemic has continued to evolve and its future impact on Valvoline will depend on a number of factors, including and among others, the ultimate duration and severity of the pandemic and the success of vaccinations, boosters, and restrictive measures on containing the spread and resurgences of the virus. While the Company cannot predict the duration or the scale of the COVID-19 pandemic, or the effect it may continue to have on Valvoline's business, results of operations, or liquidity, management continuously monitors the situation, the sufficiency of its responses, and makes adjustments as needed.

Results for Fiscal 2020 compared to Fiscal 2019

For comparisons of Valvoline's consolidated results of operations and cash flows for the fiscal years ended September 30, 2020 to September 30, 2019, refer Item 7 of Part II of the Annual Report on Form 10-K for the fiscal year ended September 30, 2020, filed with the SEC on November 24, 2020.

Use of Non-GAAP Measures

To aid in the understanding of Valvoline's ongoing business performance, certain items within this document are presented on an adjusted, non-GAAP basis. These non-GAAP measures, presented both on a consolidated and reportable segment basis, have limitations as analytical tools and should not be considered in isolation from, or as an alternative to, or more meaningful than, the financial statements presented in accordance with U.S. GAAP. The financial results presented in accordance with U.S. GAAP and reconciliations of non-GAAP measures included within this Annual Report on Form 10-K should be carefully evaluated.

The following are the non-GAAP measures management has included and how management defines them:

- **EBITDA** - defined as net income/loss, plus income tax expense/benefit, net interest and other financing expenses, and depreciation and amortization;
- **Adjusted EBITDA** - defined as EBITDA adjusted for certain unusual, infrequent or non-operational activity not directly attributable to the underlying business, which management believes impacts the comparability of operational results between periods ("key items," as further described below);
- **Segment adjusted EBITDA** - defined as segment operating income adjusted for depreciation and amortization, in addition to key items impacting comparability;
- **Free cash flow** - defined as cash flows from operating activities less capital expenditures and certain other adjustments as applicable; and

- **Discretionary free cash flow** - defined as cash flows from operating activities less maintenance capital expenditures and certain other adjustments as applicable.

These measures are not prepared in accordance with U.S. GAAP and management believes the use of non-GAAP measures on a consolidated and reportable segment basis provides a useful supplemental presentation of Valvoline's operating performance, enables comparison of financial trends and results between periods where certain items may vary independent of business performance, and allows for transparency with respect to key metrics used by management in operating the business and measuring performance. The non-GAAP information used by management may not be comparable to similar measures disclosed by other companies, because of differing methods used in calculating such measures. For a reconciliation of the most comparable U.S. GAAP measures to the non-GAAP measures, refer to the "Results of Operations" and "Financial Position, Liquidity and Capital Resources" sections below.

Management believes EBITDA measures provide a meaningful supplemental presentation of Valvoline's operating performance due to the depreciable assets associated with the nature of the Company's operations and income tax and interest costs related to Valvoline's tax and capital structures, respectively. Adjusted EBITDA measures exclude the impact of key items, which consist of income or expenses associated with certain unusual, infrequent or non-operational activity not directly attributable to the underlying business that management believes impacts the comparability of operational results between periods. Adjusted EBITDA measures enable comparison of financial trends and results between periods where key items may vary independent of business performance. Key items are often related to legacy matters or market-driven events considered by management to be outside the comparable operational performance of the business.

Key items may consist of adjustments related to: legacy businesses, including the separation from Valvoline's former parent company and associated impacts of related indemnities; significant acquisitions or divestitures; restructuring-related matters; and other matters that are non-operational or unusual in nature. Key items also include the following:

- **Net pension and other postretirement plan expense/income** - includes several elements impacted by changes in plan assets and obligations that are primarily driven by changes in the debt and equity markets, as well as those that are predominantly legacy in nature and related to prior service to the Company from employees (e.g., retirees, former employees, and current employees with frozen benefits). These elements include (i) interest cost, (ii) expected return on plan assets, (iii) actuarial gains/losses, and (iv) amortization of prior service cost/credit. Significant factors that can contribute to changes in these elements include changes in discount rates used to remeasure pension and other postretirement obligations on an annual basis or upon a qualifying remeasurement, differences between actual and expected returns on plan assets, and other changes in actuarial assumptions, such as the life expectancy of plan participants. Accordingly, management considers that these elements are more reflective of changes in current conditions in global markets (in particular, interest rates), outside the operational performance of the business, and are also primarily legacy amounts that are not directly related to the underlying business and do not have an immediate, corresponding impact on the compensation and benefits provided to eligible employees for current service. Adjusted EBITDA includes the costs of benefits provided to employees for current service, including pension and other postretirement service costs.
- **Changes in the last-in, first out ("LIFO") inventory reserve** - charges or credits recognized in Cost of sales to value certain lubricant inventories at the lower of cost or market using the LIFO method. During inflationary or deflationary pricing environments, the application of LIFO can result in variability of the cost of sales recognized each period as the most recent costs are matched against current sales, while preceding costs are retained in inventories. LIFO adjustments are determined based on published prices, which are difficult to predict and largely dependent on future events. The application of LIFO can impact comparability and enhance the lag period effects between changes in inventory costs and relating pricing adjustments.

Details with respect to the composition of key items recognized during the respective periods presented herein are set forth below in the "EBITDA and Adjusted EBITDA" section of "Results of Operations" that follows.

Management uses free cash flow and discretionary free cash flow as additional non-GAAP metrics of cash flow generation. By including capital expenditures and certain other adjustments, as applicable, management is able to provide an indication of the ongoing cash being generated that is ultimately available for both debt and equity

holders as well as other investment opportunities. Free cash flow includes the impact of capital expenditures, providing a supplemental view of cash generation. Discretionary free cash flow includes the impact of maintenance capital expenditures, which are routine uses of cash that are necessary to maintain the Company's operations and provides a supplemental view of cash flow generation to maintain operations before discretionary investments in growth. Free cash flow and discretionary free cash flow have certain limitations, including that they do not reflect adjustments for certain non-discretionary cash flows, such as mandatory debt repayments.

Key Business Measures

Valvoline tracks its operating performance and manages its business using certain key measures, including system-wide, company-operated and franchised store counts and same-store sales ("SSS"); system-wide store sales; and lubricant volumes sold. Management believes these measures are useful to evaluating and understanding Valvoline's operating performance and should be considered as supplements to, not substitutes for, Valvoline's sales and operating income, as determined in accordance with U.S. GAAP.

Sales in the Retail Services reportable segment are influenced by the number of service center stores and the business performance of those stores. Stores are considered open upon acquisition or opening for business. Temporary store closings remain in the respective store counts with only permanent store closures reflected in the activity and end of period store counts. SSS is defined as sales by U.S. Retail Services service center stores (company-operated, franchised and the combination of these for system-wide SSS), with new stores including franchised conversions, excluded from the metric until the completion of their first full fiscal year in operation as this period is generally required for new store sales levels to begin to normalize. Differences in SSS are calculated to determine the percentage change between comparative periods.

Retail Services sales are limited to sales at company-operated stores, sales of lubricants and other products to independent franchisees and Express Care operators, and royalties and other fees from franchised stores. Although Valvoline does not recognize store-level sales from franchised stores as sales in its Consolidated Statements of Comprehensive Income, management believes system-wide and franchised SSS comparisons, store counts, and total system-wide store sales are useful to assess market position relative to competitors and overall store and segment operating performance.

Management believes lubricant volumes sold in gallons by its consolidated subsidiaries is a useful measure in evaluating and understanding the operating performance of the Global Products segment. Volumes sold in other units of measure, including liters, are converted to gallons utilizing standard conversions.

RESULTS OF OPERATIONS

Consolidated review

The following summarizes the results of the Company's operations for the years ended September 30:

(In millions)	2021		2020		Variance	
	Amount	% of Sales	Amount	% of Sales	Amount	% Change
Sales	\$ 2,981	100.0 %	\$ 2,353	100.0 %	\$ 628	26.7 %
Gross profit	\$ 980	32.9 %	\$ 863	36.7 %	\$ 117	13.6 %
Net operating expenses	\$ 452	15.2 %	\$ 378	16.1 %	\$ 74	19.6 %
Operating income	\$ 528	17.7 %	\$ 485	20.6 %	\$ 43	8.9 %
Net income	\$ 420	14.1 %	\$ 317	13.5 %	\$ 103	32.5 %

Sales

The following reconciles the year-over-year changes in sales:

(In millions)	2021 Change
Volume and mix	\$ 330
Price	187
Currency exchange	39
Acquisitions	72
Change in sales	<u>\$ 628</u>

Total sales increased from both segments delivering balanced contributions led by the substantial volume growth compared to the prior year COVID-19 lows, in addition to delivering robust expansion from the pre-pandemic period due to strong ongoing demand across the business whereby sales in each region improved over this period. Strong SSS, unit growth, and benefits from acquisitions completed during the past year drove increased sales from Retail Services. In addition, the pass through of raw material cost increases from across the business, currency exchange, and favorable mix from the shift to synthetics and branded products contributed further to the growth in sales during the year.

Gross profit

The following reconciles the year-over-year changes in gross profit:

(In millions)	2021 Change
Volume and mix	\$ 170
Change in LIFO reserve	(55)
Price and cost	(29)
Currency exchange	12
Acquisitions	19
Change in gross profit	<u>\$ 117</u>

Gross profit improved driven by higher volumes in both reportable segments from the prior year unfavorable impacts of the COVID-19 pandemic, in addition to growth from the pre-pandemic period in fiscal 2019. These volume benefits combined with favorable mix due to the ongoing shift to synthetics and branded product sales, growth from acquisitions in Retail Services, and favorable currency exchange were partially offset by rising raw material costs that led to the negative impact of LIFO adjustments and lagged the pass through in pricing.

The decline in gross profit margin compared to the prior year was primarily the result of significant raw material cost increases that began earlier in the year and drove significant price-cost lag and unfavorable LIFO adjustments, in addition to labor investments made in Retail Services, which more than offset mix benefits. The lingering effects of price-cost lag and supply-chain bottlenecks are expected to continue to adversely impact margins in the first half of the next fiscal year as the Company executes incremental pricing actions to drive cost recovery during fiscal 2022.

Net operating expenses

Details of the components of net operating expenses are summarized below for the years ended September 30:

(In millions)	2021		2020		Variance	
	Amount	% of Sales	Amount	% of Sales	Amount	% Change
Selling, general and administrative expenses	\$ 520	17.5 %	\$ 442	18.8 %	\$ 78	17.6 %
Net legacy and separation-related income	(24)	(0.8)%	(30)	(1.3)%	6	(20.0)%
Equity and other income, net	(44)	(1.5)%	(34)	(1.4)%	(10)	29.4 %
Net operating expenses	\$ 452	15.2 %	\$ 378	16.1 %	\$ 74	19.6 %

The increase in selling, general and administrative expenses was primarily due to higher advertising expenses that were restricted in the prior year due to the severity of the COVID-19 pandemic, increased variable compensation driven by the Company's strong performance, in addition to investments made to support future growth, including acquisitions of service center stores in Retail Services and investments in information technology and sales, and to a lesser extent unfavorable currency exchange. These increases were partially offset by a decline in travel expenses that reflected a full year with significant restrictions in place during the COVID-19 pandemic.

Net legacy and separation-related income was lower primarily as the current year adjustments of tax-related indemnity obligations related to the settlement of tax examinations resulted in lower reductions than the prior year adjustments for the change in utilization expectations of certain legacy tax attributes.

The increase in equity and other income, net was primarily driven by increased equity and royalty income attributable to the improved performance of the Company's unconsolidated joint ventures, in addition to recoveries related to the settlement of a Retail Services legal matter, and an increase in international subsidiaries realized during the year.

Net pension and other postretirement plan income

Net pension and other postretirement plan income increased \$67 million from the prior year primarily due to the gain on pension and other postretirement plan remeasurement of \$72 million compared to a gain of \$22 million in fiscal 2020. This increased gain was primarily attributed to higher interest rates in the current year remeasurement. In addition, lower interest cost recognized throughout the year drove higher recurring non-service income.

Net interest and other financing expenses

Net interest and other financing expense increased \$18 million during fiscal 2021 compared to the prior year. The increase was driven by higher debt extinguishment costs of \$17 million as the expenses associated with the current year redemption of the 2025 Notes exceeded those incurred in connection with the extinguishment of the 5.500% senior unsecured notes due 2024 with an aggregate principal amount of \$375 million (the "2024 Notes") in the prior year.

Income tax expense

The following summarizes income tax expense and the effective tax rate during the years ended September 30:

(In millions)	2021	2020
Income tax expense	\$ 123	\$ 134
Effective tax rate percentage	22.7 %	29.7 %

Lower income tax expense from the prior year was principally driven by benefits associated with resolving tax examinations in the current year through settlement and statute lapses. This decrease in expense coupled with prior year income tax expense recognized to establish a \$30 million valuation allowance on certain legacy tax attributes led to a lower effective tax rate in fiscal 2021.

EBITDA and Adjusted EBITDA

The following reconciles net income to EBITDA and Adjusted EBITDA for the years ended September 30:

(In millions)	2021	2020
Net income	\$ 420	\$ 317
Income tax expense	123	134
Net interest and other financing expenses	111	93
Depreciation and amortization	92	66
EBITDA	746	610
Net pension and other postretirement plan income	(126)	(59)
Net legacy and separation-related income	(24)	(30)
LIFO charge (credit)	41	(15)
Business interruption recovery	(3)	(2)
Compensated absences benefits change	—	(11)
Acquisition and divestiture-related costs	—	2
Adjusted EBITDA ^(a)	\$ 634	\$ 495

(a) Net pension and other postretirement plan income (expenses) includes remeasurement gains and losses and recurring non-service pension and other postretirement net periodic income, which consists of interest cost, expected return on plan assets and amortization of prior service credit. Refer to Note 10 of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Annual Report on Form 10-K for further details.

Adjusted EBITDA increased \$139 million, or 28%, compared to the prior year. Retail Services provided exceptional SSS growth due to increased transactions and improved average ticket, in addition to benefits from recent acquisitions. Global Products had strong volume growth and product demand across all regions, in addition to increased contributions from its unconsolidated joint ventures and favorable currency exchange. These benefits were partially offset by increased operating expenses principally to support growth, and to a lesser extent, unfavorable margin impacts primarily attributed to price-cost lag as raw material costs were declining in the prior year and rose significantly during the current year.

Reportable Segment Review

During the third quarter of fiscal 2021, the Company realigned its global operations to manage its business through the following two reportable segments:

- **Retail Services** - services the passenger car and light truck quick lube market in the United States and Canada with a broad array of preventive maintenance services and capabilities performed through Valvoline's retail network of Company-operated, independent franchise, and Express Care stores that service vehicles with Valvoline products.
- **Global Products** - sells engine and automotive products in more than 140 countries and territories to mass market and automotive parts retailers, installers, and commercial customers, including original equipment manufacturers, to service light- and heavy-duty vehicles and equipment.

The Company's realignment supports its strategic initiatives to transition to a services-driven business and enhances the ability to leverage Valvoline's brand equity and product platforms across geographies. Valvoline's segments represent components of the Company for which separate financial information is available that is utilized on a regular basis by the chief operating decision maker in allocating resources and evaluating performance of the business. Adjusted EBITDA is the primary measure used in making these operating decisions, which Valvoline defines as segment operating income adjusted for depreciation and amortization and certain key items impacting comparability.

In connection with the realignment, the Company changed its allocation of certain indirect expenses for such costs to be recognized in each segment based on the estimated utilization of indirect resources. Costs to support

corporate functions and certain non-operational and corporate activity that is not directly attributable to a particular segment are not included in the segment operating results regularly utilized by the chief operating decision maker. This activity is separately delineated within Corporate to reconcile to consolidated results.

Results of Valvoline's reportable segments are presented based on how operations are managed internally, including how the results are reviewed by the chief operating decision maker. The structure and practices are specific to Valvoline; therefore, the financial results of its reportable segments are not necessarily comparable with similar information for other comparable companies.

Prior period segment financial information presented herein has been recast on a basis that is consistent with the realignment of Valvoline's global operations. Refer to the disclosures below for comparisons of Valvoline's reportable segment results for fiscal years 2021 to 2020 and 2020 to 2019 under the current basis of reporting.

Retail Services

Management believes the number of company-operated and franchised service center stores as provided in the following tables is useful to assess the operating performance of the Retail Services reporting segment.

	System-wide stores ^(a)	
	For the years ended September 30	
	2021	2020
Beginning of period	1,462	1,385
Opened	69	72
Acquired	69	12
Closed	(6)	(7)
End of period ^(b)	1,594	1,462

	Number of stores at end of period	
	For the years ended September 30	
	2021	2020
Company-operated	719	584
Franchised ^(b)	875	878

(a) System-wide store count includes franchised service center stores. Valvoline's franchisees are distinct independent legal entities and Valvoline does not consolidate the results of operations of its franchisees.

(b) As of September 30, 2020, one franchised service center store included in the store count was temporarily closed at the discretion of the respective independent operator due to the impacts of COVID-19.

The Retail Services system unit growth over the prior year was the result of 63 net openings and 69 acquired stores, which along with the conversion of 50 net stores within the system from franchised to company-operated, combined to add 132 net new company-operated and franchised stores in fiscal 2021. Organic growth was driven by 30 new company-operated service center store openings, with 39 new store openings from franchisee expansion in key markets.

The following summarizes the results of the Retail Services reportable segment for the years ended September 30:

(In millions)	2021	2020	2019	Favorable (Unfavorable)		
				2021 vs 2020	2020 vs 2019	
Financial information						
Retail Services segment sales	\$ 1,221	\$ 883	\$ 822	38%	7%	
System-wide store sales ^(a)	\$ 1,970	\$ 1,520	\$ 1,419	30%	7%	
Operating income ^(b)	\$ 321	\$ 208	\$ 205	54%	1%	
Key items	—	—	—			
Depreciation and amortization	61	39	34	56%	15%	
Adjusted EBITDA	<u>\$ 382</u>	<u>\$ 247</u>	<u>\$ 239</u>	55%	3%	
Operating margin ^(c)	26.3 %	23.6 %	24.9 %	270 bps	(130) bps	
Adjusted EBITDA margin ^(c)	31.3 %	28.0 %	29.1 %	330 bps	(110) bps	
				2021	2020	2019
Same-store sales growth						
Company-operated ^(d)				19.6 %	2.6 %	9.6 %
Franchised ^{(a) (d)}				22.4 %	2.1 %	10.4 %
System-wide ^{(a) (d)}				21.2 %	2.3 %	10.1 %

(a) Measure includes Valvoline franchisees, which are independent legal entities and Valvoline does not consolidate the results of operations of its franchisees.

(b) Valvoline does not generally allocate activity below operating income to its operating segments; therefore, the table above reconciles operating income to adjusted EBITDA.

(c) Operating margin is calculated as operating income divided by sales, and adjusted EBITDA margin is calculated as adjusted EBITDA divided by sales.

(d) Beginning in fiscal 2021, Valvoline determines SSS growth as sales by U.S. Retail Services service center stores, with new stores, including franchise conversions, excluded from the metric until the completion of their first full fiscal year in operation. Previously, SSS growth was determined as sales by U.S. Retail Services service center stores, with stores new to the U.S. Retail Services system excluded from the metric until completion of their first full fiscal year in operation. Prior period measures have been revised to conform to the current basis of presentation.

2021 compared to 2020

Retail Services sales increased 38% during fiscal 2021 and nearly 50% from pre-pandemic 2019 driven by SSS performance and unit additions. System-wide SSS grew 21.2% compared to the prior year driven by increased transactions and high single-digit growth in average ticket. Transactions benefited from customer base expansion in addition to recovery from the most significant restrictions and limited travel during the onset of the pandemic in the prior year. Average ticket increases were driven by pricing and mix improvements, including the shift to synthetics and higher non-oil change services. Year-over-year system-wide unit growth of 9% also contributed to volumes and sales through the addition of 132 net new stores.

Operating income and adjusted EBITDA growth were primarily due to strong SSS performance, from an increase in transactions and higher average ticket from the ongoing shift to synthetics, in addition to unit growth primarily driven by acquisitions made during the year. This growth was partially offset by reinstated advertising spending that was restricted by the pandemic in the prior year, as well as incremental labor investments made during the year.

2020 compared to 2019

Fiscal 2020 sales increased over 2019 due to growth in system-wide SSS and average ticket, as well as 6% unit growth. These benefits were partially offset by the adverse effects on sales and volumes from limited travel in

response to the COVID-19 pandemic. Fiscal 2020 operating income and adjusted EBITDA increased over 2019 due to benefits of mix improvements and lower expenses due to controlled spending, partially offset by deleverage in labor costs earlier in the fiscal year as a result of the COVID-19 slow-down in volumes.

Global Products

The following tables summarizes the results of the Global Products reportable segment for the years ended September 30:

(In millions)	2021	2020	2019	Favorable (Unfavorable)	
				2021 vs 2020	2020 vs 2019
Financial information					
Sales by geographic region					
North America ^(a)	\$ 1,052	\$ 945	\$ 994	11%	(5)%
Europe, Middle East and Africa ("EMEA")	219	169	181	30%	(7)%
Asia Pacific	358	273	285	31%	(4)%
Latin America ^(a)	131	83	108	58%	(23)%
Global Products segment sales	<u>\$ 1,760</u>	<u>\$ 1,470</u>	<u>\$ 1,568</u>	20%	(6)%
Operating income ^(b)	\$ 298	\$ 284	\$ 269	5%	6%
Key items:					
Acquisition-related gain	—	—	(4)		
Business interruption expenses	—	—	6		
Depreciation and amortization	29	25	25	16%	—%
Adjusted EBITDA	<u>\$ 327</u>	<u>\$ 309</u>	<u>\$ 296</u>	6%	4%
Operating margin ^(c)	16.9 %	19.3 %	17.2 %	(240) bps	210 bps
Adjusted EBITDA margin ^(c)	18.6 %	21.0 %	18.9 %	(240) bps	210 bps
Volume information					
Lubricant sales (gallons)	160.9	139.1	150.3	16%	(7)%

(a) Valvoline includes the United States and Canada in its North America region. Mexico is included within the Latin America region.

(b) Valvoline does not generally allocate activity below operating income to its operating segments; therefore, the table above reconciles operating income to adjusted EBITDA.

(c) Operating margin is calculated as operating income divided by sales, and adjusted EBITDA margin is calculated as adjusted EBITDA divided by sales.

2021 compared to 2020

Global Products sales increased in fiscal 2021 related to higher volumes across all regions, as the Company continued to gain share in key international markets through the enhancement of its supply chain capabilities and investments in brand marketing, as well as expanded distribution in North America. Sales growth exceeded volume growth, demonstrating pass-through pricing progress, which contributed to the increase in sales during the year in addition to favorable currency exchange benefits.

Operating income and adjusted EBITDA increased in fiscal 2021 due to sales growth driven by higher volumes across all regions, product mix benefits, improved equity and royalty income, as well as currency exchange. These benefits were partially offset by price-cost lag in the second half of fiscal 2021 due to significant raw material cost increases and higher operating expenses to support market share growth. Valvoline is currently executing incremental pricing actions to drive cost recovery during fiscal 2022.

2020 compared to 2019

Global Products sales decreased during fiscal 2020 primarily related to reduced volume due to the COVID-19 pandemic across all regions as well as unfavorable currency exchange that more than offset the benefits from the Eastern European acquisition completed in late fiscal 2019. Operating income and Adjusted EBITDA increased in fiscal 2020 driven by improved margins combined with expense reductions that offset the impact of lower volumes. These improvements were largely the result of favorable product and channel mix in addition to lower raw material costs and benefits from the operating expense reduction program.

FINANCIAL POSITION, LIQUIDITY AND CAPITAL RESOURCES

Overview

The Company closely manages its liquidity and capital resources. Valvoline's liquidity requirements depend on key variables, including the level of investment needed to support business strategies, the performance of the business, capital expenditures, borrowing arrangements, and working capital management. Capital expenditures, acquisitions, share repurchases, and dividend payments are components of the Company's cash flow and capital management strategy, which to a large extent, can be adjusted in response to economic and other changes in the business environment. The Company has a disciplined approach to capital allocation, which focuses on investing in key priorities that support Valvoline's business and growth strategies and returning capital to shareholders, while funding ongoing operations.

Cash flows

Valvoline's cash flows as reflected in the Consolidated Statements of Cash Flows are summarized as follows for the years ended September 30:

(In millions)	2021	2020
Cash, cash equivalents, and restricted cash - beginning of period	\$ 761	\$ 159
Cash provided by (used in):		
Operating activities	404	372
Investing activities	(400)	(222)
Financing activities	(536)	450
Effect of currency exchange rate changes on cash, cash equivalents, and restricted cash	2	2
(Decrease) increase in cash, cash equivalents, and restricted cash	(530)	602
Cash, cash equivalents, and restricted cash - end of period	\$ 231	\$ 761

Operating activities

The increase in cash flows provided by operating activities during fiscal 2021 compared to 2020 was primarily driven by higher cash earnings, partially offset by higher income tax payments of \$28 million and unfavorable changes in working capital, which included the effects of factoring \$15 million of receivables in the current year compared to \$59 million of receivables in the prior year.

Investing activities

The increase in cash flows used in investing activities for fiscal 2021 compared to 2020 was primarily due to increased investments in Retail Services growth through the expansion of its store network via acquisitions of service center stores. Valvoline invested approximately \$365 million in Retail Services through the acquisition and opening of 120 and 30 company-operated service center stores, respectively, which compared to 35 and 36, respectively, in the prior year. These increased investments are expected to continue driving growth and

transforming the business model and were partially offset by franchisee repayments of COVID-19 relief loans extended in the prior year, in addition to proceeds from the sale of service center stores to franchisees.

Valvoline is currently forecasting approximately \$180 million to \$200 million of capital expenditures for full year fiscal 2022, funded primarily from operating cash flows.

Financing activities

The increase in cash flows used in financing activities for fiscal 2021 compared to 2020 was primarily due to:

- Returning \$74 million more in cash to shareholders through increased share repurchases and dividends in the current year. These increases were due to share repurchase activity being resumed following the suspension in the prior year at the onset of the COVID-19 pandemic to preserve liquidity along with the 11% increase in the dividend rate in the current year.
- Increasing net repayments on borrowings in the current year where the net proceeds from the \$535 million 2031 Notes and cash and cash equivalents were used to redeem the \$800 million 2025 Notes, and the prior year net proceeds primarily related to the issuance of the 4.250% senior unsecured notes due 2030 with an aggregate principal amount of \$600 million (the "2030 Notes").

Free cash flow

The following table sets forth free cash flow and discretionary cash flow and reconciles cash flows from operating activities to both measures. As previously noted, free cash flow has certain limitations, including that it does not reflect adjustments for certain non-discretionary cash flows, such as mandatory debt repayments. Refer to "Use of Non-GAAP Measures" within this Item 7 for additional information regarding this non-GAAP measure.

(In millions)	For the years ended September 30	
	2021	2020
Cash flows provided by operating activities	\$ 404	\$ 372
Less: Maintenance capital expenditures	(36)	(30)
Discretionary free cash flow	368	342
Less: Growth capital expenditures	(108)	(121)
Free cash flow	\$ 260	\$ 221

The increase in free cash flow over the prior year was driven by higher cash flows provided by operating activities, in addition to modestly lower growth capital expenditures due in part to supply-chain driven delays in new company store openings. These increases were partially offset by higher maintenance capital expenditure requirements during the year.

Valvoline is currently forecasting \$260 million to \$300 million of free cash flow for full year fiscal 2022 primarily due to the Company's overall growth opportunities, partially offset by an increase in expected capital expenditures driven by new company store construction due to the supply chain challenges during fiscal 2021.

Debt

The following table summarizes Valvoline's debt as of September 30:

(In millions)	2021	2020
2031 Notes ^(a)	\$ 535	\$ —
2030 Notes	600	600
2025 Notes ^(a)	—	800
Term Loan	475	475
Trade Receivables Facility ^(b)	59	88
China Construction Facility	39	18
Debt issuance costs and discounts	(14)	(19)
Total debt	1,694	1,962
Current portion of long-term debt	17	—
Long-term debt	\$ 1,677	\$ 1,962

(a) Issued 3.625% senior notes in January 2021 with the net proceeds of \$528 million, together with cash and cash equivalents on hand, used to fully redeem the 2025 Notes, with a total aggregate redemption price of \$840 million. The combination of these transactions reduced Valvoline's gross leverage and cost of capital and lowers ongoing interest expense.

(b) Amendment in fiscal 2021 to extend maturity to April 2024 and modify the eligibility requirements for certain receivables, which increased the remaining borrowing capacity. The amendment also reduced the minimum required borrowing to the lesser of (i) 33% of the total facility limit or (ii) the borrowing base from the availability of eligible receivables, in addition to permitting up to a 30 consecutive day annual exemption from this requirement. Other relevant terms and conditions of the Trade Receivables Facility were substantially unchanged under this amendment.

Inclusive of the interest rate swap agreements, approximately 87% of Valvoline's outstanding borrowings as of September 30, 2021 had fixed rates, with the remainder bearing variable interest rates. As of September 30, 2021, Valvoline was in compliance with all covenants of its debt obligations and had a combined total of \$586 million of remaining borrowing capacity under its Revolver and Trade Receivables Facility. Credit facilities in place in China had approximately \$24 million of combined borrowing capacity remaining, \$23 million under the China Working Capital Facility and \$1 million under the China Construction Facility. Refer to Note 8 of the Notes to Consolidated Financial Statements included in Item 8 of Part II of this Annual Report on Form 10-K for additional details regarding the Company's debt instruments.

Material cash requirements

The Company's material cash requirements include the following contractual obligations and commitments as of September 30, 2021:

(In millions)	Total	Less than 1 year	1-3 years	3-5 years	5 years and more
Long-term debt	\$ 1,708	\$ 17	\$ 529	\$ 27	\$ 1,135
Interest payments ^(a)	445	56	105	90	194
Operating lease obligations	380	50	88	68	174
Finance lease obligations	257	18	36	37	166
Employee benefit obligations ^(b)	108	13	19	23	53
Total	\$ 2,898	\$ 154	\$ 777	\$ 245	\$ 1,722

(a) Includes interest expense on both variable and fixed rate debt assuming no prepayments. Variable interest rates have been assumed to remain constant through the end of the term at the rates that existed as of September 30, 2021.

(b) Includes estimated funding of pension plans for fiscal 2022, as well as projected benefit payments through fiscal 2031 for Valvoline's unfunded pension plans. Excludes benefit payments from pension plan trust funds.

Pension and other postretirement plan obligations

During fiscal 2021, the Company made cash and non-cash contributions of approximately \$14 million to its U.S. non-qualified and non-U.S. pension plans. Refer to Note 10 of the Notes to Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K for additional information relating to the Company's pension and other postretirement plans.

Dividend payments and share repurchases

During the year ended September 30, 2021, the Company paid \$91 million of cash dividends for \$0.500 per common share and repurchased approximately 5 million shares of its common stock for \$127 million. Approximately 4 million shares were repurchased for \$100 million to complete the November 12, 2020 Board authorization with the remainder of share repurchases made pursuant to the May 17, 2021 Board to repurchase up to \$300 million of common stock through September 30, 2024 (the "2021 Share Repurchase Authorization").

On November 11, 2021, the Board approved a quarterly cash dividend of \$0.125 per share of common stock. The dividend is payable December 15, 2021 to shareholders of record on November 29, 2021. Additionally, the Company repurchased approximately 0.5 million shares for an aggregate amount of \$16 million from October 1, 2021 through November 15, 2021 pursuant to the 2021 Share Repurchase Authorization. The Company has \$257 million in aggregate share repurchase authority remaining under the 2021 Share Repurchase Authorization as of November 15, 2021.

The dividend and share repurchase authorization is part of a broader capital allocation framework to deliver value to shareholders by first driving growth in the business, organically and through acquisitions, and then returning excess cash to shareholders through dividends and share repurchases. Future declarations of quarterly dividends are subject to approval by the Board and may be adjusted as business needs or market conditions change. The timing and amount of any share repurchases will be based on the level of Valvoline's liquidity, general business and market conditions and other factors, including alternative investment opportunities.

Summary

As of September 30, 2021, cash and cash equivalents totaled \$230 million, total debt was \$1.7 billion, and total remaining borrowing capacity was \$586 million. Valvoline's ability to generate positive cash flows from operations is dependent on general economic conditions, the competitive environment in the industry, and is subject to the business and other risk factors described in Item 1A of Part I of this Annual Report on Form 10-K. If the Company is unable to generate sufficient cash flows from operations, or otherwise comply with the terms of its credit facilities, Valvoline may be required to seek additional financing alternatives.

Management believes that the Company has sufficient liquidity based on its current cash and cash equivalents position, cash generated from business operations, and existing financing in place, to meet its required pension and other postretirement plan contributions, debt servicing obligations, tax-related and other material cash and operating requirements for the next twelve months.

NEW ACCOUNTING PRONOUNCEMENTS

For a discussion and analysis of recently issued and adopted accounting pronouncements and the impact on Valvoline, refer to Note 2 of the Notes to Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K.

CRITICAL ACCOUNTING ESTIMATES

The preparation of Valvoline's consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, sales and expenses, and the disclosures of contingent matters. Significant items that are subject to such estimates and assumptions include, but are not limited to, employee benefit obligations, business combinations, income taxes, and customer incentives.

Although management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, actual results could differ significantly from the estimates under different assumptions or conditions. Valvoline's significant accounting policies are discussed in Note 2 of the Notes to Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K. The Company believes the accounting estimates listed below are the most critical to aid in fully understanding and evaluating the reported financial results, and require the most difficult, subjective, or complex judgments, resulting from the need to make estimates about the effects of matters that are inherently uncertain.

Employee benefit obligations

Description	Judgments and uncertainties	Effect if actual results differ from assumptions
Valvoline sponsors defined benefit pension and other postretirement plans in the U.S and in certain countries outside the U.S. As of September 30, 2021, Valvoline's net unfunded pension and other postretirement plan liabilities included in the Consolidated Balance Sheet totaled \$197 million, and the U.S. plans represented 94% of this total obligation. Total pension and other postretirement net periodic benefit income recognized in fiscal 2021 was \$123 million, inclusive of a \$72 million rereasurement gain.	The Company's pension and other postretirement benefit costs and obligations are dependent on actuarial valuations and various assumptions that attempt to anticipate future events and are used in calculating the expense and liabilities relating to these plans. These assumptions include estimates and judgments the Company makes about discount rates, expected long-term investment return on plan assets, and mortality, among others. Significant assumptions the Company must review and set annually and at each measurement date related to its pension and other postretirement benefit obligations are described further below.	Though management considers current market conditions and other relevant factors in establishing these assumptions, the actuarial assumptions used may differ materially from actual results due to changing market and economic conditions, longer or shorter life spans of participants, and differences between the actual and expected return on plan assets. These differences may result in a significant impact to the amount of pension or other postretirement benefits cost recorded or that may be recorded. Changes in assumptions or asset values may have a significant effect on the measurement of expense or income.
Valvoline recognizes the change in the fair value of plan assets and the net actuarial gains and losses calculated using updated actuarial assumptions as of the measurement date, which for Valvoline is September 30, and when a plan qualifies for an interim rereasurement.		
Refer to Note 10 of the Notes to Consolidated Financial Statements included in Item 8 for Part II of this Annual Report on Form 10-K for additional information regarding the Company's pension and other postretirement plans.		

Actuarial assumptions

Significant assumptions the Company must review and set annually and at each measurement date related to its pension and other postretirement benefit obligations are:

- Expected long-term return on plan assets** — The expected long-term return on plan assets assumption reflects the long-term average rate of return plan assets are expected to earn. This assumption is determined considering each plan's asset allocation targets and overall expected performance, including evaluation of the most recent long-term historical returns, as applicable. The weighted-average long-term expected rate of return on assets assumption was 4.34% for fiscal 2021. In fiscal 2021, the global pension plan assets generated an actual weighted-average return of 6.39%, primarily driven by the market performance of the plan assets of the U.S. qualified pension plans based on the Company's investment strategy to hedge the movement in liabilities related to changes in discount rates with investments of a matched duration that provide offsetting returns aligned with changes in interest rates. The expected return on plan assets is designed to be a long-term assumption, and therefore, actual returns will be subject to year-to-year variances. The U.S. qualified pension plans comprise the most significant portion of plan assets, and for fiscal 2022, the expected rate of return on assets assumption for the U.S. qualified pension plans will be 4.10%. The expected long-term return on plan assets assumption has no impact on the reported net liability or net actuarial gains or losses upon rereasurement, but does impact the recurring non-service net periodic income recognized ratably throughout the year.

Valvoline's pension plans hold a variety of investments designed to diversify risk. Plan assets are invested in equity securities, government and agency securities, corporate debt, and other non-traditional assets such as hedge funds. The investment goal of the pension plans is to achieve an adequate net investment return to provide for future benefit payments to its participants. Target asset allocation percentages as of September 30, 2021 for the U.S. qualified pension plans were 83% fixed income and 17% equity investments. The U.S. qualified pension plans are managed by professional investment managers that operate under investment management contracts that include specific investment guidelines, requiring among other actions, adequate diversification and prudent use of risk management practices such as portfolio constraints relating to established benchmarks. Valvoline's investment strategy and management practices relative to plan assets of non-U.S. plans generally are consistent except in those countries where investment of plan assets is dictated by applicable regulations. Holding all other assumptions constant, a hypothetical 1.00% change in the expected long-term return on plan assets assumption for the U.S. qualified pension plans would impact fiscal 2021 recurring non-service pension income by \$19 million.

- **Discount rate** — Reflects the rates at which benefits could effectively be settled and is based on current investment yields of high-quality corporate bonds. Consistent with historical practice, the Company uses an actuarially-developed full yield curve approach, the above mean yield curve, to match the timing of cash flows of expected future benefit payments from the plans by applying specific spot rates along the yield curve to determine the assumed discount rate. Valvoline's fiscal 2021 expense, excluding actuarial gains and losses, for both U.S. and non-U.S. pension plans was determined using the spot discount rate as of the beginning of the fiscal year. The service cost and interest cost discount rates for fiscal 2021 pension expense were 1.55% and 1.91%, respectively, and 3.03% and 1.83%, respectively, for other postretirement expense. The weighted-average discount rate at the end of fiscal 2021 was 2.70% for the pension plans and 2.67% for the postretirement health and life plans.

The following table illustrates the estimated impact on hypothetical pension and other postretirement expense that would have resulted from a one percentage point change in discount rates in isolation of impacts on other significant assumptions in the years ended September 30:

(In millions)	2021	2020
Increase (decrease) in pension and other postretirement plan expense - 1.00% decrease in discount rates:		
Pension benefits		
Increase in benefit obligation	\$ 247	\$ 263
Increased return on plan assets ^(a)	(211)	(218)
Estimated hypothetical increase in expense	36	45
Other postretirement benefits		
Increase in benefit obligation	5	5
Total estimated hypothetical increase in expense	\$ 41	\$ 50

(a) The U.S. qualified pension plans employ an investing strategy to match the duration of its obligation and investments. These plans represent 92% of Valvoline's total gross pension plan obligation as of September 30, 2021 and 2020. This strategy hedges approximately 93% and 90% of the movement in liabilities related to changes in discount rates as of September 30, 2021 and 2020, respectively. Therefore, when discount rates change, asset returns generally mirror the impacts, minimizing the net impact to the consolidated financial statements. This estimated impact does not include increased returns of other plan assets that may also benefit from increased interest rates.

- **Mortality** — The mortality assumption for Valvoline's U.S. pension and other postretirement plans is utilizes the Society of Actuaries PRI-2012 mortality base tables and a mortality improvement scale that follows the 2021 Trustees Report of the Social Security Administration Intermediate Alternative as reflected in the MSS-2021 improvement scale. Valvoline's international plans utilize mortality assumptions similar to the U.S., whereby the assumptions are generally based upon country-specific base mortality tables updated for the most currently available improvement scales that have been published by reliable authorities in each

jurisdiction. Valvoline believes the updated mortality improvement scales provide a reasonable assessment of current mortality trends and is an appropriate estimate of future mortality projections.

Other assumptions, including the rate of compensation increase and healthcare cost trend rate, do not have a significant impact on Valvoline's pension and other postretirement benefit plan costs and obligations based upon current plan provisions that have generally frozen benefits and limited costs.

Business combinations

Description	Judgments and uncertainties	Effect if actual results differ from assumptions
<p>Valvoline acquired 134 service center stores during fiscal 2021 for an aggregate purchase price of \$282 million. The Company allocates the purchase price of an acquired business to its identifiable assets acquired and liabilities assumed at the acquisition date based upon their estimated fair values. The excess of the fair value of purchase consideration over the fair value of these assets acquired and liabilities assumed is recorded as goodwill or if the fair value of the assets acquired and liabilities assumed exceed the purchase price consideration, a bargain purchase gain is recorded.</p>	<p>Purchase price allocations contain uncertainties because they require management to make significant estimates and assumptions and to apply judgment to estimate the fair value of assets acquired and liabilities assumed, particularly with respect to intangible assets.</p> <p>Management estimates the fair value of assets acquired and liabilities assumed based on quoted market prices, the carrying value of the acquired assets and widely accepted valuation techniques, including discounted cash flows and market multiple analyses.</p>	<p>If actual results are materially different than the assumptions used to determine fair value of the assets acquired and liabilities assumed through a business combination, or the useful lives of the acquired intangible assets, it is possible that adjustments to the carrying values of such assets and liabilities will have a material impact on the Company's financial position and results of operations. Furthermore, if actual results are not consistent with estimates or assumptions, the Company may be exposed to an impairment charge that could materially adversely impact its consolidated financial position and results of operations.</p>
<p>Goodwill is tested at the reporting unit level for impairment on an annual basis during the fourth fiscal quarter as of July 1 or more frequently if certain events occur indicating that the carrying value of goodwill may be impaired. Valvoline's reporting units are consistent with its reportable segments of Retail Services and Global Products, and had goodwill of \$513 million and \$131 million, respectively, as of September 30, 2021.</p>	<p>Critical estimates in valuing intangible assets include, but are not limited to, estimates about: expected future cash flows from customers, including revenue and operating expenses; royalty and customer attrition rates; proprietary technology obsolescence curve; the acquired company's brand awareness and market position; the market awareness of the acquired company's branded technology solutions and services; assumptions about the period of time the brands will continue to be valuable; as well as discount rates. The Company's estimates of fair value are based upon reasonable assumptions, but which are inherently uncertain and unpredictable. Assumptions may be incomplete or inaccurate, and unanticipated events and circumstances may occur.</p>	<p>There were no impairments to intangible assets recognized by the Company during fiscal 2021, 2020, or 2019. During fiscal 2021, Valvoline performed a quantitative impairment assessment of goodwill and determined that each reporting unit had a fair value that exceeded its carrying value by at least 130% and more. Qualitative and quantitative goodwill impairment assessments performed during fiscal 2020 and 2019, respectively, also indicated no impairments.</p>
<p>Total other intangible assets were \$131 million, net of \$44 million of accumulated amortization as of September 30, 2021. Other intangible assets are evaluated for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable. Various factors are considered in determining whether a trigger requiring impairment assessment has occurred, such as, but not limited to, changes in the expected use of the assets, changes in technology or development of alternative assets, changes in economic conditions, changes in operating performance and changes in expected future cash flows.</p>		

Income taxes

Description	Judgments and uncertainties	Effect if actual results differ from assumptions
<p>Valvoline is subject to income taxes in the United States and numerous international jurisdictions. Judgment in forecasting taxable income using historical and projected future operating results is required in determining Valvoline's provision for income taxes and the related assets and liabilities.</p> <p>The provision for income taxes includes current income taxes as well as deferred income taxes. Under U.S. GAAP, deferred tax assets and liabilities are determined based on differences between the 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 deferred assets or liabilities are expected to be settled or realized. The effect of changes in tax rates on deferred taxes is recognized in the period in which such changes are enacted.</p>	<p>Valuation allowances are established when necessary on a jurisdictional basis to reduce deferred tax assets to the amounts expected to be realized when it is more likely than not that some portion or all of a deferred tax asset will not be realized. The determination as to whether a deferred tax asset will be realized is based on the evaluation of positive and negative evidence, which includes historical profitability, future market growth, future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies. The Company assesses deferred taxes and the adequacy or need for a valuation allowance on a quarterly basis.</p> <p>The Company is subject to ongoing tax examinations and assessments in various jurisdictions. At any time, multiple tax years are subject to audit by the various tax authorities and a number of years may elapse before a particular matter, for which a liability has been established, is audited and fully resolved or clarified. In evaluating the exposures associated with various tax filing positions, the Company may record liabilities for such exposures. Valvoline generally adjusts its liabilities for unrecognized tax benefits and related indemnification obligations through earnings in the period in which an uncertain tax position is effectively settled, the statute of limitations expires for the relevant taxing authority to examine the tax position, or when more information becomes available. Although management believes that the judgments and estimates discussed herein are reasonable, actual results could differ, and may materially increase or decrease the effective tax rate, as well as impact the Company's operating results.</p>	<p>If the Company is unable to generate sufficient future taxable income, there is a material change in the actual effective tax rates, the time period within which the underlying temporary differences become taxable or deductible, or if the tax laws change unfavorably, then Valvoline could be required to increase the valuation allowance against deferred tax assets, resulting in an increase in income tax expense and the effective tax rate.</p> <p>Each change of income tax expense of \$5 million would impact the fiscal 2021 effective tax rate by one percentage point.</p>

Customer incentives

Description	Judgments and uncertainties	Effect if actual results differ from assumptions
Valvoline records revenue for the amount that reflects the consideration the Company is expected to be entitled to based on when control of the promised good or service is transferred to the customer. The nature of Valvoline's contracts with customers often give rise to variable consideration that generally decrease the transaction price and consist primarily of promotional rebates and customer pricing discounts based on achieving certain levels of sales activity.	Variable consideration is recorded as a reduction of the transaction price at the time of sale and is primarily estimated utilizing the most likely amount method that is expected to be earned as the Company is able to estimate the anticipated discounts within a sufficiently narrow range of possible outcomes based on its extensive historical experience with certain customers, similar programs and management's judgment with respect to estimating customer participation and performance levels. Variable consideration is reassessed at each reporting date and adjustments are made, when necessary.	The cost of these programs recognized as a reduction of sales totaled \$402 million, \$332 million and \$346 million in the Consolidated Statements of Comprehensive Income for the years ended September 30, 2021, 2020 and 2019, respectively. A 10% change in the reserves for customer incentive programs as of September 30, 2021 would have affected net earnings by approximately \$7 million in fiscal 2021.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Valvoline is exposed to market risks arising from adverse changes in:

- Currency exchange rates;
- Inflation and changing prices;
- Interest rates; and
- Credit risk.

These market risks are described further below. In addition, refer to Item 1A of Part I in this Annual Report on Form 10-K for additional discussion of these and other risks, including the potential risks associated with the COVID-19 pandemic.

Currency exchange risk

A significant portion of Valvoline's operations and sales occur outside the U.S. and are denominated in currencies other than the U.S. Dollar. The Company's results can be significantly impacted by changes in currency exchange rates. Valvoline's currency risk is primarily related to the Euro, Australian Dollar, Canadian Dollar and Chinese Yuan with respect to sales, profits, and assets and liabilities denominated in currencies other than the U.S. Dollar. Valvoline believes its currency risk is modest as its sales are primarily derived from the United States with 74% during fiscal 2021, 75% during fiscal 2020, and 74% during fiscal 2019.

To manage exposures and mitigate the impact of currency fluctuations on the Company's operations, Valvoline uses derivatives not designated as hedging instruments consisting primarily of forward contracts to hedge non-functional currency denominated balance sheet exposures. These contracts are recorded within the Consolidated Balance Sheets as assets or liabilities at fair market value based upon market price quotations. Changes in the fair value of these derivatives are recognized in income to offset the gain or loss on the hedged item. The Company utilizes derivative instruments that are purchased exclusively from highly-rated financial institutions.

For purposes of analyzing potential risk, sensitivity analysis is used to quantify hypothetical changes in fair value of the Company's derivative portfolio and does not reflect the related gain or loss on the underlying exposure. A 10% appreciation or depreciation in the value of the U.S. Dollar against non-U.S. currencies from the prevailing market rates would have resulted in a corresponding increase or decrease of \$14 million as of September 30, 2021 in the

fair value of open derivative contracts. The Company expects that any increase or decrease in the fair value of the portfolio would be substantially offset by increases or decreases in the underlying exposures.

The U.S. Dollar was weaker in fiscal 2021 compared to the prior year based on changes in currency exchange rates. This resulted in a favorable year-over-year impact of 2% on sales as non-U.S. currencies translated into more U.S. Dollars. The net effects of currency fluctuations on the Company's consolidated financial statements has generally not been material.

Inflation and changing prices

Increases in raw material prices, including those from inflationary pressures or from supply chain constraints such as those experienced in fiscal 2021 for base oils and additives, have in the past and may continue in the future to adversely impact Valvoline's costs, results of operations and the valuation of its inventory. In fiscal 2021, results were impacted by unprecedented rising raw material costs, a significant portion of which were passed through to customers through a series of price increases. Pricing actions generally lag material cost increases as many customer contracts are negotiated, with a smaller but meaningful portion indexed to accommodate changes in base oil prices. Valvoline may not always be able to raise prices in response to increased costs of raw materials or may experience a lag in passing through such cost increases, as the ability to pass on the costs of such price increases is largely dependent upon market conditions. Likewise, reductions in the valuation of Valvoline's inventory due to market volatility may not be recovered and could result in losses.

Interest rate risk

The Company is subject to modest interest rate risk in relation to its variable-rate debt. Inclusive of the Company's interest rate swap agreements, outstanding borrowings with fixed rates are 87% as of September 30, 2021. The increase in interest expense for the year ended September 30, 2021 from a hypothetical 100 basis point increase in variable interest rates would be approximately \$2 million.

In addition, the Company is exposed to market risk relative to the impact of changes in interest rates and investment returns on its pension and other postretirement plans. Declines in the discount rates used in measuring the Company's pension and other postretirement plan obligations result in a higher obligation and decrease the funded status. The pension plans hold a variety of investments designed to diversify risk, protect against declines in interest rates, and achieve an adequate net investment return to provide for future benefit payments to its participants. These investments are subject to variability that can be caused by fluctuations in general economic conditions. Decreases in the fair value of plan assets and discount rates increase net pension and other postretirement plan expense and can also result in requirements to make contributions to the plans. Pension and other postretirement plans were underfunded by \$197 million at September 30, 2021 as the projected benefit obligation exceeded the fair value of plan assets.

Concentrations of credit risk

The Company is potentially subject to concentrations of credit risk on accounts receivable and financial instruments, such as derivative instruments and cash and cash equivalents. Credit risk includes the risk of nonperformance by counterparties, and the maximum potential loss may exceed the amount recognized within the Consolidated Balance Sheets. Exposure to credit risk is managed through credit approvals, credit limits, selecting highly-rated financial institutions as counterparties to transactions and monitoring procedures.

Valvoline's business often involves large transactions with customers for which the Company does not require collateral. If one or more of those customers were to default on its obligations under applicable contractual arrangements, the Company could be exposed to potentially significant losses. Moreover, a prolonged downturn in the global economy could have an adverse impact on the ability of customers to pay their obligations on a timely basis. The Company believes that the reserves for potential losses are adequate. As of September 30, 2021, there was not a significant concentration of credit risk related to financial instruments.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Financial Statements and Supplementary Data	Page
Report of Independent Registered Public Accounting Firm	55
Consolidated Statements of Comprehensive Income	57
Consolidated Balance Sheets	58
Consolidated Statements of Stockholders' Equity (Deficit)	59
Consolidated Statements of Cash Flows	60
Notes to Consolidated Financial Statements	61
Note 1 - Description of Business and Basis of Presentation	61
Note 2 - Significant Accounting Policies	61
Note 3 - Fair Value Measurements	72
Note 4 - Acquisitions and Divestitures	74
Note 5 - Leasing	76
Note 6 - Equity Method Investments	77
Note 7 - Intangible Assets	79
Note 8 - Debt	80
Note 9 - Income Taxes	83
Note 10 - Employee Benefit Plans	87
Note 11 - Litigation, Claims and Contingencies	93
Note 12 - Stock-Based Compensation Plans	94
Note 13 - Earnings Per Share	96
Note 14 - Accumulated Other Comprehensive Income	96
Note 15 - Reportable Segment Information	97
Note 16 - Supplemental Balance Sheet Information	101
Note 17 - Subsequent Events	102

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of
Valvoline Inc. and Consolidated Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Valvoline Inc. and Consolidated Subsidiaries (the Company) as of September 30, 2021 and 2020, the related consolidated statements of comprehensive income, stockholders' equity (deficit) and cash flows for each of the three years in the period ended September 30, 2021, and the related notes and financial statement schedule listed in the Index at Item 15(a) (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 September 30, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2021, 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 September 30, 2021, 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 November 19, 2021, expressed an unqualified opinion thereon.

Adoption of New Accounting Standard

As discussed in Note 2 to the consolidated financial statements, the Company changed its method for accounting for leases in 2020.

Basis for Opinion

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosure to which it relates.

Valuation of Employee Benefit Obligations

Description of the Matter

At September 30, 2021, the Company's aggregate defined benefit pension and other postretirement obligations (together, the "Employee Benefit Obligations") were \$2,252 million and exceeded the fair value of pension plan assets of \$2,055 million, resulting in unfunded net Employee Benefit Obligations of \$197 million. As explained in Note 10 of the consolidated financial statements, the Company recognizes the change in the net actuarial gains and losses annually in the fourth quarter of each fiscal year and whenever a plan is determined to qualify for a remeasurement to reflect the updated actuarial assumptions. The remaining components of pension and other postretirement benefits cost are recorded ratably throughout the year.

Auditing the valuation of the Employee Benefit Obligations was complex due to the judgmental nature of the actuarial assumptions (e.g., discount rate and mortality rate) used in the measurement process. These assumptions have a significant effect on the projected benefit obligations.

How We Addressed the Matter in Our Audit

We tested controls that address the risks of material misstatements related to the valuation of the Employee Benefit Obligations. For example, we tested controls over management's review of the significant actuarial assumptions and the completeness and accuracy of the data inputs provided to the actuary. Where judgment was exercised by management, our audit procedures included testing controls over management's evaluation of the assumptions used in developing the Employee Benefit Obligations, including reviews of the selected mortality and discount rates with the Company's independent actuary.

To test the Employee Benefit Obligations, our audit procedures included, among others, evaluating the methodology used, the significant actuarial assumptions discussed above, and the underlying data used by the Company. We compared the actuarial assumptions used by management to its historical accounting practices and evaluated the change in the Employee Benefit Obligations from the prior year due to the change in service cost, interest cost, actuarial gains and losses, benefit payments, contributions and other activities. In addition, we involved an actuarial specialist to assist with our procedures. For example, the discount rate reflects the rates at which benefits could effectively be settled and is based on current investment yields of high-quality corporate bonds. The Company uses an actuarially-developed full yield curve approach in establishing its discount rate. We evaluated management's methodology for determining the discount rate that reflects the maturity and duration of the benefit payments. As part of this assessment, we tested the underlying securities used to develop the yield curve to evaluate whether they were appropriate for use in a yield curve and whether the provided yield curve reasonably followed from those securities. To evaluate the mortality rate, we assessed whether the information was consistent with publicly available information, and whether any market data adjusted for entity-specific adjustments were applied. We also tested the completeness and accuracy of the underlying data, including the participant data.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2016.

Cincinnati, Ohio
November 19, 2021

Valvoline Inc. and Consolidated Subsidiaries

Consolidated Statements of Comprehensive Income

(In millions, except per share amounts)	Years ended September 30		
	2021	2020	2019
Sales	\$ 2,981	\$ 2,353	\$ 2,390
Cost of sales	2,001	1,490	1,580
Gross profit	980	863	810
Selling, general and administrative expenses	520	442	449
Net legacy and separation-related (income) expenses	(24)	(30)	3
Equity and other income, net	(44)	(34)	(40)
Operating income	528	485	398
Net pension and other postretirement plan (income) expenses	(126)	(59)	60
Net interest and other financing expenses	111	93	73
Income before income taxes	543	451	265
Income tax expense	123	134	57
Net income	\$ 420	\$ 317	\$ 208

NET EARNINGS PER SHARE

Basic	\$ 2.30	\$ 1.70	\$ 1.10
Diluted	\$ 2.29	\$ 1.69	\$ 1.10

WEIGHTED AVERAGE COMMON SHARES OUTSTANDING

Basic	182	187	189
Diluted	183	188	189

COMPREHENSIVE INCOME

Net income	\$ 420	\$ 317	\$ 208
Other comprehensive income (loss), net of tax			
Currency translation adjustments	7	7	(12)
Amortization of pension and other postretirement plan prior service credits	(9)	(9)	(9)
Unrealized gain (loss) on cash flow hedges	2	(1)	—
Other comprehensive loss	—	(3)	(21)
Comprehensive income	\$ 420	\$ 314	\$ 187

See Notes to Consolidated Financial Statements.

Valvoline Inc. and Consolidated Subsidiaries

Consolidated Balance Sheets

(In millions, except per share amounts)	As of September 30	
	2021	2020
Assets		
Current assets		
Cash and cash equivalents	\$ 230	\$ 760
Receivables, net	496	433
Inventories, net	258	199
Prepaid expenses and other current assets	53	46
Total current assets	1,037	1,438
Noncurrent assets		
Property, plant and equipment, net	817	613
Operating lease assets	307	261
Goodwill and intangibles, net	775	529
Equity method investments	47	44
Deferred income taxes	14	34
Other noncurrent assets	194	132
Total noncurrent assets	2,154	1,613
Total assets	\$ 3,191	\$ 3,051
Liabilities and Stockholders' Equity (Deficit)		
Current liabilities		
Current portion of long-term debt	\$ 17	\$ —
Trade and other payables	246	189
Accrued expenses and other liabilities	306	255
Total current liabilities	569	444
Noncurrent liabilities		
Long-term debt	1,677	1,962
Employee benefit obligations	258	317
Deferred income taxes	26	1
Operating lease liabilities	274	231
Other noncurrent liabilities	252	172
Total noncurrent liabilities	2,487	2,683
Commitments and contingencies		
Stockholders' equity (deficit)		
Preferred stock, no par value, 40 shares authorized; no shares issued and outstanding	—	—
Common stock, par value \$0.01 per share, 400 shares authorized, 180 and 185 shares issued and outstanding at September 30, 2021 and 2020, respectively	2	2
Paid-in capital	35	24
Retained earnings (deficit)	90	(110)
Accumulated other comprehensive income	8	8
Total stockholders' equity (deficit)	135	(76)
Total liabilities and stockholders' equity (deficit)	\$ 3,191	\$ 3,051

See Notes to Consolidated Financial Statements.

Valvoline Inc. and Consolidated Subsidiaries

Consolidated Statements of Stockholders' Equity (Deficit)

(In millions, except per share amounts)	Common stock		Paid-in capital	Retained (deficit) earnings	Accumulated other comprehensive income	Totals
	Shares	Amount				
Balance at September 30, 2018	188	\$ 2	\$ 7	\$ (399)	\$ 32	\$ (358)
Net income	—	—	—	208	—	208
Dividends paid, \$0.424 per common share	—	—	—	(80)	—	(80)
Stock-based compensation, net of issuances	—	—	6	—	—	6
Cumulative effect of adoption of new revenue standard, net of tax	—	—	—	(13)	—	(13)
Other comprehensive loss, net of tax	—	—	—	—	(21)	(21)
Balance at September 30, 2019	188	2	13	(284)	11	(258)
Net income	—	—	—	317	—	317
Dividends paid, \$0.452 per common share	—	—	—	(84)	—	(84)
Stock-based compensation, net of issuances	—	—	11	—	—	11
Repurchase of common stock	(3)	—	—	(60)	—	(60)
Cumulative effect of adoption of new leasing standard, net of tax	—	—	—	1	—	1
Other comprehensive loss, net of tax	—	—	—	—	(3)	(3)
Balance at September 30, 2020	185	2	24	(110)	8	(76)
Net income	—	—	—	420	—	420
Dividends paid, \$0.500 per common share	—	—	1	(91)	—	(90)
Stock-based compensation, net of issuances	—	—	10	—	—	10
Repurchase of common stock	(5)	—	—	(127)	—	(127)
Cumulative effect of adoption of new credit losses standard, net of tax	—	—	—	(2)	—	(2)
Balance at September 30, 2021	180	\$ 2	\$ 35	\$ 90	\$ 8	\$ 135

See Notes to Consolidated Financial Statements.

Valvoline Inc. and Consolidated Subsidiaries

Consolidated Statements of Cash Flows

(In millions)	Years ended September 30		
	2021	2020	2019
Cash flows from operating activities			
Net income	\$ 420	\$ 317	\$ 208
Adjustments to reconcile to cash flows from operations			
Loss on extinguishment of debt	36	19	—
Depreciation and amortization	92	66	61
Deferred income taxes	48	92	23
Pension contributions	(5)	(11)	(10)
(Gain) loss on pension and other postretirement plan remeasurements	(72)	(22)	69
Stock-based compensation expense	14	12	9
Other, net	4	(5)	(5)
Change in assets and liabilities			
Receivables	(65)	(11)	(30)
Inventories	(53)	(1)	(10)
Payables and accrued liabilities	95	(3)	37
Other assets and liabilities	(110)	(81)	(27)
Total cash provided by operating activities	404	372	325
Cash flows from investing activities			
Additions to property, plant and equipment	(144)	(151)	(108)
Notes receivable, net of repayments of \$3 million in 2020	17	(31)	(2)
Acquisitions of businesses, net of cash acquired	(282)	(40)	(78)
Other investing activities, net	9	—	—
Total cash used in investing activities	(400)	(222)	(188)
Cash flows from financing activities			
Proceeds from borrowings	555	1,558	752
Payments of debt issuance costs and discounts	(7)	(16)	(2)
Repayments on borrowings	(829)	(929)	(734)
Premium paid to extinguish debt	(26)	(15)	—
Repurchases of common stock	(127)	(60)	—
Cash dividends paid	(91)	(84)	(80)
Other financing activities	(11)	(4)	(7)
Total cash (used in) provided by financing activities	(536)	450	(71)
Effect of currency exchange rate changes on cash, cash equivalents, and restricted cash	2	2	(3)
(Decrease) increase in cash, cash equivalents and restricted cash	(530)	602	63
Cash, cash equivalents and restricted cash - beginning of year	761	159	96
Cash, cash equivalents and restricted cash - end of year	\$ 231	\$ 761	\$ 159
Supplemental disclosures			
Interest paid	\$ 62	\$ 65	\$ 67
Income taxes paid	\$ 72	\$ 44	\$ 25

See Notes to Consolidated Financial Statements.

Valvoline Inc. and Consolidated Subsidiaries

Notes to Consolidated Financial Statements

NOTE 1 – DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Description of business

Valvoline Inc. (“Valvoline” or the “Company”) is a global vehicle and engine care company that powers the future of mobility through innovative services and products for electric, hybrid, and internal combustion powertrains. Established in 1866, Valvoline’s heritage spans 155 years, during which it has developed recognition across multiple service and product channels. Valvoline’s services performed at its retail stores, Valvoline-branded passenger car motor oils, and complementary products are designed to serve evolving maintenance needs and improve vehicle and engine performance and lifespan.

Valvoline operates and franchises approximately 1,600 service center locations and is the second and third largest chain in the United States (“U.S.”) and Canada, respectively, by number of stores. With sales in more than 140 countries and territories, Valvoline’s solutions are available for every engine and powertrain, including high-mileage and heavy-duty applications, and are offered at more than 80,000 locations worldwide.

Basis of presentation and consolidation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) and Securities and Exchange Commission (“SEC”) regulations. The financial statements are presented on a consolidated basis for all periods presented and include the operations of the Company and its majority-owned and controlled subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Certain prior period amounts have been reclassified in the accompanying consolidated financial statements and notes thereto to conform to the current period presentation.

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES

Valvoline’s significant accounting policies, which conform to U.S. GAAP and are applied on a consistent basis in all periods presented, except when otherwise disclosed, are described below.

Use of estimates, risks and uncertainties

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosures of contingent matters. Although management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, actual results could differ significantly from the estimates under different assumptions or conditions.

Valvoline has substantially maintained its operations throughout the novel coronavirus (“COVID-19”) pandemic to-date and has continued precautionary measures to protect the Company’s employees and customers and manage through the currently known impacts on its business. Given the unprecedented nature of the pandemic, the extent of future impacts cannot be reasonably estimated at this time due to numerous uncertainties, including the ultimate duration and severity of the pandemic.

Cash and cash equivalents

All short-term, highly liquid investments having original maturities of three months or less are considered to be cash equivalents.

Receivables and allowance for credit losses

Valvoline invoices customers and recognizes a receivable within its Consolidated Balance Sheets once the Company performs a service or transfers control of a product, at which point its right to consideration becomes unconditional and only the passage of time is required before payment of that consideration is due. As the majority of the Company's performance obligations are satisfied at a point in time and customers typically do not make material payments in advance, nor does Valvoline have a right to consideration in advance of control transfer, the Company has no contract assets or contract liabilities.

Valvoline adopted guidance in fiscal 2021 that changes the recognition of credit losses from an incurred or probable loss methodology to a current expected credit loss model, which results in the immediate recognition of losses that are expected to occur over the life of the financial instruments, principally trade and other receivables. Allowances are maintained to estimate expected lifetime credit losses that are based on a broad range of reasonable and supportable information and factors, including the length of time receivables are past due, the financial health of its customers, macroeconomic conditions, and historical collection experience. If the financial condition of its customers deteriorates or other circumstances occur that result in an impairment of customers' ability to make payments, the Company records additional allowances as needed. The Company writes off uncollectible receivables against the allowance when collection efforts have been exhausted and/or any legal action taken by the Company has concluded.

Inventories

Inventories are primarily carried at the lower of cost or net realizable value using the weighted average cost method. In addition, certain lubricants are valued at the lower of cost or market using the last-in, first-out ("LIFO") method to provide matching of revenues with current costs. Inventory costs include materials, labor and manufacturing overhead related to the purchase and production of inventories. The Company regularly reviews inventory quantities on hand and the estimated utilization of inventory. Excess and obsolete reserves are established when inventory is estimated to not be usable based on forecasts, product demand, life cycle, or utility.

Property, plant and equipment

Property, plant and equipment is recorded at cost and is depreciated using the straight-line method over the estimated useful lives of the assets. Buildings generally have useful lives of ten to twenty-five years and machinery and equipment typically have two to thirty year useful lives, dependent on the nature and utility of the assets. Building and leasehold improvements are depreciated over the shorter of their estimated useful lives or the period from which the date the assets are placed in service to the end of the lease term, as appropriate. Depreciation expense is recognized in Cost of sales or Selling, general and administrative expenses within the Consolidated Statements of Comprehensive Income based on the function the underlying asset supports. Property, plant and equipment is relieved of the cost and related accumulated depreciation when assets are disposed of or otherwise retired. Gains or losses on the dispositions of property, plant and equipment are included in the Consolidated Statements of Comprehensive Income and generally reported in Equity and other income, net.

Property, plant and equipment carrying values are evaluated for recoverability at the lowest level of identifiable cash flows when impairment indicators are present. Such indicators could include, among other factors, operating losses, unused capacity, market value declines and technological obsolescence. Recorded values of asset groups of long-lived assets that are not expected to be recovered through undiscounted future net cash flows are written down to fair value, which generally is determined from estimated discounted future net cash flows (assets held for use) or net realizable value (assets held for sale).

Leases

Certain of the properties Valvoline utilizes, including its retail service center stores, offices, blending and warehouse facilities, in addition to certain equipment, are leased, with a small portion subleased primarily to Valvoline's franchisees. In fiscal 2020, Valvoline adopted new guidance related to leases using the optional transition approach, with prospective application from adoption on October 1, 2019 and the financial statements prior to

adoption reported in accordance with the previous guidance. Valvoline's policies under the new guidance are outlined below.

Valvoline determines if an arrangement contains a lease at inception primarily based on whether or not the Company has the right to control the asset during the contract period. For all agreements where it is determined that a lease exists, the related lease assets and liabilities are recognized within the Consolidated Balance Sheets as either operating or finance leases at the commencement date.

The lease liability is measured based on the present value of future payments over the lease term, and the right-of-use asset is measured as the lease liability, adjusted for prepaid lease payments, lease incentives, and initial direct costs (e.g., commissions). Valvoline's leases generally have terms ranging from less than one year to more than 20 years, and leases with an initial term of 12 months or less are included in the measurement of its right-of-use asset and lease liability balances. The lease term includes options to extend or terminate the lease when it is reasonably certain that the option will be exercised.

Fixed rental payments, including variable payments based on a rate or index, are included in the determination of the lease liability. Many leases also require the payment of taxes, insurance, operating expenses, and maintenance. In instances where these other components are fixed, they are included in the measurement of the lease liability due to Valvoline's election to combine lease and non-lease components and account for them as a single component. Otherwise, these components are recognized along with other variable lease payments in the Consolidated Statements of Comprehensive Income in the period in which the obligation for those payments is incurred.

As most leases do not provide the rate implicit in the lease, the Company estimates its incremental borrowing rate to best approximate the rate of interest that Valvoline would have to pay to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. Valvoline applies the incremental borrowing rate to groups of leases with similar lease terms in determining the present value of future payments. In determining the incremental borrowing rate, the Company considers information available at the commencement date, including lease term, interest rate yields for specific interest rate environments and the Company's credit spread.

Business combinations

The Company allocates the purchase consideration to the identifiable assets acquired and liabilities assumed in business combinations based on their acquisition-date fair values. The excess of the purchase consideration over the amounts assigned to the identifiable assets and liabilities is recognized as goodwill, or if the fair value of the net assets acquired exceeds the purchase consideration, a bargain purchase gain is recorded. Factors giving rise to goodwill generally include operational synergies that are anticipated as a result of the business combination and growth expected to result in economic benefits from access to new customers and markets. The fair values of identifiable intangible assets acquired in business combinations are generally determined using an income approach, requiring financial forecasts and estimates as well as market participant assumptions.

The incremental financial results of the businesses that Valvoline has acquired are included in the Company's consolidated financial results from the respective dates of each acquisition.

Goodwill and other intangible assets

Valvoline evaluates goodwill for impairment annually as of July 1 or when events and circumstances indicate an impairment may have occurred. This assessment consists of evaluating each reporting unit's fair value compared to its carrying value. Valvoline's historical reporting units were evaluated as a result of the realignment of its global operations during the third quarter of fiscal 2021. As a result, Valvoline determined its reporting units were Retail Services and Global Products, consistent with its realigned operating and reportable segments. In connection with the identification of its current operating and reportable segments and reporting units, goodwill balances and activity presented herein were reclassified to conform to the current presentation and were subject to assessment for goodwill impairment at the reporting unit level.

In evaluating goodwill for impairment, Valvoline has the option to first perform a qualitative assessment to determine whether further impairment testing is necessary or to perform a quantitative assessment by comparing the fair value

of a reporting unit to its carrying amount, including goodwill. Under the qualitative assessment, the Company is not required to calculate the fair value of a reporting unit unless the entity determines that it is more likely than not that its fair value is less than its carrying amount. Qualitative factors considered include macroeconomic conditions, industry and market conditions, cost factors, and overall financial performance, among others.

Under the quantitative assessment, if the fair value of a reporting unit is less than its carrying amount, then the amount of the impairment loss, if any, is measured as the excess of the carrying value of the reporting unit's goodwill over its fair value, not to exceed the total goodwill allocated to the reporting unit. Fair values of the reporting units are estimated using a weighted methodology considering the output from both the income and market approaches. The income approach incorporates the use of a discounted cash flow ("DCF") analysis, and a number of significant assumptions and estimates are involved in the application of the DCF model to forecast operating cash flows, including markets and market shares, sales volumes and prices, costs to produce, tax rates, capital spending, discount rate, weighted average cost of capital, terminal values, and working capital changes. Several of these assumptions vary among reporting units, and the cash flow forecasts are generally based on approved strategic operating plans. The market approach is performed using the Guideline Public Companies method based on earnings multiple data. The Company also performs a reconciliation between market capitalization and the estimated aggregate fair value of the reporting units, including consideration of a control premium.

Valvoline performed a quantitative assessment during fiscal 2021 and determined that the fair values of the Company's reporting units were substantially in excess of carrying values and no impairment existed.

Acquired finite-lived intangible assets principally consist of certain trademarks and trade names, reacquired franchise rights, and customer relationships. Intangible assets acquired in an asset acquisition are carried at cost, less accumulated amortization. For intangible assets acquired in a business combination, the estimated fair values of the assets acquired are used to establish the carrying values, which are determined using assumptions from the perspective of a market participant and generally an income approach. These intangible assets are amortized on a straight-line basis over their estimated useful lives. Valvoline evaluates finite-lived intangible assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable, and any assets not expected to be recovered through undiscounted future net cash flows are written down to current fair value.

Equity method investments

Investments in companies, including joint ventures, where Valvoline has the ability to exert significant influence over, but not control, operating and financial policies of the investee are accounted for using the equity method of accounting. Judgment regarding the level of influence over each investment includes considering key factors such as the Company's ownership interest, representation on the board of directors, and participation in policy-making decisions. The Company's proportionate share of the net income or loss of these companies is included within Equity and other income, net in the Consolidated Statements of Comprehensive Income.

The Company evaluates equity method investments for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment may not be recoverable. Factors considered by the Company when reviewing an equity method investment for other-than-temporary impairment include the length of time and extent to which the fair value of the equity method investment has been less than its carrying amount, the investee's financial condition and near-term prospects, and the intent and ability to hold the investment for a period of time sufficient to allow for anticipated recovery. An impairment that is other-than-temporary is recognized in the period identified.

Pension and other postretirement benefit plans

Valvoline sponsors defined benefit pension and other postretirement plans in the U.S and in certain other countries. The Company's U.S. pension plans are closed to new participants and the accrual of pension benefits has been frozen since September 30, 2016. In addition, most international pension plans are closed to new participants while those that remain open relate to areas where local laws require such plans. Valvoline also sponsors retiree healthcare and life insurance plans for certain qualifying participants with amendments effective in fiscal 2017 to limit annual per capita costs.

Valvoline recognizes the funded status of each applicable plan within the Consolidated Balance Sheets whereby each unfunded plan is recognized as a liability and each funded plan is recognized as either an asset or liability based on its funded status. The funded status is measured as the difference between the fair value of plan assets and the benefit obligation. Changes in the fair value of plan assets and net actuarial gains or losses are recognized upon remeasurement as of September 30, the annual measurement date, and whenever a remeasurement is triggered. The remaining components of pension and other postretirement benefits income or expense are recorded ratably throughout the year.

The fair value of plan assets represents the current market value of assets held by irrevocable trust funds for the sole benefit of participants, and the benefit obligation is the actuarial present value of the benefits expected to be paid upon retirement, death, or other distributable event based on estimates. These valuations reflect the terms of the plans and use participant-specific information such as compensation, age and years of service, as well as certain key assumptions that require significant judgment, including, but not limited to, estimates of discount rates, rate of compensation increases, interest rates and mortality rates. Actuarial gains and losses may be related to actual results that differ from assumptions as well as changes in assumptions, which may occur each year.

Due to the freeze of U.S. pension benefits effective September 30, 2016, continuing service costs are limited to certain international pension plans, and are reported in the same caption of the Consolidated Statements of Comprehensive Income as the related employee costs. All components of net periodic benefit income or costs other than service cost are recognized below operating income within Net pension and other postretirement plan (income) expenses in the Consolidated Statements of Comprehensive Income.

Commitments and contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, penalties and other sources are recorded when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Legal costs such as outside counsel fees and expenses are charged to expense in the period incurred and are recorded in Selling, general and administrative expenses in the Consolidated Statements of Comprehensive Income.

Revenue recognition

Revenue is recognized for the amount that reflects the consideration the Company is expected to be entitled to receive based on when control of the promised good or service is transferred to the customer. Revenue recognition is evaluated through the following five steps: (i) identification of the contract(s) with a customer; (ii) identification of the performance obligation(s) in the contract(s); (iii) determination of the transaction price; (iv) allocation of the transaction price to the performance obligation(s) in the contract(s); and (v) recognition of revenue when or as a performance obligation is satisfied.

Nature of goods and services

Valvoline generates all revenues from contracts with customers, primarily as a result of the sale and service delivery of engine and automotive maintenance products to its customers. Valvoline derives its sales from its broad line of products and complementary services through the following three principal activities managed across its two reportable segments: (i) engine and automotive maintenance products, (ii) company-operated service center operations, and (iii) franchised service center operations. Valvoline's sales are generally to mass market and auto parts retail, installer, industrial, distributor, franchise, and end consumers to facilitate vehicle and equipment preventive maintenance.

Valvoline's sales are predominantly comprised of products and services sold at a point in time with approximately 98% recognized either through ship-and-bill performance obligations or company-operated service center operations. The remainder of the Company's sales generally relate to franchise fees, including royalties, transferred over time. The following table summarizes Valvoline's sales by timing of revenue recognized for the fiscal years ended September 30:

(In millions)	2021	2020	2019
Sales at a point in time	\$ 2,931	\$ 2,313	\$ 2,347
Franchised revenues transferred over time	50	40	43
Total consolidated sales	\$ 2,981	\$ 2,353	\$ 2,390

Below is a summary of the key considerations for Valvoline's material revenue-generating activities:

Engine and automotive maintenance products

Engine and automotive maintenance products primarily include lubricants, antifreeze, chemicals, filters, and other complementary products for use across a wide array of vehicles and engines. The Company's customers typically enter into a sales agreement which outlines a framework of terms and conditions that apply to all current and future purchase orders for the customer submitted under such sales agreement. In these situations, the Company's contract with the customer is the sales agreement combined with the customer purchase order as specific products and quantities are not indicated until a purchase order is submitted. As the Company's contract with the customer is typically for a single purchase order under the supply agreement to be delivered at a point in time, the duration of the contract is almost always one year or less.

The Company's products are distinct and separately identifiable on customer purchase orders, with each product sale representing a separate performance obligation that is generally delivered simultaneously. The Company has elected to not disclose information about remaining performance obligations as substantially all of the Company's product sales contracts have a duration of one year or less. Valvoline is the principal to these contracts as the Company has control of the products prior to transfer to the customer. Accordingly, revenue is recognized on a gross basis.

The Company determines the point in time at which control is transferred and the performance obligation is satisfied by considering when the customer has the ability to direct the use of and obtain substantially all of the remaining benefits of the product, which generally coincides with the transfer of title and risk of loss to the customer and is typically determined based on delivery terms within the underlying contract.

Customer payment terms vary by region and customer and are generally 30 to 60 days after delivery. Valvoline does not provide extended payment terms greater than one year and therefore, does not adjust the promised amount of consideration for the effects of a significant financing component.

Company-operated service center operations

Performance obligations related to company-operated service center operations primarily include the sale of engine and automotive maintenance products and related services. These performance obligations are distinct and are delivered simultaneously at a point in time. Accordingly, sales from company-operated service center operations is recognized when payment is tendered at the point of sale, which coincides with the completion of product and service delivery and the transfer of control and benefits from the performance obligations to the customer.

Franchised service center operations

The primary performance obligations related to franchised service center operations include product sales as described above and the license of intellectual property, which provides access to the Valvoline brand and proprietary information to operate service center stores over the term of a franchise agreement. Other franchise performance obligations do not result in material revenue. Each performance obligation is distinct, and franchisees generally receive and consume the benefits provided by the Company's performance over the course of the franchise agreement, which typically ranges from 10 to 15 years. Billings and payments occur monthly. Variable consideration is not disclosed as remaining performance obligations qualify for the sales-based royalty and usage-based exemptions.

In exchange for the license of Valvoline intellectual property, franchisees generally remit initial fees upon opening a service center store and royalties at a contractual rate of the applicable service center store sales over the term of the franchise agreement. The license provides access to the intellectual property over the term of the franchise agreement and is considered a right-to-access license of symbolic intellectual property as substantially all of its

utility is derived from association with the Company's past and ongoing activities. The license granted to operate each franchised service center store is the predominant item to which the royalties relate and represents a distinct performance obligation which is recognized over time as the underlying sales occur, as this is the most appropriate measure of progress toward complete satisfaction of the performance obligation.

Variable consideration

The Company only offers an assurance-type warranty with regard to the intended functionality of products sold, which does not represent a distinct performance obligation within the context of the contract. Product returns and refunds are generally not material and are not accepted unless the item is defective as manufactured. Estimated product returns are recorded as a reduction in reported revenues at the time of sale based upon historical product return experience and is adjusted for known trends to arrive at the amount of consideration to which Valvoline expects to receive.

The nature of Valvoline's contracts with customers often give rise to variable consideration consisting primarily of promotional rebates and customer pricing discounts based on achieving certain levels of sales activity that generally decrease the transaction price. The Company determines the transaction price as the amount of consideration it expects to be entitled to in exchange for fulfilling the performance obligations, including the effects of any variable consideration, or amounts payable to the customer when there is a basis to reasonably estimate the amount and it is probable there will not be a significant reversal. Variable consideration is recorded as a reduction of the transaction price at the time of sale and is primarily estimated utilizing the most likely amount method that is expected to be earned as the Company is able to estimate the anticipated discounts within a sufficiently narrow range of possible outcomes based on its extensive historical experience with certain customers, similar programs and management's judgment with respect to estimating customer participation and performance levels. Variable consideration is reassessed at each reporting date and adjustments are made, when necessary.

The reduction of transaction price due to customer incentives was \$402 million, \$332 million, and \$346 million in the Consolidated Statements of Comprehensive Income for the years ended September 30, 2021, 2020, and 2019, respectively. Reserves for these customer programs and incentives were \$71 million and \$64 million as of September 30, 2021 and 2020, respectively, and are recorded within Accrued expenses and other liabilities in the Consolidated Balance Sheets.

Allocation of transaction price

In each contract with multiple performance obligations, Valvoline allocates the transaction price, including variable consideration, to each performance obligation on a relative standalone selling price basis, which is generally determined based on the directly observable data of the Company's standalone sales of the performance obligations in similar circumstances to similar customers. The amount allocated to each performance obligation is recognized as sales commensurate with the transfer of control to the customer.

Shipping and handling activities that occur after the customer has obtained control are treated as fulfillment activities (i.e., an expense) rather than as a performance obligation. Accordingly, amounts billed for shipping and handling are a component of the transaction price included in net sales, while costs incurred are included in cost of sales. Shipping and handling costs recorded in sales were \$10 million in fiscal 2021, \$9 million in fiscal 2020, and \$10 million in fiscal 2019. Furthermore, the Company excludes taxes collected from customers from sales, which are reflected in accrued expenses until remitted to the appropriate governmental authority.

Incremental direct costs of obtaining a contract, primarily sales commissions, are expensed when incurred due to the short-term nature of individual contracts, which would result in amortization periods of one year or less. These costs are not material and are recorded within Selling, general and administrative expenses in the Consolidated Statements of Comprehensive Income.

Expense recognition

Cost of sales are expensed as incurred and include costs associated with operation of the Company's plants, distribution network and retail service center stores, including depreciation, occupancy, labor and benefits, material and production, inbound and outbound freight, purchasing and receiving, inspection, warehousing, and all other distribution network costs. Selling, general and administrative expenses are recognized as incurred and include

sales and marketing costs, research and development costs, advertising, customer support, and other administrative costs. Advertising costs were \$90 million in fiscal 2021, \$72 million in fiscal 2020 and \$73 million in fiscal 2019, and research and development costs were \$15 million in fiscal 2021 and \$13 million in both fiscal 2020 and 2019.

Stock-based compensation

The Company recognizes expense related to stock-based compensation, net of actual forfeitures, over the requisite vesting period based on the grant date fair value of new or modified awards. The Company's outstanding stock-based compensation awards are primarily classified as equity, with a small portion of liability-classified awards based on award terms and conditions.

Income taxes

Income tax expense is provided based on income before income taxes. The Company estimates its tax expense based on current tax laws in the statutory jurisdictions in which it operates. These estimates include judgments about the recognition and realization of deferred tax assets and liabilities resulting from the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement carrying amounts and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to be recovered or settled. As changes in tax laws or rates occur, deferred tax assets and liabilities are adjusted in the period changes are enacted through income tax expense. Valvoline records valuation allowances related to its deferred income tax assets when it is more likely than not that some portion or all of the deferred income tax assets will not be realized.

Valvoline records estimated incremental withholding taxes on undistributed earnings to account for certain of its non-U.S. subsidiaries as being immediately subject to tax, while certain other outside basis differences restricted by regulations, operational or investing needs for non-U.S. subsidiaries are indefinitely reinvested. If these outside basis differences were no longer to be indefinitely reinvested in the future, the Company may be subject to additional income and withholding taxes, which are not practicable to estimate.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the consolidated financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being sustained upon examination by authorities. Interest and penalties related to unrecognized tax benefits are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law and until such time that the related tax benefits are recognized. Interest and penalties were not material to any of the periods presented herein.

Derivatives

Valvoline's derivative instruments consist of currency exchange and interest rate swap agreements, each of which is described further below.

Currency derivatives

The Company's currency exchange contracts are used to manage non-functional currency denominated balance sheet exposures and exchange on currency for another at a fixed rate on a future date of generally a month or less. These contracts are not designated as hedging instruments and are accounted for as either assets or liabilities in the Consolidated Balance Sheets at fair value with the resulting gains or losses recognized as adjustments to earnings within Selling, general and administrative expenses in the Consolidated Statements of Comprehensive Income. Gains and losses are recognized as exchange rates change the fair value of these instruments and upon settlement to offset the remeasurement gain or loss on the related currency-denominated exposures in the same period. The Company classifies its cash flows related to currency exchange contracts as investing activities in the Consolidated Statements of Cash Flows.

Interest rate swap agreements

The Company's interest rate swap agreements effectively modify its exposure to interest rate risk by converting floating rate debt to a fixed rate for the term of the swap agreements, reducing the impact of interest rate changes on future interest expense. These agreements involve the receipt of floating rate amounts in exchange for fixed rate interest payments over the life of the agreement without an exchange of the underlying principal amount.

Valvoline's interest rate swap agreements are designated as cash flow hedges with effectiveness of the hedges assessed at inception and quarterly thereafter. To the extent the hedging relationship is highly effective, the unrealized gains or losses on the swaps are recorded in Accumulated other comprehensive income and reclassified into earnings within Net interest and other financing expenses when the payments occur. The Company classifies its cash flows related to interest rate swap agreements as operating activities in the Consolidated Statements of Cash Flows.

The fair values of the interest rate swaps are reflected as an asset or liability in the Consolidated Balance Sheets and the change in fair value is reported in Accumulated other comprehensive income. The fair values of the interest rate swaps are estimated as the net present value of projected cash flows based upon forward interest rates at the balance sheet date. The Company does not offset fair value amounts recognized in its Consolidated Balance Sheets for presentation purposes.

Fair value measurements

Fair value is defined as an exit price, representing an amount that would be received to sell an asset or the amount paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the accounting guidance prioritizes the inputs used to measure fair value into the following three-tier fair value hierarchy for which an instrument's classification within the fair value hierarchy is based upon the lowest level of input that is significant to the instrument's fair value measurement:

- **Level 1** - Observable inputs such as unadjusted quoted prices in active markets for identical assets or liabilities.
- **Level 2** - Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.
- **Level 3** - Unobservable inputs for the asset or liability for which there is little, if any, market activity at the measurement date. Unobservable inputs reflect the Valvoline's assumptions about what market participants would use to price the asset or liability. The inputs are developed based on the best information available in the circumstances, which may include the Company's own financial data, such as internally developed pricing models, DCF methodologies, as well as instruments for which the fair value determination requires significant management judgment.

Certain investments which measure fair value using the net asset value ("NAV") per share practical expedient are not classified within the fair value hierarchy and are separately disclosed.

Valvoline measures its financial assets and financial liabilities at fair value based on one or more of the following three valuation techniques:

- **Market approach:** Prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities
- **Cost approach:** Amount that would be required to replace the service capacity of an asset (replacement cost)
- **Income approach:** Techniques to convert future amounts to a single present amount based upon market expectations (including present value techniques, option pricing and excess earnings models)

The Company generally uses a market approach, when practicable, in valuing financial instruments. In certain instances, when observable market data is lacking, the Company uses valuation techniques consistent with the income approach whereby future cash flows are converted to a single discounted amount. The Company uses multiple sources of pricing as well as trading and other market data in its process of reporting fair values.

The fair values of accounts receivables and accounts payable approximate their carrying values due to the relatively short-term nature of the instruments. Valvoline's notes receivable primarily consist of variable-rate interest term loans extended to franchisees to provide financial assistance as a response to the COVID-19 pandemic. These notes bear interest comparable with the market rates within Valvoline's variable rate borrowings, and accordingly, their carrying amounts approximate fair value.

The methods described above may produce a fair value that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement.

Currency translation

Operations outside the United States are measured primarily using the local currency as the functional currency. Upon consolidation, the results of operations of the subsidiaries and affiliates whose functional currency is other than the U.S. dollar are translated into U.S. dollars at the average exchange rates for the year while assets and liabilities are translated at year-end exchange rates. Adjustments to translate assets and liabilities into U.S. dollars are recorded in the stockholders' equity section of the Consolidated Balance Sheets as a component of Accumulated other comprehensive income and are included in net earnings only upon sale or substantial liquidation of the underlying non-U.S. subsidiary or affiliated company.

Earnings per share

Basic earnings per share ("EPS") is calculated by dividing net income by the weighted-average number of common shares outstanding during the reported period. Diluted EPS is calculated similar to basic EPS, except that the weighted-average number of shares outstanding includes the number of shares that would have been outstanding had potentially dilutive common shares been issued. Potentially dilutive securities include stock appreciation rights and nonvested stock-based awards. Nonvested market and performance-based share awards are included in the weighted-average diluted shares outstanding each period if established market or performance criteria have been met at the end of the respective periods.

Share repurchases

Shares that are repurchased are retired and returned to the status of authorized, unissued shares. The excess of the repurchase price over the par value of shares acquired is recognized in Retained earnings.

Recent accounting pronouncements

The following standards relevant to Valvoline were either issued or adopted in the current year, or are expected to have a meaningful impact on Valvoline in future periods.

Recently adopted

In June 2016, the Financial Accounting Standards Board ("FASB") issued updated guidance that changes the recognition of credit losses from an incurred or probable loss methodology to a current expected credit loss model that results in the immediate recognition of credit losses that are expected to occur over the life of the financial instruments that are within the scope of the guidance, principally trade and other receivables for Valvoline. The new credit loss guidance was adopted on October 1, 2020 using the required modified retrospective approach. Under this approach, the new accounting guidance is applied prospectively from the date of adoption through a cumulative effect adjustment in retained deficit, while prior period financial statements continue to be reported in accordance with the previous guidance. Adoption did not have a material impact on the Company's consolidated financial statements and resulted in a \$2 million, net of tax, cumulative effect of accounting change that increased retained

deficit and allowances for credit losses. Refer to Note 16 for additional information regarding the Company's trade and other receivables and its allowances for credit losses.

Issued but not yet adopted

In March 2020, the FASB issued guidance regarding the effects of reference rate reform on financial reporting. This guidance provides temporary optional expedients and exceptions to accounting guidance for certain contract modifications and hedging arrangements to ease financial reporting burdens as the market transitions from the London Interbank Offered Rate ("LIBOR") and other interbank reference rates to alternative reference rates.

The Company has interest rate swap hedging arrangements and long-term debt as described in Notes 3 and 8 in the Notes to Consolidated Financial Statements, respectively, for which existing payments are LIBOR-based. This guidance is available to be adopted on a prospective basis through the end of calendar 2022 to simplify the accounting for arrangements modified for the transition to alternative reference rates. The Company expects to adopt this guidance to the extent its arrangements are modified for the underlying reference rate prior to the end of calendar 2022 and does not expect adoption will have a material impact on its condensed consolidated financial statements.

The FASB issued other accounting guidance during the period that is not currently applicable or not expected to have a material impact on Valvoline's financial statements, and therefore, is not described above.

NOTE 3 – FAIR VALUE MEASUREMENTS

Recurring fair value measurements

The Company's financial assets and liabilities accounted for at fair value on a recurring basis are summarized below by level within the fair value hierarchy:

(In millions)	As of September 30, 2021				
	Total	Level 1	Level 2	Level 3	NAV ^(a)
Cash and cash equivalents					
Money market funds	\$ 13	\$ 13	\$ —	\$ —	\$ —
Time deposits	87	—	87	—	—
Prepaid expenses and other current assets					
Currency derivatives	3	—	3	—	—
Other noncurrent assets					
Non-qualified trust funds	11	—	4	—	7
Interest rate swap agreements	2	—	2	—	—
Total assets at fair value	\$ 116	\$ 13	\$ 96	\$ —	\$ 7
Accrued expenses and other liabilities					
Currency derivatives	\$ 3	\$ —	\$ 3	\$ —	\$ —
Interest rate swap agreements	1	—	1	—	—
Other noncurrent liabilities					
Deferred compensation obligations	24	—	—	—	24
Total liabilities at fair value	\$ 28	\$ —	\$ 4	\$ —	\$ 24
As of September 30, 2020					
(In millions)	Total	Level 1	Level 2	Level 3	NAV ^(a)
Cash and cash equivalents					
Money market funds	\$ 296	\$ 296	\$ —	\$ —	\$ —
Time deposits	139	—	139	—	—
Prepaid expenses and other current assets					
Currency derivatives	3	—	3	—	—
Other noncurrent assets					
Non-qualified trust funds	16	—	8	—	8
Total assets at fair value	\$ 454	\$ 296	\$ 150	\$ —	\$ 8
Accrued expenses and other liabilities					
Currency derivatives	\$ 2	\$ —	\$ 2	\$ —	\$ —
Interest rate swap agreements	1	—	1	—	—
Other noncurrent liabilities					
Deferred compensation obligations	25	—	—	—	25
Total liabilities at fair value	\$ 28	\$ —	\$ 3	\$ —	\$ 25

(a) Funds measured at fair value using the NAV per share practical expedient have not been classified in the fair value hierarchy.

Money market funds

Money market funds trade in an active market and are valued using quoted market prices, which are Level 1 inputs.

Time deposits

Time deposits are balances held with financial institutions at face value plus accrued interest, which approximates fair value and are categorized as Level 2.

Currency derivatives

The Company had outstanding currency forward contracts with notional values of \$137 million and \$149 million as of September 30, 2021 and 2020, respectively. The fair value of these outstanding contracts are recorded as assets and liabilities on a gross basis measured using readily observable market inputs to estimate the fair value for similar derivative instruments and are classified as Level 2. Gains and losses recognized related to these instruments were not material in any period presented herein.

Non-qualified trust funds

The Company maintains a non-qualified trust that is utilized to fund benefit payments for certain of its U.S. non-qualified pension plans. This trust is primarily invested in fixed income U.S. government bonds and mutual funds that are measured at fair value based upon Level 2 inputs corroborated by observable market data and using the NAV per share practical expedient, respectively. There were no significant redemption restrictions or unfunded commitments on these mutual fund investments as of September 30, 2021. Gains and losses related to these investments are immediately recognized within Selling, general and administrative expenses in the Consolidated Statements of Comprehensive Income and were not material in any period presented herein.

Interest rate swap agreements

The Company is party to four interest rate swap agreements with three to four year maturities to exchange interest rate payments on \$350 million of variable rate term loan borrowings to fixed interest rates. The Company expects these hedges to be highly effective and based on interest rates as of September 30, 2021 and current circumstances, estimates that there will not be material reclassifications into earnings over the next twelve months.

The fair value of interest rate swap agreements represents the difference in the present value of cash flows calculated at the contracted interest rates and at current market interest rates at the end of the period. The Company utilizes Level 2 observable inputs such as interest rate yield curves to estimate fair value for the interest rate swap agreements.

Deferred compensation obligations

The Company has an unfunded deferred compensation plan that is valued based on the underlying participant-directed investments. The fair value of underlying investments in collective trust funds is determined using the NAV provided by the administrator of the fund as a practical expedient. The NAV is determined by each fund's trustee based upon the fair value of the underlying assets owned by the fund, less its liabilities, divided by outstanding units. There were no significant redemption restrictions or unfunded commitments on these investments as of September 30, 2021. Changes in the fair values are recognized in the Consolidated Statements of Comprehensive Income within Selling, general and administrative expenses and were not material for the periods presented herein.

Fair value of long-term debt

Long-term debt is reported in the Consolidated Balance Sheets at carrying value, rather than fair value, and is therefore excluded from the disclosure above of financial assets and liabilities measured at fair value within the consolidated financial statements on a recurring basis. The fair values of the Company's outstanding fixed rate senior notes shown in the table below are based on recent trading values, which are considered Level 2 inputs within the fair value hierarchy.

(In millions)	September 30, 2021			September 30, 2020		
	Fair value	Carrying value ^(a)	Unamortized discounts and issuance costs	Fair value	Carrying value ^(a)	Unamortized discounts and issuance costs
2025 Notes	\$ —	\$ —	\$ —	\$ 827	\$ 790	\$ (10)
2030 Notes	622	593	(7)	613	592	(8)
2031 Notes	531	529	(6)	—	—	—
Total	<u>\$ 1,153</u>	<u>\$ 1,122</u>	<u>\$ (13)</u>	<u>\$ 1,440</u>	<u>\$ 1,382</u>	<u>\$ (18)</u>

(a) Carrying values shown are net of unamortized discounts and issuance costs.

Refer to Note 8 for details of these notes as well as Valvoline's other debt instruments that have variable interest rates with carrying amounts that approximate fair value.

NOTE 4 – ACQUISITIONS AND DIVESTITURES

Acquisitions

Fiscal 2021 acquisitions

The Company acquired 134 service center stores in single and multi-store transactions for an aggregate purchase price of \$282 million during fiscal 2021. These acquisitions expand Valvoline's services presence in key North American and international markets, increase the Retail Services system to more than 700 company-operated and nearly 1,600 system-wide service center stores, and included:

- Fourteen company-operated service center stores in Texas acquired from Kent Lubrication Centers Ltd. (doing business as Avis Lube) on October 1, 2020;
- Twenty-one former franchise locations converted to company-operated service center stores in Kansas and Missouri acquired from Westco Lube, Inc. on October 15, 2020;
- Twelve company-operated service center stores in Idaho acquired from L&F Enterprises (doing business as Einstein's Oilery) on October 30, 2020;
- Twenty-seven Mister Oil Change Express® locations (15 company-operated and 12 franchise-operated) across seven states acquired from Car Wash Partners, Inc. on December 11, 2020;
- Sixteen former franchise locations converted to company-operated service center stores in Texas acquired from AWC Premium Automotive Service Ltd. on April 30, 2021;
- Thirteen former franchise and fourteen former joint venture locations converted to company-operated service center stores acquired in single and multi-store transactions; and
- Eleven company-operated service center stores and six former Express Care locations acquired in single and multi-store transactions.

Fiscal 2020 acquisitions

During fiscal 2020, Valvoline acquired 35 service center stores in single and multi-store transactions, including 23 former franchise locations converted to company-operated service centers stores, for an aggregate purchase price of \$40 million within the Retail Services reportable segment. These acquisitions provide an opportunity to expand Valvoline's Retail Services system within key markets.

Fiscal 2019 acquisitions

Valvoline acquired 60 service center stores and a lubricant production company during fiscal 2019 for an aggregate purchase price of \$78 million. These acquisitions included 31 franchise service center stores in Canada acquired from Oil Changers Inc. on October 31, 2018, five former franchise locations converted to company-operated service centers stores, and 24 company-operated service center stores acquired in single and multi-store transactions within the Retail Services reportable segment. The Company also acquired an Eastern European lubricant production company, including its manufacturing facility, within the Global Products segment. These acquisitions provided an opportunity to grow Valvoline's Retail Services system within key markets and expand Valvoline's presence and supply chain capabilities in Eastern Europe.

Summary

The following table summarizes the aggregate cash consideration paid and the total assets acquired and liabilities assumed for the years ended September 30:

(In millions)	2021		2020		2019	
Inventories	\$	3	\$	1	\$	—
Other current assets		1		—		—
Property, plant and equipment ^(a)		99		6		19
Operating lease assets		38		1		—
Goodwill ^(b)		207		17		50
Intangible assets ^(c)						
Reacquired franchise rights ^(d)		59		20		5
Customer relationships		—		—		6
Trademarks and trade names		—		—		1
Other		3		—		2
Other current liabilities ^(a)		(9)		(1)		—
Operating lease liabilities		(35)		—		—
Other noncurrent liabilities ^(a)		(84)		(4)		(1)
Net assets acquired		282		40		82
Bargain purchase gain ^(e)		—		—		(4)
Consideration transferred	\$	282	\$	40	\$	78

(a) Includes \$84 million of finance lease assets in property, plant and equipment and finance lease liabilities of \$4 million and \$80 million in other current and noncurrent liabilities, respectively, for leases acquired during the year ended September 30, 2021.

(b) Goodwill is generally expected to be deductible for income tax purposes and is primarily attributed to the operational synergies and potential growth expected to result in economic benefits in the respective markets of the acquisitions.

(c) Weighted average amortization period of intangible assets acquired in each period presented above is 10 years.

(d) Prior to the acquisition of former franchise service center stores, Valvoline licensed the right to operate franchised quick lube service centers, including use of the Company's trademarks and trade name. In connection with these acquisitions, Valvoline reacquired those rights and recognized separate definite-lived reacquired franchise rights intangible assets, which are being amortized on a straight-line basis over the weighted average remaining term of approximately 10 years for the rights reacquired in fiscal 2021 and 2020 and nine years for the rights reacquired in fiscal 2019. The effective settlement of these arrangements resulted in no settlement gain or loss as the contractual terms were at market.

(e) Recorded in Equity and other income, net within the Consolidated Statements of Comprehensive Income.

The fair values above are preliminary for up to one year from the date of acquisition as they are subject to measurement period adjustments as new information is obtained about facts and circumstances that existed as of the acquisition date. The Company does not expect any material changes to the preliminary purchase price allocations summarized above for acquisitions completed during the last twelve months.

NOTE 5 – LEASE COMMITMENTS

The following table presents the Company's lease balances as of September 30:

(In millions)	Location in Consolidated Balance Sheets	2021	2020
Assets			
Operating lease assets	Operating lease assets	\$ 307	\$ 261
Finance lease assets	Property, plant and equipment, net	198	77
Amortization of finance lease assets	Property, plant and equipment, net	(21)	(10)
Total leased assets		<u>\$ 484</u>	<u>\$ 328</u>
Liabilities			
Current			
Operating lease liabilities	Accrued expenses and other liabilities	\$ 38	\$ 33
Finance lease liabilities	Accrued expenses and other liabilities	9	3
Noncurrent			
Operating lease liabilities	Operating lease liabilities	274	231
Finance lease liabilities	Other noncurrent liabilities	178	70
Total lease liabilities		<u>\$ 499</u>	<u>\$ 337</u>

The following table presents the components of total lease costs for the years ended September 30:

(In millions)	Location in Consolidated Statements of Comprehensive Income	2021	2020
Operating lease cost	Cost of sales and Selling, general and administrative expenses	\$ 52	\$ 45
Finance lease costs			
Amortization of lease assets	Cost of sales ^(a)	11	4
Interest on lease liabilities	Net interest and other financing expenses	8	3
Variable lease cost	Cost of sales and Selling, general and administrative expenses ^(a)	10	6
Sublease income	Equity and other income, net	(8)	(6)
Total lease cost		<u>\$ 73</u>	<u>\$ 52</u>

Other information related to the Company's leases follows for the years ended September 30:

(In millions)	2021	2020
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases ^(a)	\$ 50	\$ 43
Operating cash flows from finance leases	\$ 8	\$ 4
Financing cash flows from finance leases	\$ 6	\$ 1
Lease assets obtained in exchange for lease obligations:		
Operating leases	\$ 83	\$ 49
Finance leases	\$ 118	\$ 49

(a) Included within the change in Other assets and liabilities within the Consolidated Statements of Cash Flows offset by noncash operating lease asset amortization and liability accretion.

The following table reconciles the undiscounted cash flows for the next five fiscal years ended September 30 and thereafter to the operating and finance lease liabilities recorded within the Consolidated Balance Sheet as of September 30, 2021:

(In millions)	Operating leases		Finance leases	
2022	\$	50	\$	18
2023		46		18
2024		42		18
2025		37		18
2026		31		19
Thereafter		174		166
Total future lease payments		380		257
Imputed interest		68		70
Present value of lease liabilities	\$	312	\$	187

As of September 30, 2021, Valvoline has additional leases primarily related to its retail service center stores that have not yet commenced with approximately \$101 million in undiscounted future lease payments that are not included in the table above. These leases are expected to commence over the next twelve months and generally have lease terms of 15 years.

The weighted average remaining lease terms and interest rates as of September 30, 2021 were:

	Operating leases		Finance leases	
Weighted average remaining lease term (in years)		9.6		13.7
Weighted average discount rate		3.98 %		5.20 %

NOTE 6 – EQUITY METHOD INVESTMENTS

Valvoline has a strategic relationship with Cummins, Inc. (“Cummins”), a leading supplier of engines and related component products, which includes co-branding products for heavy duty consumers and a 50 percent interest in joint ventures in India, China and Argentina. Valvoline also had investments in joint ventures with other partners in Latin and North America, as well as China. Valvoline’s investments in these unconsolidated affiliates were \$47 million and \$44 million as of September 30, 2021 and 2020, respectively.

Undistributed earnings from affiliates accounted for under the equity method included in Valvoline's stockholders' equity (deficit) were \$42 million and \$39 million as of September 30, 2021 and 2020, respectively. Summarized financial information for Valvoline's equity method investments follows as of and for the years ended September 30:

(In millions)	2021	2020
Financial position		
Current assets	\$ 162	\$ 143
Current liabilities	(89)	(75)
Working capital	73	68
Noncurrent assets	25	26
Noncurrent liabilities	(5)	(8)
Stockholders' equity	\$ 93	\$ 86

(In millions)	2021	2020	2019
Results of operations ^(a)			
Sales	\$ 375	\$ 273	\$ 309
Income from operations	\$ 60	\$ 50	\$ 59
Net income	\$ 31	\$ 25	\$ 24

(a) Includes the results of equity method investments during the Company's period of ownership.

The Company's transactions with affiliate companies accounted for under the equity method were as follows for the years ended September 30:

(In millions)	2021	2020	2019
Equity income ^(a)	\$ 15	\$ 12	\$ 12
Distributions received	\$ 14	\$ 5	\$ 9
Royalty income ^(a)	\$ 10	\$ 8	\$ 9
Sales to ^(b)	\$ 33	\$ 7	\$ 12
Purchases from ^(b)	\$ 14	\$ 7	\$ 4

(a) Equity and royalty income from affiliates accounted for under the equity method of accounting are recognized in Equity and other income, net in the Consolidated Statements of Comprehensive Income and are primarily related to the Global Products reportable segment.

(b) Transactions with affiliates accounted for under the equity method of accounting are eliminated commensurate with Valvoline's ownership percentage until realized through sale to an independent third party.

Transactions with affiliate companies accounted for under the equity method resulted in the following balances within the Consolidated Balance Sheets as of September 30:

(In millions)	2021	2020
Accounts receivable ^(a)	\$ 13	\$ 4
Notes receivable ^(b)	\$ —	\$ 5
Trade and other payables	\$ 1	\$ 1

(a) Included in Receivables, net within the Consolidated Balance Sheets.

(b) Included in Other noncurrent assets within the Consolidated Balance Sheets.

NOTE 7 – INTANGIBLE ASSETS

Goodwill

The following summarizes the changes in the carrying amount of goodwill for each reportable segment and in total during fiscal 2021 and 2020:

(In millions)	Retail Services		Global Products		Total
Balance at September 30, 2019 ^(a)	\$	301	\$	129	\$ 430
Acquisitions		17		—	17
Currency translation		1		—	1
Dispositions ^(b)		(3)		—	(3)
Balance at September 30, 2020 ^(a)		316		129	445
Acquisitions ^(c)		205		2	207
Currency translation		2		—	2
Dispositions ^(b)		(10)		—	(10)
Balance at September 30, 2021	\$	513	\$	131	\$ 644

- (a) Goodwill balances as of September 30, 2019 and 2020 have been recast to conform to the current period presentation. Refer to Note 15 for further details regarding the Company's change in reportable segments during fiscal 2021.
- (b) Derecognition of goodwill as a result of the sale of service center stores to franchisees, which included 12 company-owned, franchise-operated locations in fiscal 2021 and six company-owned and operated locations in fiscal 2020.
- (c) Includes acquisitions within the Retail Services reportable segment of 120 service center stores and a former joint venture in the Global Products reportable segment. Refer to Note 4 for additional details.

Other intangible assets

Valvoline's purchased intangible assets were specifically identified when acquired, have finite lives, and are reported in Goodwill and intangibles, net within the Consolidated Balance Sheets. The following summarizes the gross carrying amounts and accumulated amortization of the Company's intangible assets as of September 30:

(In millions)	2021			2020		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Definite-lived intangible assets						
Trademarks and trade names	\$ 30	\$ (8)	\$ 22	\$ 30	\$ (6)	\$ 24
Reacquired franchise rights	116	(25)	91	57	(14)	43
Customer relationships	23	(9)	14	22	(7)	15
Other intangible assets	6	(2)	4	3	(1)	2
Total definite-lived intangible assets	\$ 175	\$ (44)	\$ 131	\$ 112	\$ (28)	\$ 84

The table that follows summarizes amortization expense (actual and estimated) for the Company's current intangible assets for the years ended September 30:

(In millions)	Actual			Estimated			
	2021	2022	2023	2024	2025	2026	
Amortization expense	\$ 16	\$ 17	\$ 17	\$ 16	\$ 14	\$ 11	

NOTE 8 – DEBT

The following table summarizes Valvoline's debt as of September 30:

(In millions)	2021	2020
2031 Notes	\$ 535	\$ —
2030 Notes	600	600
2025 Notes	—	800
Term Loan	475	475
Trade Receivables Facility	59	88
China Construction Facility	39	18
Debt issuance costs and discounts	(14)	(19)
Total debt	1,694	1,962
Current portion of long-term debt	17	—
Long-term debt	\$ 1,677	\$ 1,962

Senior Notes

The Company's outstanding fixed rate senior notes as of September 30, 2021 consist of 3.625% senior unsecured notes due 2031 with an aggregate principal amount of \$535 million (the "2031 Notes") and 4.250% senior unsecured notes due 2030 with an aggregate principal amount of \$600 million (the "2030 Notes" and collectively with the 2031 Notes, the "Senior Notes"). The Senior Notes are subject to customary events of default for similar debt securities, which if triggered may accelerate payment of principal, premium, if any, and accrued but unpaid interest. If a change of control repurchase event occurs, Valvoline may be required to offer to purchase the Senior Notes from the holders thereof. The Senior Notes are not otherwise required to be repaid prior to maturity, although they may be redeemed at the option of Valvoline at any time prior to maturity in the manner specified in the governing indentures.

2031 and 2025 Notes

In January 2021, Valvoline issued the 2031 Notes in a private offering for net proceeds of \$528 million (after deducting initial purchasers' discounts and debt issuance costs). The net proceeds, along with cash and cash equivalents on hand, were used to redeem in full Valvoline's 4.375% senior unsecured notes due 2025 with an aggregate principal amount of \$800 million (the "2025 Notes"), including an early redemption premium of \$26 million, accrued and unpaid interest, as well as related fees and expenses for an aggregate redemption price of approximately \$840 million. A loss on extinguishment of the 2025 Notes of \$36 million was recognized in Net interest and other financing expenses in the Consolidated Statements of Comprehensive Income during the year ended September 30, 2021, comprised of the early redemption premium and the write-off of related unamortized debt issuance costs and discounts.

2030 Notes

In February 2020, Valvoline issued the 2030 Notes in a private offering for net proceeds of \$592 million (after deducting initial purchasers' discounts and debt issuance costs). A portion of the net proceeds were used to redeem in full Valvoline's 5.500% senior unsecured notes due 2024 at the aggregate principal amount of \$375 million (the "2024 Notes"), plus an early redemption premium of \$15 million, accrued and unpaid interest, as well as related fees and expenses for an aggregate redemption price of \$394 million. A loss on extinguishment of the 2024 Notes of \$19 million was recognized in Net interest and other financing expenses in the Consolidated Statements of Comprehensive Income during the year ended September 30, 2020, comprised of the early redemption premium and the write-off of related unamortized debt issuance costs and discounts.

A portion of the net proceeds from the offering of the 2030 Notes were also utilized to prepay \$100 million of indebtedness from the Company's term loan facility under the Senior Credit Agreement, with the remainder of the

net proceeds used for general corporate purposes. In response to the COVID-19 pandemic, the Company preserved the remaining proceeds during fiscal 2020 to maintain its liquidity.

Senior Credit Agreement

Key terms and conditions

The Senior Credit Agreement provides an aggregate principal amount of \$1,050 million in senior secured credit facilities, comprised of (i) a five-year \$575 million term loan facility (the "Term Loan") and (ii) a five-year \$475 million revolving credit facility (the "Revolver"), including a \$100 million letter of credit sublimit.

The outstanding principal balance of the Term Loan is required to be repaid in quarterly installments, with the balance due at maturity in April 2024, and prepayment of the net cash proceeds due from certain events. Amounts outstanding under the Senior Credit Agreement may be prepaid at any time, and from time to time, in whole or part, without premium or penalty. At Valvoline's option, amounts outstanding under the Senior Credit Agreement bear interest at either LIBOR or an alternate base rate, in each case plus the applicable interest rate margin. The interest rate fluctuates between LIBOR plus 1.375% per year and LIBOR plus 2.000% per year (or between the alternate base rate plus 0.375% per year and the alternate base rate plus 1.000% per year), based upon Valvoline's corporate credit ratings or its consolidated net leverage ratio, whichever yields the lowest rate.

Summary of activity

As of September 30, 2021 and 2020, the Term Loan had an outstanding balance of \$475 million, and there were no amounts outstanding under the Revolver. The total borrowing capacity remaining under the Revolver was \$470 million as of September 30, 2021, due to a reduction of \$5 million for letters of credit outstanding.

Following the Term Loan prepayment in fiscal 2020 with a portion of the proceeds from the offering of the 2030 Notes, quarterly principal payments will resume with \$1 million due on June 30, 2022 and approximately \$14 million due each quarter beginning with September 30, 2022 through maturity.

Trade Receivables Facility

Key terms and conditions

In April 2021, Valvoline amended its \$175 million trade receivables securitization facility (the "Trade Receivables Facility"), to extend its maturity to April 2024 and modify the eligibility requirements for certain receivables. The amendment also reduced the minimum required borrowing to the lesser of (i) 33 percent of the total facility limit or (ii) the borrowing base from the availability of eligible receivables, in addition to permitting up to a 30 consecutive day annual exemption from this requirement. The Trade Receivables Facility is subject to customary default and termination provisions.

Under the Trade Receivables Facility, Valvoline sells and/or transfers a majority of its U.S. trade receivables to a wholly-owned, bankruptcy-remote subsidiary as they are originated. Advances by the lenders to that subsidiary (in the form of cash or letters of credit) are secured by its trade receivables. The assets of this financing subsidiary are restricted as collateral for the payment of its obligations under the Trade Receivables Facility, and its assets and credit are not available to satisfy the debts and obligations owed to the Company's other creditors. The Company includes the assets, liabilities and results of operations of this financing subsidiary in its consolidated financial statements.

The financing subsidiary pays customary fees to the lenders, and advances by a lender under the Trade Receivables Facility accrue interest for which the weighted average interest rates were 1.0% and 1.4% for the years ended September 30, 2021 and 2020, respectively.

Summary of activity

The Trade Receivables Facility had an outstanding balance of \$59 million and \$88 million as of September 30, 2021 and 2020, respectively. During fiscal 2021, Valvoline made payments of \$29 million, resulting in \$116 million of

borrowing capacity remaining as of September 30, 2021. The financing subsidiary owned \$301 million and \$267 million of outstanding accounts receivable as of September 30, 2021 and 2020, respectively, which are reported in Receivables, net in the Company's Consolidated Balance Sheets.

China Construction Facility

In May 2020, the Company entered into a five-year credit agreement for approximately \$40 million to finance the preparation of the blending and packaging plant in China for production (the "China Construction Facility"). The China Construction Facility had an outstanding balance of \$39 million and \$18 million as of September 30, 2021 and 2020, respectively. Borrowings bear interest at the local prime rate less the applicable interest rate margin, which was 4.35% for the years ended September 30, 2021 and 2020. The proceeds from the China Construction Facility are restricted to finance capital expenditures associated with the preparation of the blending and packaging plant in China for production at capacity, and borrowings are secured by the assets underlying the project. Borrowings are required to be repaid in semiannual installments, which total approximately \$2 million in fiscal 2022, \$4 million in fiscal 2023, and \$7 million in fiscal 2024, with the remaining balance due in fiscal 2025.

China Working Capital Facility

In November 2020, the Company entered into a revolving credit facility with a two-year term for approximately \$23 million to finance working capital needs for the blending and packaging plant in China (the "China Working Capital Facility"). Borrowings will bear interest at the local prime rate less the applicable interest rate margin with interest due monthly and repayment of borrowings due at maturity. As of September 30, 2021, the China Working Capital Facility had no outstanding borrowings, leaving its full borrowing capacity of approximately \$23 million remaining.

Covenants and guarantees

The Company is required to satisfy certain covenants pursuant to its long-term borrowings. These covenants contain customary limitations, including limitations on liens, additional indebtedness, investments, restricted payments, asset sales, mergers, and affiliate transactions. The maintenance of financial covenants as of the end of each fiscal quarter is required, as defined in the Senior Credit Agreement, including: i) a maximum net leverage ratio of 4.5, which is calculated as net debt divided by Adjusted EBITDA and ii) a minimum interest coverage ratio of 3.0, which is calculated as Adjusted EBITDA divided by net interest expense. Cross-default provisions also exist between certain debt instruments. As of September 30, 2021 and 2020, the Company was in compliance with all debt covenants.

Valvoline's existing and future subsidiaries (other than certain immaterial subsidiaries, joint ventures, special purpose financing subsidiaries, regulated subsidiaries, non-U.S. subsidiaries and certain other subsidiaries) guarantee obligations under the Senior Credit Agreement, which is also secured by a first-priority security interest in substantially all the personal property assets and certain real property assets of Valvoline and the guarantors, including all or a portion of the equity interests of certain of Valvoline's domestic subsidiaries and first-tier non-U.S. subsidiaries, and in certain cases, a portion of the equity interests of other non-U.S. subsidiaries. Valvoline's subsidiaries that guarantee obligations under its Senior Credit Agreement also guarantee the Senior Notes, which have not been and are not expected to be registered in exchange offers as debt securities.

Long-term debt maturities

The future maturities of debt outstanding as of September 30, 2021, excluding debt issuance costs and discounts, are as follows:

(In millions)	
Years ending September 30	
2022	\$ 17
2023	61
2024	468
2025	27
2026	—
Thereafter	1,135
Total	\$ 1,708

NOTE 9 – INCOME TAXES

Components of income tax expense

Income tax expense consisted of the following for the years ended September 30:

(In millions)	2021	2020	2019
Current			
Federal	\$ 36	\$ 16	\$ 10
State	14	11	5
Non-U.S.	25	15	19
	<u>75</u>	<u>42</u>	<u>34</u>
Deferred			
Federal	42	62	24
State	8	26	—
Non-U.S.	(2)	4	(1)
	<u>48</u>	<u>92</u>	<u>23</u>
Income tax expense	\$ 123	\$ 134	\$ 57

The following presents pre-tax income and the principal components of the reconciliation between the effective tax rate and the U.S. federal statutory income tax rate in effect for the years ended September 30:

(In millions)	2021	2020	2019
Income before income taxes			
United States	\$ 483	\$ 399	\$ 212
Non-U.S.	60	52	53
Total income before income taxes	<u>\$ 543</u>	<u>\$ 451</u>	<u>\$ 265</u>
<i>U.S. statutory tax rate</i>	<i>21.0 %</i>	<i>21.0 %</i>	<i>21.0 %</i>
Income taxes computed at U.S. statutory tax rate	\$ 114	\$ 95	\$ 56
(Decrease) increase in amount computed resulting from:			
Unrecognized tax benefits	(5)	1	5
State taxes, net of federal benefit	19	16	9
International rate differential	3	2	2
Permanent items	(6)	(4)	(3)
Remeasurement of net deferred taxes	—	1	(4)
Return-to-provision adjustments	—	(2)	(6)
Change in valuation allowances	1	29	(4)
Tax Matters Agreement activity	(6)	(6)	1
Other	3	2	1
Income tax expense	<u>\$ 123</u>	<u>\$ 134</u>	<u>\$ 57</u>
<i>Effective tax rate</i>	<i>22.7 %</i>	<i>29.7 %</i>	<i>21.5 %</i>

The lower income tax expense and effective tax rate in fiscal 2021 from the prior year was principally driven by tax benefits recognized during the year as a result of audit settlements. This decrease in expense coupled with prior year income tax expense recognized to establish a \$30 million valuation allowance on certain legacy tax attributes led to a lower effective tax rate in fiscal 2021.

Deferred taxes

A summary of the deferred tax assets and liabilities included in the Consolidated Balance Sheets follows as of September 30:

(In millions)	2021	2020
Deferred tax assets		
Non-U.S. net operating loss carryforwards ^(a)	\$ 2	\$ 2
State net operating loss carryforwards ^(b)	18	18
Employee benefit obligations	46	79
Compensation accruals	29	26
Credit carryforwards ^(c)	12	11
Operating lease liabilities	98	69
Other	23	17
Valuation allowances ^(d)	(32)	(30)
Net deferred tax assets	196	192
Deferred tax liabilities		
Goodwill and other intangibles	16	11
Property, plant and equipment	109	75
Operating lease assets	78	67
Undistributed earnings	5	6
Total deferred tax liabilities	208	159
Total net deferred tax (liabilities) assets ^(e)	\$ (12)	\$ 33

(a) Gross non-U.S. net operating loss carryforwards of \$7 million expire in fiscal years 2023 to 2040.

(b) Apportioned gross state net operating loss carryforwards of \$361 million expire in fiscal years 2023 through 2034.

(c) Credit carryforwards consist primarily of U.S. tax credits that generally expire in fiscal years 2025 through 2036.

(d) Valuation allowances at September 30, 2021 primarily relate to state net operating loss carryforwards and certain other federal legacy tax attributes that are not expected to be realized or realizable.

(e) Balances are presented in the Consolidated Balance Sheets based on the net position of each tax jurisdiction.

Tax Matters Agreement

Background

Prior to its initial public offering (the "IPO") in September 2016, the Valvoline business operated as a wholly-owned subsidiary of Ashland Global Holdings Inc. (which together with its predecessors and consolidated subsidiaries is referred to herein as "Ashland"). In advance of the IPO, the Valvoline business and certain other legacy Ashland assets and liabilities were transferred from Ashland to Valvoline as a reorganization of entities under common Ashland control (the "Contribution"). In connection with the IPO, Ashland retained 83% of the total outstanding shares of Valvoline's common stock. On May 12, 2017, Ashland distributed its interest in Valvoline to Ashland stockholders through a pro rata dividend on shares of Ashland common stock outstanding (the "Distribution"), which marked the completion of Valvoline's separation from Ashland.

For the periods prior to the Distribution, Valvoline was included in Ashland's consolidated U.S. and state income tax returns and in the income tax returns of certain Ashland international subsidiaries (collectively, the "Ashland Group Returns"). For the taxable periods that began on and after the Distribution, Valvoline files tax returns that include only Valvoline and its subsidiaries.

Key terms and conditions

An agreement (the "Tax Matters Agreement") was entered into in September 2016 between Valvoline and Ashland, that generally provides that Valvoline indemnify Ashland for the following items:

- The utilization of certain legacy tax attributes transferred from Ashland as the result of the Contribution;
- Taxes for the pre-IPO period that arise on audit or examination and are directly attributable to the Valvoline business;
- Certain U.S. federal, state or local taxes for the pre-IPO period of Ashland and/or its subsidiaries that arise on audit or examination and are not directly attributable to either the Valvoline business or the Ashland chemicals business;
- Taxes of Valvoline for the period between the IPO and Distribution that are not attributable to Ashland Group Returns (as defined above);
- Taxes of Valvoline for all taxable periods that begin on or after the day after the date of the Distribution; and
- Certain taxes and expenses resulting from the failure of the Contribution or Distribution to qualify for the intended tax-free treatment.

Summary of activity

Adjustments to the net obligations to Ashland under the Tax Matters Agreement are recorded within Net legacy and separation-related (income) expenses, with any resulting impacts to Valvoline's stand-alone income tax provision recorded in Income tax expense within the Consolidated Statements of Comprehensive Income. The Company reduced its indemnity obligations to Ashland under the Tax Matters Agreement by \$33 million during fiscal 2021, principally due to settlement of the fiscal 2014 to 2016 federal audit examinations. This reduction resulted in pre-tax income of \$27 million, and the remaining benefit of \$6 million was recognized in income tax expense for matters attributable to the Valvoline stand-alone business.

During fiscal 2020, the Company determined it did not expect to utilize certain tax attributes that were transferred from Ashland as a result of the Contribution. Accordingly, the Company recognized income tax expense of \$30 million to establish a valuation allowance for these tax attributes with an offsetting reduction in its indemnity obligation, the combined effects of which had no impact on net income in the fiscal year ended September 30, 2020.

Total liabilities related to obligations owed to Ashland under the Tax Matters Agreement are primarily recorded in Other noncurrent liabilities in the Consolidated Balance Sheets and were \$1 million and \$34 million as of September 30, 2021 and 2020, respectively. Given the indemnification of Ashland for periods in which Valvoline was included in Ashland Group Returns, a portion of the Company's liability for unrecognized tax benefits is included in the Tax Matters Agreement obligation. The periods under indemnity that currently remain open to examination include certain U.S. state jurisdictions from fiscal 2011.

Unrecognized tax benefits

The aggregate changes in the balance of gross unrecognized tax benefits were as follows for the years ended September 30:

(In millions)	2021	2020	2019
Gross unrecognized tax benefits as of October 1	\$ 15	\$ 14	\$ 10
Increases related to tax positions from prior years	2	1	5
Decreases related to tax positions from prior years	(1)	—	—
Increases related to tax positions taken during the current year	1	1	—
Settlements with tax authorities	(4)	—	—
Lapses of statutes of limitation	(1)	(1)	(1)
Gross unrecognized tax benefits as of September 30 ^(a)	\$ 12	\$ 15	\$ 14

(a) These unrecognized tax benefits would favorably impact the effective income tax rate, if recognized. Accruals for interest and penalties were \$2 million as of September 30, 2021 and 2020.

The Company's U.S. federal income tax returns and certain U.S. state jurisdictions remain open to examination from fiscal 2017 forward. Fiscal years including and after 2010 remain open to examination by certain non-U.S. taxing authorities.

Because Valvoline is routinely under examination by various taxing authorities, it is reasonably possible that the amount of unrecognized tax benefits will change during fiscal 2022. Due to the complexity and number of open years, it is not practical to estimate the amount or range of such change at this time. Based on current information available, management does not expect a material change to the Company's gross unrecognized tax benefits within fiscal 2022.

NOTE 10 – EMPLOYEE BENEFIT PLANS

Pension and other postretirement plans

The components of pension and other postretirement plans net periodic benefit (income) costs and the assumptions used in this determination are summarized below for the years ended September 30:

(In millions)	Pension benefits			Other postretirement benefits		
	2021	2020	2019	2021	2020	2019
Net periodic benefit (income) costs						
Service cost	\$ 2	\$ 3	\$ 2	\$ —	\$ —	\$ —
Interest cost	43	61	81	1	1	2
Expected return on plan assets	(86)	(87)	(80)	—	—	—
Amortization of prior service credit ^(a)	—	—	—	(12)	(12)	(12)
Actuarial (gain) loss	(72)	(24)	61	—	2	8
Net periodic benefit (income) costs	<u>\$ (113)</u>	<u>\$ (47)</u>	<u>\$ 64</u>	<u>\$ (11)</u>	<u>\$ (9)</u>	<u>\$ (2)</u>
Weighted-average plan assumptions ^(b)						
Discount rate for service cost	1.55 %	1.49 %	2.92 %	3.03 %	3.12 %	3.98 %
Discount rate for interest cost	1.91 %	2.79 %	4.00 %	1.83 %	2.69 %	3.83 %
Rate of compensation increase	3.00 %	3.04 %	3.06 %	—	—	—
Expected long-term rate of return on plan assets	4.34 %	4.64 %	4.66 %	—	—	—

(a) Other postretirement plan amendments are amortized within this caption during all periods presented.

(b) The plan assumptions are a blended weighted-average rate for Valvoline's U.S. and non-U.S. plans. The U.S. pension plans represented approximately 97% of the total pension projected benefit obligation as of September 30, 2021. Other postretirement benefit plans are in the U.S. and Canada, with the U.S. plan representing approximately 79% of the total other postretirement projected benefit obligation as of September 30, 2021. Non-U.S. plans use assumptions generally consistent with those of U.S. plans.

Valvoline recognizes the change in the fair value of plan assets and net actuarial gains and losses annually in the fourth quarter of each fiscal year and whenever a plan is determined to qualify for remeasurement. These gains and losses are reported within Net pension and other postretirement plan income in the Consolidated Statements of Comprehensive Income and included a gain of \$72 million and \$22 million for the years ended September 30, 2021 and 2020, respectively, and a loss of \$69 million for the year ended September 30, 2019.

The fiscal 2021 gain was primarily attributed to higher than expected returns on plan assets and an increase in discount rates. The fiscal 2020 gain was primarily attributed to higher than expected returns on plan assets and favorable changes in mortality assumptions, which more than offset the impacts of lower discount rates.

The following table summarizes the net periodic benefit income and the amortization of prior service credits recognized during the years ended September 30:

(In millions)	Pension benefits			Other postretirement benefits		
	2021	2020	2019	2021	2020	2019
Amortization of prior service credits recognized in Accumulated other comprehensive income	\$ —	\$ —	\$ —	\$ 12	\$ 12	\$ 12
Net periodic benefit income	(113)	(47)	64	(11)	(9)	(2)
Total pre-tax amount recognized in comprehensive income	<u>\$ (113)</u>	<u>\$ (47)</u>	<u>\$ 64</u>	<u>\$ 1</u>	<u>\$ 3</u>	<u>\$ 10</u>

Obligations and funded status

Changes in benefit obligations and the fair value of plan assets, as well as key assumptions used to determine the benefit obligations, and the amounts in the Consolidated Balance Sheets for the Company's pension and other postretirement benefit plans are summarized below as of September 30:

(In millions)	Pension benefits		Other postretirement benefits	
	2021	2020	2021	2020
Change in benefit obligations				
Benefit obligations as of October 1	\$ 2,321	\$ 2,287	\$ 52	\$ 55
Service cost	2	3	—	—
Interest cost	43	61	1	1
Benefits paid	(133)	(132)	(5)	(6)
Actuarial (gain) loss	(31)	107	—	2
Currency exchange rate changes	2	1	1	—
Transfers in	3	3	—	—
Settlements	(4)	(9)	—	—
Benefit obligations as of September 30	\$ 2,203	\$ 2,321	\$ 49	\$ 52
Change in plan assets				
Fair value of plan assets as of October 1	\$ 2,045	\$ 1,943	\$ —	\$ —
Actual return on plan assets	128	218	—	—
Employer contributions	14	22	5	6
Benefits paid	(133)	(133)	(5)	(6)
Currency exchange rate changes	2	1	—	—
Settlements	(4)	(9)	—	—
Transfers in	3	3	—	—
Fair value of plan assets as of September 30	\$ 2,055	\$ 2,045	\$ —	\$ —
Unfunded status of the plans as of September 30	\$ 148	\$ 276	\$ 49	\$ 52
Amounts in the Consolidated Balance Sheets				
Noncurrent benefit assets ^(a)	\$ 72	\$ 1	\$ —	\$ —
Current benefit liabilities ^(b)	9	10	5	5
Noncurrent benefit liabilities ^(c)	211	267	44	47
Total benefit liabilities	220	277	49	52
Net liabilities recognized	\$ 148	\$ 276	\$ 49	\$ 52
Balance in Accumulated other comprehensive loss				
Prior service cost (credit)	\$ 1	\$ 1	\$ (21)	\$ (33)
Weighted-average plan assumptions				
Discount rate	2.70 %	2.59 %	2.67 %	2.39 %
Rate of compensation increase	3.00 %	3.00 %	—	—
Healthcare cost trend rate ^(d)	—	—	6.4 %	6.7 %

- (a) Noncurrent benefit assets are recorded in Other noncurrent assets within the Consolidated Balance Sheets,
(b) Current benefit liabilities are recorded in Accrued expenses and other liabilities within the Consolidated Balance Sheets.
(c) Noncurrent benefit liabilities are recorded in Employee benefit obligations within the Consolidated Balance Sheets.
(d) The assumed pre-65 health care cost trend rate continues to be reduced to 4.0% in 2040 and thereafter.

Accumulated benefit obligation

The accumulated benefit obligation for all pension plans was \$2.2 billion and \$2.3 billion as of September 30, 2021 and 2020, respectively. Information for pension plans with a benefit obligation in excess of the fair value of plan assets follows for the Company's plans as of September 30:

(In millions)	2021		2020	
	Benefit obligation	Plan assets	Benefit obligation	Plan assets
Plans with projected benefit obligation in excess of plan assets	\$ 1,607	\$ 1,386	\$ 2,275	\$ 1,998
Plans with accumulated benefit obligation in excess of plan assets	\$ 1,593	\$ 1,374	\$ 2,253	\$ 1,978

Plan assets

Pension plan asset investments and their level within the fair value hierarchy is summarized below as of:

(In millions)	September 30, 2021				
	Total fair value	Level 1	Level 2	Level 3	Assets measured at NAV
Cash and cash equivalents	\$ 136	\$ 136	\$ —	\$ —	\$ —
U.S. government securities and futures	96	—	96	—	—
Other government securities	58	—	58	—	—
Corporate debt instruments	1,371	—	1,371	—	—
Insurance contracts	58	—	—	58	—
Private equity and hedge funds	11	—	—	—	11
Collective trust funds	316	—	—	—	316
Other investments	9	\$ —	9	\$ —	—
Total assets at fair value	<u>\$ 2,055</u>	<u>\$ 136</u>	<u>\$ 1,534</u>	<u>\$ 58</u>	<u>\$ 327</u>

(In millions)	September 30, 2020				
	Total fair value	Level 1	Level 2	Level 3	Assets measured at NAV
Cash and cash equivalents	\$ 102	\$ 102	\$ —	\$ —	\$ —
U.S. government securities and futures	172	—	172	—	—
Other government securities	47	—	47	—	—
Corporate debt instruments	1,201	—	1,201	—	—
Insurance contracts	12	—	—	12	—
Private equity and hedge funds	13	—	—	—	13
Collective trust funds	497	—	—	—	497
Other investments	1	—	1	—	—
Total assets at fair value	<u>\$ 2,045</u>	<u>\$ 102</u>	<u>\$ 1,421</u>	<u>\$ 12</u>	<u>\$ 510</u>

Cash and cash equivalents

The carrying value of cash and cash equivalents approximates fair value.

Government securities

Government securities are valued based on Level 2 inputs, which include yields available for comparable securities of issuers with similar credit ratings.

Corporate debt instruments

Corporate debt instruments are valued based on Level 2 inputs that are observable in the market or may be derived principally from, or corroborated by, recently executed transactions, observable market data such as pricing for similar securities, cash flow models with yield curves, counterparty credit ratings, and credit spreads applied using the maturity and coupon interest rate terms of the debt instrument.

Insurance contracts

Insurance contracts are arrangements with insurance companies that guarantee the payment of the pension entitlements and are valued based on Level 3 inputs, which are neither quoted prices nor observable inputs for pricing. Insurance contracts are valued at cash surrender value, which approximates fair value.

Private equity and hedge funds

Private equity and hedge funds primarily represent alternative investments not traded on an active market which are valued at the NAV per share determined by the manager of the fund based on the fair value of the underlying net assets owned by the fund divided by the number of shares or units outstanding.

Collective trust funds

Collective trust funds are comprised of a diversified portfolio of investments across various asset classes, including U.S. and international equities, fixed-income securities, commodities and currencies. The collective trust funds are valued using a NAV provided by the manager of each fund, which is based on the underlying net assets owned by the fund, divided by the number of shares outstanding.

The following reconciles the beginning and ending balances for Level 3 plan assets:

(In millions)	Total Level 3 assets
Balance at September 30, 2019	\$ 7
Purchases	4
Actual return on assets held at end of year	1
Balance at September 30, 2020	12
Purchases	48
Actual return on assets held at end of year	(2)
Balance at September 30, 2021	<u>\$ 58</u>

The following summarizes investments for which fair value is measured using the NAV per share practical expedient as of September 30, 2021:

(In millions)	Fair value at NAV	Unfunded commitments	Redemption frequency (if currently eligible)	Redemption notice period
Long/short hedge funds	\$ 2	\$ —	None ^(a)	None ^(a)
Relative value hedge funds	3	—	None ^(b)	None ^(b)
Event driven hedge funds	1	—	None ^(b)	None ^(b)
Collective trust funds	299	—	Daily	Up to 3 days
	9	—	Monthly	5 days
	8	—	N/A ^(c)	N/A ^(c)
Private equity	5	2	None ^(d)	None ^(d)
	<u>\$ 327</u>	<u>\$ 2</u>		

(a) These hedge funds are in the process of liquidation over the next year.

(b) These hedge funds are in the process of liquidation and the timing is unknown.

(c) These assets are held in fund investments that include a diversified portfolio across various asset classes. The time period for redemption of these assets is not determinable.

(d) These private equity instruments are estimated to be liquidated over the next 1 to 5 years.

Investments and strategy

In developing an investment strategy for its defined benefit plans, Valvoline considered the following factors: the nature of the liabilities of the plans; the allocation of liabilities between active, deferred and retired plan participants; the funded status of the plans; the applicable investment horizon; the respective size of the plans; and historical and expected investment returns. Valvoline's U.S. pension plan assets are managed by outside investment managers,

which are monitored against investment benchmark returns and Valvoline's established investment strategy. Investment managers are selected based on an analysis of, among other things, their investment process, historical investment results, frequency of management turnover, cost structure, and assets under management. Assets are periodically reallocated between investment managers to optimize returns and maintain an appropriate asset mix and diversification of investments.

The current target asset allocation for the U.S. plans is 83% fixed income securities and 17% equity-based securities. Fixed income securities are liability matching assets that primarily include long duration, high grade corporate debt obligations. Equity-based securities are return-seeking assets that include both traditional equities as well as a mix of non-traditional assets such as hedge and commingled funds and private equity. Investment managers may employ a limited use of futures or other derivatives to manage risk within the portfolio through efficient exposure to markets. Valvoline's pension plans hold a variety of investments designed to diversify risk and achieve an adequate net investment return to provide for future benefit payments to its participants.

Valvoline's investment strategy and management practices relative to non-U.S. plan assets are generally consistent with those for U.S. plans, except in those countries where the investment of plan assets is dictated by applicable regulations. The weighted-average asset allocations for Valvoline's plans by asset category follow as of September 30:

	Target	2021	2020
Plan assets allocation			
Equity securities	15-25%	11 %	18 %
Debt securities	65-85%	85 %	80 %
Other	0-20%	4 %	2 %
Total		<u>100 %</u>	<u>100 %</u>

The basis for determining the expected long-term rate of return is a combination of future return assumptions for the various asset classes in Valvoline's investment portfolio based on active management, historical analysis of previous returns, market indices, and a projection of inflation, net of plan expenses.

Funding and benefit payments

Valvoline contributed \$14 million and \$22 million to its pension plans during fiscal 2021 and 2020, respectively. Valvoline does not plan to contribute to its U.S. qualified pension plans in fiscal 2022 and expects to contribute approximately \$12 million to its U.S. non-qualified and non-U.S. pension plans.

The following benefit payments, which reflect future service expectations, are projected to be paid in each of the next five fiscal years ended September 30 and the five fiscal years thereafter in aggregate:

(In millions)	Pension benefits	Other postretirement benefits
2022	\$ 145	\$ 5
2023	145	4
2024	141	4
2025	139	3
2026	138	3
2027 - 2031	651	14
Total	\$ 1,359	\$ 33

Other plans

Defined contribution and other defined benefit plans

Valvoline sponsors certain defined contribution savings plans that provide matching contributions. Expense associated with these plans was \$19 million in fiscal 2021, \$15 million in fiscal 2020 and \$14 million in fiscal 2019.

Valvoline also sponsors various other benefit plans, some of which are required by local laws within certain countries. Total liabilities associated with these plans were \$3 million as of September 30, 2021 and 2020.

Multiemployer pension plans

Valvoline participates in two multiemployer pension plans that provide pension benefits to certain union-represented employees under the terms of collective bargaining agreements. Valvoline assumed responsibility for contributions to these plans in connection with the separation from its former parent company. Contributions to these plans were not material for any period presented herein.

Incentive plans

Reserves for incentive plans were \$49 million and \$39 million as of September 30, 2021 and 2020, respectively.

NOTE 11 – LITIGATION, CLAIMS AND CONTINGENCIES

From time to time, Valvoline is party to lawsuits, claims and other legal proceedings that arise in the ordinary course of business. The Company establishes liabilities for the outcome of such matters where losses are determined to be probable and reasonably estimable. Where appropriate, the Company has recorded liabilities with respect to these matters, which were not material for the periods presented as reflected in the consolidated financial statements herein. There are certain claims and legal proceedings pending where loss is not determined to be probable or reasonably estimable, and therefore, accruals have not been made. In addition, there are currently no matters for which management believes a material loss is at least reasonably possible.

In all instances, management has assessed each matter based on current information available and made a judgment concerning its potential outcome, giving due consideration to the amount and nature of the claim and the probability of success. The Company believes it has established adequate accruals for liabilities that are probable and reasonably estimable.

Although the ultimate resolution of these matters cannot be predicted with certainty and there can be no assurances that the actual amounts required to satisfy liabilities from these matters will not exceed the amounts reflected in the consolidated financial statements, based on information available at this time, it is the opinion of management that such pending claims or proceedings will not have a material adverse effect on its consolidated financial statements.

NOTE 12 – STOCK-BASED COMPENSATION PLANS

Valvoline has approved stock-based incentive plans that authorize 21 million shares of common stock to be issued, with approximately 12 million shares of common stock remaining available for issuance as of September 30, 2021. The Valvoline stock-based incentive plans authorize the grant of stock options, stock appreciation rights (“SARs”), and nonvested stock awards, principally in the form of restricted stock, restricted stock units, and performance share units. The following summarizes stock-based compensation expense recognized by the Company during the years ended September 30:

(In millions)	2021	2020	2019
Stock appreciation rights	\$ 1	\$ 1	\$ 1
Nonvested stock awards ^(a)	14	11	9
Total stock-based compensation expense, pre-tax	15	12	10
Tax benefit	(4)	(3)	(2)
Total stock-based compensation expense, net of tax	\$ 11	\$ 9	\$ 8

(a) Includes approximately \$1 million in each period presented related to certain awards that are cash-settled and liability-classified; therefore, fair value is remeasured at the end of each reporting period until settlement.

Stock appreciation rights

SARs are granted to certain Valvoline employees to provide vested award holders with the ability to profit from the appreciation in value of a set number of shares of common stock over a period of time by receiving the differential between the value of the Company's common stock price at the grant and exercise dates. SARs typically vest and become exercisable over a period of one to three years and are subject to pre-vesting forfeiture upon service termination. Unexercised SARs generally lapse ten years after the grant date. Stock-based compensation expense for SARs is determined using the Black-Scholes option-pricing model to estimate the grant date fair value of new or modified awards.

Nonvested stock awards

Nonvested stock awards in the form of Restricted Stock Awards (“RSAs”) and Restricted Stock Units (“RSUs”) are granted to certain Valvoline employees and directors. These awards can have service-based or both service and performance-based vesting conditions. Nonvested stock awards generally vest over a one to three-year period and are subject to forfeiture upon termination of service prior to vesting. Nonvested stock awards are primarily granted as RSUs that settle in shares upon vesting, while RSAs result in share issuance at grant, which entitles award holders to voting rights that are restricted until vesting. Nonvested stock awards with service-only vesting conditions receive dividend equivalents in the form of additional units or shares, which are subject to vesting and forfeiture provisions.

Nonvested stock awards with both service and performance conditions vest through continued employee service and upon the achievement of specific financial targets subject to adjustment relative to performance among selected industry peer groups. These awards are granted annually and subject to a three-year performance and vesting period. Each performance share unit is convertible to one share of common stock, the actual number of which is dependent upon performance compared to financial and market performance targets at the end of each performance period. Compensation cost for performance-based nonvested stock awards is recognized at fair value over the requisite service period based on the probable achievement of the financial performance conditions.

The following summarizes nonvested stock award activity during the year ended September 30, 2021:

	Number of shares (in thousands)	Weighted average grant date fair value per share
Unvested shares as of September 30, 2020	1,668	\$ 20.89
Granted	520	\$ 22.33
Performance adjustments ^(a)	126	\$ 22.96
Vested	(288)	\$ 22.69
Forfeited	(58)	\$ 21.85
Unvested shares as of September 30, 2021	<u>1,968</u>	<u>\$ 21.50</u>

(a) Adjustments based on current attainment expectations of performance targets.

The fair value of new or modified nonvested stock awards with service-only conditions was determined based on the closing market price of Valvoline common stock on the grant date, and the fair value of performance-based nonvested stock awards that include both financial and market performance conditions was determined using a Monte Carlo simulation valuation model with the following key assumptions:

	2021	2020	2019
Weighted average grant date fair value per share	\$ 21.81	\$ 23.21	\$ 21.22
Assumptions (weighted average)			
Risk-free interest rates ^(a)	0.2 %	1.6 %	2.8 %
Expected dividend yield	2.3 %	2.1 %	1.3 %
Expected volatility ^(b)	42.0 %	26.0 %	26.8 %
Expected term (in years)	3.0	3.0	3.0

(a) Based on the U.S. Treasury yield curve in effect at the time of grant or modification for the expected term of the award. The range of risk-free interest rates used for performance awards was 0.13% to 0.23% in fiscal 2021, 1.55% to 1.59% in fiscal 2020, and 2.66% to 2.82% in fiscal 2019.

(b) Expected volatility is based on historical volatilities over periods commensurate with the expected term. In recent years, Valvoline utilized its historical daily closing price over this period, and in fiscal 2019, expected volatility was determined based on the average of peer companies due to Valvoline's lack of historical data at the time.

The total grant date fair value of nonvested stock awards vested and the weighted average grant date fair value of nonvested stock awards granted follows for the years ended September 30:

(In millions, except weighted average)	2021	2020	2019
Total grant date fair value of shares vested	\$ 7	\$ 5	\$ 12
Weighted average grant date fair value	\$ 22.33	\$ 22.17	\$ 20.72

As of September 30, 2021, there was \$11 million of total unrecognized compensation costs related to nonvested stock awards, which is expected to be recognized over a weighted average period of 2.4 years. The aggregate intrinsic value of nonvested stock awards as of September 30, 2021 is \$61 million.

NOTE 13 - EARNINGS PER SHARE

The following is the summary of basic and diluted EPS for the years ended September 30:

(In millions, except per share data)	2021	2020	2019
Numerator			
Net income	\$ 420	\$ 317	\$ 208
Denominator			
Weighted average common shares outstanding	182	187	189
Effect of potentially dilutive securities ^(a)	1	1	—
Weighted average diluted shares outstanding	183	188	189
Earnings per share			
Basic	\$ 2.30	\$ 1.70	\$ 1.10
Diluted	\$ 2.29	\$ 1.69	\$ 1.10

(a) There were approximately 1 million outstanding securities, primarily SARs, not included in the computation of diluted earnings per share in the years ended September 30, 2020 and 2019, because the effects would have been antidilutive.

NOTE 14 - ACCUMULATED OTHER COMPREHENSIVE INCOME

Changes in Accumulated other comprehensive income by component for fiscal years 2021 and 2020 were as follows:

(In millions)	Unamortized benefit plan credits	Currency translation adjustments	Changes in fair value of cash flow hedges	Total
Balance as of September 30, 2019	\$ 34	\$ (23)	\$ —	\$ 11
Other comprehensive income (loss) before reclassification	—	6	(1)	5
(Gain) loss reclassified out of accumulated other comprehensive income	(12)	1	—	(11)
Tax expense	3	—	—	3
Balance as of September 30, 2020	25	(16)	(1)	8
Other comprehensive income before reclassification	—	7	3	10
Gains reclassified out of accumulated other comprehensive income	(12)	—	(1)	(13)
Tax expense	3	—	—	3
Balance as of September 30, 2021	\$ 16	\$ (9)	\$ 1	\$ 8

Amounts reclassified from Accumulated other comprehensive income follow for the years ended September 30:

(in millions)	2021	2020	2019
Amortization of pension and other postretirement plan prior service credits ^(a)	\$ (12)	\$ (12)	\$ (12)
Loss (gain) on liquidation of subsidiaries ^(b)	—	1	(1)
Gain on cash flow hedges ^(c)	(1)	—	—
Tax effect of reclassifications	3	3	3
Total amounts reclassified, net of tax	\$ (10)	\$ (8)	\$ (10)

(a) Amortization of unrecognized prior service credits included in net periodic benefit income for pension and other postretirement plans was reported in Net pension and other postretirement plan (income) expenses within the Consolidated Statements of Comprehensive Income.

- The Company releases the income tax effects from Accumulated other comprehensive income as benefit plan credits are amortized into earnings.
- (b) Represents the realization of cumulative translation adjustments in Equity and other income, net within the Consolidated Statements of Comprehensive Income as a result of the liquidation of certain non-U.S. subsidiaries.
 - (c) Represents the realization of gains from cash flow hedges reported in Net interest and other financing expenses within the Consolidated Statements of Comprehensive Income.

NOTE 15 – REPORTABLE SEGMENT INFORMATION

During the third quarter of fiscal 2021, the Company realigned its global operations to support its strategic initiatives to transition to a services-driven business. As a result of the realignment, Valvoline now manages its business through the following two reportable segments:

- **Retail Services** - services the passenger car and light truck quick lube market in the United States and Canada with a broad array of preventive maintenance services and capabilities performed through Valvoline's retail network of Company-operated, independent franchise, and Express Care stores that service vehicles with Valvoline products.
- **Global Products** - sells engine and automotive products in more than 140 countries and territories to mass market and automotive parts retailers, installers, and commercial customers, including original equipment manufacturers, to service light- and heavy-duty vehicles and equipment.

These segments represent components of the Company for which separate financial information is available that is utilized on a regular basis by the chief operating decision maker in allocating resources and evaluating performance of the business. Adjusted EBITDA is the primary measure used in making these operating decisions, which Valvoline defines as segment operating income adjusted for depreciation and amortization and certain key items impacting comparability.

In connection with the realignment, the Company changed its allocation of certain indirect expenses for such costs to be recognized by each segment based on the estimated utilization of indirect resources. Costs to support corporate functions and certain non-operational and corporate activity that is not directly attributable to a particular segment are not included in the segment operating results regularly utilized by the chief operating decision maker. This activity is separately delineated within Corporate to reconcile to consolidated results.

Prior period segment financial information presented herein has been recast on a basis that is consistent with the realignment of Valvoline's global operations.

Reportable segment results

The following table presents sales and adjusted EBITDA of each reportable segment for the years ended September 30:

(In millions)	2021	2020	2019
Sales			
Retail Services	\$ 1,221	\$ 883	\$ 822
Global Products	1,760	1,470	1,568
Consolidated sales	<u>\$ 2,981</u>	<u>\$ 2,353</u>	<u>\$ 2,390</u>
Adjusted EBITDA			
Retail Services	\$ 382	\$ 247	\$ 239
Global Products	327	309	296
Total operating segments	709	556	535
Corporate ^(a)	(75)	(61)	(57)
Consolidated Adjusted EBITDA	634	495	478
Reconciliation to income before income taxes:			
Net interest and other financing expenses	(111)	(93)	(73)
Depreciation and amortization	(92)	(66)	(61)
Key items: ^(b)			
Net pension and other postretirement plan income (expenses)	126	59	(60)
Net legacy and separation-related income (expenses)	24	30	(3)
LIFO (charge) credit	(41)	15	—
Business interruption recovery (expenses)	3	2	(6)
Compensated absences benefits change	—	11	—
Acquisition and divestiture-related (costs) income	—	(2)	4
Restructuring and related expenses	—	—	(14)
Income before income taxes	<u>\$ 543</u>	<u>\$ 451</u>	<u>\$ 265</u>

(a) Corporate includes the costs of corporate functions and certain other non-operational matters and corporate activity that is not directly attributable to a particular segment.

(b) Key items represent adjustments to U.S. GAAP results and consist of non-operational matters, including pension and other postretirement plan non-service income and remeasurement adjustments, net legacy and separation-related activity, changes in the LIFO inventory reserve, and certain other corporate matters excluded from operating results, which management believes impacts the comparability of operational results between periods.

Disaggregation of revenue

The following table summarizes sales by category for each reportable segment for the years ended September 30:

(In millions)	2021	2020	2019
Retail Services			
<i>Company operations</i>			
Oil changes	\$ 657	\$ 450	\$ 407
Non-oil changes	205	141	124
<i>Non-company operations</i>			
Franchise fees	50	40	43
Product sales	309	252	248
Total Retail Services	<u>\$ 1,221</u>	<u>\$ 883</u>	<u>\$ 822</u>
Global Products			
Lubricants	\$ 1,570	\$ 1,287	\$ 1,364
Antifreeze	119	104	121
Filters	13	13	12
Chemicals and other	58	66	71
Total Global Products	<u>\$ 1,760</u>	<u>\$ 1,470</u>	<u>\$ 1,568</u>

Sales by primary customer channel for the Company's reportable segments are summarized below for the years ended September 30:

(In millions)	2021	2020	2019
Retail Services			
Company operations	\$ 862	\$ 591	\$ 531
Non-company operations	359	292	291
Total Retail Services	<u>1,221</u>	<u>883</u>	<u>822</u>
Global Products			
Do-it-Yourself	626	571	558
Installer and other	1,134	899	1,010
Total Global Products	<u>1,760</u>	<u>1,470</u>	<u>1,568</u>
Consolidated sales	<u>\$ 2,981</u>	<u>\$ 2,353</u>	<u>\$ 2,390</u>

Valvoline did not have a single customer that represented 10% or more of consolidated sales in fiscal 2021, 2020 or 2019.

Sales by reportable segment disaggregated by geographic region are summarized as follows:

(In millions)	Retail Services	Global Products	Totals
Year ended September 30, 2021			
North America ^(a)	\$ 1,221	\$ 1,052	\$ 2,273
Europe, Middle East and Africa ("EMEA")	—	219	219
Asia Pacific	—	358	358
Latin America ^(a)	—	131	131
Total	\$ 1,221	\$ 1,760	\$ 2,981
Year ended September 30, 2020			
North America ^(a)	883	\$ 945	\$ 1,828
EMEA	—	169	169
Asia Pacific	—	273	273
Latin America ^(a)	—	83	83
Total	\$ 883	\$ 1,470	\$ 2,353
Year ended September 30, 2019			
North America ^(a)	\$ 822	\$ 994	\$ 1,816
EMEA	—	181	181
Asia Pacific	—	285	285
Latin America ^(a)	—	108	108
Total	\$ 822	\$ 1,568	\$ 2,390

(a) Valvoline includes the United States and Canada in its North America region. Mexico is included within the Latin America region.

Entity-wide disclosures

The following presents sales and net property, plant and equipment by geographic area for the years ended and as of September 30:

(In millions)	Sales from external customers ^(a)			Property, plant and equipment, net ^(b)	
	2021	2020	2019	2021	2020
United States	\$ 2,209	\$ 1,775	\$ 1,766	\$ 700	\$ 512
International	772	578	624	117	101
Total	\$ 2,981	\$ 2,353	\$ 2,390	\$ 817	\$ 613

(a) Sales are attributed to the geographic area where solutions are delivered.

(b) Property, plant and equipment, net is attributed to the geographic area in which assets physically reside.

NOTE 16 – SUPPLEMENTAL BALANCE SHEET INFORMATION

Cash, cash equivalents and restricted cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the Consolidated Balance Sheets to the totals shown within the Consolidated Statements of Cash Flows for the years ended September 30:

(In millions)	2021	2020	2019
Cash and cash equivalents	\$ 230	\$ 760	\$ 159
Restricted cash ^(a)	1	1	—
Total cash, cash equivalents and restricted cash	<u>\$ 231</u>	<u>\$ 761</u>	<u>\$ 159</u>

(a) Included in Prepaid expenses and other current assets within the Consolidated Balance Sheets.

Accounts and other receivables

The following summarizes Valvoline's accounts and other receivables in the Consolidated Balance Sheets as of September 30:

(In millions)	2021	2020
Current		
Trade	\$ 475	\$ 409
Other	16	14
Notes receivable from franchisees	10	13
Receivables, gross	<u>501</u>	<u>436</u>
Allowance for credit losses	(5)	(3)
Receivables, net	<u>\$ 496</u>	<u>\$ 433</u>
Non-current ^(a)		
Notes receivable from franchisees	\$ —	\$ 13
Other notes receivable	3	8
Noncurrent notes receivable, gross	<u>3</u>	<u>21</u>
Allowance for losses	(3)	(4)
Noncurrent notes receivable, net	<u>\$ —</u>	<u>\$ 17</u>

(a) Included in Other noncurrent assets within the Consolidated Balance Sheets.

Valvoline is party to an agreement to sell certain trade accounts receivable in the form of drafts or bills of exchange to a financial institution. Each draft constitutes an order to pay Valvoline for obligations of the customer arising from the sale of goods. The intention of the arrangement is to decrease the time accounts receivable is outstanding and increase cash flows. Valvoline sold \$15 million and \$59 million of accounts receivable to the financial institution during the years ended September 30, 2021 and 2020, respectively.

Inventories

Inventories are primarily carried at the lower of cost or net realizable value using the weighted average cost method. In addition, certain lubricants with a replacement cost of \$129 million at September 30, 2021 and \$99 million at September 30, 2020 are valued at the lower of cost or market using the LIFO method.

The following summarizes Valvoline's inventories within the Consolidated Balance Sheets as of September 30:

(In millions)	2021	2020
Finished products	\$ 276	\$ 195
Raw materials, supplies and work in process	49	30
Reserve for LIFO cost valuation	(67)	(26)
Total inventories, net	<u>\$ 258</u>	<u>\$ 199</u>

Property, plant and equipment

The following table summarizes the various components of property, plant and equipment within the Consolidated Balance Sheets as of September 30:

(In millions)	2021	2020
Land	\$ 130	\$ 96
Buildings	607	412
Machinery and equipment	564	494
Construction in progress	71	101
Total property, plant and equipment	1,372	1,103
Accumulated depreciation	(555)	(490)
Net property, plant and equipment	<u>\$ 817</u>	<u>\$ 613</u>

The following summarizes finance lease assets included in net property, plant and equipment as of September 30:

(In millions)	2021	2020
Land	\$ 64	\$ 34
Buildings	134	43
Total finance lease assets	198	77
Accumulated depreciation	(21)	(10)
Net finance lease assets	<u>\$ 177</u>	<u>\$ 67</u>

Non-cash transactions, including finance leases, recognized within total property, plant and equipment were \$119 million and \$51 million during the years ended September 30, 2021 and 2020, respectively.

The following summarizes expense associated with property, plant and equipment recognized within the Consolidated Statements of Comprehensive Income for the years ended September 30:

(In millions)	2021	2020	2019
Depreciation (includes finance and capital leases)	\$ 76	\$ 56	\$ 52

NOTE 17 – SUBSEQUENT EVENTS

Strategic separation

On October 12, 2021, Valvoline announced its intention to pursue a separation of its two reportable segments, Retail Services and Global Products. Valvoline is evaluating the alternatives to accomplish the separation, and consummation of the separation will be subject to final approval by Valvoline's Board of Directors (the "Board"). No timetable has currently been established for completion of the separation, which is expected to enable the two businesses to enhance focus on their distinct customer bases, strategies and operational needs.

Dividend declaration

On November 11, 2021, the Board approved a quarterly cash dividend of \$0.125 per share of common stock. The dividend is payable December 15, 2021 to shareholders of record on November 29, 2021.

Share repurchases

The Company repurchased approximately 0.5 million shares for an aggregate amount of \$16 million from October 1, 2021 through November 15, 2021 pursuant to the May 17, 2021 Board authorization to repurchase up to \$300 million of common stock through September 30, 2024 (the "2021 Share Repurchase Authorization"). The Company has \$257 million in aggregate share repurchase authority remaining under the 2021 Share Repurchase Authorization as of November 15, 2021.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures

Valvoline's Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), with the assistance of management, has evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended ("Exchange Act")), as of the end of the period covered by this Annual Report on Form 10-K (the "Evaluation Date"), and based upon such evaluation, have concluded that as of the Evaluation Date, the Company's disclosure controls and procedures were effective. These controls are designed to ensure that information required to be disclosed in the reports that are filed or submitted under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission ("SEC"), and that such information is accumulated and communicated to Valvoline's management, including the CEO and CFO, to allow timely decisions regarding required disclosure.

Management's report on internal control over financial reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). Management assessed the effectiveness of the Company's internal control over financial reporting as of September 30, 2021 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in the 2013 Internal Control - Integrated Framework. Based on this assessment, management concluded that the Company's internal control over financial reporting was effective as of September 30, 2021 based on those criteria. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. Valvoline's independent registered public accounting firm, Ernst & Young LLP, has issued an audit report with respect to the effectiveness of the Company's internal control over financial reporting as of September 30, 2021, which appears herein.

Changes in internal control

During the fourth fiscal quarter ended September 30, 2021, there were no significant changes in Valvoline's internal control over financial reporting that materially affected, or are reasonably likely to materially affect, Valvoline's internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of
Valvoline Inc. and Consolidated Subsidiaries

Opinion on Internal Control Over Financial Reporting

We have audited Valvoline Inc. and Consolidated Subsidiaries' internal control over financial reporting as of September 30, 2021, 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, Valvoline Inc. and Consolidated Subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of September 30, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of September 30, 2021 and 2020, the related consolidated statements of comprehensive income, stockholders' equity (deficit) and cash flows for each of the three years in the period ended September 30, 2021, and the related notes and financial statement schedule listed in the Index at Item 15(a) and our report dated November 19, 2021, 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 Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

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

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Cincinnati, Ohio
November 19, 2021

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

A list of Valvoline's executive officers and related information appears under the caption "Executive Officers of Valvoline" in Item 1 of Part I of this Annual Report on Form 10-K. The other information required by this item will be included in the Proxy Statement, which will be filed with the SEC on or before January 28, 2022 and is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item will be included in the Proxy Statement, which will be filed with the SEC on or before January 28, 2022 and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item will be included in the Proxy Statement, which will be filed with the SEC on or before January 28, 2022 and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this item will be included in the Proxy Statement, which will be filed with the SEC on or before January 28, 2022 and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item will be included in the Proxy Statement, which will be filed with the SEC on or before January 28, 2022 and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this Report

(1) Financial statements

The consolidated financial statements of Valvoline filed as part of this Annual Report on Form 10-K are included in Item 8 of Part II.

Separate financial statements of unconsolidated affiliates are omitted because none of these companies constitute significant subsidiaries using the 20% tests when considered individually. Summarized financial information for all unconsolidated affiliates is disclosed in Note 6 of the Notes to Consolidated Financial Statements.

(2) Financial statement schedules

Financial Statement Schedule II - Valuation and Qualifying Accounts included within this Item 15 in this Annual Report on Form 10-K. All other schedules are not required under the related instructions or are not applicable.

(3) Exhibits

See Item 15(b) included in this Annual Report on Form 10-K.

(b) Documents required by Item 601 of Regulation S-K

- 3.1 - [Amended and Restated Articles of Incorporation of Valvoline Inc. \(incorporated by reference to Exhibit 3.1 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on November 17, 2017\).](#)
- 3.2 - [Amended and Restated By-laws of Valvoline Inc. \(incorporated by reference to Exhibit 3.2 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 4.1 - [Specimen Stock Certificate \(incorporated by reference to Exhibit 4.1 to Valvoline's Registration Statement on Form S-1 \(File No. 333-211720\) filed on September 12, 2016\).](#)
- 4.2 - [Indenture, dated as of February 25, 2020, among Valvoline Inc. the guarantors party thereto and U.S. Bank National Association, as Trustee \(incorporated by reference to Exhibit 4.1 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on February 25, 2020\).](#)
- 4.3 - [Indenture, dated as of January 4, 2021, among Valvoline Inc. the guarantors party thereto and U.S. Bank National Association, as Trustee \(incorporated by reference to Exhibit 4.1 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on January 4, 2021\).](#)
- 4.5* - [Description of Securities.](#)

The following Exhibits 10.1 through 10.24 are contracts, compensatory plans or arrangements, or management contracts required to be filed as exhibits pursuant to Items 601(b)(10)(ii)(A) and 601(b)(10)(iii)(A) and (B) of Regulations S-K.

- 10.1 - [Valvoline Inc. 2016 Deferred Compensation Plan for Employees \(incorporated by reference to Exhibit 10.1 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 10.2 - [Valvoline Inc. 2016 Deferred Compensation Plan for Non-Employee Directors \(incorporated by reference to Exhibit 10.6 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)

- 10.3 - [2016 Valvoline Inc. Incentive Plan, as Amended \(incorporated by reference to Exhibit 10.1 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on February 5, 2019.](#)
- 10.4 - [Valvoline Inc. Employee Stock Purchase Plan \(incorporated by reference to Exhibit 10.1 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on February 5, 2018\).](#)
- 10.5 - [Form of \(Outside Directors\) Restricted Stock Award Agreement pursuant to the 2016 Valvoline Inc. Incentive Plan \(incorporated by reference to Exhibit 10.3 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 10.6 - [Form of Performance Unit Award Agreement pursuant to the 2016 Valvoline Inc. Incentive Plan \(incorporated by reference to Exhibit 10.5 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on May 15, 2017\).](#)
- 10.7 - [Form of Stock Appreciation Right Award Agreement pursuant to the 2016 Valvoline Inc. Incentive Plan \(incorporated by reference to Exhibit 10.6 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on May 15, 2017\).](#)
- 10.8 - [Form of Stock Appreciation Right Award Agreement pursuant to the 2016 Valvoline Inc. Incentive Plan, as Amended, for awards granted after fiscal 2020 \(incorporated by reference to Exhibit 10.8 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on November 24, 2020\).](#)
- 10.9 - [Form of Restricted Stock Unit Award Agreement pursuant to the 2016 Valvoline Inc. Incentive Plan \(incorporated by reference to Exhibit 10.7 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on November 17, 2017\).](#)
- 10.10 - [Form of Restricted Stock Unit Award Agreement \(Cash-Settled\) pursuant to the 2016 Valvoline Inc. Incentive Plan \(incorporated by reference to Exhibit 10.8 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on May 15, 2017\).](#)
- 10.11 - [Form of Restricted Stock Unit Award Agreement pursuant to the 2016 Valvoline Inc. Incentive Plan, as Amended, for awards granted after fiscal 2020 \(incorporated by reference to Exhibit 10.11 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on November 24, 2020\).](#)
- 10.12 - [Valvoline Inc. Nonqualified Defined Contribution Plan \(incorporated by reference to Exhibit 10.4 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 10.13 - [Ashland Inc. Nonqualified Excess Benefit Pension Plan \(incorporated by reference to Exhibit 10.12 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on November 17, 2017\).](#)
- 10.14 - [Amendment to Ashland Inc. Nonqualified Excess Benefit Pension Plan, effective as of September 1, 2016 \(incorporated by reference to Exhibit 10.7 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 10.15 - [Amendment to Ashland Inc. Nonqualified Excess Benefit Pension Plan, effective as of September 30, 2016 \(incorporated by reference to Exhibit 10.9 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 10.16 - [Ashland Inc. Supplemental Early Retirement Plan for Certain Employees \("Ashland SERP"\) \(incorporated by reference to Exhibit 10.15 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on November 17, 2017\).](#)
- 10.17 - [Amendment to Ashland SERP, effective as of January 1, 2015 \(incorporated by reference to Exhibit 10.16 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on November 17, 2017\).](#)
- 10.18 - [Amendment to Ashland SERP, effective as of September 1, 2016 \(incorporated by reference to Exhibit 10.17 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on November 17, 2017\).](#)
- 10.19 - [Amendment to Ashland SERP, effective as of September 30, 2016 \(incorporated by reference to Exhibit 10.8 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 10.20 - [Form of CEO Change in Control Agreement \(incorporated by reference to Exhibit 10.1 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on May 15, 2017\).](#)

- 10.21 - [Form of Executive Officer Change in Control Agreement \(incorporated by reference to Exhibit 10.2 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on May 15, 2017\).](#)
- 10.22 - [Valvoline Change in Control Severance Plan \(incorporated by reference to Exhibit 10.3 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on May 15, 2017\).](#)
- 10.23 - [Valvoline Severance Pay Plan \(incorporated by reference to Exhibit 10.4 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on May 15, 2017\).](#)
- 10.24 - [Credit Agreement dated as of July 11, 2016, among Valvoline Finco One LLC, as Initial Borrower, The Bank of Nova Scotia, as Administrative Agent, Swing Line Lender and an L/C Issuer, Citibank, N.A., as Syndication Agent, and the Lenders from time to time party thereto \("Valvoline Credit Agreement"\) \(incorporated by reference to Exhibit 10.9 to Valvoline's Registration Statement on Form S-1 \(File No. 333-211720\) filed on September 12, 2016\).](#)
- 10.25 - [Amendment No. 1, dated as of September 21, 2016, to Valvoline Credit Agreement \(incorporated by reference to Exhibit 10.11 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 10.26 - [Amendment and Restatement Agreement, dated as of April 12, 2019, among Valvoline Inc. \("Valvoline"\), as the Borrower, the subsidiaries of Valvoline party thereto, The Bank of Nova Scotia, as Administrative Agent, and the Lenders party thereto \(including Exhibit A - Amended and Restated Credit Agreement, dated as of April 12, 2019, among Valvoline, the Administrative Agent, Citibank N.A., as Syndication Agent, and the other Lenders party thereto\) \(incorporated by reference to Exhibit 10.1 to Valvoline's Quarterly Report on Form 10-Q \(File No. 001-37884\) filed on May 2, 2019\).](#)
- 10.27 - [Transfer and Administration Agreement, dated as of November 29, 2016, among LEX Capital LLC, Valvoline LLC, and each other entity from time to time party hereto as an Originator, as Originators, Valvoline LLC, as initial Master Servicer, PNC Bank, National Association, as the Agent, a Letter of Credit Issuer, a Managing Agent and a Committed Investor, The Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, as a Managing Agent, an Administrator and a Committed Investor, Gotham Funding Corporation, as a Conduit Investor and an Uncommitted Investor, PNC Capital Markets, LLC, as Structuring Agent and the various investor groups, managing agents, letter of credit issuers and Administrators from time to time parties thereto \(incorporated by reference to Exhibit 10.1 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on December 2, 2016\).](#)
- 10.28 - [First Amendment to the Transfer and Administration Agreement, dated as of November 20, 2017, among Valvoline LLC, Lex Capital LLC, the Originators, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party thereto, and PNC Bank National Association, as agent for the Investors \(incorporated by reference to Exhibit 10.1 to Valvoline's Current Report on Form 10-Q \(File No. 001-37884\) filed on February 8, 2018\).](#)
- 10.29 - [Second Amendment to the Transfer and Administration Agreement, dated as of January 31, 2020, among Valvoline LLC, Lex Capital LLC, the Originators, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party thereto, and PNC Bank National Association, as agent for the Investors \(incorporated by reference to Exhibit 10.1 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on February 4, 2020\).](#)
- 10.30 - [Third Amendment to the Transfer and Administration Agreement, dated as of April 22, 2020, among Valvoline LLC, Lex Capital LLC, the Originators, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party thereto, and PNC Bank National Association, as agent for the Investors \(incorporated by reference to Exhibit 10.1 to Valvoline's Current Report on Form 10-Q \(File No. 001-37884\) filed on May 7, 2020\).](#)
- 10.31 - [Fourth Amendment, dated as of April 27, 2021, to the Transfer and Administration Agreement, dated as of November 29, 2016, among Valvoline LLC, Lex Capital LLC, the Originators, the Investors, Letter of Credit Issuers, Managing Agents and Administrators party thereto, and PNC Bank National Association, as agent for the Investors \(incorporated by reference to Exhibit 10.1 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on April 29, 2021\).](#)
- 10.32 - [Sale Agreement, dated as of November 29, 2016, by and between Valvoline LLC and LEX Capital LLC \(incorporated by reference to Exhibit 10.2 to Valvoline Current Report on Form 8-K \(File No. 001-37884\) filed on December 2, 2016\).](#)
- 10.33 - [Parent Undertaking, dated as of November 29, 2016, by Valvoline Inc. in favor of PNC Bank National Association and the Secured Parties. \(incorporated by reference to Exhibit 10.3 to Valvoline's Current Report on Form 8-K \(File No. 001-37884\) filed on December 2, 2016\).](#)

- 10.34 - [Separation Agreement, dated as of September 22, 2016, by and between Ashland Global Holdings Inc. and Valvoline Inc. \(incorporated by reference to Exhibit 10.15 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 10.35 - [Tax Matters Agreement, dated as of September 22, 2016, by and between Ashland Global Holdings Inc. and Valvoline Inc. \(incorporated by reference to Exhibit 10.18 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 10.36 - [Employee Matters Agreement, dated as of September 22, 2016, by and between Ashland Global Holdings Inc. and Valvoline Inc. \(incorporated by reference to Exhibit 10.19 to Valvoline's Annual Report on Form 10-K \(File No. 001-37884\) filed on December 19, 2016\).](#)
- 21* - [List of Subsidiaries.](#)
- 23.1* - [Consent of Ernst & Young LLP.](#)
- 24* - [Power of Attorney.](#)
- 31.1* - [Certification of Samuel J. Mitchell, Jr., Chief Executive Officer of Valvoline, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 31.2* - [Certification of Mary E. Meixelsperger, Chief Financial Officer of Valvoline, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 32* - [Certification of Samuel J. Mitchell, Jr., Chief Executive Officer of Valvoline, and Mary E. Meixelsperger, Chief Financial Officer of Valvoline, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 101.INS - XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
- 101.SCH - XBRL Taxonomy Extension Schema Document.
- 101.CAL - XBRL Taxonomy Extension Calculation Linkbase Document.
- 101.DEF - XBRL Taxonomy Extension Definition Linkbase Document.
- 101.LAB - XBRL Taxonomy Extension Label Linkbase Document.
- 101.PRE - XBRL Taxonomy Extension Presentation Linkbase Document.
- 104 - Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101).

* Filed herewith.

SM Service mark, Valvoline or its subsidiaries, registered in various countries.

TM Trademark, Valvoline or its subsidiaries, registered in various countries.

† Trademark owned by a third party.

Upon written or oral request, a copy of the above exhibits will be furnished at cost.

VALVOLINE INC.
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
For the years ended September 30, 2021, 2020 and 2019
(In millions)

(A)	(B)		(C)		(D)	(E)
Description	Balance at beginning of period	Additions		Deductions	Balance at end of period	
		Charged to expenses	Charged to other accounts			
Current allowance for credit losses						
Year ended September 30, 2021	\$ 3	\$ 1	\$ 1	\$ —	\$ —	\$ 5
Year ended September 30, 2020	\$ 3	\$ 1	\$ (1)	\$ —	\$ —	\$ 3
Year ended September 30, 2019	\$ 4	\$ —	\$ —	\$ (1)	\$ —	\$ 3
Allowances for loan losses						
Year ended September 30, 2021	\$ 4	\$ 1	\$ (2)	\$ —	\$ —	\$ 3
Year ended September 30, 2020	\$ 2	\$ 1	\$ 1	\$ —	\$ —	\$ 4
Year ended September 30, 2019	\$ —	\$ —	\$ 2	\$ —	\$ —	\$ 2
Inventory excess and obsolete reserves						
Year ended September 30, 2021	\$ 4	\$ —	\$ —	\$ —	\$ —	\$ 4
Year ended September 30, 2020	\$ 3	\$ 1	\$ —	\$ —	\$ —	\$ 4
Year ended September 30, 2019	\$ 3	\$ —	\$ —	\$ —	\$ —	\$ 3
Deferred tax asset valuation allowance						
Year ended September 30, 2021	\$ 30	\$ 1	\$ 1	\$ —	\$ —	\$ 32
Year ended September 30, 2020	\$ 2	\$ 29	\$ —	\$ (1)	\$ —	\$ 30
Year ended September 30, 2019	\$ 7	\$ —	\$ —	\$ (5)	\$ —	\$ 2

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

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

VALVOLINE INC.
(Registrant)
By:
/s/ Mary E. Meixelsperger
Mary E. Meixelsperger
Chief Financial Officer
Date: November 19, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant, in the capacities indicated, on November 19, 2021.

Signatures

/s/ Samuel J. Mitchell, Jr.

Samuel J. Mitchell, Jr.

/s/ Mary E. Meixelsperger

Mary E. Meixelsperger

/s/ Michael S. Ryan

Michael S. Ryan

*

Stephen F. Kirk

*

Gerald W. Evans, Jr.

*

Richard J. Freeland

*

Carol H. Kruse

*

Stephen E. Macadam

*

Vada O. Manager

*

Charles M. Sonsteby

*

Mary J. Twinem

Capacity

Chief Executive Officer and Director
(Principal Executive Officer)

Chief Financial Officer
(Principal Financial Officer)

Chief Accounting Officer and Controller
(Principal Accounting Officer)

Chairman of the Board and Director

Director

Director

Director

Director

Director

Director

Director

*By: /s/ Julie M. O'Daniel

Julie M. O'Daniel

Attorney-in-Fact

Date: November 19, 2021

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

Valvoline Inc. ("Valvoline," "we," "us," and "our") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): our Common Stock

DESCRIPTION OF COMMON STOCK

The following description of our Common Stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Amended and Restated Articles of Incorporation ("Articles of Incorporation") and our Amended and Restated By-laws ("By-laws"), which are filed as exhibits to our Annual Report on Form 10-K and are incorporated by reference herein. We encourage you to carefully review our Articles of Incorporation, our By-laws and the applicable provisions of the Kentucky Business Corporation Act ("KBCA"), for additional information.

Authorized Capital Stock

Our authorized capital shares consist of 400,000,000 shares of Common Stock, \$0.01 par value per share ("Common Stock") and 40,000,000 shares of preferred stock, no par value ("Preferred Stock"). The outstanding shares of our Common Stock are fully paid and nonassessable.

Voting Rights

Holders of Common Stock are entitled to one vote per share on all matters to be voted on by such holders, including the election of directors; provided, however, that, except where required by law, holders of our Common Stock are not entitled to vote on any amendment to our Articles of Incorporation relating solely to the terms of one or more outstanding series of Preferred Stock. Holders of our Common Stock are not entitled to cumulative voting rights.

Dividend Rights

Subject to the rights of the holders of outstanding shares of Preferred Stock, if any, holders of our Common Stock are entitled to receive dividends, if any, as may be declared from time to time by our Board of Directors, in its discretion, out of funds legally available for the payment of dividends.

Liquidation Rights

Subject to the rights of the holders of outstanding shares of Preferred Stock, if any, holders of our Common Stock will share ratably in all assets legally available for distribution to our shareholders in the event of our liquidation, dissolution or winding up, either voluntary or involuntary.

Other Rights and Preferences

Holders of our Common Stock have no preemptive rights and no right to convert their Common Stock into any other securities. There are no redemption or sinking fund provisions applicable to our Common Stock.

Certain Anti-Takeover Provisions of our Articles of Incorporation, By-laws and Kentucky Law

Certain provisions in our Articles of Incorporation, By-laws and under Kentucky law may have the effect of delaying, deferring or preventing a change in control of Valvoline that our shareholders may consider favorable.

These provisions include:

- a. Our Articles of Incorporation authorize our Board of Directors to issue shares of preferred stock and set the voting powers, designations, preferences and other rights related to that preferred stock without shareholder approval. Any such designation and issuance of shares of preferred stock could delay, defer or prevent any attempt to acquire or control us.
 - a. Our Articles of Incorporation and By-laws limit the ability of our shareholders to remove directors without cause, change the authorized number of directors and fill director vacancies. These provisions may make it more difficult for our shareholders to change the composition of our Board of Directors.
 - a. Our Articles of Incorporation and By-laws do not provide for cumulative voting. Accordingly, the holders of a majority of the shares of Common Stock entitled to vote in any election of directors may elect all of the directors standing for election.
 - a. Our By-laws require shareholders to provide advance notice in order to raise business or make nominations at shareholders' meetings, which could have the effect of delaying shareholder action until the next shareholders' meeting that is favored by the holders of a majority of our outstanding voting securities or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of us.
 - a. Our Articles of Incorporation limit the ability of shareholders to adopt, amend or repeal our By-laws and to amend or repeal certain provisions in our Articles of Incorporation.
 - a. Our Articles of Incorporation and Section 271B.12 of the KBCA prevent us from engaging in certain business combinations with an interested shareholder (generally defined as a beneficial owner of 10% or more of our outstanding voting power) for a period of five years after the date such shareholder became an interested shareholder, unless certain procedures are followed or certain conditions are satisfied.
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Forum Selection Provision of our Articles of Incorporation

Our Articles of Incorporation also provide that, unless we consent in writing to the selection of an alternative forum, the Fayette County Circuit Court of the Commonwealth of Kentucky (or, if that court lacks subject matter jurisdiction, any other state or federal court located within the Commonwealth of Kentucky) shall be the sole and exclusive forum for: (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim for breach of a fiduciary duty owed by any of our directors, officers or other employees or our shareholders, (iii) any action asserting a claim arising pursuant to any provision of the KBCA or (iv) any action asserting a claim governed by the internal affairs doctrine. This forum selection provision does not apply to suits brought to enforce any duty or liability created by the Exchange Act or by the Securities Act of 1933, as amended. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum selection provision in our Articles of Incorporation.

Transfer Agent and Registrar

EQ Shareowner Services serves as the transfer agent and registrar for our Common Stock.

Exchange Listing

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

List of Subsidiaries of the Registrant

Subsidiaries of Valvoline Inc. at September 30, 2021, included the companies listed below.

<u>Name</u>	<u>Jurisdiction of Incorporation</u>
2209196 Alberta Inc.	Alberta, Canada
10070217 Manitoba LTD.	Manitoba, Canada
Ellis Enterprises B.V.	Netherlands
Ellis Enterprises East doo Kruševac	Serbia
Funding Corp. I	Delaware
Integral Defense, LLC	Delaware
LEX Capital LLC	Delaware
Lubricantes Andinos "Lubrian S. A."	Ecuador
Lubrival S. A.	Ecuador
OCH International, Inc.	Oregon
OCHI Advertising Fund LLC	Oregon
OCHI Holdings II LLC	Oregon
OCHI Holdings LLC	Oregon
PT. Valvoline Lubricants and Chemicals Indonesia	Indonesia
Qingdao Valvoline Automotive Services Co., Ltd.	China
Relocation Properties Management LLC	Delaware
Shanghai VC Lubricating Oil Co., Ltd.	China
VCA Solutions, LLC	Delaware
V C Lubricating Oil Co. Ltd.	Hong Kong
Valvoline (Australia) Pty. Limited	Australia
Valvoline (Deutschland) GmbH	Germany
Valvoline (Shanghai) Chemical Co., Ltd	China
Valvoline (Thailand) Ltd.	Thailand
Valvoline (Zhangjiagang) Lubricants Co., Ltd.	China
Valvoline Branded Finance, Inc.	Delaware
Valvoline Canada Corp.	Nova Scotia
Valvoline Canada Holdings B.V.	Netherlands
Valvoline Canadian Franchising Corp.	British Columbia
Valvoline Cummins Argentina S.A.	Argentina
Valvoline Cummins Private Limited	India
Valvoline de Colombia S.A.S.	Colombia
Valvoline Eurasia LLC	Russian Federation

Valvoline Europe Holdings LLC	Delaware
Valvoline Holdings B.V.	Netherlands
Valvoline Holdings Pte. Ltd.	Singapore
Valvoline Indonesia Holdings LLC	Delaware
Valvoline Instant Oil Change Franchising, Inc.	Delaware
Valvoline International de Mexico, S. de R.L. de C.V.	Mexico
Valvoline International Holdings Inc.	Delaware
Valvoline International Servicios de Mexico, S. de R.L. de C.V.	Mexico
Valvoline International, Inc.	Delaware
Valvoline Investments B.V.	Netherlands
Valvoline Italy S.r.l.	Italy
Valvoline Junior Holdings LLC	Delaware
Valvoline Licensing and Intellectual Property LLC	Delaware
Valvoline LLC	Delaware
Valvoline Lubricants & Solutions India Private Limited	India
Valvoline New Zealand Limited	New Zealand
Valvoline Poland Sp. z o.o.	Poland
Valvoline Pte. Ltd.	Singapore
Valvoline Quick Lube Corp.	British Columbia
Valvoline South Africa Proprietary Limited	South Africa
Valvoline Spain, S.L.	Spain
Valvoline UK Limited	United Kingdom
Valvoline US LLC	Delaware
VIOC Funding, Inc.	Delaware

Consent of Independent Registered Public Accounting Firm

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

- (1) Registration Statement (Form S-8 No. 333-225081) pertaining to the Valvoline Inc. Employee Stock Purchase Plan,
- (2) Registration Statement (Form S-8 No. 333-225079) pertaining to the Valvoline 401(k) Plan,
- (3) Registration Statement (Form S-8 No. 333-218580) pertaining to the Inducement Restricted Stock Award,
- (4) Registration Statement (Form S-8 No. 333-217887) pertaining to the Valvoline Inc. 2016 Deferred Compensation Plan for Employees and the Valvoline 401(k) Plan,
- (5) Registration Statement (Form S-8 No. 333-215230) pertaining to the 2016 Deferred Compensation Plan for Employees, and
- (6) Registration Statement (Form S-8 No. 333-213898) pertaining to the 2016 Valvoline Incentive Plan and the 2016 Deferred Compensation Plan for Non-Employee Directors;

of our reports dated November 19, 2021, with respect to the consolidated financial statements and schedule of Valvoline Inc. and Consolidated Subsidiaries and the effectiveness of internal control over financial reporting of Valvoline Inc. and Consolidated Subsidiaries included in this Annual Report (Form 10-K) of Valvoline Inc. and Consolidated Subsidiaries for the year ended September 30, 2021.

/s/ Ernst & Young LLP

Cincinnati, Ohio
November 19, 2021

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each of the undersigned Directors of VALVOLINE INC., a Kentucky corporation, which is about to file an Annual Report on Form 10-K with the Securities and Exchange Commission under the provisions of the Securities Exchange Act of 1934, as amended, hereby constitutes and appoints SAMUEL J. MITCHELL, JR., MARY E. MEIXELSPERGER, and JULIE M. O'DANIEL, and each of them, his or her true and lawful attorneys-in-fact and agents, with full power to act without the others to sign and file such Annual Report and the exhibits thereto and any and all other documents in connection therewith, and any such amendments thereto, with the Securities and Exchange Commission, and to do and perform any and all acts and things requisite and necessary to be done in connection with the foregoing as fully as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

Dated: November 19, 2021

/s/ Stephen F. Kirk

Stephen F. Kirk
Chairman of the Board and Director

/s/ Stephen E. Macadam

Stephen E. Macadam
Director

/s/ Gerald W. Evans, Jr.

Gerald W. Evans, Jr.
Director

/s/ Vada O. Manager

Vada O. Manager
Director

/s/ Richard J. Freeland

Richard J. Freeland
Director

/s/ Charles M. Sonsteby

Charles M. Sonsteby
Director

/s/ Carol H. Kruse

Carol H. Kruse
Director

/s/ Mary J. Twinem

Mary J. Twinem
Director

CERTIFICATION

I, Samuel J. Mitchell, Jr., certify that:

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

Date: November 19, 2021

/s/ Samuel J. Mitchell, Jr.

Samuel J. Mitchell Jr.

Chief Executive Officer and Director

(Principal Executive Officer)

CERTIFICATION

I, Mary E. Meixelsperger, certify that:

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

Date: November 19, 2021

/s/ Mary E. Meixelsperger

Mary E. Meixelsperger
Chief Financial Officer
(Principal Financial Officer)

VALVOLINE INC.

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

In connection with the Annual Report of Valvoline Inc. (the "Company") on Form 10-K for the period ended September 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned, Samuel J. Mitchell, Jr., Chief Executive Officer of the Company, and Mary E. Meixelsperger, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Samuel J. Mitchell, Jr.

Samuel J. Mitchell, Jr.
Chief Executive Officer and Director
November 19, 2021

/s/ Mary E. Meixelsperger

Mary E. Meixelsperger
Chief Financial Officer
November 19, 2021