

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

FORM 10-K

(Mark one)

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

For the fiscal year ended October 29, 2023

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 1-4121

DEERE & COMPANY

(Exact name of registrant as specified in its charter)

Delaware
(State of incorporation)

36-2382580
(IRS Employer Identification No.)

One John Deere Place, Moline, Illinois
(Address of principal executive offices)

61265
(Zip Code)

(309) 765-8000
(Telephone Number)

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT

Title of each class	Trading symbol	Name of each exchange on which registered
Common stock, \$1 par value	DE	New York Stock Exchange
6.55% Debentures Due 2028	DE28	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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒
Non-accelerated filer ☐

Accelerated filer ☐
Smaller reporting company ☐
Emerging growth company ☐

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

Indicate by check mark whether the registrant 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. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

The aggregate quoted market price of voting stock of the registrant held by non-affiliates at April 28, 2023 was \$110,752,079,592. At November 30, 2023, 280,255,442 shares of common stock, \$1 par value, of the registrant were outstanding.

Documents Incorporated by Reference. Portions of the proxy statement for the annual meeting of stockholders to be held on February 28, 2024 are incorporated by reference into Part III of this Form 10-K.

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PART I

ITEM 1. BUSINESS.





This Annual Report on Form 10-K contains forward-looking statements that are subject to risks and uncertainties. All statements other than statements of historical fact included in this Annual Report on Form 10-K are forward-looking statements. Forward-looking statements provide our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance, and business. You can identify forward-looking statements as they do not relate to historical or current facts and by words such as “believe,” “expect,” “estimate,” “anticipate,” “will,” “aim,” “should,” “plan,” “forecast,” “target,” “guide,” “project,” “intend,” “could,” and similar words or expressions.

All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we expected. Important factors that could cause actual results to differ materially from our expectations, or cautionary statements, and other important information about forward-looking statements are disclosed under Item 1A, “Risk Factors,” and Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Forward-Looking Statements,” in this Annual Report on Form 10-K.

As used herein, the terms “John Deere,” “we,” “us,” “our,” or “the Company” refer to Deere & Company and its subsidiaries unless designated or identified otherwise. All amounts are presented in millions of dollars, unless otherwise specified.

Products

The John Deere enterprise has manufactured agricultural equipment since 1837. Deere & Company was incorporated under the laws of Delaware in 1958. Our business is managed through the following four business segments: production and precision agriculture (PPA), small agriculture and turf (SAT), construction and forestry (CF), and financial services (John Deere Financial or FS).

				
BUSINESS SEGMENT	PRODUCTION AND PRECISION AGRICULTURE	SMALL AGRICULTURE AND TURF	CONSTRUCTION AND FORESTRY	FINANCIAL SERVICES
PRODUCTS	<ul style="list-style-type: none"> • Large and Certain Mid-Size Tractors • Combines • Cotton Pickers and Cotton Strippers • Sugarcane Harvesters • Sugarcane Loaders and Pull Behind Scrapers • Soil Preparation, Seeding, Application, and Crop Care Equipment • Tillage Equipment 	<ul style="list-style-type: none"> • Certain Mid-Size, Utility, and Compact Utility Tractors • Self-Propelled Forage Harvesters • Hay and Forage Equipment • Rotary Mowers • Utility Vehicles • Riding Lawn Equipment and Commercial Mowing Equipment • Golf Course Equipment 	<ul style="list-style-type: none"> • Backhoe Loaders • Crawler Dozers and Loaders • Four-Wheel-Drive Loaders and Compact Track Loaders • Excavators and Compact Excavators • Equipment used in Timber Harvesting • Road Building and Road Rehabilitation Equipment • Articulated Dump Trucks and Motor Graders 	<ul style="list-style-type: none"> • Retail Notes • Revolving Charge Accounts • Wholesale Receivables • Leases • Extended Warranties
CROPS/FUNCTION	<ul style="list-style-type: none"> • Corn and Soy • Small Grain • Cotton • Sugarcane 	<ul style="list-style-type: none"> • Dairy and Livestock • Lawn and Property Maintenance • Golf Course Maintenance • High-Value Crop Solutions 	<ul style="list-style-type: none"> • Earthmoving • Forestry • Roadbuilding 	<ul style="list-style-type: none"> • Financial Solutions

Smart Industrial Operating Model and Leap Ambitions

In fiscal year 2020, we announced our Smart Industrial Operating Model. The model is based on the following three focus areas:

1. Production Systems. A strategic alignment of products and solutions around our customers' production systems. Production systems refer to the series of steps our customers take to execute different tasks, operations, and projects to grow an agricultural product or execute a project.
2. Technology Stack. Investments in technology, as well as research and development, that deliver intelligent solutions to our customers through hardware and devices, embedded software, connectivity, data platforms, and applications. The technology stack leverages the core technologies mentioned in the previous sentence across the enterprise, including digital capabilities, automation, autonomy, and alternative power technologies. The stack has the potential to unlock economic and sustainable value for customers by optimizing jobs, strengthening decision-making, and better connecting the steps of a production system.
3. Lifecycle Solutions. The enterprise integration of our aftermarket and support capabilities to more effectively manage customer equipment, service, and technology needs across the full lifetime of a John Deere product, and with a specific lifecycle solution focus on the ownership experience. This integrated support seeks to enhance customer value through proactive and reactive support, easy access to parts, value-add services, and precision upgrades, regardless of when a customer purchases our equipment.

Building upon the Smart Industrial Operating Model, we announced our Leap Ambitions framework in fiscal year 2022. The Leap Ambitions are designed to boost economic value and sustainability for our customers. The ambitions align across our customers' production systems seeking to optimize their operations to deliver better outcomes with fewer resources.

The Leap Ambitions framework has three components: (i) size the incremental market opportunity, quantifying the value that can be created; (ii) identify the key actions required to guide investment in digitalization, autonomy, automation, and alternative power technologies; and (iii) define the desired financial and sustainable outcomes we hope to achieve to help investors and stakeholders understand the opportunities that can be unlocked in the future through present investments. Applying this framework, the Leap Ambitions set goals to measure the results under our Smart Industrial Operating Model. Current financial and sustainability goals for the Leap Ambitions relate to workforce safety, agriculture customer outcomes, product circularity, environmental footprint, Solutions as a Service, and equipment operations operating return on sales (OROS).

We aim to deliver ongoing value across our product lines by digitally connecting certain equipment we produce, enabling our customers to leverage technology for better economic and more sustainable outcomes in their businesses. We are introducing viable alternative power technologies for various product families. We also plan to enhance how we deliver value by introducing and scaling a Solutions as a Service business model.

We also aim to enable our agriculture customers to be more sustainable in their production steps by providing technology solutions that help to improve their nitrogen use efficiency, increase their crop protection efficiency, and reduce their CO_{2e} emissions.

We believe we will deliver ongoing value to our SAT customers by increasing the connectivity of their equipment, offering electric options where feasible in our product families, and working toward production of a fully autonomous, battery powered electric agricultural tractor. For our CF customers, we aim to deliver ongoing value by offering electric and hybrid-electric options where feasible in our product families and increasing the use of grade management control for earthmoving customers, intelligent boom control for forestry customers, and precision roadbuilding solutions for our roadbuilding customers.

We anticipate enabling sustainable outcomes for our customers. Specifically, we aim to enable our agriculture customers to be more sustainable in their production steps by providing technology solutions that help to improve their nitrogen use efficiency, increase their crop protection efficiency, and reduce their CO_{2e} emissions.

Available Information

Our internet address is <http://www.deere.com>. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports are available on our website free of charge as soon as reasonably practicable after they are filed or furnished with the United States Securities and Exchange Commission (SEC or Commission). The information contained on our website is not included in, nor incorporated by reference into, this Annual Report on Form 10-K.

Equipment Operations

Our equipment operations consist of three of our business segments: PPA, SAT, and CF. In fiscal year 2023, PPA generated \$26,790 net sales and revenue, or 48 percent of equipment operations net sales and revenues; SAT generated \$13,980 net sales and revenues, or 25 percent of equipment operations net sales and revenues; and CF generated \$14,795 net sales and revenues, or 27 percent of equipment operations net sales.

Production and Precision Agriculture

As compared with fiscal year 2022, PPA net sales for fiscal year 2023 were:

(In millions of dollars)	2023	2022	% Change
Net Sales	\$26,790	\$22,002	22%

The PPA segment is committed to meeting the fundamental needs of our customers through a combination of equipment and technology designed to enable our customers to overcome some of their biggest challenges: doing more with less, labor shortages, volatile input costs, and executing jobs in tighter timeframes. This segment defines, develops, and delivers global equipment and technology solutions for production-scale growers of crops like large grains (such as corn and soy), small grains (such as wheat, oats, and barley), cotton, and sugarcane. Equipment manufactured and distributed by the segment includes large and certain mid-size tractors, combines, cotton pickers, cotton strippers, sugarcane harvesters, related harvesting front-end equipment, and pull-behind scrapers. In addition, the segment includes tillage, seeding, and application equipment, including sprayers and nutrient management and soil preparation machinery.

We have been bringing innovations to agriculture for nearly 200 years and continue to invest in the development and production of advanced technology through integrated agricultural solutions and precision technologies across our portfolio of equipment. We have developed a differentiated, production system-level approach that helps us understand how customers operate, focusing on their costs, identifying the opportunities for them to reduce inputs, and increasing productivity, yield improvement, and sustainability. This approach directs our work. Advancements such as precise global navigation satellite systems technology, advanced connectivity and telematics, on-board sensors and computing power, automation software, digital tools, applications, and analytics provide seamless integration of information designed to improve customer decision-making and job execution. Our advanced telematics systems remotely connect equipment owners, business managers, and dealers to equipment in the field. This provides real-time alerts and information about equipment location, utilization, performance, and maintenance to improve productivity and efficiency, as well as to monitor agronomic job execution.

We aim to support our customers and their equipment throughout the entire equipment lifecycle. To prevent downtime, we offer a wide variety of aftermarket and customer solutions to keep equipment running, including machine monitoring, remote diagnostics, predictive maintenance alerts, and e-commerce solutions.

Examples of recent developments to unlock customer value and address challenges in the field include ExactShot™ and FurrowVision, which help customers reduce inputs during planting applications, generating cost savings, and lowering their environmental footprint; our fully autonomous 8R tillage tractor with a GPS guidance system and stereo cameras to execute tillage work without an in-cab operator, which helps to address farmers' labor challenges and time constraints; and See & Spray™ Ultimate, which targets the application of non-residual herbicides on weeds in corn, soybean, and cotton fields.

In addition to John Deere brand names, the table below provides a list of PPA products and their associated brand names:

PRODUCT	BRAND NAME
Sprayers	Hagie, Mazzotti
Planters and Cultivators	Monosem
Sprayers and Planters	PLA
Carbon Fiber Sprayer Booms	King Agro
Sugarcane Harvester Aftermarket Parts	Unimil
Aftermarket Parts for PPA Products	Vapormatic, A&I, Unimil, Alternatives by John Deere

Small Agriculture and Turf

As compared with fiscal year 2022, SAT net sales for fiscal year 2023 were:

(In millions of dollars)	2023	2022	% Change
Net Sales	\$13,980	\$13,381	4%

SAT is committed to meeting the needs of our customers through defining, developing, and delivering global equipment and technology solutions designed to unlock customer value and sustainability for dairy and livestock producers, high-value crop producers, and turf and utility customers. The segment works to provide product leadership while extending integrated agricultural solutions and precision technologies across its portfolio of equipment to unlock incremental value for customers. Similar to PPA, the SAT segment aims to support customers and their equipment through the entire equipment lifecycle.

Equipment manufactured and distributed by the segment includes certain mid-size, small and utility tractors, and related loaders and attachments; turf and utility equipment, including riding lawn equipment, commercial mowing equipment, golf course equipment, utility vehicles, implements for mowing, tilling, snow and debris handling, aerating, and other residential, commercial, golf, and sports turf care applications; and hay and forage equipment, including self-propelled forage harvesters and attachments, balers, and mowers. SAT equipment is sold primarily through independent retail dealer networks, although the segment also builds turf products for sale by mass retailers, including The Home Depot and Lowe's. Our turf equipment is sold primarily in North American, Western European, and Australian markets.

In the small agriculture market, we have introduced autonomous solutions, connectivity capabilities, and a path to electrifying our future by delivering a portfolio that helps current customers meet sustainability goals while finding innovative ways to serve new customers and unlock new markets for mechanization, at scale. For example, our joint venture with GUSS Automation, LLC in fiscal year 2022 added to our portfolio an autonomous sprayer to target our high value crop customers' needs. In fiscal year 2023, we announced the acquisition of Smart Apply, Inc., a precision spraying equipment company. The Smart Apply Intelligent Spray Control System™ stacked with GUSS Automation's remote sprayer is aimed at the needs of our high-value crop customers to improve their productivity and optimize inputs. On the turf side of the business, in fiscal year 2023 we launched two battery-powered walk behind mowers and announced certain hybrid innovations.

In addition to John Deere brand names, the table below provides a list of SAT products and their associated brand names:

PRODUCT	BRAND NAME
Equipment Attachments	Frontier, Kemper, GreenSystem, Smart Apply
Aftermarket Parts for SAT	Vapormatic, A&I, Sunbelt, Alternatives by John Deere

Agriculture and Turf Operations

Smart Industrial Operating Model. Our PPA and SAT segments offer a full line of agriculture and turf equipment and related service parts. As part of our Smart Industrial Operating Model, the segments are aligned around production systems, enabling focus on delivering equipment, technology, and solutions across all the jobs customers execute during a season. Sales and marketing support for both the PPA and SAT segments continues to be organized around four geographic regions: U.S., Canada, and Australia; Latin America and South America; Europe, Middle East, and the Commonwealth of Independent States (CIS); and Africa and Asia.

Business Environment. Sales of agricultural equipment are affected by total farm cash receipts, which reflect levels of farm commodity prices, acreage planted, crop yields, and government policies, including global trade policies, the amount and timing of government payments, and policies related to climate change. Sales also are influenced by general economic conditions, farmland prices, farmers' debt levels and access to financing, interest and exchange rates, agricultural trends, including the production of and demand for renewable fuels, labor availability and costs, energy costs, tax policies, and other input costs associated with farming. Other key factors affecting new agricultural equipment sales are the value, age, and level of used equipment, including tractors, harvesting equipment, self-propelled sprayers, hay and forage equipment, and seeding equipment. Weather and climatic conditions also can affect buying decisions of agricultural equipment purchasers.

Innovations in machinery and technology also influence agricultural equipment purchasing. For example, larger, more productive equipment is well accepted where farmers are striving for more efficiency in their operations. Large, cost-efficient, highly mechanized agricultural operations account for an important share of worldwide farm output. These customers are increasingly adopting and integrating precision agricultural technologies like guidance, telematics, automation, and data management in their operations. The large-size agricultural equipment used on such farms has been particularly important to us. A large proportion of the equipment

operations' total agricultural equipment sales in the U.S. and Canada, as well as in many countries outside the U.S. and Canada, are comprised of tractors over 100 horsepower, self-propelled combines, self-propelled cotton pickers, self-propelled forage harvesters, self-propelled sprayers, and seeding equipment. However, small tractors are also an important part of our global business. Further, we offer a number of harvesting solutions to support development of the mechanized harvesting of grain, oilseeds, cotton, sugarcane, forage, and biomass.

Retail sales of lawn and garden tractors, compact utility tractors, residential and commercial mowers, utility vehicles, and golf and turf equipment are influenced by the housing market, weather conditions, consumer spending patterns, and general economic conditions like unemployment, interest, and inflation rates.

Seasonality. Seasonal patterns in retail demand for agricultural equipment can result in substantial variations in the volume and mix of products sold to retail customers during the year. Seasonal demand must be estimated in advance, and equipment must be manufactured in anticipation of such demand to achieve efficient utilization of personnel and facilities throughout the year. The PPA and SAT segments can incur substantial seasonal variations in cash flows to finance production and inventory of agricultural and turf equipment. The segments also incur costs to finance sales to dealers in advance of seasonal demand.

For certain equipment, we offer early order programs, which can include discounts to retail customers that place orders well in advance of the use season. Production schedules are based, in part, on these early order programs; however, during periods of high demand, some factories may still produce after the use season. New combine and cotton harvesting equipment has been sold under early order programs with waivers of retail finance charges available to customers who take delivery of machines during non-use seasons.

In Australia, Canada, and the U.S., there are typically several used equipment trade-in transactions that take place in connection with most new agricultural equipment sales. To provide support to our dealers in these countries for carrying and ultimately selling this used inventory to retail customers, we provide these dealers with pools of funds awarded as a percentage of the dealer cost for eligible new equipment sales at the time of the new equipment settlement.

Retail demand for turf and utility equipment is normally higher in the second and third fiscal quarters. We have pursued a strategy of building and shipping such equipment as close to retail demand as possible. Consequently, to increase asset turnover and reduce the average level of field inventories throughout the year, production and shipment schedules of these product lines are normally proportionately higher in the second and third fiscal quarters of each year, corresponding closely to the seasonal pattern of retail sales. However, the patterns of seasonality have been affected by the supply chain disruptions experienced during fiscal year 2022.

Construction and Forestry

As compared with fiscal year 2022, CF net sales for fiscal year 2023 were:

(In millions of dollars)	2023	2022	% Change
Net Sales	\$14,795	\$12,534	18%

Our CF segment is committed to meeting the need for smart and more sustainable solutions to help our customers meet industry challenges, including jobsite safety, a shortage of skilled labor, volatile input costs, reducing rework, maximizing uptime, and minimizing their environmental footprint. CF also aims to support customers and their equipment through the entire equipment lifecycle (see PPA section above).

To address these challenges and unlock value for customers, we deliver a robust portfolio of construction, roadbuilding, and forestry products with precision technology solutions. Our smart solutions such as SmartWeigh™, grade control offerings, machine and system automation, and operations center, are designed to allow customers to complete more functions with fewer inputs, reduce rework and guesswork, and transform data into insights to allow for better decisions. Obstacle detection solutions such as SmartDetect™ supplements operator visibility on the jobsite through a combination of cameras, radar, and machine learning. Additionally, we plan to deliver hybrid-electric and battery electric equipment solutions to help customers reduce tailpipe emissions without sacrificing power and performance. We currently have the 644X four-wheel-drive loader and 944X four-wheel-drive loader in production with an electric drive coupled with a diesel engine.

Our primary construction products include excavators, wheel loaders, motor graders, dozers, backhoes, articulated dump trucks, compact construction equipment including skid steers, compact excavators, and compact track loaders, along with a variety of attachments. Our Wirtgen roadbuilding products include milling machines, pavers, compactors, rollers, crushers, screens, and asphalt plants. Similar to the construction product lineup, the Wirtgen brand also provides a technology stack aimed at allowing customers to make smarter and more sustainable decisions. Technology offerings include Wirtgen Performance Tracker, Mill Assist, Level Pro, Vögele Roadscan, Smart Compact, WITOS Paving, Spective Connect, AutoTrac™, and John Deere Connected Support™.

In forestry, our primary products include skidders, wheeled and tracked feller bunchers, forwarders, knuckleboom loaders, wheeled and tracked harvesters, swing machines, and precision forestry technology solutions such as Intelligent Boom Control, TimberMatic™ maps, and TimberManager™. These solutions allow customers to closely track jobsite progress and provide visibility into fleet location, utilization, performance, and maintenance information.

We have a number of initiatives in the rent-to-rent, or short-term rental, market for construction, earthmoving, roadbuilding, and material handling equipment. These include specially designed rental programs for our dealers and expanded cooperation with major national equipment rental companies.

We own retail forestry sales operations in Australia, Brazil, Finland, Ireland, New Zealand, Norway, Sweden, and the United Kingdom. In addition, the Wirtgen Group sells its products primarily through company-owned sales and service subsidiaries in many markets worldwide (most significantly in Europe, India, and Australia). In most other geographies, we sell through an independent dealer channel.

The prevailing levels of residential, commercial, and public construction, investment in infrastructure, and the condition of the forestry products industry influence retail sales of our construction, roadbuilding, and forestry equipment. General economic conditions, interest rate levels, the availability of credit, and certain commodity prices, such as those applicable to oil and gas, pulp, paper, and saw logs, also influence sales.

In addition to John Deere brand names, the table below provides a list of CF products and their associated brand names:

PRODUCT	BRAND NAME
Roadbuilding Equipment	Wirtgen, Vögele, Hamm, Kleemann, Benninghoven, and Ciber
Forestry Attachments	Waratah

Competition

The equipment operations sell products and services in a variety of competitive global and regional markets. The principal competitive factors in all markets include product performance, innovation, quality, distribution, sustainability, customer service, and value. John Deere's brand recognition is a competitive factor in North America and many other parts of the world.

The agricultural equipment industry continues to change and is becoming even more competitive through the emergence and expanding global capability of many competitors. The competitive environment for the agriculture and turf operations includes some global competitors, including AGCO Corporation, CLAAS KGaA mbH, CNH Industrial N.V., Kubota Tractor Corporation, Mahindra & Mahindra Limited, and The Toro Company, as well as many regional and local competitors. These competitors have varying numbers of product lines competing with our products and each has varying degrees of regional focus. Additional competition within the agricultural equipment industry has come from a variety of short-line and specialty manufacturers, as well as local or regional competitors, with differing manufacturing and marketing methods. As technology increasingly enables enhanced productivity in agriculture, the industry is also attracting non-traditional competitors, including technology-focused companies and start-up ventures.

Our forestry and roadbuilding businesses operate globally. The construction business operates in competitive markets in North and South America, as well as other global markets. Global competitors of the CF segment include Caterpillar Inc., CNH Industrial N.V., Doosan Infracore Co., Ltd. and its subsidiary Doosan Bobcat Inc., Fayat Group, GOMACO Corporation, Hitachi Construction Machinery, Komatsu Ltd., Kubota Tractor Corporation, Ponsse Plc, SANY Group Co., Ltd., Terex, Tigercat Industries Inc., Volvo Construction Equipment (part of Volvo Group AB), and XCMG.

Manufacturing and Assembly

Common manufacturing processes and techniques are used in producing components for PPA, SAT, and CF equipment sold by us and our dealers. The equipment operations also pursue external sales of selected parts that can be manufactured and supplied to third parties on a competitive basis, including engines, power train components, and electronic components. The equipment operations' manufacturing strategy involves four elements: Build a Stronger Business, Deliver Innovation, Excite the Customer, and Live the Team.

Build a Stronger Business refers to our ability to execute lean initiatives supported by safety, quality, delivery, and productivity goals.

Deliver Innovation refers to implementing our digitally connected factory projects to improve efficiency and differentiated value. We implement technology solutions to support our factories across the globe to increase our speed of manufacturing innovation and allow the workforce to focus on high-value tasks.

Excite the Customer refers to designing operations to be flexible and accommodate product design changes to meet market conditions and changing customer requirements.

Live the Team refers to building a safety culture by ensuring that employees are safe at work.

To utilize manufacturing facilities and technology more effectively, the equipment operations pursue continuous improvements in manufacturing processes, including steps to streamline manufacturing processes and enhance responsiveness to customers. Our flexible assembly lines can accommodate a wider product mix and deliver products in line with dealer and customer demand. Additionally, considerable effort is being directed to manufacturing cost reduction through process improvement and improvements in product design, advanced manufacturing technology, and supply management and logistics, as well as compensation incentives related to productivity and organizational structure.

See Item 2 “Properties” in this Annual Report on Form 10-K for more information about our manufacturing facilities.

Patents, Trademarks, Copyrights, and Trade Secrets

We own a significant number of patents, trademarks, copyrights, trade secrets, and intellectual property licenses related to our products and services and expect the number to grow as we continue to pursue technological innovations. We further our competitive position by filing patent and trademark applications in the U.S. and internationally to protect technology, improvements considered important to the business, and our brand. We believe that, taken together, our rights under these patents and licenses are important to our operations and competitive position, but do not regard any of our businesses as being dependent upon any single patent or family of patents. See “Risk Factors- Our business could be adversely affected by the infringement or loss of intellectual property rights” for more information.

Sales and Distribution

Through the U.S. and Canada, we market products to approximately 2,050 independent dealer locations. Of these, approximately 1,600 sell agricultural equipment, while approximately 450 sell construction, earthmoving, material handling, roadbuilding, and/or forestry equipment. In addition, roadbuilding equipment is sold at approximately 90 roadbuilding-only locations that may carry products that compete with our construction, earthmoving, material handling, and/or forestry equipment. Turf equipment is sold at most John Deere agricultural equipment locations, a few construction, earthmoving, material handling, roadbuilding, and/or forestry equipment locations, and about 280 turf-only locations, many of which also sell dissimilar lines of non-John Deere products. In addition, certain lawn and garden product lines are sold through The Home Depot and Lowe’s.

Outside the U.S. and Canada, our agriculture and turf equipment is sold to distributors and dealers for resale in over 100 countries. Sales and administrative offices are in Argentina, Australia, Brazil, China, France, Germany, India, Italy, Mexico, Poland, Singapore, Sweden, South Africa, Spain, Ukraine, and the United Kingdom. Turf equipment sales outside the U.S. and Canada occur primarily in Western Europe and Australia. Construction, earthmoving, material handling, and forestry equipment is sold to distributors and dealers primarily by sales offices located in Australia, Brazil, Finland, New Zealand, Singapore, and the United Kingdom. Some of these dealers are independently owned while we own others. Roadbuilding equipment is sold directly to retail customers and independent distributors and dealers for resale. As of November 1, 2022, we did not renew dealer agreements in Russia, and in October 2023, we sold our roadbuilding business in Russia. Consequently, we no longer sell equipment in Russia. The Wirtgen Group operates company-owned sales and service subsidiaries in Australia, Austria, Belgium, Bulgaria, China, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, India, Ireland, Italy, Japan, Latvia, Lithuania, Malaysia, the Netherlands, Norway, Poland, Romania, South Africa, Sweden, Taiwan, Thailand, Turkey, Ukraine, and the United Kingdom. The equipment operations operate centralized parts distribution warehouses in the U.S., Brazil, and Germany in coordination with regional parts depots and distribution centers in Argentina, Australia, China, India, Mexico, South Africa, Sweden, and the United Kingdom.

We market engines, power trains, and electronic components worldwide through select sales branches or directly to regional and global original equipment manufacturers and independently owned engine distributors.

Raw Materials

We purchase raw materials, manufactured components, and replacement parts for our equipment, engines, and other products from leading suppliers both domestically and internationally. These materials and components include a variety of steel products, metal castings, forgings, plastics, hydraulics, electronics, and ready-to-assemble components made to certain specifications. We also purchase various goods and services used for production, logistics, offices, and research and development. We develop and maintain sourcing strategies for our purchased materials and emphasize long-term supplier relationships at the core of these strategies. We use a variety of agreements with suppliers intended to drive innovation, ensure availability and delivery of industry-leading quality raw materials and components, manage costs on a globally competitive basis, protect our intellectual property, and minimize other supply-related risks. We actively monitor supply chain risks to minimize the likelihood of business disruptions caused by the supply base,

including supplier financial viability, capacity, business continuity, labor availability, quality, delivery, cybersecurity, weather-related events, and natural disasters. We have implemented mitigation efforts to minimize the impact of potential and actual supply chain disruptions on our customers. Examples include working with the supply base to prioritize allocations to improve material availability, multi-sourcing selected parts and materials, entering long term contracts for some critical components, and using alternative freight carriers to expedite delivery.

Backlog Orders

The dollar amount of backlog orders as of October 29, 2023 was approximately \$7.9 billion for the PPA segment and \$3.3 billion for the SAT segment, compared with \$9.7 billion and \$4.6 billion, respectively, at October 30, 2022. The agriculture and turf backlog are generally highest in the second and third quarters due to seasonal buying trends in these industries. The dollar amount of backlog orders for the CF segment was approximately \$6.4 billion at October 29, 2023, compared with \$8.2 billion at October 30, 2022, including, for both periods, backlog orders for roadbuilding equipment, which had not historically been included in discussions of the CF segment's backlog orders. Backlog orders for equipment operations include all orders deemed to be firm as of the referenced date. Backlog orders decreased as demand has declined.

Financial Services

U.S. and Canada. The financial services segment primarily provides and administers financing for retail purchases from our dealers of new equipment manufactured by our agricultural and turf and construction and forestry markets, as well as used equipment taken in trade for this equipment. The Company and John Deere Construction & Forestry Company (a wholly owned subsidiary of the Company) are referred to as the "sales companies." John Deere Capital Corporation (Capital Corporation), a U.S. financial services subsidiary, generally purchases retail installment sales and loan contracts (retail notes) from the sales companies. In Canada, John Deere Financial Inc., a Canadian financial services subsidiary, purchases and finances retail notes acquired by John Deere Canada ULC, our Canadian sales company. The terms of retail notes and the basis on which the financial services operations acquire retail notes from the sales companies are governed by agreements with the sales companies. The financial services segment also finances and services revolving charge accounts, in most cases acquired from and offered through merchants in the agricultural and turf markets. Additionally, the financial services operations provide wholesale financing to dealers of our agriculture and turf equipment and construction and forestry equipment (wholesale notes), primarily to finance inventories of equipment for those dealers. The various financing options offered by the financial services operations are designed to enhance sales of our products and generate financing income for the financial services operations. In the U.S. and Canada, certain subsidiaries included in the financial services segment offer extended equipment warranties.

Retail notes acquired by the sales companies are immediately sold to the financial services operations. The equipment operations are the financial services operations' major source of business, although many retail purchasers of our products finance their purchases outside our organization through a variety of sources, including commercial banks and finance and leasing companies.

The financial services operations offer retail leases to equipment users in the U.S. A small number of leases are executed with units of local governments. Leases are usually written for periods ranging from less than one year to seven years, and typically contain an option permitting the customer to purchase the equipment at the end of the lease term. Retail leases also are offered in a generally similar manner to customers in Canada.

The financial services operations' terms for financing equipment retail sales (other than smaller items financed with unsecured revolving charge accounts) generally provide for retention of a security interest in the equipment financed. Finance charges are sometimes waived for specified periods or reduced on certain John Deere products sold or leased in advance of the season of use or in other sales promotions. The financial services operations generally receive compensation from the sales companies at approximate market interest rates for periods during which finance charges are waived or reduced on the retail notes or leases. The cost is accounted for as a deduction in arriving at net sales by the equipment operations.

We have an agreement with Capital Corporation to make payments to Capital Corporation such that its consolidated ratio of earnings to fixed charges is not less than 1.05 to 1 for any four consecutive fiscal quarterly periods. We also have committed to continuing to own, directly or through one or more wholly-owned subsidiaries, at least 51 percent of the voting shares of capital stock of Capital Corporation and to maintain Capital Corporation's consolidated tangible net worth at not less than \$50 million. Our obligations to make payments to Capital Corporation under this agreement are independent of whether Capital Corporation is in default on its indebtedness, obligations, or other liabilities. Further, our obligations under the agreement are not measured by the amount of Capital Corporation's indebtedness, obligations, or other liabilities. Our obligations to make payments under this agreement are expressly stated not to be a guaranty of any specific indebtedness, obligation, or liability of Capital Corporation and are enforceable only by or in the name of Capital Corporation. As of October 29, 2023, we were in compliance with all of our obligations, and no payments were required under this agreement in fiscal year 2023 or fiscal year 2022. At October 29, 2023, we indirectly owned

100 percent of the voting shares of Capital Corporation's capital stock and Capital Corporation's consolidated tangible net worth was \$5,901.6 million.

Outside the U.S. and Canada. The financial services operations also offer financing, primarily for our products, in Argentina, Australia, Brazil, China, India, Mexico, New Zealand, and in several other countries in Africa, Asia, Europe, and Latin America. John Deere Financial sold its financial services business in Russia during the second quarter of fiscal year 2023. In certain markets, financing is offered through cooperation agreements or joint ventures with other financial institutions. The way the financial services operations offer financing in these countries is affected by a variety of country-specific laws, regulations, and customs, including those governing property rights and debtor obligations, which are subject to change, and which may introduce greater risk to the financial services operations.

The financial services operations also offer to select customers and dealers credit enhanced international export financing primarily for the purchase of our products.

Additional information on the financial services operations is provided in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" (MD&A) section in this Annual Report on Form 10-K.

Environmental Matters

We are subject to a variety of local, state, and federal environmental laws and regulations in the U.S., as well as the environmental laws and regulations of other countries in which we conduct business. We strive to comply with applicable laws and regulations; however, in the event of noncompliance, we could be subject to fines and other penalties. Compliance with these laws and regulations adds to the cost of our production operations. Compliance with emissions regulations adds to the cost of our products. However, we do not expect to incur material capital expenditures for environmental control facilities during fiscal year 2024. In addition to ensuring compliance with laws and regulations, we aim to reduce our environmental footprint through our Leap Ambitions framework and seek opportunities to reduce environmental impacts on the communities where we operate.

The U.S., the European Union (EU), India, and other governments throughout the world have enacted, and continue to enact, laws and regulations to reduce off-road engine emissions. Compliance with these regulations requires significant investments in the development of new engine technologies and after-treatment systems.

Governments also are implementing laws regulating products across their life cycles, including raw material sourcing and the storage, distribution, sale, use, and disposal of products at their end-of-life. These laws and regulations include requirements to develop less hazardous chemical substances and products, right-to-know, restriction of hazardous substances, and product take-back laws.

We are evaluating, cleaning-up, or conducting corrective action at a limited number of sites. We do not expect that these matters or other expenses or liabilities we may incur in connection with any noncompliance with environmental laws, regulations, or the clean-up of any additional properties, will have a material adverse effect on our consolidated financial position, results of operations, cash flows, or competitive position.

We continue to monitor and review developing sustainability frameworks, standards, and global regulations and work to incorporate those most applicable to our business into our sustainability reporting.

With respect to properties and businesses that have been or will be acquired, we conduct due diligence into potential exposure to environmental liabilities but cannot be certain that we have identified, or will identify, all adverse environmental conditions. Compliance with these laws and regulations adds to the cost of our production operations. Compliance with emissions regulations adds to the cost of our products. However, we do not expect to incur material capital expenditures for environmental controls facilities during fiscal year 2024. In addition to ensuring compliance with laws and regulations, we aim to reduce our environmental footprint through our Leap Ambitions framework and seek opportunities to reduce environmental impacts on the communities where we operate.

New regulations applicable to John Deere products

California promulgated regulations prohibiting the use of small off-road spark-ignition engines under 25 horsepower. These regulations go into effect in 2024 and will impact some of our products, such as our turf care and golf course maintenance products. Even though we do not expect a material impact to our business from these regulations, to comply with new laws and regulations that limit off-road gasoline and diesel-powered engines, we intend to offer an electric option in each turf and compact utility tractor product family by 2026. However, compliance with emissions regulations has added, and will continue to add, to the cost of our products.

Government Regulations

We are subject to a wide variety of local, state, and federal laws and regulations in the countries where we operate. These laws and regulations include a range of trade, product, foreign exchange, employment, tax, environmental, safety, data privacy, antitrust, and other laws and regulations.

Compliance with these laws and regulations often requires the dedication of time and effort of our employees, as well as financial resources. In fiscal year 2023, compliance with the regulations applicable to us did not have a material effect on our capital expenditures, earnings, or competitive position. At this time, we do not expect to incur material capital expenditures related to compliance with regulations during fiscal year 2024. Additional information about the impact of government regulations on our business is included in Item 1A, "Risk Factors – Strategic Risks" and "Legal and Compliance Risks."

Human Capital

Higher Purpose

Our employees are guided by our higher purpose: *We run so life can leap forward*. Employees are further guided by our Code of Business Conduct (Code), which helps them to uphold and strengthen the standards of honor and integrity that have defined us since our founding. Our world and business may change, yet we continue to be guided by our core values — integrity, quality, commitment, and innovation.

Employees

At October 29, 2023, we had approximately 83,000 employees, including approximately 33,800 employees in the U.S. and Canada. We also retain consultants, independent contractors, temporary, and part-time workers. Unions are certified as bargaining agents for approximately 80 percent of our U.S. production and maintenance employees. Approximately 11,500 of our active U.S. production and maintenance workers are covered by a collective bargaining agreement with the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW), with an expiration date of November 1, 2027. A small number of U.S. production employees are represented by the International Association of Machinists and Aerospace Workers (IAM). Collective bargaining agreements covering our employees in the U.S. expire between 2024 and 2027. Unions also represent the majority of employees at our manufacturing facilities outside the U.S.

There is no guarantee that we will be able to renew collective bargaining agreements or whether such agreements will be on terms satisfactory to us. For further discussion, see "Risk Factors—Disputes with labor unions may adversely affect our ability to operate in our facilities as well as impact our financial results."

Code of Business Conduct

We are committed to conducting business in accordance with the highest ethical standards. We require all employees to complete training on our Code and, where permitted by law, also require that employees regularly certify compliance with the Code. The Code provides specific guidance to all our employees, outlining how they can and must uphold and strengthen the integrity that has defined John Deere since its founding. In addition, we maintain a global compliance hotline to allow for concerns of potential violations of the Code, global policies, or the law to be brought forward.

Health and Safety

We strive to achieve safety excellence through increased focus on leading indicators, risk reduction, health and safety management systems, and prevention. We have made progress on implementing best practices and leading indicators for enabling employee safety over recent years with our Health and Safety Management System.

We utilize a safety balanced scorecard, which includes leading and lagging indicators, and is designed to enable continuous measurement of safety performance and drive continuous improvement. Leading indicators include incident corrective action closure rates, ergonomic scorecard, and risk reduction from safety and ergonomic risk assessment projects. Lagging indicators include total recordable incident rate, ergonomic recordable case rate, and near-miss rate. Leading indicators are tracked by most of our manufacturing facilities and internally reported. In fiscal year 2023, we reported a total recordable incident rate of 2.08 and a lost time frequency rate of 0.65. To improve our total recordable incident rate, we will prioritize risk and injury reduction strategies, improve ergonomic programs, and focus on prevention through design.

We also updated our new employee onboarding in fiscal year 2023 to include training labs, hands-on-training, tooling and process exposures on the shop floor, operator checklists, and training videos of workstations.

Diversity, Equity, and Inclusion (DEI)

We adhere to the principle of equal employment opportunity and we believe that a diverse workforce is essential to our long-term success and solving our customers' most pressing challenges. We strive to foster a diverse, equitable, and inclusive culture. We

embrace employees' differences in race, color, religion, age, sex, sexual orientation, gender, gender identity and expression, marital or partnership status, family status, citizenship, national origin, ancestry, geographic background, military or veteran status, disability (mental or physical), and any other characteristics that make our employees unique.

Our leadership team works to set a consistent and transparent tone on DEI issues and strategy. We also create spaces for open conversations and learning through our Employee Resources Groups (ERGs) speaker series and micro-learning. We sponsor 13 ERGs that are run by employees, open to all employees, and are a key driver of inclusion. ERGs build organization-wide networks that allow employees to come together and discuss shared interests. The global chapters work with local teams to support efforts to attract, retain, and develop the best talent. In addition, our global DEI strategy focuses on embedding DEI into world-wide business operations and people processes.

In addition to recruiting from a wide array of colleges and universities, we partner with several professional organizations to support our diversity recruitment strategy, including AnitaB.org – a global organization for women in technology, Minorities in Agriculture Natural Resources and Related Sciences, the National Association of Black Accountants, Inc., the National Black MBA Association, Inc., the National Society of Black Engineers, the Society of Women Engineers, the Thurgood Marshall College Fund Leadership Institute, and the Society of Hispanic Professional Engineers. Our broad recruiting strategy helps us identify talent from all backgrounds.

Compensation & Benefits

Our total rewards are intended to be competitive, meet the varied needs of our global workforce, and reinforce our values. We are committed to providing comprehensive and competitive pay and benefits to our employees. We invested, and continue to invest, in employees through growth and development and well-being initiatives.

Our work environment is designed to promote innovation, well-being, and reward performance. Our total rewards for employees include a variety of components that aim to support sustainable employment and the ability to build a strong financial future, including competitive market-based pay and comprehensive benefits. In addition to earning base pay, eligible employees are compensated for their contributions to our goals with both short-term cash incentives and long-term equity-based incentives.

Eligible full-time employees in the U.S. have access to medical, dental, and vision plans; savings and retirement plans; parental leave and paid time off; and other resources, such as the Employee Assistance Program, which provides mental health and wellness services. We also offer a variety of working arrangements to eligible employees, including flexible schedules, remote work, and job sharing to help employees manage home and work-life situations. Programs and benefits differ internationally for a variety of reasons, such as local legal requirements, market practices, and negotiations with works councils, trade unions, and other employee representative bodies.

Training and Development

Employees are critical to the long-term success of our business. We encourage employees to identify the paths that can build the skills, experience, knowledge, and competencies needed for career advancement. We support employees by creating purpose-driven work opportunities, comprehensive performance reviews and development plans, mentoring opportunities, and professional and personal development opportunities.

We encourage employees to provide feedback across the enterprise through our internal voluntary employee experience survey, ad-hoc "pulse" surveys, and new-hire and exit surveys. Reports from these surveys help equip us to address needs across the employee lifecycle to improve the overall experience and engagement of our workforce.

Around the world, we offer internships, training, upskilling, apprenticeships, and leadership development at all stages of an employee's career. Training programs are tailored to different geographic regions and job functions and include topics such as technical operation of equipment, equipment assembly, relationships with customers and dealers, our culture and values, compliance with the Code, compliance with anti-bribery/corruption laws and policies, compliance with management of private data and cybersecurity, conflicts of interest, discrimination and workplace harassment policies, sexual harassment policies, and leadership development.

Human Rights and Our Code of Conduct

We honor human rights and respect the individual dignity of all persons globally. Our commitment to human rights requires that we understand and fulfill our responsibilities consistent with our values and practices. We strive to ensure that human rights are upheld for our employees and workers in our supply chain. Our commitment to human rights is defined in the Code, our Supplier Code of Conduct, our Dealer Code of Conduct, related policies and procedures, and our statement "Support of Human Rights in our Business Practice," each of which is available on our website under "Governance." These documents establish guidelines for our employees, suppliers, and dealers. We do not tolerate human rights abuses, such as forced labor, unlawful child labor, and human trafficking.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The following are our executive officers as of December 6, 2023. All executive officers are elected or appointed by the Board of Directors and hold office until the meeting of the Board of Directors following the annual meeting of stockholders each year.

Name (Age)	Present Deere Position (Effective Date)	Business Experience (Effective Date)
John C. May (54)	Chairman, Chief Executive Officer, and President (2020)	<ul style="list-style-type: none"> - Chief Executive Officer and President (2019) - President and Chief Operating Officer (2019) - President, Worldwide Agriculture & Turf Division Global Harvesting and Turf Platforms, Ag Solutions Americas, and Australia (2018)
Joshua A. Jepsen (46)	Senior Vice President and Chief Financial Officer (2022)	<ul style="list-style-type: none"> - Deputy Financial Officer (2022) - Director, Investor Relations (2018)
Ryan D. Campbell (49)	President, Worldwide Construction & Forestry Division and Power Systems (2022)	<ul style="list-style-type: none"> - Senior Vice President and Chief Financial Officer (2019) - Deputy Financial Officer (2018)
Jahmy J. Hindman (48)	Senior Vice President and Chief Technology Officer (2023)	<ul style="list-style-type: none"> - Chief Technology Officer (2020) - Global Director Tractor Platform Engineering (2018) - Global Manager, Architecture, Systems, Modules (2018)
Mary K.W. Jones (55)	Senior Vice President, General Counsel and Worldwide Public Affairs (2019)	<ul style="list-style-type: none"> - Senior Vice President and General Counsel (2013)
Rajesh Kalathur (55)	President, John Deere Financial, and Chief Information Officer (2022)	<ul style="list-style-type: none"> - President, John Deere Financial and Senior Vice President, Global Information Technology and Chief Financial Officer (2022) - President, John Deere Financial, and Chief Information Officer (2019) - Senior Vice President, Chief Financial Officer and Chief Information Officer (2018)
Deanna M. Kovar (45)	President, Worldwide Agriculture & Turf Division, Small Ag & Turf, Sales and Marketing Regions of Europe, CIS, Asia, and Africa (2023)	<ul style="list-style-type: none"> - Vice President, Production Systems, Production & Precision Ag (2023) - Vice President, Production Systems (2020) - Director, Operation Station (2018)
Felecia J. Pryor (49)	Senior Vice President and Chief People Officer (2022)	<ul style="list-style-type: none"> - Executive Vice President & Chief Human Resources Officer, BorgWarner Inc (2022) - Global Vice President Human Resources, BorgWarner, Inc. - Morse Systems (2019) - Vice President Human Resources ASEAN, Ford Motor Company (2016)
Cory J. Reed (53)	President, Worldwide Agriculture & Turf Division, Production & Precision Ag, Sales and Marketing Regions of the Americas and Australia (2020)	<ul style="list-style-type: none"> - President, Worldwide Agriculture & Turf Division, Americas and Australia, Global Harvesting and Turf Platforms, Agricultural Solutions (2019) - President, John Deere Financial (2016)
Justin R. Rose (44)	President, Lifecycle Solutions, Supply Management, and Customer Success (2022)	<ul style="list-style-type: none"> - Senior Partner and Managing Director at the Boston Consulting Group (BCG) (2020) - Various roles of increasing responsibility from Associate to Partner and Managing Director at BCG (2002)

ITEM 1A. RISK FACTORS.

The following risks are considered material to our business based upon current knowledge, information, and assumptions. This discussion of risk factors should be considered closely in conjunction with the MD&A, including the risks and uncertainties described in the Forward-Looking Statements, and the Notes to Consolidated Financial Statements. These risk factors and other forward-looking statements relate to future events, expectations, trends, and operating periods. They involve certain factors that are subject to change and important risks and uncertainties that could cause actual results to differ materially. Some of these risks and uncertainties could affect particular lines of business, while others could affect all our businesses. Although the risks are organized by headings and each risk is discussed separately, many are interrelated. The risks described in this Annual Report on Form 10-K and the Forward-Looking Statements in this report are not the only risks faced by us.

STRATEGIC RISKS

We may face risks associated with international, national, and regional trade laws, regulations, and policies, and government farm programs and policies which could significantly impair our profitability and growth prospects.

International, national, and regional laws, regulations, and policies directly or indirectly related to or restricting the import and export of our products, services, and technology, or those of our customers, or for the benefit of favored industries or sectors, could harm our global business. We are subject to various regulatory risks including, but not limited to, the following:

- Restricted access to global markets could impair our ability to export goods and services from various manufacturing locations around the world. Restricted access could limit the ability to access raw materials and high-quality parts and components at competitive prices on a timely basis. For example, expanding export controls or limits on foreign investment can impact global supply of key materials and components, and actions taken within the US-China trade conflict can impact business in China, as well as sales, import/exports, and/or business engagement with Chinese entities globally.
- Trade restrictions, negotiation of new trade agreements, non-tariff trade barriers, local content requirements, and imposition of new or retaliatory tariffs against certain countries or covering certain products, including developments in U.S.-China trade relations, export control and sanctions against Russia, have limited, and could continue to limit, our ability to capitalize on current and future growth opportunities in international markets. These trade restrictions, and changes in, or uncertainty surrounding global trade policies, may affect our competitive position.
- Trade restrictions could impede those in developing countries from achieving a higher standard of living, which could negatively impact our future growth opportunities arising from increasing global demand for food, fuel, and infrastructure.
- Policies impacting exchange rates and commodity prices, or those limiting the export or import of commodities, could have a material adverse effect on the international flow of agricultural and other commodities that may result in a corresponding negative effect on the demand for agricultural and forestry equipment in many areas of the world. Our agricultural equipment sales could be harmed by such policies because farm income influences sales of agricultural equipment around the world.
- Changes in government farm programs and policies can influence demand for agricultural equipment as well as create unequal competition for multinational companies relative to domestic companies.

We may be unable to manage increasing political, economic, and social uncertainty in certain regions of the world, which could significantly change the dynamics of our competition, customer base, and product offerings globally.

Efforts to grow our businesses depend in part upon access and developing market share and profitability in additional geographic markets, including, but not limited to, Argentina, Brazil, China, India, and South Africa. There are various risks associated with our global footprint, including, but not limited to, the following:

- In some cases, these countries have greater political and economic volatility, greater vulnerability to infrastructure and labor disruptions, and differing customer product preferences and requirements than our other markets. In fiscal year 2023, as a result of the war in Ukraine, we suspended shipments of machines and service parts to Russia. The suspension of shipments to Russia reduced actual and forecasted revenue for the region and resulted in impairments of most long-lived assets, among other impacts. In addition, we initiated a voluntary separation program for employees in Russia in the third quarter of fiscal year 2022.
- Having business operations in various regions and countries exposes us to multiple and potentially conflicting business practices and legal and regulatory requirements that are subject to change. These practices and legal requirements are often complex and difficult to navigate, including those related to tariffs and trade regulations, investments, property ownership rights, taxation, repatriation of earnings, and advanced technologies.

- Expanding business operations globally also increases exposure to currency fluctuations, which can materially affect our financial results.
- While we maintain a positive corporate image and our brands are widely recognized and valued in our traditional markets, the brands are less known in some emerging markets, which could impede our efforts to successfully compete in these markets.
- Changing U.S. export controls and sanctions on various foreign countries and on various parties could affect our ability to collect receivables, provide aftermarket warranty support for our equipment, sell products, and otherwise impact our reputation and business.

We may be impacted by general negative economic conditions and outlook, causing weakened demand for our equipment and services, limiting access to funding, and resulting in higher funding costs.

The demand for our products and services depends on the fundamentals in the markets in which we operate and can be significantly reduced in an economic environment characterized by high unemployment, high interest rates, cautious consumer spending, inflation, lower corporate earnings, and lower business investment. Negative or uncertain economic conditions that cause our customers to lack confidence in the general economic outlook can significantly reduce their likelihood of purchasing our equipment. These economic events adversely affected and may continue to adversely affect our operations.

Sustained general negative economic conditions and outlook also affect housing starts, energy prices and demand, and other construction, which dampens demand for certain construction equipment. Our turf operations and our construction and forestry segments are dependent on construction activity and have also been affected by recent adverse economic conditions. Decreases in construction activity and housing starts could have a material adverse effect on our financial results.

If negative economic conditions affect the overall farm economy, there could be a similar effect on our agricultural equipment sales. Uncertain or negative outlook with respect to pervasive U.S. fiscal issues as well as general economic conditions and outlook, such as market volatility and continuing interest rate increases by the Federal Reserve, have caused and could continue to cause significant changes in market liquidity conditions. Such changes could impact access to funding and associated funding costs, which could reduce our earnings and cash flows.

We may be affected by changing worldwide demand for food and different forms of renewable energy, which could impact the price of farm commodities and consequently the demand for our equipment. This could result in higher research and development costs related to changing machine fuel requirements.

Changing worldwide demand for farm outputs to meet the world's growing food and renewable energy demands, driven in part by government policies, including those related to climate change, and a growing world population, are likely to result in fluctuating agricultural commodity prices, which directly affect sales of agricultural equipment. Lower agricultural commodity prices directly affect farm incomes, which could negatively affect sales of agricultural equipment and result in higher credit losses. While higher commodity prices benefit our crop-producing agricultural equipment customers, they could result in greater feed costs for livestock and poultry producers, which in turn may result in lower levels of equipment purchased by these customers. In addition, changing energy renewable demands may cause farmers to change the types or quantities of the crops they raise, with corresponding changes in equipment demands. Finally, changes in governmental policies regulating bio-fuel utilization could affect commodity demand and commodity prices, demand for our diesel-fueled equipment, and result in higher research and development costs related to equipment fuel standards.

We may not realize the anticipated benefits of our Smart Industrial Operating Model and Leap Ambitions.

Failure to realize the anticipated benefits of our Smart Industrial Operating Model and related business strategies in production systems, precision technologies, and aftermarket support could adversely affect results of our operations and financial condition. Several factors could impact our ability to successfully execute our Smart Industrial Operating Model, including, among other things:

- Failure to accurately assess market opportunities and the technology required to address such opportunities;
- Failure to develop and introduce new technologies or lack of adoption of such technologies by our customers;
- Failure to holistically provide lifecycle solutions; and
- Failure to optimize our capital allocation in connection with the Smart Industrial Operating Model.

Similarly, we may not realize the anticipated benefits of our Leap Ambitions and related goals within the expected timelines, or at all. As part of our Leap Ambitions we adopted various goals we expect to achieve by 2026 or 2030. We may not be able to achieve these goals for a variety reasons, some of which may be beyond our control. Examples include:

- Our estimates and assumptions related to efficiency of our products and the adoption of precision technology may not be accurate;
- Certain materials, such as quality battery cells and cameras, may become unavailable or too costly;
- The infrastructure required to achieve our goals, such as sufficient charging stations or fuel availability, may become too costly or may not be developed on the expected timeline; and
- The actual or perceived failure to achieve our Leap Ambitions could negatively impact our ability to execute the Smart Industrial Operating Model.

We may not realize all anticipated benefits of acquisitions, joint ventures, and divestitures, or these benefits may take longer to realize than expected.

From time to time, we make strategic acquisitions and divestitures and participate in joint ventures. Acquisitions and joint ventures we have entered, or may enter in the future, may involve significant challenges and risks, including that the acquisitions or joint ventures do not advance our business strategy, or fail to produce satisfactory returns on investment. Other risks include:

- We may encounter difficulties in integrating acquisitions with our operations, applying internal control processes to these acquisitions, managing strategic investments, assimilating new capabilities to meet the future needs of our businesses, and/or combining business cultures;
- We may choose not to fully integrate businesses and may face regulatory or compliance exposure until appropriate processes and controls are put in place;
- Integrating acquisitions is often costly and may require significant attention from management and personnel;
- We may not realize all the anticipated benefits of acquisitions or joint ventures, or the realized benefits may be significantly delayed; and
- Due diligence evaluations of potential transactions include business, legal, and financial reviews with the goal of identifying and evaluating the material risks involved. These due diligence reviews may not identify all of the issues necessary to accurately estimate the cost and potential risks of a particular acquisition or joint venture, including potential exposure to regulatory sanctions resulting from an acquisition target's or joint venture partner's previous activities or costs associated with any quality issues with an acquisition target's or joint venture's products or services.

We may also decide to divest businesses if in the best interests of our shareholders and joint ventures may be terminated at or before their stated expiration. For example, in March and October 2023, we sold our financial services and roadbuilding businesses in Russia following the outbreak of the war in Ukraine. Divestitures of businesses or dissolutions of joint ventures may involve significant challenges and risks, including failure to advance our business strategy, costs or disruptions to us, and negative effects on our product offerings, which may adversely affect our business, results of operations, and financial condition. Divestitures of businesses and dissolutions of joint ventures may result in ongoing financial or legal involvement in the divested business through indemnifications or other financial arrangements, such as retained liabilities, which could affect our future financial results.

Our ability to understand our customers' preferences and requirements and to develop, manufacture, and market products that meet customer demand could significantly affect our business results.

Our ability to match new product offerings to global customers' preferences for different types and sizes of equipment and various equipment features and functionality, at affordable prices, is critical to our success. This requires a thorough understanding of our existing and potential customers on a global basis, particularly in growth markets such as Argentina, Brazil, and India. Failure to deliver quality products that meet customer needs at competitive prices could have an adverse effect on our business.

In addition, customer preferences in the markets we serve are changing as a result of ongoing social and regulatory focus on sustainability as these markets transition to less carbon-intensive business models. As regulations and social pressure drive change, we must continue to proactively monitor trends and develop alternatives and enhancements that elevate and complement our product offerings. For example, even though we plan to offer electric, hybrid-electric, and battery electric equipment solutions, we may be unable to keep up with the rising demand for electric agriculture, turf, and construction equipment.

The development of alternative farming techniques, carbon sequestration technologies, and new low-carbon biofuels are changing farmers' business models and equipment needs. If we fail to continue to develop or invest in emerging technologies to meet changing customer demands, we will be at risk of losing potential sources of revenue, which could affect our future financial results.

If we are unable to deliver precision technology and agricultural solutions to our customers, it could affect our business, results of operations, and financial condition.

Our approach to precision technology involves hardware and software, guidance, connectivity and digital solutions, automation and machine intelligence, and autonomy. Customers continue to adopt technology integrated in our portfolio of "smart" machines, systems, and solutions. We expect this trend to persist for the foreseeable future. To create and maintain a competitive differentiation, we need to successfully develop and introduce new precision technology solutions that improve profitability and sustainability for our customers. We may make significant investments in research and development, connectivity solutions, digital security for precision technology solutions, and dealer and employee training. These investments may not produce solutions that provide the desired results for customers' profitability or sustainability outcomes. We utilize automation and machine learning and intelligence in some of our products. While the use of these emerging technologies can present significant benefits, it also creates risks and challenges. Data sourcing, technology, integration and process issues, program bias into decision-making algorithms, security problems, and the protection of privacy could impair the adoption and acceptance of autonomous machine solutions. If the output from these solutions is deemed to be inaccurate or questionable, our brand and reputation may be harmed and we may be subject to legal liability claims. Automation and machine learning and intelligence may also become the subject of local, state, federal, and foreign regulatory efforts limiting the features and capabilities of the technology. If we are not able to deliver precision technology solutions with differentiated features and functionality, or these solutions are not effective, customers may not adopt technology solutions, which could have a material adverse effect on our reputation and business.

We could be impacted by changes to or reallocation of radio frequency (RF) bands which could disrupt or degrade the reliability of our high precision augmented Global Positioning System (GPS) or other RF technology, which could impair our ability to develop and market GPS- and RF-based technology solutions, as well as significantly reduce agricultural and construction customers' profitability.

Our current and planned integrated agricultural business and equipment management systems, as well as our fleet management telematics solutions for construction equipment, depend upon the use of RF signals. These signals include, but are not limited to, GPS signals, other GPS-like satellite signals, augmented GPS services, and other RF technologies that link equipment, operations, owners, dealers, and technicians. These radio services depend on frequency allocations governed by international and national government agencies. Any international or national reallocation of frequency bands, including frequency bands segmentation and band spectrum sharing, or other modifications concerning the regulation of frequency bands, could significantly disrupt or degrade the utility and reliability of our GPS-based products, which could negatively affect our ability to develop and market GPS-based technology solutions.

In addition, disruptions with GPS signals or the failure of telecommunications network operators to supply the bandwidth we need to support our products could interfere with the speed, availability, and usability of our equipment and services. If these GPS signals or RF signals become unavailable, our customers could be unable to use their equipment indefinitely. For our agricultural customers, this could result in lower crop yields, decreased operational efficiency, and higher equipment maintenance, seed, fertilizer, fuel, and wage costs. For construction customers, this could result in higher fuel and equipment maintenance costs, as well as lower construction design and project management efficiencies. These cost increases could significantly reduce customers' profitability, sustainability, and demand for our products. As a result, our sales and revenue could significantly decrease, which would have a material adverse effect on our results of operations and our business.

Our ability to adapt in highly competitive markets could affect our business, results of operations, and financial condition.

We compete in a variety of highly competitive global and regional markets with other manufacturers and distributors that produce and sell similar products. In addition, our industry is attracting non-traditional competitors, including technology-focused companies and start-up ventures. We compete on product performance, innovation and quality, distribution, sustainability, customer service, and price. Aggressive pricing or other strategies of competitors, unanticipated product or manufacturing delays, or our failure to price products competitively could adversely affect our business, results of operations, and financial condition.

We rely on a network of independent dealers to manage the distribution of our products and services. If dealers are unsuccessful with their sales and business operations, it could have an adverse effect on our overall sales and revenue.

We rely on the capability of our dealers to develop and implement effective sales plans to create demand among purchasers for the equipment and related products and services that dealers purchase from us. If our dealers are unsuccessful in these endeavors, we will be unable to grow our sales and revenue, which would have an adverse effect on our financial condition.

In addition, the dealer channel's ability to support and service precision technology solutions and emerging power solutions may affect customers' acceptance and adoption rates of these products. The unavailability of specialized technicians to service our equipment may result in overburdening dealers' servicing capacity.

Dealers may have trouble funding their day-to-day cash flow needs and paying their obligations due to adverse business conditions resulting from negative economic effects or other factors. Dealers may exit or we may seek to terminate relationships with certain dealers if they are unable to meet customer needs. The unplanned loss of any of our dealers could lead to inadequate market coverage, negative customer impressions, and may adversely impact our ability to collect receivables that are associated with that dealer.

ENVIRONMENTAL, CLIMATE, AND WEATHER RISKS

Unfavorable weather conditions or natural catastrophes that reduce agricultural production and demand for agriculture and turf equipment could directly and indirectly affect our business.

The purchasing decisions of our customers, particularly the purchasers of agriculture and turf equipment, can be significantly affected by poor or unusual weather conditions. Such conditions include:

- Insufficient levels of rain, which prevent farmers from planting new crops and may cause growing crops to die or result in lower yields;
- Excessive rain or flooding can prevent planting from occurring at optimal times and may cause crop loss through increased disease or mold growth;
- Temperatures outside normal ranges, which can cause crop failure or decreased yields and may also affect disease incidence;
- Natural disasters such as regional floods, hurricanes or other storms, droughts, diseases, wildfires, and pests, either as a physical effect of climate change or otherwise, which have had, and could in the future have, significant negative effects on agricultural and livestock production;
- Adverse weather conditions in a particular geographic region, particularly during the important spring selling season; and
- Drought conditions can adversely affect sales of certain mowing equipment and can similarly cause lower sales volume.

Each of these conditions could have a negative impact on farm income which can affect demand for agricultural equipment and the financial condition and credit risk of our dealers and customers.

Governmental actions designed to address climate change based on the emergence of new technologies and business models in connection with the transition to a lower-carbon economy could adversely affect John Deere and our customers.

There is global scientific consensus that greenhouse gas (GHG) emissions continue to alter the composition of Earth's atmosphere in ways that are affecting and are expected to continue to affect the global climate. These considerations have led to new international, national, regional, and local legislative and regulatory responses. Various stakeholders, including legislators and regulators, shareholders, and non-governmental organizations, as well as companies in many business sectors, including us, are continuing to look for ways to reduce GHG emissions. The regulation of GHG emissions from certain stationary or mobile sources or the imposition of carbon pricing mechanisms could result in additional costs to us in the form of taxes or emission allowances, required facilities improvements, and increased energy costs. These results would increase our operating costs through higher utility, transportation, and materials cost and could prevent us from selling products into certain markets. Increased input costs, such as fuel and fertilizer, and compliance-related costs could also affect customer operations and demand for our equipment.

Further, our financial services segment is subject to additional international and national European regulations relating to climate and environmental risk, which are continually evolving and could affect the financing operations and climate-risk processes developed by the segment. Regulators in Europe and the U.S. have also focused efforts on increased disclosure related to climate change and mitigation efforts. The EU recently adopted the European Sustainability Reporting Standards (ESRS) and the Corporate Sustainability Reporting Directive (CSRD) that will impose disclosure of the risks and opportunities arising from social and environmental issues, and on the impact of companies' activities on people and the environment. The CSRD will need to be transposed into Member State law before it becomes effective, which is expected to occur in 2024. Similarly, the State of California recently passed the Climate Corporate Data Accountability Act and the Climate-Related Financial Risk Act that will impose broad climate-related disclosure obligations on certain companies doing business in California, including us, starting in 2026. The SEC has included in its regulatory agenda potential rulemaking on climate change disclosures that, if adopted, could significantly increase compliance burdens and associated regulatory costs and complexity.

Increasingly stringent engine emission regulations or bans on internal combustion engines may impact our ability to manufacture and distribute certain engines or equipment, which could negatively affect business results.

Our equipment operations must meet increasingly stringent engine emission reduction regulations throughout the world, including the European Union's Stage V standard, which limits the amount of certain substances in exhaust gases that off-road engines can emit into the environment. Governmental agencies throughout the world are enacting more stringent laws and regulations to reduce off-road engine emissions. These laws and regulations are applicable to engines we manufacture, including those used in agriculture and CF equipment.

We have incurred, and continue to incur, substantial research and development costs related to the implementation of these more rigorous laws and regulations. While we have developed and are executing comprehensive plans to meet these requirements, these plans are subject to variables that could delay or otherwise affect our ability to manufacture and distribute certain equipment or engines, which could negatively impact business results. Additionally, in certain locations governments have banned, or may in the future ban, internal combustion engines for some types of products completely. To the extent these bans affect products manufactured and sold by us, our business, results of operations, and financial condition could be negatively affected.

FINANCIAL RISKS

Changes in government banking, monetary, and fiscal policies could have a negative effect on us.

Policies of the U.S. and other governments regarding banking, monetary, and fiscal policies intended to promote or maintain liquidity, stabilize financial markets, and/or address local deficit or structural economic issues could have a material impact on our customers and markets. Central bank policy interest rates continued to increase in fiscal year 2023. Most of our retail receivables are fixed rate, while wholesale financing receivables are variable rate. We have both fixed and variable rate borrowings. Historically, rising interest rates impact our borrowings sooner than the benefit is realized from the financing receivable and equipment on operating lease portfolios.

Our operations and results could also be affected by financial regulatory reform that could, among other things, have an adverse effect on the financial services segment and on our customers by limiting their ability to enter hedging transactions or to finance purchases of our products. Government policies on spending can also affect us, especially the CF segment, due to the impact of government spending on infrastructure development. Our operations, including those outside of the U.S., may also be affected by non-U.S. regulatory reforms being implemented to further regulate non-U.S. financial institutions and markets.

Changes in tax rates, tax legislation, or exposure to additional tax liabilities could have a negative effect on our business.

We are subject to income taxes in the U.S. and numerous foreign jurisdictions. Our domestic and international tax liabilities are dependent upon the location of earnings among these different jurisdictions. Tax rates in various jurisdictions may be subject to significant change. Our effective tax rates could be affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, or changes in tax laws or their interpretations. If our effective tax rates were to increase, or if the ultimate determination of taxes owed is for an amount more than amounts previously accrued, our operating results, cash flows, and financial condition could be adversely affected.

Our consolidated financial results are reported in U.S. dollars while certain assets and other reported items are denominated in foreign currencies, creating currency exchange and translation risk.

We are a global company with transactions denominated in a variety of currencies. We are subject to currency exchange risk to the extent that our costs are denominated in currencies other than those in which we earn our revenues.

Additionally, the reporting currency for our consolidated financial statements is the U.S. dollar. Certain of our assets, liabilities, expenses, and revenues are denominated in other countries' currencies, which are then translated into U.S. dollars at the applicable exchange rates and reported in our consolidated financial statements. Therefore, fluctuations in foreign exchange rates affect the value of those items as reflected in our consolidated financial statements, even if their value remains unchanged in the original currencies. While the use of currency hedging instruments may provide us with some protection from adverse fluctuations in currency exchange rates, by utilizing these instruments we potentially forego any benefits that may result from favorable fluctuations in such rates. In Argentina, we have employed mechanisms to convert Argentine pesos into U.S. dollars to the extent possible. These mechanisms are short-term in nature, leaving us exposed to long-term currency fluctuations.

Changes in interest rates or market liquidity conditions could adversely affect our financials and our earnings and/or cash flows.

Central bank policy interest rates continued to increase in fiscal year 2023. Rising interest rates could have a dampening effect on overall economic activity and/or the financial condition of our customers, either or both of which could negatively affect customer demand for our equipment and customers' ability to repay their obligations to us. Rising interest rates may cause credit market

dislocations, that can impact funding costs, which can affect the financial services segment's ability to offer customers competitive financing rates. While we strive to match the interest rate characteristics of our financial assets and liabilities, changing interest rates have had an adverse effect on our net interest rate margin—the difference between the yield we earn on our assets and the interest rates we pay for funding, which has affected our net interest income and earnings.

In addition, actions by credit rating agencies, such as downgrades or negative changes to ratings outlooks, can affect the availability and cost of funding for us and can increase our costs of capital and hurt our competitive position.

Because the financial services segment provides financing for a significant portion of our sales worldwide, negative economic conditions in the financial industry could materially impact our operations and financial results.

Negative economic conditions could have an adverse effect on the financial industry in which the financial services segment operates. The financial services segment provides financing for a significant portion of our sales worldwide. The financial services segment is exposed to the risk that customers and others will default on contractual obligations and may experience credit losses that exceed our expectations and adversely affect our financial condition and results of operations. The financial services segment's inability to access funds at cost-effective rates to support our financing activities could have a material adverse effect on our business. The financial services segment's liquidity and ongoing profitability depend largely on timely access to capital to meet future cash flow requirements and to fund operations and costs associated with engaging in diversified funding activities. Additionally, negative market conditions could reduce customer confidence levels, resulting in declines in credit applications and increases in delinquencies and default rates, which could materially impact the financial services segment's write-offs and provision for credit losses. The financial services segment may also experience residual value losses that exceed our expectations caused by lower pricing for used equipment and higher-than-expected equipment returns at lease maturity.

We may sustain increases in funding obligations under our pension plans which may impair our liquidity or financial condition.

We maintain certain defined benefit pension plans for certain employees, which impose funding obligations. We use various assumptions in calculating our future payment obligations under these plans. Significant adverse changes in credit or market conditions could result in actual rates of return on pension investments being lower than expected. Regulatory changes could cause a deterioration in the statutory funded status of our plans. We may be required to make significant contributions to our pension plans in the future. These factors could significantly increase our payment obligations under the plans and adversely affect our business, results of operations, and financial condition.

MANUFACTURING AND OPERATIONAL RISKS

We may be unable to accurately forecast customer demand for products and services, and to adequately manage inventory, which could adversely affect our operating results.

To ensure adequate inventory supply, we must forecast inventory needs and expenses and place orders sufficiently in advance with suppliers and contract manufacturers. These forecasts are based on estimates of future demand for products and services. Failure to accurately forecast our needs may result in unmet market demand, parts shortages, manufacturing delays, increased costs, or excess inventory. In fiscal year 2022, supply chain disruptions resulted in higher inventory levels. Although production schedules in fiscal year 2023 were more aligned with the customers' seasonal use of our products, marking a return to historical seasonal production patterns, our ability to accurately forecast demand in the future could be affected by many factors, including changes in customer demand for our products and services, changes in demand for the products and services of competitors, unanticipated changes in general market conditions, and the weakening of economic conditions or customer confidence in future economic conditions. If the forecasts used to manage inventory are not accurate, we may experience excess inventory levels, shortage of available products, or reduced manufacturing efficiencies.

Changes in the availability and price of certain raw materials, components, and whole goods have resulted and could continue to result in disruptions to the supply chain causing production disruptions, increased costs, and lower profits on sales of our products.

We require access to various raw materials, components, and whole goods at competitive prices to manufacture and distribute our products. The price and availability of these materials have varied significantly in the last 36 months. For example, in fiscal year 2022, supply chain disruptions impacted many aspects of our business, including receiving past due deliveries from suppliers, parts availability, increased production costs, and higher inventory levels. We experienced supply chain improvements in fiscal year 2023 with a return to normal in the second half of the fiscal year.

While we have seen stabilization in the supply chain and some commodity pricing improvements, we anticipate potential fluctuations due to inflation, geopolitical and economic uncertainty, and regulatory and policy instability, including import tariffs and trade agreements. The latter have the potential to significantly increase production and logistics costs and have a material negative effect on the profitability of the business, particularly if we are unable to recover the increased costs due to market considerations or other

factors. We have experienced changes in the availability and prices of these raw materials, components, whole goods, and freight over the past several years, especially in fiscal years 2021 and 2022. Global logistics network challenges resulted in delays, shortages of key manufacturing components, increased order backlogs, increased transportation costs, and production inefficiencies from a higher number of partially completed machines in inventory, which increased our overall production and overhead costs. Increases in such costs have had an adverse effect on our business operations.

We rely on our suppliers to acquire the raw materials, components, and whole goods required to manufacture their products. Significant disruptions to the supply chain resulting from shortages of raw materials, components, and whole goods have and could continue to adversely affect our ability to meet commitments to our customers. In addition, certain materials and components used in our products are acquired from a single supplier or are proprietary in nature and cannot be alternatively sourced expeditiously. Furthermore, if our customers are unwilling to accept price increases for our products, or if we are unable to offset the increases in costs, raw material costs or shortages could have a material adverse effect on our operational or financial results.

Disputes with labor unions may adversely affect our ability to operate in our facilities as well as impact our financial results.

Many of our production and maintenance employees are represented by labor unions under various collective bargaining agreements with different expiration dates. Our failure to successfully renegotiate labor agreements as they expire has from time to time led, and could in the future lead, to work stoppages or other disputes with labor unions. For example, the UAW initiated a labor strike that had an adverse effect on our results of operations in fiscal 2022 because of reduced productions and shipments. Certain of our labor agreements expire as early as 2024. Disruptions to our manufacturing and parts-distribution facilities through various forms of labor disputes could adversely affect us. Any strike, work stoppage, or other dispute with a labor union distracts management from operating the business, may displace employees from ordinary job positions to fill in vacant positions, may affect our reputation, and could materially adversely affect our business, results of operations, and financial condition.

Our business may suffer if our equipment fails to perform as expected.

If our equipment does not perform as expected, we may receive warranty claims and have to perform post-sales repairs or recalls. We may also be subject to regulatory requirements and penalties that will impact our ability to develop, market, and sell equipment. This may result in product delivery delays. It could also lead to product liability, breach of warranty, and consumer protection claims. These claims and warranty expenses could be significant. As a manufacturer of equipment, we must manage the cost and risk associated with product warranties, post-sale repairs and recalls, regulatory penalties, and product liability, breach of warranty, and consumer protection claims with respect to our products. In addition to post-sale repairs or recalls initiated by us for various reasons, investigations into our products by government regulators may compel us to initiate product recalls or may result in negative public perceptions about the safety of our products, even if we disagree with the regulator's determination. Such post-sale repairs or recalls, whether voluntary or involuntary, could result in significant expense, supply chain complications, and may harm our brand, business, prospects, financial condition, and operating results.

RESOURCES RISKS

Our ability to attract, develop, engage, and retain qualified employees could affect our ability to execute our strategy.

Our continued success depends, in part, on our ability to identify and attract qualified candidates with the requisite education, background, and experience as well as our ability to develop, engage, and retain qualified employees. Failure to attract, develop, engage, and retain qualified employees, whether as a result of an insufficient number of qualified applicants, difficulty in recruiting new employees, or inadequate resources to train, integrate, and retain qualified employees, could impair our ability to execute our business strategy and could adversely affect our business, results of operations, and financial condition. In addition, while we strive to reduce the impact of the departure of employees, our operations or ability to execute our business strategy and meet our business objectives may be affected by the loss of employees, particularly when departures involve larger numbers of employees, such as those we could experience if a surge occurs in the number of employees voluntarily leaving their jobs. Higher rates of employee separations may adversely affect us through decreased employee morale, the loss of knowledge of departing employees, and the devotion of resources to recruiting and onboarding new employees.

Security breaches and other disruptions to our information technology infrastructure could interfere with our operations and could compromise our information as well as information of our employees, customers, suppliers, and/or dealers, exposing us to liability that could cause our business and reputation to suffer.

In the ordinary course of business, we rely upon information technology networks and systems, some of which are managed by third parties, to process, transmit, and store electronic information and to manage or support a variety of business processes and activities, including supply chain, manufacturing, distribution, invoicing, and collection of payments from dealers and other purchasers of our equipment and from customers of the financial services segment. We use information technology systems to record, process, and

summarize financial information and results of operations for internal reporting purposes and to comply with regulatory financial reporting, legal, and tax requirements.

Additionally, we collect and store sensitive data, including intellectual property, proprietary business information, and the proprietary business information of our customers, suppliers, and dealers, as well as personally identifiable information of our customers and employees in data centers which are often owned by third parties and on information technology networks. The secure operation of these information technology networks and the processing and maintenance of this information is critical to our business operations and strategy.

Despite security measures, including a vulnerability disclosure program, and business continuity plans, our information technology networks and infrastructure have been and may be vulnerable to intrusion, damage, disruptions, or shutdowns due to attacks by cyber criminals, employees', suppliers', or dealers' error or malfeasance, supply chain compromise, disruptions during the process of upgrading or replacing computer software or hardware, power outages, computer viruses, ransomware or other malware, telecommunication or utility failures, terrorist acts, natural disasters, or other events. Although we have not suffered any significant cyber incidents that resulted in material business impact, we have from time to time been the target of malicious cyber threat actors. The occurrence of any significant event could compromise our networks, and the information stored there could be accessed, obtained, publicly disclosed, lost, altered, misused, or stolen. Any such access, disclosure, alteration, misuse, or other loss of information could result in legal claims or proceedings, government investigations, liability or regulatory penalties, disruption or shut down of our operations, and damage to our reputation, which could adversely affect our business, results of operations, and financial condition. Furthermore, as security threats continue to evolve and increase in frequency and sophistication, we may need to invest additional resources to protect information security.

Any unauthorized control or manipulation of our products' systems could result in loss of confidence in us and our products.

Some of our products include connectivity hardware and software typically used for remote system updates. While we have implemented security measures intended to protect against unauthorized remote access to these products, malicious threat actors have attempted, and may attempt in the future, to gain unauthorized access to such products in order to gain control of the products, change the products' functionality, user interface, or performance characteristics, interfere with the products' operations, or gain access to data stored in or generated by the products or to systems to which they connect. In addition, reports of unauthorized access to our products, systems, and data, regardless of their reliability, may result in the perception that the products, systems, or data are vulnerable to malicious or unauthorized modifications. Any unauthorized access to or control of our products or systems, any loss of data, or any perception that products, systems, or data are vulnerable could result in legal claims or proceedings against us, government investigations, liability, or regulatory penalties, which could adversely affect our business, results of operations, and financial condition.

Our business could be adversely affected by the infringement or loss of intellectual property rights.

We protect our intellectual property with a combination of patents, trademarks, copyrights, trade secret laws, and legal agreements. We heavily rely on certain trademarks to protect our identity and customer recognition of our products and services, including, but not limited to, the "John Deere" mark, the leaping deer logo, the "Nothing Runs Like a Deere" slogan, and the green and yellow color combination. These trademarks, as well as the many patents that protect innovations used in our products, are integral to our business, and their loss could have a material adverse effect on us.

Additionally, third parties may initiate legal proceedings to challenge the validity of our intellectual property or allege that we infringe on their intellectual property. We may incur substantial costs if third parties initiate such legal proceedings, or if we initiate legal proceedings to protect or enforce our intellectual property. If the outcome of any such legal proceedings is unfavorable to us, our business could be adversely affected.

LEGAL AND COMPLIANCE RISKS

Our global operations are subject to complex and changing laws and regulations, the violation of which could expose us to potential liabilities, increased costs, and other adverse effects.

We are subject to numerous international, federal, state, and local laws and regulations, many of which are complex, frequently changing, and subject to varying interpretations. These laws and regulations cover a variety of subjects, including advertising, anti-money laundering, antitrust, consumer finance, environmental, climate-related, health and safety, foreign exchange controls and cash repatriation restrictions, foreign ownership and investment, import/export and trade, human rights, labor and employment, product liability reporting, cybersecurity, data privacy, telematics, and connectivity.

These laws may vary substantially within the different markets in which we operate. Compliance with these laws and regulations is expensive and may further increase the cost of conducting our global operations. In addition, we must comply with the U.S. Foreign

Corrupt Practices Act and all applicable foreign anti-corruption laws, including the U.K. Bribery Act. These laws generally prohibit companies and their intermediaries from making improper payments or providing anything of value to improperly influence government officials or private individuals for the purpose of obtaining or retaining a business advantage, regardless of whether those practices are culturally expected in a particular jurisdiction. Although we have a compliance program in place designed to reduce the likelihood of potential violations of these laws and regulations, there can be no assurance that our employees, contractors, or agents will not violate such laws and regulations or our policies and procedures. Violations of these laws and regulations could result in criminal or civil sanctions and have a material adverse effect on our reputation, business, results of operations, and financial condition.

Changes to existing laws and regulations, or changes to how they are interpreted, or the implementation of new, more stringent laws or regulations, could adversely affect our business by increasing compliance costs, limiting our ability to offer a product or service, requiring changes to our business practices, or otherwise making our products and services less attractive to customers. Legislative and regulatory changes, and other actions that could potentially affect our business may be announced with little or no advance notice and we may not be able to effectively mitigate all adverse effects from such measures.

We are subject to governmental laws, regulations, and other legal obligations related to privacy and data protection. Any inability or perceived inability of addressing these requirements could adversely affect our business.

The legislative and regulatory framework for privacy and data protection issues worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. We collect personal information and other data as integral parts of our business processes and activities. This data is subject to a variety of U.S. and foreign laws and regulations, including oversight by various regulatory and other governmental bodies. Many foreign countries and governmental bodies, including the EU, China, Canada, and other relevant jurisdictions where we conduct business, have laws and regulations concerning the collection and use of personal information and other data obtained from their residents or by businesses operating within their jurisdictions. The EU General Data Protection Regulation (GDPR), the California Consumer Privacy Act, and the China Personal Information Protection Law, among others, impose stringent data protection requirements and provide significant penalties for noncompliance. New privacy laws will continue to come into effect around the world in the future. Any inability or perceived inability to adequately address privacy and data protection concerns (even if unfounded), or comply with applicable laws, regulations, policies, industry standards, contractual obligations, or other legal obligations (including at newly acquired companies) could result in additional cost and liability to us, damage our reputation, inhibit sales, and otherwise adversely affect our business.

Legal proceedings and disputes in which we are, and may in the future be, involved could harm our business, financial condition, reputation, and brand.

We routinely are a party to claims and legal actions incidental to our business. These include claims for personal injury or property by users of our equipment, environmental, health, and safety claims, disputes with distributors, vendors and others with respect to commercial matters, and disputes with taxing and other governmental authorities regarding the conduct of our business. The defense of lawsuits and government inquiries or investigations has resulted and may result in expenditures of significant financial resources and the diversion of management's time and attention away from business operations.

We are currently subject to a consolidated multidistrict class action lawsuit in the Northern District of Illinois alleging that we have engaged in attempted monopolization, exclusionary conduct, and restraint of the market for repair services for John Deere brand agricultural equipment by limiting repair resources only to our authorized technicians or independent authorized John Deere dealers. In addition, the Federal Trade Commission (FTC) is investigating whether we have violated laws in connection with the repair of John Deere brand agriculture equipment, as well as our information security practices and statements as they relate to the risk of unauthorized access to our computer systems, products, and services. We are fully cooperating with the FTC. We are currently unable to predict the outcome of these matters. The development and resolution of these matters could have a material adverse effect on our business, operations, and financial results.

GENERAL RISKS

Our reputation and brand could be damaged by negative publicity.

Our brand has worldwide recognition and significantly contributes to the success of our business. Our reputation is critical to growing our customer base. Our brand depends on the ability to maintain a positive customer perception of the business, including the core values of integrity, quality, innovation, and commitment. Negative claims or publicity involving us, our products or services, our culture and values, our stance on environmental, social, and governance topics, customer data, or any of our key employees or suppliers, could damage our reputation and brand image, regardless of whether such claims are accurate. In addition, our stance on environmental, social, and governance topics damage to our reputation could adversely impact the ability to attract new and maintain existing customers, employees, dealers, and business relationships. For example, we have been the subject of negative media articles relating to our customers' right to maintain and safely repair their equipment.

Additionally, negative or inaccurate postings, articles, or comments on social media and the internet about us could generate negative publicity that could damage the reputation of our brand. Further, adverse publicity about regulatory or legal action against us, or legal proceedings initiated by us, could also damage our reputation and brand image, undermine customer confidence, and reduce long-term demand for equipment, even if the regulatory or legal action is unfounded or not material to our operations. If the reputation, culture, or image of our brands are damaged, or we receive negative publicity, then our sales, financial condition, and results of operations could be materially and adversely affected.

Unexpected events have increased and may in the future increase our cost of doing business or disrupt our operations.

The occurrence of one or more unexpected events, including war, acts of terrorism, epidemics and pandemics (such as the COVID pandemic), civil unrest, fires, tornadoes, tsunamis, hurricanes, earthquakes, floods, and other forms of severe weather in the United States or in other countries in which we operate, or in which our suppliers are located, have adversely affected and could in the future adversely affect our operations and financial performance. Such events have caused and could cause complete or partial closure of one or more of our manufacturing facilities or distribution centers, temporary or long-term disruptions in the supply of component products from some local and international suppliers, and disruption and delay in the transport of products to dealers, end-users, and distribution centers. Existing insurance coverage may not provide protection from all the costs that may arise from such events.

The potential physical impacts of climate change on our facilities, suppliers, and customers, and therefore on our operations, are highly uncertain and will be particular to the circumstances developing in various geographic regions. These potential physical effects may adversely affect the demand for our products and the cost, production, sales, and financial performance of our operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

In the U.S. and Canada, the equipment operations own and operate 23 factory locations and lease and operate another 3 locations. Outside of the U.S. and Canada, the equipment operations own or lease and operate 45 factory locations in Argentina, Austria, Brazil, China, Finland, France, Germany, India, Israel, Italy, Mexico, the Netherlands, New Zealand, and Spain.

In addition, the equipment operations own or lease 12 facilities comprised of three locations supporting centralized parts distribution and nine regional parts depots and distribution centers throughout the U.S. and Canada. Outside the U.S. and Canada, the equipment operations also own or lease and occupy 11 total facilities with centralized parts distribution centers in Brazil, Germany, and India and regional parts depots and distribution centers in Argentina, Australia, China, India, Mexico, South Africa, Sweden, and the United Kingdom. We also own or lease eight facilities for the manufacture and distribution of other brands of replacement parts.

Our manufacturing facility in Russia was shut down in 2022. Our Eurasian parts distribution center in Russia was also closed, and the leased premises were returned to the landlord in the second quarter of fiscal year 2023. Premises owned by Wirtgen in Russia operating in the roadbuilding business were sold in the fourth quarter of fiscal year 2023.

We own or lease 53 administrative offices and research facilities globally as well as many other smaller, miscellaneous facilities.

Overall, we own approximately 70.0 million square feet of facilities and lease approximately 13.1 million additional square feet in various locations. These properties are adequate and suitable for our business as presently conducted and are well maintained.

ITEM 3. LEGAL PROCEEDINGS.

We are subject to various unresolved legal actions that arise in the normal course of business, the most prevalent of which relate to product liability (including asbestos related liability), retail credit, employment, patent, trademark, and antitrust matters. Currently we believe the reasonably possible range of losses for other unresolved legal actions would not have a material effect on our financial statements; however, the outcome of any current or future proceedings, claims, or investigations cannot be predicted with certainty. Adverse decisions in one or more of these proceedings, claims, or investigations could require us to pay substantial damages or fines, undertake service actions, initiate recall campaigns, or take other costly actions. It is therefore possible that legal judgements could give rise to expenses that are not covered, or not fully covered by our insurance programs and could affect our financial position and results.

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.

- (a) Our common stock is listed on the New York Stock Exchange (NYSE) under the symbol "DE." We have a history of paying quarterly cash dividends. While we currently expect a cash dividend to be paid in the future, future dividend payments will depend on our earnings, capital requirements, financial condition, and other factors considered relevant by our Board of Directors. See the information concerning the number of stockholders in Note 21 to the Consolidated Financial Statements.
- (b) Not applicable.
- (c) Purchases of our common stock during the fourth quarter of 2023 were as follows:

ISSUER PURCHASES OF EQUITY SECURITIES

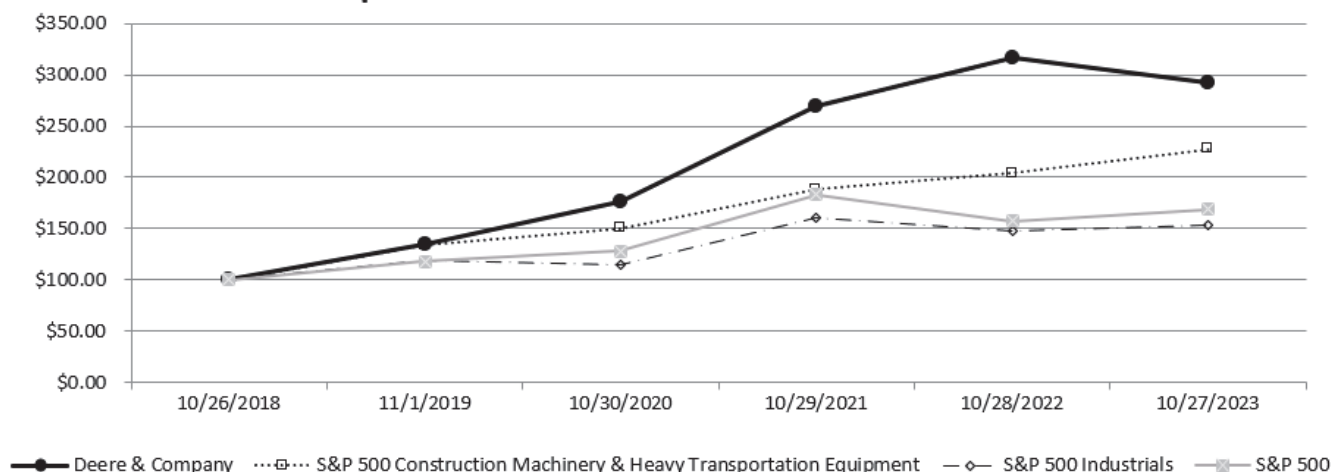
Period	Total Number of Shares Purchased (2) (thousands)	Average Price Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1) (thousands)	Maximum Number of Shares that May Yet Be Purchased under the Plans or Programs (1) (millions)
Jul 31 to Aug 27	682	\$ 424.30	681	42.3
Aug 28 to Sept 24	2,204	410.43	2,204	39.8
Sept 25 to Oct 29	3,593	384.94	3,593	35.9
Total	6,479		6,478	

- (1) We have a share repurchase plan that was announced in December 2022 to purchase up to \$18.0 billion of shares of our common stock. The maximum number of shares that may yet be repurchased under this plan was 35.9 million based on the closing price of our common stock on the NYSE as of the end of the fourth quarter of \$361.15 per share. At the end of the fourth quarter of 2023, \$13.0 billion of common stock remains to be repurchased under this plan.
- (2) In the fourth quarter of 2023, 1 thousand shares were acquired from a plan participant at a market price of \$431.68 to pay payroll taxes on the vesting of a restricted stock award.

STOCK PERFORMANCE GRAPH

The graph compares the total shareholder returns (TSR) of Deere & Company, the Standard & Poor's (S&P) 500 Construction Machinery & Heavy Transportation Equipment Index, the S&P 500 Industrials, and the S&P 500 Stock Index over a five-year period. It assumes \$100 was invested on October 26, 2018 and that dividends were reinvested. Our stock price at October 27, 2023, was \$361.15. Going forward, we intend to use the S&P 500 Industrials to replace the S&P 500 Construction Machinery & Heavy Transportation Equipment. We believe the S&P 500 Industrials provides a better benchmark to compare our cumulative total returns against the industry because it comprises those companies included in the S&P 500 that are classified as members of the GICS industrials sector, and therefore, have many characteristics similar to us, regardless of the specific types of products they offer. In contrast, the S&P's 500 Construction Machinery & Heavy Transportation Equipment Index is made up of only four companies (Caterpillar (CAT), Cummins (CMI), Paccar (PCAR), and Wabtec (WAB)). The stock performance shown in the graph is not intended to forecast and does not necessarily indicate future price performance.

Comparison of 5 Year Total Cumulative Return*



*\$100 invested on 10/26/2018 in stock or Index, including reinvestment of dividends

	10/26/2018	11/3/2019	11/1/2020	10/31/2021	10/30/2022	10/29/2023
TSR Performance						
Company / Index	2018	2019	2020	2021	2022	2023
Deere & Company	\$100.00	\$134.98	\$176.31	\$270.06	\$317.07	\$292.18
S&P 500 Construction Machinery & Heavy Transportation Equipment	\$100.00	\$133.71	\$150.24	\$187.78	\$204.10	\$227.67
S&P 500	\$100.00	\$117.76	\$127.95	\$182.86	\$157.30	\$168.81
S&P 500 Industrials	\$100.00	\$118.76	\$114.80	\$160.53	\$147.88	\$153.41

ITEM 6. [RESERVED]

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

See the information under the caption "Management's Discussion and Analysis."

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We are exposed to a variety of market risks, including interest rates and currency exchange rates. We attempt to actively manage these risks. See the information under "Management's Discussion and Analysis," under "Financial Instrument Market Risk Information" and in Note 26 to the Consolidated Financial Statements.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

See the Consolidated Financial Statements and notes thereto and supplementary data.

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES.

Disclosure Controls and Procedures

Our principal executive officer and our principal financial officer have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the Exchange Act)) were effective as of October 29, 2023, based on the evaluation of these controls and procedures required by Rule 13a-15(b) or 15d-15(b) of the Exchange Act.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system was designed to provide reasonable assurance regarding the preparation and fair presentation of published financial statements in accordance with generally accepted accounting principles.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation in accordance with generally accepted accounting principles.

Management assessed the effectiveness of our internal control over financial reporting as of October 29, 2023, using the criteria set forth in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that assessment, management concluded that, as of October 29, 2023, our internal control over financial reporting was effective.

Our independent registered public accounting firm has issued an audit report on the effectiveness of our internal control over financial reporting. That report is included herein.

Changes in Internal Control Over Financial Reporting

During the fourth quarter, there were no changes that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION.

Director and Executive Officer Trading Arrangements

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS.

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information regarding directors required by this Item 10 will be set forth in the definitive proxy statement for our 2024 annual meeting of stockholders (proxy statement) to be filed with the Commission in advance of such meeting. Information regarding executive officers is presented in Item 1 of this report under the caption "Information about our Executive Officers."

We have adopted a code of ethics that applies to our executives, including our principal executive officer, principal financial officer, and principal accounting officer. This code of ethics and our corporate governance policies are posted on our website at <http://www.deere.com/governance>. We intend to satisfy disclosure requirements regarding amendments to or waivers from our code of ethics by posting such information on this website. The charters of the Audit Review, Corporate Governance, Compensation, and Finance committees of our Board of Directors are available on our website as well. This information is also available in print free of charge to any person who requests it.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this Item 11 will be set forth in the proxy statement to be filed with the Commission.

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

The information required by this Item 12 will be set forth in the proxy statement to be filed with the Commission.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information required by this Item 13 will be set forth in the proxy statement to be filed with the Commission.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

Information required by this Item 14, including aggregate fees billed to us by our principal accountant, Deloitte & Touche LLP (PCAOB ID No. 34), will be set forth in the proxy statement to be filed with the Commission.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

	<u>Page</u>
(1) <i>Financial Statements</i>	
Statements of Consolidated Income for the years ended October 29, 2023, October 30, 2022, and October 31, 2021	44
Statements of Consolidated Comprehensive Income for the years ended October 29, 2023, October 30, 2022, and October 31, 2021	45
Consolidated Balance Sheets as of October 29, 2023 and October 30, 2022	46
Statements of Consolidated Cash Flows for the years ended October 29, 2023, October 30, 2022, and October 31, 2021	47
Statements of Changes in Consolidated Stockholders' Equity for the years ended October 31, 2021, October 30, 2022, and October 29, 2023	48
Notes to Consolidated Financial Statements	49

(2) *Exhibits*

See the ["Index to Exhibits"](#) on pages 83 – 86 of this report

Certain instruments relating to long-term borrowings constituting less than 10 percent of registrant's total assets are not filed as exhibits herewith pursuant to Item 601(b)(4)(iii)(A) of Regulation S-K. Registrant agrees to file copies of such instruments upon request of the Commission.

Financial Statement Schedules Omitted

The following schedules for the company and consolidated subsidiaries are omitted because of the absence of the conditions under which they are required: I, II, III, IV, and V.

ITEM 16. FORM 10-K SUMMARY.

None.

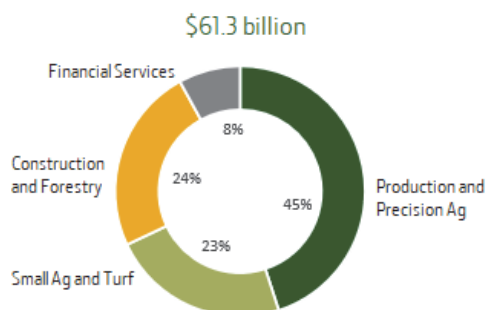
MANAGEMENT'S DISCUSSION AND ANALYSIS

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is intended to promote understanding of our financial condition and results of operations. The MD&A is provided as a supplement to, and should be read in conjunction with, the consolidated financial statements and the accompanying Notes to Consolidated Financial Statements. All amounts are presented in millions of dollars, unless otherwise specified. For comparison of 2022 to 2021 results, refer to the "Management's Discussion and Analysis" section of our 2022 Form 10-K.

OVERVIEW

Deere & Company is a global leader in the production of agricultural, turf, construction, and forestry equipment and solutions. John Deere Financial provides financing for John Deere equipment, parts, service, and other input costs customers need to run their operations. Our operations are managed through the production and precision agriculture (PPA), small agriculture and turf (SAT), construction and forestry (CF), and financial services operating segments. References to "equipment operations" include PPA, SAT, and CF, while references to "agriculture and turf" include both PPA and SAT.

Net Sales and Revenues by Segment in 2023



Smart Industrial Operating Model and Leap Ambitions

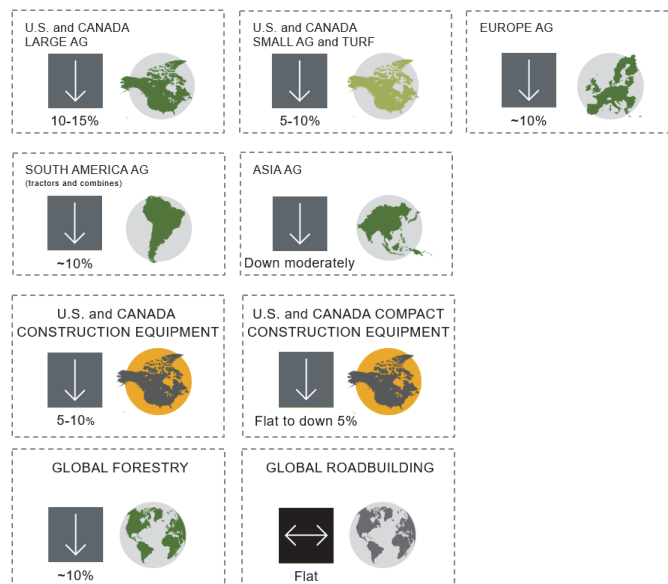
We announced the Smart Industrial Operating Model in 2020. This operating model is based on three focus areas:

- Production systems: A strategic alignment of products and solutions around our customers' operations.
- Technology stack: Investments in technology, as well as research and development, that deliver intelligent solutions to our customers through digital capabilities, automation, autonomy, and alternative power technologies.
- Lifecycle solutions: The integration of our aftermarket and support capabilities to more effectively manage customer equipment, service, and technology needs across the full lifetime of a John Deere product.

Our Leap Ambitions were launched in 2022. These ambitions are designed to boost economic value and sustainability for our customers. The ambitions align across our customers' production systems seeking to optimize their operations to deliver better outcomes with fewer resources.

TRENDS & ECONOMIC CONDITIONS

Industry Sales Outlook for Fiscal 2024



Company Trends – Customers seek to improve profitability, productivity, and sustainability through technology. Integration of technology into equipment is a persistent market trend. Our Smart Industrial Operating Model and Leap Ambitions are intended to capitalize on this market trend. These technologies are incorporated into products within each of our operating segments. We expect this trend to persist for the foreseeable future. The investments in these technologies and in establishing a Solutions as a Service business model might increase our operating costs and may decrease operating margins during the transition period. Most notably in 2023, we introduced See & Spray™ Ultimate and a new model of See & Spray™ Premium. These technologies were introduced on a limited basis and did not represent a significant percentage of our sales in 2023.

Company Outlook for 2024

- Demand is expected to decline in 2024.
- Production volumes will decline to more normal levels in 2024.

Agriculture and Turf Outlook for 2024

- We expect large agricultural equipment sales to decline in 2024 in North America, Europe, and South America.
- Demand for small agricultural equipment is expected to moderate in Europe.
- Turf and utility equipment product sales are expected to be lower due to the overall U.S. economic condition and elevated interest rates.

Market Conditions:

- Agricultural fundamentals are expected to moderate in 2024 due to lower commodity prices and elevated interest rates, offset by declining input costs and improved customer financials.

- The dairy and livestock sector continues to benefit from elevated protein and hay prices.
- Farm input costs in Europe are declining. Grain prices vary from favorable in Western Europe to depressed in Eastern Europe due to the Russia/Ukraine war.
- Dealer inventories are elevated in Brazil due to inventory oversupply driven by weakening demand in the second half of 2023.
- Industry sales in Asia are impacted by moderating demand in India, the world's largest tractor market by number of units.
- The fleet average age is older than in prior business cycles. Combines are in line with the historical average age, while tractors are slightly older than historical averages.

Construction and Forestry Outlook for 2024

Market Conditions:

- Construction equipment industry sales are forecasted to be down from 2023 levels.
- Benefits from rental fleet replenishment, the energy industry, and U.S. infrastructure spending are expected to partially offset moderation in residential home, office, and retail construction.
- Roadbuilding demand remains strong, similar to 2023 in the U.S., largely offset by softening demand in Europe.

Financial Services Outlook for 2024

Net Income	Up moderately
+ Nonrecurring prior period special items	Favorable
+ Higher average portfolio	Favorable
(-) Financing spreads	Unfavorable
(-) Recoveries on operating lease dispositions	Unfavorable

Additional Trends – We experienced supply chain disruptions and inflationary pressures in 2022. While these issues moderated in 2023, the effect on production schedules and central bank policy interest rates continued in 2023. These changes are discussed below.

Supply Chain Impact on Production Schedules. We experienced supply chain improvements compared to 2022, with a return to normal in 2023. The ease in supply chain disruptions contributed to higher levels of production compared to prior year. As a result, our production schedules in 2023 were more aligned with the customers' seasonal use of our products, marking a return to historical seasonal production patterns and on-time product delivery. Additionally, supply chain improvements contributed to reductions in premium freight costs, moderation in material cost increases, and disciplined inventory management in 2023. In 2022, supply chain disruptions impacted many aspects of our business, including receiving past due deliveries from suppliers, parts availability, increased production costs, and higher inventory levels.

Interest Rates. Central bank policy interest rates increased in 2022 and 2023. Increased rates impacted us in several ways, primarily affecting the financing spreads for the financial services operations, and may impact future demand for our products.

Most retail customer receivables are fixed rate. Wholesale financing receivables generally are variable rate. Both types of

receivables are financed with fixed and floating rate borrowings. We manage our exposure to interest rate fluctuations by matching our receivables with our funding sources. We also enter into interest rate swap agreements to match our interest rate exposure.

Rising interest rates have historically impacted our borrowings sooner than the benefit is realized from receivable and lease portfolios. As a result, our financial services operations experienced \$170 (after-tax) less favorable financing spreads in 2023 compared to 2022. If interest rates continue to rise, we expect to continue experiencing spread compression in 2024.

Demand for our products is negatively impacted by rising interest rates. We expect higher borrowing costs for our customers to primarily affect discretionary and residential product sales in 2024.

Rising interest rates are driven by factors outside of our control, and as a result, we cannot reasonably foresee when this condition will subside.

Agricultural Market Business Cycle. The agricultural market is affected by various factors including commodity prices, acreage planted, crop yields, and government policies. These factors affect farmers' income and may result in lower demand for equipment. We may experience any of the following effects during unfavorable market conditions: lower net sales, higher sales discounts, higher receivable write-offs, or losses on equipment on operating leases. A potential benefit is that customers may invest in integrated technology solutions and precision agriculture to lower input costs and improve margins.

Other Items of Concern and Uncertainties – Other items that could impact our results are:

- global and regional political conditions, including the war in Ukraine and the Israel-Hamas war,
- economic, tax, and trade policies,
- new or retaliatory tariffs,
- capital market disruptions,
- foreign currency and capital control policies,
- regulations and legislation regarding right to repair,
- weather conditions,
- marketplace adoption and monetization of technologies we have invested in,
- our ability to strengthen our digital capabilities, automation, autonomy, and alternative power technologies,
- changes in demand and pricing for new and used equipment,
- significant fluctuations in foreign currency exchange rates,
- volatility in the prices of many commodities, and
- slower economic growth or possible recession.

CONSOLIDATED RESULTS

2023 compared to 2022

Highlights

- Net income rose in 2023 compared to 2022, driven by strong market conditions.
- We continue to focus on structural profitability and strategically investing in solutions that deliver value to our customers.

Net Sales and Revenues



Net Sales (Equipment Operations)



- Favorable industry fundamentals and strong demand for farm and construction equipment drove the sales increases in 2023.

Net Income (Attributable to Deere & Company)



Diluted Earnings Per Share (EPS) (\$ per share)



- Net income and diluted EPS grew at a faster rate than sales due to our ability to keep cost increases below price realization.

Other Significant Statement of Consolidated Income Changes –

An explanation of the cost of sales to net sales ratio and other significant statement of consolidated income changes follows:

Deere & Company	2023	2022	% Change
Cost of sales to net sales	67.9%	73.7%	-8
+ Price realization			Favorable
(-) Production costs			Unfavorable

Price realization was 12 percent driven by strong demand.

Production costs increased due to a moderate rise in material cost and manufacturing overhead. These factors were partially offset by lower freight costs and production efficiencies generated by easing supply chain disruptions.

Other income	\$ 1,003	\$ 1,295	-23
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Other income was lower due to a non-cash gain on the remeasurement of the previously held equity investment in the Deere-Hitachi joint venture in 2022.

Research and development expenses	2,177	1,912	+14
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Research and development expenditures were higher due to continued focus on developing new technology solutions and new product introductions.

Selling, administrative and general expenses	4,595	3,863	+19
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Selling, administrative and general expenses rose due to higher salary expenses driven by inflationary conditions, profit-sharing incentives, and an increase in expenses to support the Leap Ambitions framework. Also impacting the current year was a cumulative correction of the accounting treatment for financing incentives offered to John Deere dealers (see Note 4).

Interest expense	2,453	1,062	+131
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Interest expense increased due to higher average borrowing rates and higher average borrowings.

Other operating expenses	1,292	1,275	+1
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See Note 9 for more information.

Provision for income taxes	2,871	2,007	+43
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Consistent with higher pretax income.

BUSINESS SEGMENT RESULTS

2023 compared to 2022

Each equipment operation segment experienced price realization during 2023, as orderbooks were full and most product lines were on allocation. These factors contributed to higher shipment volumes for large agriculture and construction equipment.

Production costs were unfavorable in 2023 due to higher material costs, profit-sharing incentive compensation, and manufacturing overhead costs, partially offset by lower freight costs and improved production efficiency. Material costs were higher in the first three quarters of 2023 but continued to moderate through the year. In the fourth quarter of 2023, material costs were lower than in the prior year.

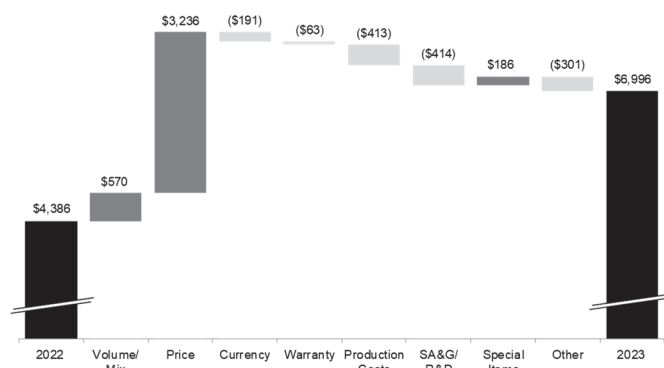
Production and Precision Agriculture Operations

	2023	2022	% Change
Net sales	\$ 26,790	\$ 22,002	+22
Sales volume and other			+7
Price realization			+15
Currency translation			
Operating profit	6,996	4,386	+60
Operating margin	26.1%	19.9%	

Sales volumes increased 10 percent in the U.S. and Canada, 32 percent in Australia, and 9 percent in Western Europe, partially offset by the effect of suspension of shipments to Russia. Price realization was 17 percent in the U.S. and Canada and 12 percent outside the U.S. and Canada, driven by strong demand. Prior period results were impacted by special items (see Note 4).

Production & Precision Agriculture Operating Profit

2023 compared to 2022



Small Agriculture and Turf Operations

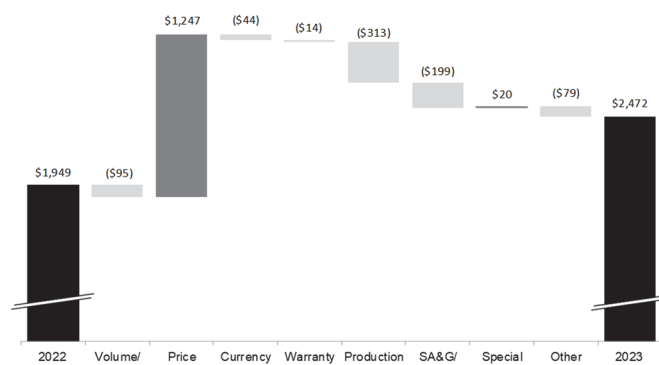
	2023	2022	% Change
Net sales	\$ 13,980	\$ 13,381	+4
Sales volume and other			-4
Price realization			+9
Currency translation			-1
Operating profit	2,472	1,949	+27
Operating margin	17.7%	14.6%	

Sales volumes decreased 8 percent in the U.S. and Canada but increased 18 percent in Mexico and 2 percent in Western Europe.

Price realization was 8 percent in the U.S. and Canada driven by inflation and 12 percent in Western Europe driven by strong demand.

Small Agriculture & Turf Operating Profit

2023 compared to 2022



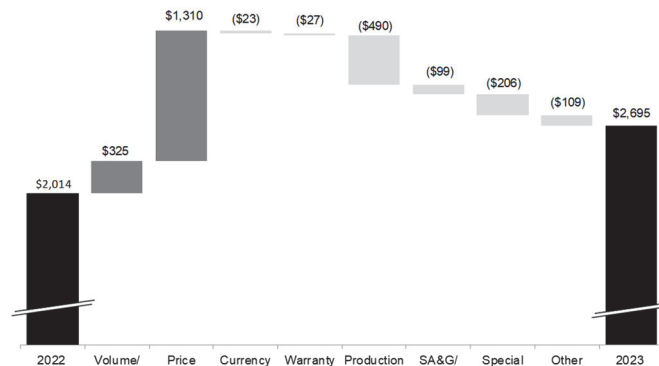
Construction and Forestry Operations

	2023	2022	% Change
Net sales	\$ 14,795	\$ 12,534	+18
Sales volume and other			+9
Price realization			+10
Currency translation			-1
Operating profit	2,695	2,014	+34
Operating margin	18.2%	16.1%	

Sales volumes increased 18 percent in the U.S. and Canada but decreased 6 percent outside the U.S. and Canada driven by lower sales in Brazil and the suspension of shipments to Russia. Price realization was 12 percent in the U.S. and Canada driven by strong demand, and 7 percent outside the U.S. and Canada. Results in both periods were impacted by special items (see Note 4).

Construction & Forestry Operating Profit

2023 compared to 2022

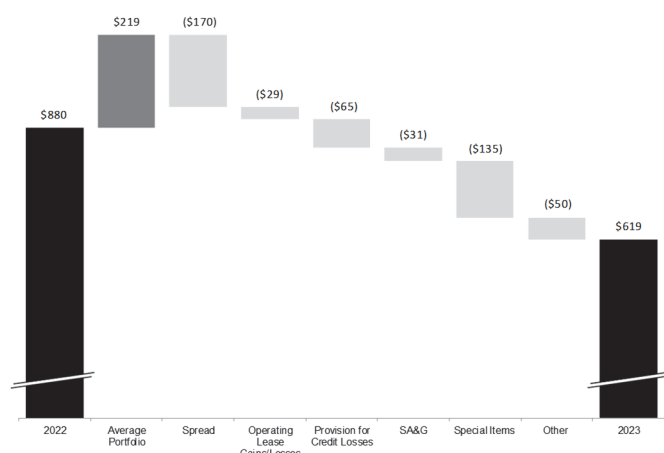


Financial Services Operations

	2023	2022	% Change
Revenue (including intercompany)	\$ 5,554	\$ 4,085	+36
Average balance of receivables and leases			+19
Interest expense	2,362	799	+196
Average borrowings			+20
Average borrowing rates			+143
Net income	619	880	-30

Average wholesale receivables increased 72 percent and retail notes increased 13 percent driven by higher equipment sales. Revenue also increased due to higher average financing rates. Net income declined as a result of unfavorable financing spreads and a correction of the accounting treatment for financing incentives offered to John Deere dealers (see Note 4). In 2022, financial services increased the provision for credit losses in Russia and recorded an intercompany benefit from the equipment operations, which guarantees financial services' investments in certain international markets, including Russia (see Note 4). The Russia-related impacts are displayed in the "Other" bar below.

Financial Services Net Income
2023 compared to 2022



BUSINESS SEGMENT RESULTS

2022 compared to 2021

Please refer to the "Management's Discussion and Analysis" section of our [2022 Form 10-K](#).

CAPITAL RESOURCES AND LIQUIDITY

2023 compared to 2022

We have access to global markets at a reasonable cost. Sources of liquidity include:

- cash, cash equivalents, and marketable securities on hand,
- funds from operations,
- the issuance of commercial paper and term debt,
- the securitization of retail notes, and
- bank lines of credit.

We closely monitor our cash requirements. Based on the available sources of liquidity, we expect to meet our funding needs in the short term (next 12 months) and long term (beyond 12 months). We

are forecasting lower operating cash flows in 2024 compared with 2023 as identified previously in Trends and Economic Conditions.

We operate in multiple industries, which have unique funding requirements. The equipment operations are capital intensive. Historically, these operations have been subject to seasonal variations in financing requirements for inventories and receivables from dealers. However, the patterns of seasonality have been affected by the supply chain disruptions experienced during fiscal year 2022.

The financial services operations rely on their ability to raise substantial amounts of funds to finance their receivable and lease portfolios.

Key Metrics and Balance Sheet Changes

Cash, Cash Equivalents and Marketable Securities



- See the detailed cash flow discussion in the next section.
- The increase was primarily driven by higher operating cash flow.

Trade Accounts and Notes Receivable – Net



- Receivables are generated from the sales of goods to customers.
- The increase was driven by higher sales.

Financing Receivables and Equipment on Operating Leases



- Acquisition volumes were 30 percent higher driven by higher retail volumes due to increased retail sales and higher wholesale receivables.

Inventories



- Inventories decreased due to easing of supply disruption constraints and moderation of future demand.

Property and Equipment



- Cash expenditures were \$1.5 billion in 2023.
- Capital expenditures are forecast to be \$1.9 billion in 2024.

Borrowings



- Borrowings increased corresponding with the level of the financing receivable and lease portfolios.

Unused Credit Lines



- The decrease in unused credit lines was due to an increase in commercial paper outstanding to fund growth in the receivable portfolios.

Financial Services Ratio of Interest-Bearing Debt to Stockholder's Equity



CASH FLOWS

2023, 2022, and 2021

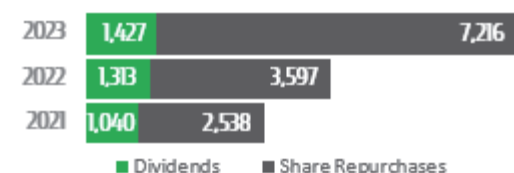
	2023	2022	2021
Net cash provided by operating activities	\$ 8,589	\$ 4,699	\$ 7,726
Net cash used for investing activities	(8,749)	(8,485)	(5,750)
Net cash provided by (used for) financing activities	2,808	826	(1,078)
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	31	(224)	55
Net increase (decrease) in cash, cash equivalents, and restricted cash	\$ 2,679	\$ (3,184)	\$ 953

Operating cash flows in 2023 were higher due to an increase in net income and lower inventory offset by higher receivables related to sales, while operating cash flows in 2022 were impacted by a \$1 billion other postretirement benefit (OPEB) contribution.

Cash outflows from investing activities were \$8.7 billion in 2023 due to growth in the financing receivable and lease portfolios, and purchases of property and equipment.

Cash inflows from financing activities were \$2.8 billion in 2023, as higher borrowings were partially offset by repurchases of common stock and dividends paid.

Cash Returned to Shareholders



Cash returned to shareholders increased \$3.7 billion in 2023.

DEBT RATINGS

To access debt markets, we rely on credit rating agencies to assign short-term and long-term credit ratings to our debt. These ratings are an indicator of credit quality for fixed income investors. A debt rating is not a recommendation by the rating agency to buy, sell, or hold. A credit rating agency may change or withdraw company ratings based on its assessment of our current and future ability to meet interest and principal repayment obligations. Lower credit ratings or negative changes to ratings outlooks generally result in higher borrowing costs, including costs of derivative transactions, and reduced access to debt capital markets, and may adversely impact our liquidity.

The senior long-term and short-term debt ratings and outlook currently assigned to unsecured company securities by the rating agencies engaged by us are as follows:

	Senior Long-Term	Short-Term	Outlook
Fitch Ratings	A+	F1	Stable
Moody's Investors Service, Inc.	A2	Prime-1	Positive
Standard & Poor's	A	A-1	Stable

CONTRACTUAL OBLIGATIONS AND CASH REQUIREMENTS

2024 and Beyond

Our material cash requirements include the following:

Borrowings – As of October 29, 2023, we had \$21.2 billion of payments due on borrowings and securitization borrowings in the next year, along with interest payments of \$2.2 billion. The securitization borrowing payments are based on the expected liquidation of the retail notes. See Notes 12 and 19 for additional borrowing details. These payments will likely be replaced with new borrowings to finance the receivable and lease portfolio, which is expected to grow in 2024.

Purchase Obligations – As of October 29, 2023, our outstanding purchase obligations were \$4.5 billion, with \$4.1 billion payable within one year. These purchase obligations are noncancelable.

Other Cash Requirements – In addition to our contractual obligations, we have the following commitments:

- capital expenditures of \$1.9 billion are planned for 2024,
- expected quarterly cash dividend throughout 2024 (subject to change at the discretion of our Board of Directors), and
- total pension and OPEB contributions in 2024 are expected to be approximately \$225.

Share repurchases will be considered as a means of deploying excess cash to shareholders, once the previously mentioned requirements are met.

CRITICAL ACCOUNTING ESTIMATES

The timely preparation of financial statements requires management to make estimates and assumptions. Those estimates affect reported amounts in these financial statements. Changes in those estimates and assumptions could have a significant effect. The following estimates are the most critical to our financial statements:

- sales incentives,
- product warranties,
- postretirement benefit obligations,
- allowance for credit losses,
- operating lease residual values, and
- income taxes.

These items require the most difficult, subjective, or complex judgments. Our accounting policies are described primarily in Note 2 of our consolidated financial statements.

Sales Incentives

We provide sales incentives to dealers. These incentives are offered in two forms:

- volume bonuses – awarded based on a dealer’s sales volume and performance, and
- retail sales incentive programs – discounts or financing programs that are due when the dealer sells the equipment to a retail customer.

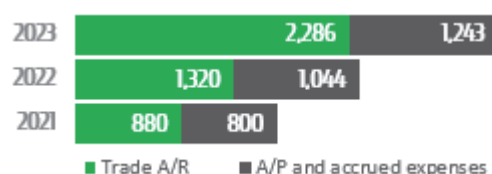
The estimated cost of these programs is based on:

- historical data,
- announced and expected incentive programs,
- field inventory levels, and
- forecasted sales volumes.

At the time a sale is recognized, we record an estimate of the sales incentive costs. The final cost is determined at the end of the volume bonus measurement period or at the time of the retail sale.

There are numerous programs available at any time, and new programs may be announced after we record the equipment sale to the dealer. Changes in the mix and types of sales incentive programs affect these estimates, which are reviewed quarterly. Actual cost differences from the original cost estimate are recognized in “Net sales.”

Sales Incentive Accruals



The accruals recorded against receivables relate to programs where we have the contractual right and the intent to offset against existing receivables. The increase in each of 2023 and 2022 primarily resulted from higher retail sales. Additional factors in

2023 were higher incentives for dealer market share and incentives provided to offset elevated interest rates.

A key assumption of the retail sales incentive accrual is the predictive value of the historical percent of retail sales incentive costs to retail sales. Over the last five fiscal years, this percent has varied by an average of .7 percent. Holding other assumptions constant, .7 percent change would have modified the sales incentive accrual by \$105.

Product Warranties

A standard warranty is provided as an assurance that our equipment will function as intended. The standard warranty period varies by product and region.

At the time a sale is recognized, we record an estimate of future warranty costs, based on the following calculation:

- historical claims rate experience – multiplied by –
- the estimated population.

The historical claims rate is determined by a review of five-year claims costs. The estimated population is based on dealer inventories and retail sales. These estimates are reviewed quarterly. Adjustments are also made for current quality developments.

Product Warranty Accruals



The increase in each of 2023 and 2022 related to higher sales volumes, partially offset by a decrease in the warranty rate.

Product warranty accrual estimates are affected by the historical percent of warranty claims costs as a percentage of gross sales. During this time, the percent has varied plus or minus .12 percent. Holding all other assumptions constant, if this estimated cost experience percent would have increased or decreased .12 percent, the warranty accrual at October 29, 2023 would have changed by approximately \$81.

Postretirement Benefit Obligations

The pension and OPEB plan obligations (defined benefit) and expenses require the use of estimates. The main estimate is the present value of the projected future benefit payments. These future benefit payments extend several decades.

The estimates are based on existing retirement plan provisions. No assumption is made regarding any potential changes to benefit provisions beyond those to which we are presently committed (e.g., in existing labor contracts).

The key assumptions used by our actuaries to calculate the estimates include:

- discount rates,
- health care cost trend rates,
- expected long-term return on plan assets,
- compensation increases,

- retirement rates,
- mortality rates, and
- expected contributions.

Assumptions are set each year-end. These assumptions are not changed during the year unless there is a significant plan event. Actual results that differ from the assumptions affect future expenses and obligations.

The key pension and OPEB amounts follow:

	2023	2022	2021
Pension and OPEB net (benefit) cost	\$ (13)	\$ 176	\$ 197
Long-term expected return on pension and OPEB plan assets (as a percent)	6.2	5.0	5.9
Long-term expected return on pension and OPEB plan assets	995	836	876
Actual return (loss) on pension and OPEB plan assets	(395)	(3,565)	3,616
Pension assets, net of pension liabilities	2,076	2,690	2,665
OPEB liabilities, net of OPEB assets	1,001	1,205	3,175

The reduction in the 2023 pension and OPEB net (benefit) cost was due to increased expected long-term return rates on plan assets and increased discount rates.

The effect of hypothetical changes to selected assumptions on our major U.S. retirement benefit plans would be as follows:

		October 29, 2023	2024
	Percentage Change	Increase (Decrease) PBO/APBO*	Increase (Decrease) Expense
Assumptions			
Pension			
Discount rate**	+/- .5	\$ (414)/456	\$ 3/(3)
Expected return on assets	+/- .5		(63)/63
OPEB			
Discount rate**	+/- .5	(120)/130	(4)/5
Expected return on assets	+/- .5		(10)/10
Health care cost trend rate**	+/-1.0	231/(202)	39/(34)

* Projected benefit obligation (PBO) for pension plans and accumulated postretirement benefit obligation (APBO) for OPEB plans.

** Pretax impact on service cost, interest cost, and amortization of gains or losses.

Allowance for Credit Losses

The allowance for credit losses is an estimate of the credit losses expected over the life of the receivable portfolio. The allowance is measured on a collective basis for receivables with similar risk characteristics. Receivables that do not share risk characteristics are evaluated on an individual basis. Risk characteristics include:

- finance product category,

- market,
- geography,
- credit risk, and
- remaining balance.

We utilize the following loss forecast models to estimate expected credit losses:

- Transition matrix models are used for large and complex retail customer receivable pools. These models are used for more than 90 percent of retail customer receivables. Historical portfolio performance and current delinquency levels are used to forecast future defaults. Estimated recovery rates are applied to the estimated default balance to calculate the expected credit losses.
- Weighted average remaining maturity (WARM) models are used for smaller and less complex retail customer receivable pools.
- Historical loss rate models are used on wholesale receivables, with consideration of current economic conditions and dealer financial risk.

The model output is adjusted for forecasted economic conditions, which may include the following economic indicators:

- commodity prices,
- industry equipment sales,
- unemployment rates, and
- housing starts.

Management reviews each model's output quarterly, and qualitative adjustments are incorporated as necessary.

Allowance for Credit Losses



The allowance decreased in 2023 due to the disposition of the receivable portfolio in Russia (see Note 11). Excluding the portfolio in Russia, the allowance increased slightly as higher portfolio balances and higher expected losses on turf and construction customer accounts. The allowance increased in 2022 due to higher reserves related to the economic uncertainty in Russia.

While we believe our allowance is sufficient to provide for losses over the life of our existing receivable portfolio, different assumptions would result in changes to the allowance for credit losses, specifically:

- For the wholesale receivable portfolio: Changes in economic conditions have historically had limited impact on credit losses.
- Within the retail customer receivable portfolio: Credit loss estimates are dependent on a number of factors, including historical portfolio performance, current economic conditions, current delinquency levels, and estimated recoveries on defaulted accounts.

Holding all other factors constant, a 10 percent increase in the transition matrix models' forecasted defaults and a simultaneous 10 percent decrease in recovery rates would have resulted in a \$53 increase to the allowance for credit losses at October 29, 2023.

Operating Lease Residual Values

Equipment on operating leases is depreciated to the estimated residual value over the lease term. The residual values are based on several factors, including:

- lease term,
- expected hours of usage,
- historical wholesale sales prices,
- return experience,
- intended equipment use,
- market dynamics and trends, and
- dealer residual value guarantees.

We review residual value estimates during the lease term.

Depreciation is adjusted over the remaining lease term if residual estimates are revised. Impairments are recorded when events or circumstances necessitate.

At the end of the majority of leases, the equipment is disposed in the following sequence:

- The lessee has the option to purchase the equipment for the contractual residual value.
- The dealer has the option to purchase the equipment.
- The equipment is sold to a third party at the equipment's fair value. In this situation, we may record a gain or a loss for the difference between the residual value and the sale price.

Operating Lease Residual Values



Hypothetically, if (a) future market values for this equipment were to decrease 10 percent from our present estimates and (b) all the equipment on operating leases were returned to us for remarketing at the end of the lease term, the total unfavorable impact after consideration of dealer residual value guarantees would be approximately \$90. This amount would be recognized as higher depreciation expense over the remaining term of the operating leases, or potentially as an impairment.

Income Taxes

We are subject to federal, state, and foreign income taxes. These tax laws can be complex. Significant judgment and interpretation is required to implement them. Changes in tax laws could materially affect our consolidated financial statements. We record our tax positions in the following categories:

- current taxes,
- deferred taxes, and
- uncertain tax positions.

Deferred income taxes represent temporary differences between the tax and the financial reporting basis of assets and liabilities.

This will result in taxable or deductible amounts in the future. Loss carryforwards and tax credits are significant components of deferred tax asset balances. These assets are reviewed regularly for the following:

- the likelihood of recoverability from future taxable income,
- reversal of deferred tax liabilities, and
- tax planning strategies.

Valuation allowances are established when we determine that the deferred tax benefit may not be realized. The recoverability analysis requires significant judgment and relies on estimates. The valuation allowance as of October 29, 2023 was \$1.6 billion. Changes in foreign income tax laws, income for certain jurisdictions, or our tax structure could impact the valuation allowance balance.

Some tax positions contain significant uncertainties. These positions may be challenged or disallowed by taxing authorities. If it is likely the position will be disallowed, no tax benefit is recorded. If it is likely the position will be sustained, a tax benefit is recognized. The ultimate resolution could take many years. This may result in a payment that is significantly different from the original estimate.

See Note 8 for further information on income taxes.

FORWARD-LOOKING STATEMENTS

Certain statements contained herein, including in the section entitled "Overview" relating to future events, expectations, and trends constitute "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 and involve factors that are subject to change, assumptions, risks, and uncertainties that could cause actual results to differ materially. Some of these risks and uncertainties could affect all lines of our operations generally while others could more heavily affect a particular line of business.

Forward-looking statements are based on currently available information and current assumptions, expectations, and projections about future events and should not be relied upon. Except as required by law, we expressly disclaim any obligation to update or revise our forward-looking statements. Many factors, risks, and uncertainties could cause actual results to differ materially from these forward-looking statements. Among these factors are risks related to:

- changes in U.S., foreign and international laws, regulations, and policies relating to trade, spending, taxing, banking, monetary, environmental (including climate change and engine emission), and farming policies;
- political, economic, and social instability of the geographies in which we operate, including the ongoing wars between Russia and Ukraine and between Israel and Hamas;
- adverse macroeconomic conditions, including unemployment, inflation, rising interest rates, changes in consumer practices due to slower economic growth or possible recession, and regional or global liquidity constraints;

-
- growth and sustainability of non-food uses for crops (including ethanol and biodiesel production);
 - the ability to execute business strategies, including our Smart Industrial Operating Model, Leap Ambitions, and mergers and acquisitions;
 - the ability to understand and meet customers' changing expectations and demand for our products and solutions;
 - accurately forecasting customer demand for products and services and adequately managing inventory;
 - our ability to integrate new technology, including automation and machine learning, and deliver precision technology and solutions to customers;
 - changes to governmental communications channels (radio frequency technology);
 - our ability to adapt in highly competitive markets;
 - dealer practices and their ability to manage distribution of our products and support and service precision technology solutions;
 - changes in climate patterns, unfavorable weather events, and natural disasters;
 - governmental and other actions designed to address climate change in connection with a transition to a lower-carbon economy;
 - higher interest rates and currency fluctuations which could adversely affect the U.S. dollar, customer confidence, access to capital, and demand for our products and solutions;
 - stress in the banking sector may have adverse impacts on vendors or customers as well as on our ability to access cash deposits;
 - availability and price of raw materials, components, and whole goods;
 - delays or disruptions in our supply chain;
 - labor relations and contracts, including work stoppages and other disruptions;
 - the ability to attract, develop, engage, and retain qualified personnel;
 - security breaches, cybersecurity attacks, technology failures, and other disruptions to our information technology infrastructure and products;
 - loss of or challenges to intellectual property rights;
 - compliance with evolving U.S. and foreign laws, including economic sanctions, data privacy, and environmental laws and regulations;
 - legislation introduced or enacted that could affect our business model and intellectual property, such as so-called right to repair or right to modify legislation;
 - investigations, claims, lawsuits, or other legal proceedings;
 - events that damage our reputation or brand;
 - world grain stocks, available farm acres, soil conditions, harvest yields, prices for commodities and livestock, input costs, and availability of transport for crops; and
 - housing starts and supply, real estate and housing prices, levels of public and non-residential construction, and infrastructure investment.

Further information concerning our businesses, including factors that could materially affect our financial results, is included in our filings with the SEC (including, but not limited to, the factors discussed in Item 1A. "Risk Factors" of this Annual Report on Form 10-K). There also may be other factors that we cannot anticipate or that are not described herein because we do not currently perceive them to be material.

SUPPLEMENTAL CONSOLIDATING DATA

The supplemental consolidating data presented on the subsequent pages is presented for informational purposes. The equipment operations represents the enterprise without financial services. The equipment operations includes production and precision agriculture operations, small agriculture and turf operations, construction and forestry operations, and other corporate assets, liabilities, revenues, and expenses not reflected within financial services. Transactions between the “equipment operations” and “financial services” have been eliminated to arrive at the consolidated financial statements.

The equipment operations and financial services participate in different industries. The equipment operations generate earnings and cash flows by manufacturing and selling equipment, service parts, and technology solutions to dealers and retail customers. Financial services finances sales and leases by dealers of new and used equipment that is largely manufactured by us. Those earnings and cash flows generally are the difference between the finance income received from customer payments less interest expense, and depreciation on equipment subject to an operating lease. The two businesses are capitalized differently and have separate performance metrics. The supplemental consolidating data is also used by management due to these differences.

INCOME STATEMENTS

For the Years Ended October 29, 2023, October 30, 2022, and October 31, 2021

Unaudited

	EQUIPMENT OPERATIONS			FINANCIAL SERVICES			ELIMINATIONS			CONSOLIDATED		
	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
Net Sales and Revenues												
Net sales	\$ 55,565	\$ 47,917	\$ 39,737							\$ 55,565	\$ 47,917	\$ 39,737
Finance and interest income	636	213	133	\$ 5,055	\$ 3,583	\$ 3,442	\$ (1,008)	\$ (431)	\$ (279)	4,683	3,365	3,296 ¹
Other income	858	1,261	941	499	502	352	(354)	(468)	(302)	1,003	1,295	991 ^{2,3}
Total	57,059	49,391	40,811	5,554	4,085	3,794	(1,362)	(899)	(581)	61,251	52,577	44,024
Costs and Expenses												
Cost of sales	37,739	35,341	29,119				(24)	(3)	(3)	37,715	35,338	29,116 ⁴
Research and development expenses	2,177	1,912	1,587							2,177	1,912	1,587
Selling, administrative and general expenses	3,611	3,137	2,887	994	735	504	(10)	(9)	(8)	4,595	3,863	3,383 ⁴
Interest expense	411	390	368	2,362	799	687	(320)	(127)	(62)	2,453	1,062	993 ¹
Interest compensation to Financial Services	687	299	217				(687)	(299)	(217)			¹
Other operating expenses	217	350	181	1,396	1,386	1,453	(321)	(461)	(291)	1,292	1,275	1,343 ^{5,6}
Total	44,842	41,429	34,359	4,752	2,920	2,644	(1,362)	(899)	(581)	48,232	43,450	36,422
Income before Income Taxes	12,217	7,962	6,452	802	1,165	1,150				13,019	9,127	7,602
Provision for income taxes	2,685	1,718	1,386	186	289	272				2,871	2,007	1,658
Income after Income Taxes	9,532	6,244	5,066	616	876	878				10,148	7,120	5,944
Equity in income of unconsolidated affiliates	4	6	18	3	4	3				7	10	21
Net Income	9,536	6,250	5,084	619	880	881				10,155	7,130	5,965
Less: Net income (loss) attributable to noncontrolling interests	(11)	(1)	2							(11)	(1)	2
Net Income Attributable to Deere & Company	<u>\$ 9,547</u>	<u>\$ 6,251</u>	<u>\$ 5,082</u>	<u>\$ 619</u>	<u>\$ 880</u>	<u>\$ 881</u>				<u>\$ 10,166</u>	<u>\$ 7,131</u>	<u>\$ 5,963</u>

¹ Elimination of intercompany interest income and expense.

² Elimination of equipment operations' margin from inventory transferred to equipment on operating leases (see Note 6).

³ Elimination of financial services' income related to intercompany guarantees of investments in certain international markets and intercompany service revenues.

⁴ Elimination of intercompany service fees.

⁵ Elimination of financial services' lease depreciation expense related to inventory transferred to equipment on operating leases.

⁶ Elimination of equipment operations' expense related to intercompany guarantees of investments in certain international markets and intercompany service expenses.

SUPPLEMENTAL CONSOLIDATING DATA (continued)
CONDENSED BALANCE SHEETS

As of October 29, 2023 and October 30, 2022

Unaudited

	EQUIPMENT OPERATIONS		FINANCIAL SERVICES		ELIMINATIONS		CONSOLIDATED	
	2023	2022	2023	2022	2023	2022	2023	2022
ASSETS								
Cash and cash equivalents	\$ 5,720	\$ 3,767	\$ 1,738	\$ 1,007			\$ 7,458	\$ 4,774
Marketable securities	104	61	842	673			946	734
Receivables from Financial Services	4,516	6,569			\$ (4,516)	\$ (6,569)		
Trade accounts and notes receivable – net	1,320	1,273	8,687	6,434	(2,268)	(1,297)	7,739	6,410
Financing receivables – net	64	47	43,609	36,587			43,673	36,634
Financing receivables securitized – net			7,335	5,936			7,335	5,936
Other receivables	1,813	1,670	869	832	(59)	(10)	2,623	2,492
Equipment on operating leases – net			6,917	6,623			6,917	6,623
Inventories	8,160	8,495					8,160	8,495
Property and equipment – net	6,843	6,021	36	35			6,879	6,056
Goodwill	3,900	3,687					3,900	3,687
Other intangible assets – net	1,133	1,218					1,133	1,218
Retirement benefits	2,936	3,666	72	66	(1)	(2)	3,007	3,730
Deferred income taxes	2,133	940	68	45	(387)	(161)	1,814	824
Other assets	1,948	1,794	559	626	(4)	(3)	2,503	2,417
Total Assets	\$ 40,590	\$ 39,208	\$ 70,732	\$ 58,864	\$ (7,235)	\$ (8,042)	\$ 104,087	\$ 90,030
LIABILITIES AND STOCKHOLDERS' EQUITY								
LIABILITIES								
Short-term borrowings	\$ 1,230	\$ 1,040	\$ 16,709	\$ 11,552			\$ 17,939	\$ 12,592
Short-term securitization borrowings			6,995	5,711			6,995	5,711
Payables to Equipment Operations			4,516	6,569	\$ (4,516)	\$ (6,569)		
Accounts payable and accrued expenses	14,862	12,962	3,599	3,170	(2,331)	(1,310)	16,130	14,822
Deferred income taxes	452	380	455	276	(387)	(161)	520	495
Long-term borrowings	7,210	7,917	31,267	25,679			38,477	33,596
Retirement benefits and other liabilities	2,032	2,351	109	108	(1)	(2)	2,140	2,457
Total liabilities	25,786	24,650	63,650	53,065	(7,235)	(8,042)	82,201	69,673
Commitments and contingencies (Note 20)								
Redeemable noncontrolling interest (Note 3)	97	92					97	92
STOCKHOLDERS' EQUITY								
Total Deere & Company stockholders' equity	21,785	20,262	7,082	5,799	(7,082)	(5,799)	21,785	20,262
Noncontrolling interests	4	3					4	3
Financial Services' equity	(7,082)	(5,799)			7,082	5,799		
Adjusted total stockholders' equity	14,707	14,466	7,082	5,799			21,789	20,265
Total Liabilities and Stockholders' Equity	\$ 40,590	\$ 39,208	\$ 70,732	\$ 58,864	\$ (7,235)	\$ (8,042)	\$ 104,087	\$ 90,030

⁷ Elimination of receivables / payables between equipment operations and financial services.

⁸ Primarily reclassification of sales incentive accruals on receivables sold to financial services.

⁹ Reclassification of net pension assets / liabilities.

¹⁰ Reclassification of deferred tax assets / liabilities in the same taxing jurisdictions.

¹¹ Elimination of financial services' equity.

SUPPLEMENTAL CONSOLIDATING DATA (continued)
STATEMENTS OF CASH FLOWS

For the Years Ended October 29, 2023, October 30, 2022, and October 31, 2021

Unaudited

	EQUIPMENT OPERATIONS			FINANCIAL SERVICES			ELIMINATIONS			CONSOLIDATED		
	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
Cash Flows from Operating Activities												
Net income	\$ 9,536	\$ 6,250	\$ 5,084	\$ 619	\$ 880	\$ 881				\$ 10,155	\$ 7,130	\$ 5,965
Adjustments to reconcile net income to net cash provided by operating activities:												
Provision (credit) for credit losses	7	3	7	(23)	189	(13)				(16)	192	(6)
Provision for depreciation and amortization	1,123	1,041	1,043	1,016	1,050	1,140	\$ (135)	\$ (196)	\$ (133)	2,004	1,895	2,050
Impairments and other adjustments	18	88	50	173						191	88	50
Share-based compensation expense							130	85	82	130	85	82
Gain on remeasurement of previously held equity investment		(326)									(326)	
Distributed earnings of Financial Services	215	444	555				(215)	(444)	(555)			
Provision (credit) for deferred income taxes	(959)	8	(369)	169	(74)	(72)				(790)	(66)	(441)
Changes in assets and liabilities:												
Receivables related to sales	(58)	(189)	(105)				(4,195)	(2,294)	1,074	(4,253)	(2,483)	969
Inventories	474	(1,924)	(1,835)				(195)	(167)	(662)	279	(2,091)	(2,497)
Accounts payable and accrued expenses	1,352	1,444	1,589	449	143	57	(971)	(454)	238	830	1,133	1,884
Accrued income taxes payable/receivable	8	166	13	(31)	(25)	(2)				(23)	141	11
Retirement benefits	(164)	(1,016)	30	(6)	1	(1)				(170)	(1,015)	29
Other	367	250	(162)	(51)	(287)	(25)	(64)	53	(183)	252	16	(370)
Net cash provided by operating activities	11,919	6,239	5,900	2,315	1,877	1,965	(5,645)	(3,417)	(139)	8,589	4,699	7,726
Cash Flows from Investing Activities												
Collections of receivables (excluding receivables related to sales)				24,128	22,400	20,527	(1,077)	(1,493)	(1,568)	23,051	20,907	18,959
Proceeds from sales of equipment on operating leases				1,981	2,093	2,094				1,981	2,093	2,094
Cost of receivables acquired (excluding receivables related to sales)				(29,229)	(26,903)	(25,305)	457	603	1,652	(28,772)	(26,300)	(23,653)
Acquisitions of businesses, net of cash acquired	(82)	(498)	(244)							(82)	(498)	(244)
Purchases of property and equipment	(1,494)	(1,131)	(845)	(4)	(3)	(3)				(1,498)	(1,134)	(848)
Cost of equipment on operating leases acquired				(3,234)	(2,879)	(2,627)	264	225	895	(2,970)	(2,654)	(1,732)
Increase (decrease) in investment in Financial Services	(870)	7	(8)				870	(7)	8			
Decrease (increase) in trade and wholesale receivables				(5,783)	(3,601)	1,364	5,783	3,601	(1,364)			
Collateral on derivatives – net	(1)	5	(7)	(11)	(647)	(274)				(12)	(642)	(281)
Other	(290)	(213)	70	(160)	(81)	(84)	3	37	(31)	(447)	(257)	(45)
Net cash used for investing activities	(2,737)	(1,830)	(1,034)	(12,312)	(9,621)	(4,308)	6,300	2,966	(408)	(8,749)	(8,485)	(5,750)
Cash Flows from Financing Activities												
Net proceeds (payments) in short-term borrowings (original maturities three months or less)	(113)	136	65	4,121	3,716	753				4,008	3,852	818
Change in intercompany receivables/payables	2,090	(1,633)	(354)	(2,090)	1,633	354						
Proceeds from borrowings issued (original maturities greater than three months)	342	138	11	15,087	10,220	8,711				15,429	10,358	8,722
Payments of borrowings (original maturities greater than three months)	(901)	(1,356)	(94)	(7,012)	(7,089)	(6,996)				(7,913)	(8,445)	(7,090)
Repurchases of common stock	(7,216)	(3,597)	(2,538)							(7,216)	(3,597)	(2,538)
Capital investment from Equipment Operations				870	(7)	8	(870)	7	(8)			
Dividends paid	(1,427)	(1,313)	(1,040)	(215)	(444)	(555)	215	444	555	(1,427)	(1,313)	(1,040)
Other	(7)	6	87	(66)	(35)	(37)				(73)	(29)	50
Net cash provided by (used for) financing activities	(7,232)	(7,619)	(3,863)	10,695	7,994	2,238	(655)	451	547	2,808	826	(1,078)
Effect of Exchange Rate Changes on Cash, Cash Equivalents, and Restricted Cash	24	(209)	41	7	(15)	14				31	(224)	55
Net Increase (Decrease) in Cash, Cash Equivalents, and Restricted Cash	1,974	(3,419)	1,044	705	235	(91)				2,679	(3,184)	953
Cash, Cash Equivalents, and Restricted Cash at Beginning of Year	3,781	7,200	6,156	1,160	925	1,016				4,941	8,125	7,172
Cash, Cash Equivalents, and Restricted Cash at End of Year	\$ 5,755	\$ 3,781	\$ 7,200	\$ 1,865	\$ 1,160	\$ 925				\$ 7,620	\$ 4,941	\$ 8,125
Components of Cash, Cash Equivalents, and Restricted Cash												
Cash and cash equivalents	\$ 5,720	\$ 3,767	\$ 7,188	\$ 1,738	\$ 1,007	\$ 829				\$ 7,458	\$ 4,774	\$ 8,017
Restricted cash (Other assets)	35	14	12	127	153	96				162	167	108
Total Cash, Cash Equivalents, and Restricted Cash	<u>\$ 5,755</u>	<u>\$ 3,781</u>	<u>\$ 7,200</u>	<u>\$ 1,865</u>	<u>\$ 1,160</u>	<u>\$ 925</u>				<u>\$ 7,620</u>	<u>\$ 4,941</u>	<u>\$ 8,125</u>

¹² Elimination of depreciation on leases related to inventory transferred to equipment on operating leases (see Note 6).

¹³ Reclassification of share-based compensation expense.

¹⁴ Elimination of dividends from financial services to the equipment operations, which are included in the equipment operations operating activities.

¹⁵ Primarily reclassification of receivables related to the sale of equipment.

¹⁶ Reclassification of direct lease agreements with retail customers.

¹⁷ Reclassification of sales incentive accruals on receivables sold to financial services.

¹⁸ Elimination and reclassification of the effects of financial services partial financing of the construction and forestry retail locations sales and subsequent collection of those amounts.

¹⁹ Elimination of investment from equipment operations to financial services.

SELECTED FINANCIAL DATA

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Net sales and revenues	\$ 61,251	\$ 52,577	\$ 44,024	\$ 35,540	\$ 39,258	\$ 37,358	\$ 29,738	\$ 26,644	\$ 28,863	\$ 36,067
Net sales	55,565	47,917	39,737	31,272	34,886	33,351	25,885	23,387	25,775	32,961
Finance and interest income	4,683	3,365	3,296	3,450	3,493	3,107	2,732	2,511	2,381	2,282
Research and development expenses	2,177	1,912	1,587	1,644	1,783	1,658	1,373	1,394	1,410	1,437
Selling, administrative and general expenses	4,595	3,863	3,383	3,477	3,551	3,455	3,098	2,791	2,868	3,266
Interest expense	2,453	1,062	993	1,247	1,466	1,204	899	764	680	664
Net income*	10,166	7,131	5,963	2,751	3,253	2,368	2,159	1,524	1,940	3,162
Return on net sales	18.3%	14.9%	15.0%	8.8%	9.3%	7.1%	8.3%	6.5%	7.5%	9.6%
Return on beginning Deere & Company stockholders' equity	50.2%	38.7%	46.1%	24.1%	28.8%	24.8%	33.1%	22.6%	21.4%	30.8%
Comprehensive income*	10,099	6,629	8,963	2,819	2,081	3,222	3,221	627	994	2,072
Net income per share – basic*	\$ 34.80	\$ 23.42	\$ 19.14	\$ 8.77	\$ 10.28	\$ 7.34	\$ 6.76	\$ 4.83	\$ 5.81	\$ 8.71
– diluted*	34.63	23.28	18.99	8.69	10.15	7.24	6.68	4.81	5.77	8.63
Dividends declared per share	5.05	4.36	3.61	3.04	3.04	2.58	2.40	2.40	2.40	2.22
Dividends paid per share	4.83	4.28	3.32	3.04	2.97	2.49	2.40	2.40	2.40	2.13
Average number of common shares outstanding (in millions) – basic	292.2	304.5	311.6	313.5	316.5	322.6	319.5	315.2	333.6	363.0
– diluted	293.6	306.3	314.0	316.6	320.6	327.3	323.3	316.6	336.0	366.1
Total assets	\$ 104,087	\$ 90,030	\$ 84,114	\$ 75,091	\$ 73,011	\$ 70,108	\$ 65,786	\$ 57,918	\$ 57,883	\$ 61,267
Trade accounts and notes receivable – net	7,739	6,410	4,208	4,171	5,230	5,004	3,925	3,011	3,051	3,278
Financing receivables – net	43,673	36,634	33,799	29,750	29,195	27,054	25,104	23,702	24,809	27,422
Financing receivables securitized – net	7,335	5,936	4,659	4,703	4,383	4,022	4,159	5,127	4,835	4,602
Equipment on operating leases – net	6,917	6,623	6,988	7,298	7,567	7,165	6,594	5,902	4,970	4,016
Inventories	8,160	8,495	6,781	4,999	5,975	6,149	3,904	3,341	3,817	4,210
Property and equipment – net	6,879	6,056	5,820	5,817	5,973	5,868	5,068	5,171	5,181	5,578
Short-term borrowings	17,939	12,592	10,919	8,582	10,784	11,062	10,035	6,911	8,425	8,018
Short-term securitization borrowings	6,995	5,711	4,605	4,682	4,321	3,957	4,119	4,998	4,585	4,553
Long-term borrowings	38,477	33,596	32,888	32,734	30,229	27,237	25,891	23,703	23,775	24,318
Total Deere & Company stockholders' equity	21,785	20,262	18,431	12,937	11,413	11,288	9,557	6,520	6,743	9,063
Book value per share*	\$ 77.37	\$ 67.82	\$ 59.83	\$ 41.25	\$ 36.45	\$ 35.45	\$ 29.70	\$ 20.71	\$ 21.29	\$ 26.23
Capital expenditures	\$ 1,537	\$ 1,176	\$ 867	\$ 762	\$ 1,084	\$ 969	\$ 586	\$ 668	\$ 655	\$ 1,004
Number of employees (at year end)	82,956	82,239	75,550	69,634	73,489	74,413	60,476	56,767	57,180	59,623

* Attributable to Deere & Company.

FINANCIAL INSTRUMENT MARKET RISK INFORMATION

We are naturally exposed to various interest rate and foreign currency risks. As a result, we enter into derivative transactions to manage this exposure and not for speculative purposes.

From time to time, we enter into interest rate swap agreements to manage our interest rate exposure. We also have foreign currency exposures at some of our foreign and domestic operations related to buying, selling, and financing in currencies other than the functional currencies. We have entered into derivative agreements related to the management of these foreign currency transaction risks.

Interest Rate Risk

Results of Operations – Central bank policy rates increased in 2022 and 2023. Rising interest rates have historically impacted our borrowings sooner than the benefit is realized from the financing receivable and equipment on operating lease portfolios. As a result, our financial services operations experienced spread compression in 2023. If interest rates continue to rise, we expect to continue experiencing spread compression in 2024.

Fair Value Measurement – Quarterly, we use a combination of cash flow models to assess the sensitivity of our financial instruments with interest rate exposure to changes in market interest rates. The models calculate the effect of adjusting interest rates as follows:

- cash flows for financing receivables are discounted at the current prevailing rate for each receivable portfolio,
- cash flows for marketable securities are discounted at the applicable benchmark yield curve plus market credit spreads,
- cash flows for unsecured borrowings are discounted at the applicable benchmark yield curve plus market credit spreads for similarly rated borrowers,
- cash flows for securitized borrowings are discounted at the swap yield curve plus a market credit spread for similarly rated borrowers, and
- cash flows for interest rate swaps are projected and discounted using forward rates from the swap yield curve at the repricing dates.

The net impact in these financial instruments' fair values which would be caused by decreasing or increasing the interest rates by 10 percent from the market rates at October 29, 2023 and October 30, 2022 would have been approximately \$10 and \$50, respectively.

Reference Rate Reform – We transitioned our financing, funding, and hedging portfolios from the London Interbank Offered Rate (LIBOR) to alternative reference rates in 2023. In 2024, we will transition certain portfolios from the Canadian Dollar Offered Rate (CDOR) to an alternative reference rate. These transition activities did not / are not expected to have a material impact on our financial statements.

Foreign Currency Risk

In the equipment operations, the practice is to hedge significant currency exposures. Worldwide foreign currency exposures are reviewed quarterly. Based on the anticipated and committed foreign currency cash inflows, outflows, and hedging policy for the next twelve months, we estimate that a hypothetical 10 percent strengthening of the U.S. dollar relative to other currencies through 2024 would increase the 2024 expected net cash inflows by approximately \$25. At October 29, 2023, a hypothetical 10 percent strengthening of the U.S. dollar under similar assumptions and calculations indicated a potential \$125 decrease on the 2023 net cash inflows. The estimated impacts by currency follow:

	2024	2023
Australian dollar	\$ (75)	\$ (100)
Brazilian real	25	(150)
British pound	(50)	(25)
Canadian dollar		(25)
Euro	75	50
Japanese yen	75	125
Mexican peso	25	25
Polish Zloty	(25)	(25)
All other	(25)	
Total increase (decrease)	\$ 25	\$ (125)

In the financial services operations, our policy is to manage foreign currency risk through hedging strategies if the currency of the borrowings does not match the currency of the receivable portfolio. As a result, a hypothetical 10 percent adverse change in the value of the U.S. dollar relative to all other foreign currencies would not have a material effect on the financial services cash flows.

DEERE & COMPANY

STATEMENTS OF CONSOLIDATED INCOME

For the Years Ended October 29, 2023, October 30, 2022, and October 31, 2021

	2023	2022	2021
Net Sales and Revenues			
Net sales	\$ 55,565	\$ 47,917	\$ 39,737
Finance and interest income	4,683	3,365	3,296
Other income	1,003	1,295	991
Total	61,251	52,577	44,024
Costs and Expenses			
Cost of sales	37,715	35,338	29,116
Research and development expenses	2,177	1,912	1,587
Selling, administrative and general expenses	4,595	3,863	3,383
Interest expense	2,453	1,062	993
Other operating expenses	1,292	1,275	1,343
Total	48,232	43,450	36,422
Income of Consolidated Group before Income Taxes	13,019	9,127	7,602
Provision for income taxes	2,871	2,007	1,658
Income of Consolidated Group	10,148	7,120	5,944
Equity in income of unconsolidated affiliates	7	10	21
Net Income	10,155	7,130	5,965
Less: Net income (loss) attributable to noncontrolling interests	(11)	(1)	2
Net Income Attributable to Deere & Company	<u>\$ 10,166</u>	<u>\$ 7,131</u>	<u>\$ 5,963</u>
Per Share Data			
Basic	\$ 34.80	\$ 23.42	\$ 19.14
Diluted	34.63	23.28	18.99
Dividends declared	5.05	4.36	3.61
Dividends paid	4.83	4.28	3.32
Average Shares Outstanding (In millions of shares)			
Basic	292.2	304.5	311.6
Diluted	293.6	306.3	314.0

The notes to consolidated financial statements are an integral part of this statement.

DEERE & COMPANY

STATEMENTS OF CONSOLIDATED COMPREHENSIVE INCOME

For the Years Ended October 29, 2023, October 30, 2022, and October 31, 2021

	2023	2022	2021
Net Income	<u>\$ 10,155</u>	<u>\$ 7,130</u>	<u>\$ 5,965</u>
Other Comprehensive Income (Loss), Net of Income Taxes			
Retirement benefits adjustment	(456)	645	2,884
Cumulative translation adjustment	443	(1,116)	118
Unrealized gain (loss) on derivatives	(29)	63	16
Unrealized loss on debt securities	<u>(16)</u>	<u>(109)</u>	<u>(18)</u>
Other Comprehensive Income (Loss), Net of Income Taxes	<u>(58)</u>	<u>(517)</u>	<u>3,000</u>
Comprehensive Income of Consolidated Group	<u>10,097</u>	<u>6,613</u>	<u>8,965</u>
Less: Comprehensive income (loss) attributable to noncontrolling interests	(2)	(16)	2
Comprehensive Income Attributable to Deere & Company	<u>\$ 10,099</u>	<u>\$ 6,629</u>	<u>\$ 8,963</u>

The notes to consolidated financial statements are an integral part of this statement.

DEERE & COMPANY
CONSOLIDATED BALANCE SHEETS
As of October 29, 2023 and October 30, 2022

	2023	2022
ASSETS		
Cash and cash equivalents	\$ 7,458	\$ 4,774
Marketable securities	946	734
Trade accounts and notes receivable – net	7,739	6,410
Financing receivables – net	43,673	36,634
Financing receivables securitized – net	7,335	5,936
Other receivables	2,623	2,492
Equipment on operating leases – net	6,917	6,623
Inventories	8,160	8,495
Property and equipment – net	6,879	6,056
Goodwill	3,900	3,687
Other intangible assets – net	1,133	1,218
Retirement benefits	3,007	3,730
Deferred income taxes	1,814	824
Other assets	2,503	2,417
Total Assets	\$ 104,087	\$ 90,030
LIABILITIES AND STOCKHOLDERS' EQUITY		
LIABILITIES		
Short-term borrowings	\$ 17,939	\$ 12,592
Short-term securitization borrowings	6,995	5,711
Accounts payable and accrued expenses	16,130	14,822
Deferred income taxes	520	495
Long-term borrowings	38,477	33,596
Retirement benefits and other liabilities	2,140	2,457
Total liabilities	82,201	69,673
Commitments and contingencies (Note 20)		
Redeemable noncontrolling interest (Note 3)	97	92
STOCKHOLDERS' EQUITY		
Common stock, \$1 par value (authorized – 1,200,000,000 shares; issued – 536,431,204 shares in 2023 and 2022), at paid-in amount	5,303	5,165
Common stock in treasury, 254,846,927 shares in 2023 and 237,659,289 shares in 2022, at cost	(31,335)	(24,094)
Retained earnings	50,931	42,247
Accumulated other comprehensive income (loss)	(3,114)	(3,056)
Total Deere & Company stockholders' equity	21,785	20,262
Noncontrolling interests	4	3
Total stockholders' equity	21,789	20,265
Total Liabilities and Stockholders' Equity	\$ 104,087	\$ 90,030

The notes to consolidated financial statements are an integral part of this statement.

DEERE & COMPANY

STATEMENTS OF CONSOLIDATED CASH FLOWS

For the Years Ended October 29, 2023, October 30, 2022, and October 31, 2021

	2023	2022	2021
Cash Flows from Operating Activities			
Net income	\$ 10,155	\$ 7,130	\$ 5,965
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision (credit) for credit losses	(16)	192	(6)
Provision for depreciation and amortization	2,004	1,895	2,050
Impairments and other adjustments	191	88	50
Share-based compensation expense	130	85	82
Gain on remeasurement of previously held equity investment		(326)	
Credit for deferred income taxes	(790)	(66)	(441)
Changes in assets and liabilities:			
Receivables related to sales	(4,253)	(2,483)	969
Inventories	279	(2,091)	(2,497)
Accounts payable and accrued expenses	830	1,133	1,884
Accrued income taxes payable/receivable	(23)	141	11
Retirement benefits	(170)	(1,015)	29
Other	252	16	(370)
Net cash provided by operating activities	8,589	4,699	7,726
Cash Flows from Investing Activities			
Collections of receivables (excluding receivables related to sales)	23,051	20,907	18,959
Proceeds from sales of equipment on operating leases	1,981	2,093	2,094
Cost of receivables acquired (excluding receivables related to sales)	(28,772)	(26,300)	(23,653)
Acquisitions of businesses, net of cash acquired	(82)	(498)	(244)
Purchases of property and equipment	(1,498)	(1,134)	(848)
Cost of equipment on operating leases acquired	(2,970)	(2,654)	(1,732)
Collateral on derivatives – net	(12)	(642)	(281)
Other	(447)	(257)	(45)
Net cash used for investing activities	(8,749)	(8,485)	(5,750)
Cash Flows from Financing Activities			
Net proceeds in short-term borrowings (original maturities three months or less)	4,008	3,852	818
Proceeds from borrowings issued (original maturities greater than three months)	15,429	10,358	8,722
Payments of borrowings (original maturities greater than three months)	(7,913)	(8,445)	(7,090)
Repurchases of common stock	(7,216)	(3,597)	(2,538)
Dividends paid	(1,427)	(1,313)	(1,040)
Other	(73)	(29)	50
Net cash provided by (used for) financing activities	2,808	826	(1,078)
Effect of Exchange Rate Changes on Cash, Cash Equivalents, and Restricted Cash	31	(224)	55
Net Increase (Decrease) in Cash, Cash Equivalents, and Restricted Cash	2,679	(3,184)	953
Cash, Cash Equivalents, and Restricted Cash at Beginning of Year	4,941	8,125	7,172
Cash, Cash Equivalents, and Restricted Cash at End of Year	<u>\$ 7,620</u>	<u>\$ 4,941</u>	<u>\$ 8,125</u>
Components of Cash, Cash Equivalents, and Restricted Cash			
Cash and cash equivalents	\$ 7,458	\$ 4,774	\$ 8,017
Restricted cash (Other assets)	162	167	108
Total Cash, Cash Equivalents, and Restricted Cash	<u>\$ 7,620</u>	<u>\$ 4,941</u>	<u>\$ 8,125</u>

The notes to consolidated financial statements are an integral part of this statement.

DEERE & COMPANY

STATEMENTS OF CHANGES IN CONSOLIDATED STOCKHOLDERS' EQUITY

For the Years Ended October 31, 2021, October 30, 2022, and October 29, 2023

	Total Stockholders' Equity						Redeemable Noncontrolling Interest
	Deere & Company Stockholders						
	Total Stockholders' Equity	Common Stock	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests	
Balance November 1, 2020	\$ 12,944	\$ 4,895	\$ (18,065)	\$ 31,646	\$ (5,539)	\$ 7	
ASU No. 2016-13 adoption	(35)			(35)			
Net income	5,965			5,963		2	
Other comprehensive income	3,000				3,000		
Repurchases of common stock	(2,538)		(2,538)				
Treasury shares reissued	70		70				
Dividends declared	(1,127)			(1,125)		(2)	
Share based awards and other	155	159				(4)	
Balance October 31, 2021	18,434	5,054	(20,533)	36,449	(2,539)	3	
Acquisitions (see Note 3)							\$ 104
Net income (loss)	7,133			7,131		2	(3)
Other comprehensive loss	(517)				(517)		(15)
Repurchases of common stock	(3,597)		(3,597)				
Treasury shares reissued	36		36				
Dividends declared	(1,329)			(1,327)		(2)	
Share based awards and other	105	111		(6)			6
Balance October 30, 2022	20,265	5,165	(24,094)	42,247	(3,056)	3	92
Net income (loss)	10,168			10,166		2	(13)
Other comprehensive income (loss)	(58)				(58)		9
Repurchases of common stock	(7,274)		(7,274)				
Treasury shares reissued	33		33				
Dividends declared	(1,477)			(1,472)		(5)	
Share based awards and other	132	138		(10)		4	9
Balance October 29, 2023	\$ 21,789	\$ 5,303	\$ (31,335)	\$ 50,931	\$ (3,114)	\$ 4	\$ 97

The notes to consolidated financial statements are an integral part of this statement.

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1. ORGANIZATION AND CONSOLIDATION

References to “Deere & Company”, “John Deere”, “Deere”, “we”, “us”, or “our” include our consolidated subsidiaries. We manage our business through the following operating segments: production and precision agriculture (PPA), small agriculture and turf (SAT), construction and forestry (CF), and financial services (FS). References to “equipment operations” include PPA, SAT, and CF, while references to “agriculture and turf” include both PPA and SAT.

Principles of Consolidation

The consolidated financial statements represent the consolidation of all companies in which Deere & Company has a controlling interest. Certain variable interest entities (VIEs) are consolidated since we are the primary beneficiary. The primary beneficiary has both the power to direct the activities that most significantly impact the VIEs’ economic performance and the obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIEs. We consolidate certain VIEs related to retail note securitizations (see Note 12).

We record our investment in each unconsolidated affiliated company (20 to 50 percent ownership) at cost, plus or minus our share of the profit or loss after acquisition, and further reduced for any dividends (see Note 16). Other investments (less than 20 percent ownership) are recorded at cost.

Fiscal Year

We use a 52/53 week fiscal year ending on the last Sunday in the reporting period, which generally occurs near the end of October. An additional week is included in the fourth fiscal quarter every five or six years to realign our fiscal quarters with the calendar. The fiscal year ends for 2023, 2022, and 2021 were October 29, 2023, October 30, 2022, and October 31, 2021, respectively. Fiscal years 2023, 2022, and 2021 contained 52 weeks. Unless otherwise stated, references to particular years, quarters, or months refer to our fiscal years and the associated periods in those fiscal years.

Presentation of Amounts

All amounts are presented in millions of dollars, unless otherwise specified.

Argentina

We have equipment operations and financial services operations in Argentina. The U.S. dollar has historically been the functional currency for our Argentina operations, as our business is indexed to the U.S. dollar due to the highly inflationary conditions. The Argentine government has certain capital and currency controls that restrict our ability to access U.S. dollars in Argentina and remit earnings from our Argentine operations. As of October 29, 2023 and October 30, 2022, our net investment in Argentina was \$766 and \$742, respectively. Net sales and revenues from our Argentine operations represented approximately 1 percent of consolidated net sales and revenues for 2023 and 2022. We have employed mechanisms to convert Argentine pesos into U.S. dollars to the extent possible. These mechanisms are short-term in nature, leaving us exposed to long-term currency fluctuations. As of October 29, 2023 and October 30, 2022, the gross peso exposure was \$30 and \$133, respectively, while the net peso exposure (after considering the impact of short-term hedges) was \$5 and \$53, respectively. Argentine peso-denominated monetary assets and liabilities are remeasured at each balance sheet date using the official currency exchange rate.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND NEW ACCOUNTING STANDARDS

The following are significant accounting policies in addition to those included in other notes to the consolidated financial statements.

Use of Estimates in Financial Statements

Certain accounting policies require management to make estimates and assumptions in determining the amounts reflected in the financial statements and related disclosures. Actual results could differ from those estimates.

Revenue Recognition

General

Sales of equipment and service parts are recognized when we transfer control of the good to the independent customer, which generally occurs upon shipment. In most situations, the independent customer is a dealer, which subsequently sells the equipment and service parts purchased from us to a retail customer, who can finance the equipment with the financial services segment or another source of financing. In some

situations, we sell directly to a retail customer. The term “customer” includes both dealers and retail customers to whom we make direct sales.

Interest-Free Periods and Past-Due Interest

We charge dealers interest on outstanding balances from the earlier of when goods are sold to a retail customer by the dealer or the expiration of the interest-free period granted at the time of the sale to the dealer. Interest-free periods are determined based on the type of equipment sold and the time of year of the sale. These periods range from one to twelve months for most equipment. Interest-free periods may not be extended. Interest charged may not be forgiven, and past due interest rates are charged at higher rates. If the interest-free or below market interest rate period exceeds one year, we adjust the expected sales revenue for the effects of the time value of money using a current market interest rate. The revenue related to the financing component is recognized in “Finance and interest income” using the interest method. We do not adjust the sales price to account for a financing component if the expected interest-free or below market period is one year or less.

Right of Return

Generally, no right of return exists on sales of equipment. Dealers cannot cancel purchases after we recognize a sale and are responsible for payment even if the equipment is not sold to a retail customer. Service parts and certain attachment returns are estimable and accrued at the time a sale is recognized. The estimated returns are based on historical return rates, current dealer inventory levels, and current economic conditions. The estimated returns are recorded in “Other assets” for the inventory value of estimated returns, adjusted for restocking fees. The estimated dealer refund liability, adjusted for restocking fees, is recorded in “Accounts payable and accrued expenses.”

Remanufacturing

We remanufacture used engines and components (cores) that are sold to dealers and retail customers for maintenance and repair parts. Revenue for remanufactured components is recognized using the same criteria as other parts sales. When a remanufactured part is sold, we collect a deposit that is repaid if the customer returns a core that meets certain specifications within a defined time period. The deposit received from the customer is recognized as a liability in “Accounts payable and accrued expenses” and the used component that is expected to be returned is recognized in “Other assets.” When a customer returns a core, the deposit is repaid, the liability reversed, and the returned core is recorded in inventory to be remanufactured and sold to another customer. If a core is not returned within the required time, the deposit is recognized as revenue in “Net sales,” and the cost of the core is recorded as an expense in “Cost of sales.”

Bundled Technology

Certain equipment is sold with precision guidance, telematics, and other information gathering and analyzing capabilities. These technology solutions require hardware, software, and may include an obligation to provide services for a period of time. These solutions are mostly bundled with the sale of the equipment but

can also be purchased or renewed separately. The revenue related to the hardware and embedded software is recognized at the time of the equipment sale and recorded in “Net sales.” The revenue for the future services and usage-based software is deferred and recognized over the service period. The deferred revenue is recorded as a contract liability in “Accounts payable and accrued expenses.”

Financing Revenue and Origination Costs

Financing revenue and deferred costs on the origination of financing receivables are recorded over the lives of the related receivables using the interest method. Deferred costs are recognized as a reduction to “Finance and interest income.” Income and deferred costs on the origination of operating leases are recognized on a straight-line basis over the scheduled lease terms in “Finance and interest income.”

Sales Incentives

We offer sales incentive programs to promote the sale of our products from the dealer to the retail customer. At the time of the sale to a dealer, we record an estimated cost for the sales incentive programs as a reduction to the sales price. The estimated cost is based on historical data, announced and expected incentive programs, field inventory levels, and forecasted sales volumes. The final cost of these programs is determined at the end of the measurement period for volume-based incentives or when the dealer sells the equipment to a retail customer. Actual cost differences from the original cost estimate are recognized in “Net sales.”

Product Warranties

For equipment and service parts sales, we provide a standard warranty. At the time a sale is recognized, the estimated future warranty costs are recorded. The warranty liability is estimated based on historical warranty claims rate experience and the estimated amount of equipment still under warranty. The historical claims rate is primarily determined by a review of five-year claims costs while also taking into consideration current quality developments. The amount of equipment still under warranty is estimated based on dealer inventories and retail sales.

We also offer extended warranty arrangements for purchase at the customer’s option. The premiums for extended warranties are recognized in “Other income” primarily in proportion to the costs expected to be incurred over the contract period. The unamortized extended warranty premiums (deferred revenue) are recorded in “Accounts payable and accrued expenses” (see Note 18).

Sales and Transaction Taxes

We collect and remit taxes for revenue producing transactions as necessary based on various tax laws. These taxes include sales, use, value-added, and some excise taxes. We elected to exclude these taxes from the determination of the sales price. These taxes are not included in revenues.

Contract Costs

Incremental costs of obtaining an equipment revenue contract are recognized as an expense when incurred since the amortization period would be one year or less.

Advertising Costs

Advertising costs are charged to "Selling, administrative and general expenses" as incurred. Advertising costs were \$244 in 2023, \$227 in 2022, and \$212 in 2021.

Depreciation and Amortization

Property and equipment, capitalized software, and other intangible assets are stated at cost less accumulated depreciation or amortization. These assets are depreciated over their estimated useful lives using the straight-line method. Equipment on operating leases is depreciated over the terms of the leases using the straight-line method. Property and equipment expenditures for new and revised products, increased capacity, and the replacement or major renewal of significant items are capitalized. Expenditures for maintenance, repairs, and minor renewals are charged to expense as incurred.

Cash and Cash Equivalents

We consider investments with purchased maturities of three months or less to be cash equivalents.

Receivables and Allowances

All financing and trade receivables are reported on the balance sheet at outstanding principal and accrued interest, adjusted for:

- write-offs,
- allowance for credit losses, and
- unamortized deferred fees or costs on originated financing receivables.

The allowance is a reduction to the receivable balances, and the provision is recorded in "Selling, administrative and general expenses." The allowance for credit losses is an estimate of the credit losses expected over the life of the receivable portfolio. The allowance is measured on a collective basis for receivables with similar risk characteristics. Receivables that do not share risk characteristics are evaluated on an individual basis. Risk characteristics include:

- finance product category,
- market,
- geography,
- credit risk, and
- remaining balance.

We utilize the following loss forecast models to estimate expected credit losses:

- Transition matrix models are used for large and complex retail customer receivable pools. These models are used for more than 90 percent of retail customer receivables. Historical portfolio performance and current delinquency levels are used to forecast future defaults. Estimated recovery rates are applied to the estimated default balance to calculate the expected credit losses.
- Weighted average remaining maturity (WARM) models are used for smaller and less complex retail customer receivable pools.
- Historical loss rate models are used on wholesale receivables, with consideration of current economic conditions and dealer financial risk.

The model output is adjusted for forecasted economic conditions, which may include the following economic indicators:

- commodity prices,
- industry equipment sales,
- unemployment rates, and
- housing starts.

Management reviews each model's output quarterly, and qualitative adjustments are incorporated as necessary (see Note 11).

Long-Lived Assets, Goodwill, and Other Intangible Asset Impairment

We evaluate the carrying value of long-lived assets (including equipment on operating leases, property and equipment, goodwill, and other intangible assets) when events or circumstances warrant such a review. Goodwill and unamortized intangible assets are tested for impairment annually at the end of the third quarter of each fiscal year, and more often if events or circumstances may have caused the fair value to fall below the carrying value. If the carrying value of the long-lived asset is considered impaired, the long-lived asset is written down to its fair value (see Notes 4 and 25).

Goodwill is allocated and reviewed for impairment by reporting unit. Goodwill is allocated to the reporting unit in which the business that created the goodwill resides. To test for goodwill impairment, the carrying value of each reporting unit is compared with its fair value. If the carrying value of the goodwill is considered impaired, the impairment is measured as the reporting unit's carrying value minus the fair value.

Derivative Financial Instruments

It is our policy to use derivative transactions only to manage exposures from the normal course of business. We do not execute derivative transactions for the purpose of creating speculative positions or trading. Our financial services operations have interest rate and foreign currency exposure between (a) the receivable or lease portfolio and (b) how those portfolios are funded. We also have foreign currency exposures at some of our foreign and domestic operations related to buying, selling, and financing in currencies other than the functional currencies. In addition, we have interest rate and foreign currency exposure at certain equipment operations units for sales incentive programs.

All derivatives are recorded at fair value on the consolidated balance sheets. Cash collateral received or paid is not offset against the derivative fair values on the balance sheets. The cash flows from the derivative contracts are recorded in operating activities in the statements of consolidated cash flows. Each derivative is designated as a cash flow hedge, fair value hedge, or remains undesignated.

Changes in the fair value of derivatives are recorded as follows:

- Cash flow hedges: Recorded in other comprehensive income (OCI) and reclassified to the income statement when the effects of the item being hedged are recognized in the income statement. These amounts offset the effects of interest rate changes on the related borrowings in interest expense.

- Fair value hedges: Recorded in interest expense, and the gains or losses are offset by the fair value gains or losses on the hedged items (fixed-rate borrowings), which are also recorded in interest expense.
- Derivatives not designated as hedging instruments: Changes in the fair value of undesignated hedges are recognized as they occur in the income statement.

All designated hedges are formally documented as to the relationship with the hedged item as well as the risk-management strategy. Both at inception and on an ongoing basis, the hedging instrument is assessed for its effectiveness. If and when a derivative is determined not to be highly effective as a hedge, the underlying hedged transaction is no longer likely to occur, the hedge designation is removed, or the derivative is terminated, hedge accounting is discontinued (see Note 26).

Foreign Currency Translation

The functional currencies for most of our foreign operations are their respective local currencies. The assets and liabilities of these operations are translated into U.S. dollars using the exchange rates at the end of the period. The revenues and expenses are translated at weighted-average rates for the period. The gains or losses from these translations are recorded in OCI.

Foreign currency gains or losses and foreign exchange components of derivative contracts are included in net income, with trade flow activity recorded in "Cost of sales," sales incentive activity recorded in "Net sales," and all other activity recorded in "Other operating expenses." The pretax net loss for foreign exchange in 2023, 2022, and 2021 was \$159, \$175, and \$134, respectively.

New Accounting Standards

We closely monitor all Accounting Standard Updates (ASUs) issued by the Financial Accounting Standards Board (FASB) and other authoritative guidance. We adopted the following standards in 2023, none of which had a material effect on our consolidated financial statements:

New Accounting Standards Adopted

No. 2021-10 — Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance

No. 2021-05 — Leases (Topic 842): Lessors — Certain Leases with Variable Lease Payments

No. 2021-04 — Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity Classified Written Call Options

We will adopt the following standards in future periods, none of which are expected to have a material effect on our consolidated financial statements.

New Accounting Standards to be Adopted

No. 2022-04 — Liabilities — Supplier Finance Programs (Subtopic 405-50): Disclosure of Supplier Finance Program Obligations

No. 2022-02 — Financial Instruments — Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures

No. 2022-01 — Derivatives and Hedging (Topic 815): Fair Value Hedging — Portfolio Layer Method

No. 2021-08 — Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers

3. ACQUISITIONS AND DISPOSITIONS

During the presented periods, we completed acquisitions to support our Leap Ambitions, which focus on advancing our capabilities in technology.

Acquisitions

2023 Acquisitions

In 2023, we acquired SparkAI Inc. (Spark AI) and Smart Apply, Inc. (Smart Apply) to accelerate the integration of smart technology innovation in our products. The combined cost of these acquisitions was \$82, net of cash acquired of \$2. Spark AI was assigned to the PPA segment, while Smart Apply was assigned to the SAT segment. Most of the purchase price for these acquisitions was allocated to goodwill.

2022 Acquisitions

Kreisel

In February 2022, we acquired majority ownership in Kreisel Electric Inc. (Kreisel), a pioneer in the development of immersion-cooled battery technology. The Austrian company manufactures high-density, high-durability electric battery modules and packs for high-performance and off-highway applications and has created a battery-buffered, high-powered charging infrastructure platform. The transaction includes a call option to purchase the remaining ownership interest in Kreisel in 2027. The minority interest holders also have a put option that would require us to purchase the holders' ownership interests in 2027. The put and call options cannot be separated from the noncontrolling interest. Due to the redemption features, the minority interest is classified as redeemable noncontrolling interest in our consolidated balance sheets.

The total cash purchase price was \$276, consisting of \$253 for the acquired equity interests, \$21 to reduce the option price, and customary working capital adjustments, net of cash acquired. The fair values assigned to the assets and liabilities of the acquired entity, which are based on information as of the acquisition date and available at October 30, 2022, follows:

	February 2022
Trade accounts and notes receivable	\$ 2
Other receivables	11
Inventories	11
Property and equipment	11
Goodwill	218
Other intangible assets	178
Other assets	6
Total assets	\$ 437
Accounts payable and accrued expenses	\$ 26
Deferred income taxes	39
Redeemable noncontrolling interest	\$ 96

The identifiable intangible assets were related to technology, trade name, and customer relationships with a weighted average amortization period of 12 years. The goodwill is not deductible for income tax purposes. Kreisel is allocated amongst the PPA, SAT, and CF segments.

Excavator Factories

In March 2022, we acquired full ownership of three former Deere-Hitachi joint venture factories and began new license and supply agreements with Hitachi Construction Machinery Co., Ltd. (Hitachi). The two companies also ended their joint venture manufacturing and marketing agreements. The former joint venture factories continue to manufacture Deere-branded construction excavators and forestry equipment. Through a new supply agreement with Hitachi, Deere continues to offer a full portfolio of excavators. Deere's marketing arrangement for Hitachi-branded construction excavators and mining equipment in the Americas ended with Hitachi assuming distribution and support of these products. John Deere dealers may continue to support their existing field population of Hitachi-branded excavators.

With the completion of this acquisition, we now have complete control over the excavator design, product, and feature updates, making it possible to more rapidly respond to customer requirements and integrate excavators with other construction products in the John Deere product portfolio. We can leverage technology developed for other product lines and production systems across the enterprise and extend those advanced solutions to Deere-designed excavators, strengthening the entire product portfolio. The total invested capital is as follows:

	March 2022
Cash consideration for factories	\$ 205
Cash consideration for license agreement	70
Deferred consideration	271
Total purchase price consideration	546
Less: Cash obtained	(187)
Less: Settlement of intercompany balances	(113)
Net purchase price consideration	246
Fair value of previously held equity investment	444
Total invested capital	\$ 690

The total purchase price consideration includes deferred consideration that will be paid as we purchase Deere-branded excavators, components, and service parts from Hitachi under the new supply agreement with a duration that ranges from 5 to 30 years. The deferred consideration represents the price increases under the new supply arrangement. Excluding inflation adjustments, the price increases for products to be acquired by us from Hitachi are as much as 27 percent higher than the prior supply arrangement. We financed the acquisition and associated transaction expenses from cash on hand. The fair value of the previously held equity investment created a non-cash gain of \$326 (pretax and after-tax), which was recorded in "Other income" and included in the CF segment's operating profit.

Prior to the acquisition, we purchased Deere- and Hitachi-branded excavators, components, and parts from the Deere-Hitachi joint venture factories for sale to John Deere dealers. These purchases were included in Cost of sales, while the sales to John Deere dealers were included in Net sales. Cost of sales also included profit-sharing payments to Hitachi in accordance with the previous marketing agreements. Following the acquisition, Net sales only

includes the sale of Deere-branded excavators to John Deere dealers, while Cost of sales reflects market pricing to purchase and manufacture excavators, as well as the related components and service parts.

The fair values assigned to the assets and liabilities of the acquired factories, which are based on information as of the acquisition date and available at October 30, 2022, follow:

	March 2022
Other receivables	\$ 29
Inventories	286
Property and equipment	180
Goodwill	529
Other intangible assets	70
Deferred income taxes	56
Other assets	3
Total assets	\$ 1,153
Accounts payable and accrued expenses	\$ 300
Long-term borrowings	163
Total liabilities	\$ 463

The identifiable intangible assets were related to technology with a 10-year amortization period. The goodwill is not deductible for income tax purposes. The excavator factories are reported in the CF segment.

Other Acquisitions

In 2022, we acquired AgriSync Inc. (AgriSync), a technology service provider; an 80 percent stake in both SureFire Ag Systems, Inc. and SureFire Electronics, LLC (renamed after acquisition and collectively referred to as SurePoint), which design and manufacture liquid fertilizer application and spray tendering systems; an equity method investment in GUSS Automation LLC (GUSS Automation), a pioneer in semi-autonomous orchard and vineyard sprayers; LGT, LLC (Light), which specializes in depth sensing and camera-based perception for autonomous vehicles; and an equity method investment in InnerPlant, Inc. (InnerPlant), an early-stage biotech company. The combined cost of these acquisitions was \$134, net of cash acquired of \$3. The asset and liability fair values at the respective acquisition dates follow:

	October 2022
Trade accounts and notes receivable	\$ 8
Inventories	8
Property and equipment	4
Goodwill	53
Other intangible assets	21
Other assets	60
Total assets	\$ 154
Accounts payable and accrued expenses	\$ 6
Deferred income taxes	5
Total liabilities	\$ 11
Redeemable noncontrolling interest	\$ 9

The identifiable intangible assets were related to trade name, technology, and customer relationships with a weighted average amortization period of 7 years. AgriSync was allocated amongst the PPA, SAT, and CF segments, while SurePoint, Light, and InnerPlant were allocated to the PPA segment. GUSS Automation was assigned to the SAT segment.

2021 Acquisitions

Bear Flag

In August 2021, we acquired Bear Flag Robotics, Inc. (Bear Flag) to further accelerate Deere's development and delivery of advanced technology. Bear Flag's technology is complementary to other Deere technology efforts and enables autonomous tractor operations. The total cash purchase price before final adjustments, net of cash acquired of \$4, was \$225, with an additional \$25 to be recognized as compensation expense over the four-year post-acquisition service period. In addition to the cash purchase price, \$19 of liabilities were assumed. The asset and liability fair values at the acquisition date follow:

	August 2021
Property and equipment	\$ 1
Goodwill	189
Other intangible assets	54
Total assets	\$ 244
Accounts payable and accrued expenses	\$ 1
Deferred income taxes	18
Total liabilities	\$ 19

The identified intangible was related to technology with a seven-year amortization period. The goodwill is not deductible for income tax purposes.

For the acquisitions, the goodwill was the result of future cash flows and related fair value exceeding the fair value of the identified assets and liabilities. The results of these operations have been included in our consolidated financial statements, and the pro forma results of operations as if these acquisitions had occurred at the beginning of the current or comparative fiscal year would not differ significantly from the reported results.

Dispositions

In October 2023, we sold our roadbuilding business in Russia. At the time of the sale, total assets were \$32, consisting primarily of restricted cash, total liabilities were \$1, and the cumulative translation loss was \$11. Total proceeds from the sale include \$16 of cash and \$8 of deferred consideration. A pretax and after-tax loss of \$18 was recorded in "Other operating expenses" in the CF segment.

In March 2023, we sold our financial services business in Russia (registered in Russia as a leasing company) to Insight Investment Group. The total proceeds, net of restricted cash sold, were \$36. The operations were included in the financial services operating segment through the date of sale. At the disposal date, the total assets were \$31, consisting primarily of financing receivables, the total liabilities were \$5, and the cumulative translation loss was \$10. In the first quarter of 2023, we reversed the allowance for

credit losses and recorded a valuation allowance on the assets held for sale in "Selling, administrative and general expenses." We did not incur additional gains or losses upon disposition.

4. SPECIAL ITEMS

We were impacted by the following infrequent items. These items should not be considered recurring in nature.

2023 Special Items

Sale of Russian Roadbuilding Business

In the fourth quarter of 2023, we sold our Russian roadbuilding business, recognizing a loss of \$18 (pretax and after-tax). The loss was recorded in "Other operating expenses" in the construction and forestry operations.

Brazil Tax Ruling

In the third quarter of 2023, the Brazil Superior Court of Justice published a favorable tax ruling regarding taxability of local incentives, which allowed us to record a \$243 reduction in the provision for income taxes and \$47 of interest income.

Financial Services Financing Incentives Correction

In the second quarter of 2023, we corrected the accounting treatment for financing incentives offered to John Deere dealers, which impacted the timing of expense recognition and the presentation of incentive costs in the consolidated financial statements. The cumulative effect of this correction, \$173 pretax (\$135 after-tax), was recorded in the second quarter of 2023. Prior period results for Deere & Company were not restated, as the adjustment was considered immaterial to our financial statements.

2022 Special Items

UAW Collective Bargaining Agreement

In November 2021, employees represented by the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW) approved a new collective bargaining agreement. The agreement, which has a term of six years, covers the wages, hours, benefits, and other terms and conditions of employment for our UAW-represented employees at 14 U.S. facilities. The labor agreement included a lump sum ratification bonus payment of \$8,500 per eligible employee, totaling \$90 million, and an immediate wage increase of 10 percent plus further wage increases over the term of the contract. The lump sum payment was expensed in the first quarter of 2022.

Impact of Events in Russia / Ukraine

We suspended shipments of machines and service parts to Russia due to the events in Russia / Ukraine. The suspension of shipments reduced the forecasted revenue for the region, which made it probable future cash flows would not cover the carrying value of certain assets. As a result, an impairment was recorded for most long-lived assets in Russia, and our U.S. senior management decided to initiate a voluntary employee-separation program. We also recorded a reserve on inventory, and increased our allowance for credit losses, reflecting economic uncertainty in Russia.

The financial services operations received an intercompany benefit from the equipment operations, which guarantees the financial

services' investments in certain international markets, including Russia.

The Russian government imposed certain restrictions on companies' abilities to repatriate or remit cash from their Russian-based operations to locations outside of Russia. Cash in excess of what was required to fund operations in Russia was reclassified as restricted. A summary of the reserves, impairments, and voluntary-separation costs recorded in 2022 follows. See Note 25 for fair value measurement information.

	PPA	SAT	CF	FS	Total
Inventory reserve –					
Cost of sales	\$ 14	\$ 2	\$ 3		\$ 19
Fixed asset impairment –					
Cost of sales	30		11		41
Intangible asset impairment –					
Cost of sales			28		28
Allowance for credit losses –					
Financing receivables –					
SA&G expenses				\$ 153	153
Voluntary-separation program:					
– Cost of sales	3				3
– SA&G expenses	4		6	1	11
Intercompany agreement	82	9	62	(153)	
Total Russia/Ukraine events					
pretax expense	\$ 133	\$ 11	\$ 110	\$ 1	255
Net tax impact					(40)
Total Russia/Ukraine events					
after-tax expense					\$ 215

Gain on Previously Held Equity Investment

In March 2022, we acquired full ownership of three former Deere-Hitachi joint venture factories and began new license and supply agreements with Hitachi. The fair value of the previous equity investment resulted in a non-cash gain of \$326 (pretax and after-tax; see Note 3).

Summary of 2023 and 2022 Special Items

The following table summarizes the operating profit impact of the special items recorded in 2023 and 2022:

	PPA	SAT	CF	FS	Total
2023 Expense					
Russian roadbuilding sale – Other					
operating expense			\$ 18		\$ 18
Financing incentive – SA&G					
expense				\$ 173	173
Total expense			18	173	191
2022 Expense (benefit)					
Gain on remeasurement of equity					
investment – Other income					
(Note 3)			(326)		(326)
Total Russia/Ukraine events					
pretax expense	\$ 133	\$ 11	110	1	255
UAW ratification bonus – Cost of					
sales	53	9	28		90
Total expense (benefit)	186	20	(188)	1	19
Year over year change	<u>\$ (186)</u>	<u>\$ (20)</u>	<u>\$ 206</u>	<u>\$ 172</u>	<u>\$ 172</u>

5. REVENUE RECOGNITION

Our net sales and revenues by primary geographic market, major product line, and timing of revenue recognition follow:

	PPA	SAT	CF	FS	Total
2023					
Primary geographic					
markets:					
United States	\$ 13,917	\$ 7,796	\$ 9,109	\$ 3,283	\$ 34,105
Canada	1,738	687	1,221	641	4,287
Western Europe	2,640	2,824	1,725	132	7,321
Central Europe and CIS	1,218	530	353	36	2,137
Latin America	5,608	707	1,429	453	8,197
Asia, Africa, Oceania,					
and Middle East	2,166	1,679	1,183	176	5,204
Total	<u>\$ 27,287</u>	<u>\$ 14,223</u>	<u>\$ 15,020</u>	<u>\$ 4,721</u>	<u>\$ 61,251</u>
Major product lines:					
Production agriculture	\$ 26,450				\$ 26,450
Small agriculture		\$ 10,122			10,122
Turf		3,505			3,505
Construction			\$ 6,842		6,842
Compact construction			2,451		2,451
Roadbuilding			3,794		3,794
Forestry			1,429		1,429
Financial products	219	96	58	\$ 4,721	5,094
Other	618	500	446		1,564
Total	<u>\$ 27,287</u>	<u>\$ 14,223</u>	<u>\$ 15,020</u>	<u>\$ 4,721</u>	<u>\$ 61,251</u>
Revenue recognized:					
At a point in time	\$ 26,969	\$ 14,092	\$ 14,915	\$ 111	\$ 56,087
Over time	318	131	105	4,610	5,164
Total	<u>\$ 27,287</u>	<u>\$ 14,223</u>	<u>\$ 15,020</u>	<u>\$ 4,721</u>	<u>\$ 61,251</u>

	PPA	SAT	CF	FS	Total
2022					
Primary geographic markets:					
United States	\$ 10,975	\$ 7,741	\$ 7,103	\$ 2,419	\$ 28,238
Canada	1,387	676	1,238	601	3,902
Western Europe	2,188	2,478	1,576	102	6,344
Central Europe and CIS	1,207	488	545	49	2,289
Latin America	4,991	578	1,467	303	7,339
Asia, Africa, Oceania, and Middle East	1,570	1,608	1,136	151	4,465
Total	\$ 22,318	\$ 13,569	\$ 13,065	\$ 3,625	\$ 52,577
Major product lines:					
Production agriculture	\$ 21,685				\$ 21,685
Small agriculture		\$ 10,027			10,027
Turf		3,027			3,027
Construction			\$ 5,864		5,864
Compact construction			1,667		1,667
Roadbuilding			3,441		3,441
Forestry			1,308		1,308
Financial products	60	52	32	\$ 3,625	3,769
Other	573	463	753		1,789
Total	\$ 22,318	\$ 13,569	\$ 13,065	\$ 3,625	\$ 52,577
Revenue recognized:					
At a point in time	\$ 22,178	\$ 13,493	\$ 12,980	\$ 105	\$ 48,756
Over time	140	76	85	3,520	3,821
Total	\$ 22,318	\$ 13,569	\$ 13,065	\$ 3,625	\$ 52,577
	PPA	SAT	CF	FS	Total
2021					
Primary geographic markets:					
United States	\$ 8,223	\$ 6,505	\$ 5,697	\$ 2,389	\$ 22,814
Canada	853	498	1,047	617	3,015
Western Europe	2,086	2,433	1,807	103	6,429
Central Europe and CIS	1,322	475	828	39	2,664
Latin America	2,916	456	903	247	4,522
Asia, Africa, Oceania, and Middle East	1,417	1,679	1,331	153	4,580
Total	\$ 16,817	\$ 12,046	\$ 11,613	\$ 3,548	\$ 44,024
Major product lines:					
Production agriculture	\$ 16,248				\$ 16,248
Small agriculture		\$ 8,619			8,619
Turf		2,853			2,853
Construction			\$ 4,684		4,684
Compact construction			1,489		1,489
Roadbuilding			3,749		3,749
Forestry			1,280		1,280
Financial products	55	46	20	\$ 3,548	3,669
Other	514	528	391		1,433
Total	\$ 16,817	\$ 12,046	\$ 11,613	\$ 3,548	\$ 44,024
Revenue recognized:					
At a point in time	\$ 16,659	\$ 11,969	\$ 11,522	\$ 105	\$ 40,255
Over time	158	77	91	3,443	3,769
Total	\$ 16,817	\$ 12,046	\$ 11,613	\$ 3,548	\$ 44,024

Following is a description of the elements of net sales and revenues for our major product lines:

Production Agriculture – Includes net sales of large and certain mid-size tractors and associated attachments, combines, cotton pickers, cotton strippers, sugarcane harvesters, sugarcane loaders and pull behind scrapers, tillage, seeding, and application equipment, including sprayers and nutrient management and soil preparation machinery, and related attachments and service parts.

Small Agriculture – Includes net sales of mid-size, utility, and compact utility tractors, self-propelled forage harvesters, hay and forage equipment, balers, mowers, and related attachments and service parts.

Turf – Includes net sales of turf and utility equipment, including riding lawn equipment, golf course equipment, utility vehicles, and commercial mowing equipment, along with a broad line of associated implements, other outdoor power products, and related attachments and service parts.

Construction – Includes net sales of a broad range of machines used in construction, earthmoving, and material handling, including backhoe loaders, crawler dozers and loaders, four-wheel-drive loaders, excavators, motor graders, articulated dump trucks, and related attachments and service parts.

Compact Construction – Includes net sales of smaller construction equipment, including compact excavators, compact track loaders, compact wheel loaders, skid steers, landscape loaders, and related attachments and service parts.

Roadbuilding – Includes net sales of equipment used in roadbuilding and renovation, including milling machines, recyclers, slipform pavers, surface miners, asphalt pavers, compactors, tandem and static rollers, mobile crushers and screens, mobile and stationary asphalt plants, and related attachments and service parts.

Forestry – Includes net sales of equipment used in timber harvesting, including log skidders, feller bunchers, log loaders, log forwarders, log harvesters, and related attachments and service parts.

Financial Products – Includes finance and interest income from retail notes related to sales of John Deere equipment to retail customers, wholesale financing to dealers of John Deere equipment, and revolving charge accounts; lease income from retail leases of John Deere equipment; and revenue from extended warranties.

Other – Includes sales of components to other equipment manufacturers that are included in “Net sales;” revenue earned over time from precision guidance, telematics, and other information enabled solutions; revenue from service performed at company owned dealerships and service centers; gains on disposition of property and businesses; trademark licensing revenue; and other miscellaneous revenue items that are included in “Other income.”

We invoice in advance of recognizing the sale of certain products and the revenue for certain services. These relate to extended warranty premiums, advance payments for future equipment sales, and subscription and service revenue related to precision guidance, telematic services, and other information enabled solutions. These advanced customer payments are presented as deferred revenue, a contract liability, in "Accounts payable and accrued expenses." The deferred revenue received, but not recognized in revenue was \$1,697 and \$1,423 at October 29, 2023 and October 30, 2022, respectively. The contract liability is reduced as the revenue is recognized. Revenue recognized from deferred revenue that was recorded as a contract liability at the beginning of the fiscal year was \$547 in 2023, \$609 in 2022, and \$485 in 2021.

The total amount of unsatisfied performance obligations for contracts with an original duration greater than one year and the estimated revenue to be recognized by fiscal year at October 29, 2023 follows:

Year	Net Sales and Revenues
2024	\$ 457
2025	382
2026	268
2027	161
2028	97
Later years	126
Total	<u>\$ 1,491</u>

As permitted, we elected only to disclose remaining performance obligations with an original contract duration greater than one year. The contracts with an expected duration of one year or less are for sales to dealers and retail customers for equipment, service parts, repair services, and certain telematics services.

6. SUPPLEMENTAL CASH FLOW INFORMATION

All cash flows from receivables related to sales are included in operating activities. This includes all changes in trade accounts and notes receivables, as well as some financing receivables. Financing receivables that are related to loans on equipment sold by independent dealers are included in investing activities.

Our short-term borrowings mature or may require payment within three months or less. During 2023, we issued \$4.5 billion and retired \$3.2 billion of retail note securitization borrowings, which are presented in "Net proceeds (payments) in short-term borrowings (original maturities three months or less)."

Restricted cash, recorded in "Other assets," relates to securitization of financing receivables (see Note 12) and cash held in Russia.

Supplemental cash flow information follows:

	2023	2022	2021
Cash paid for interest	\$ 2,227	\$ 1,101	\$ 1,041
Cash paid for income taxes	3,578	1,940	2,075
Inventory transferred to equipment on operating leases	195	167	662
Accounts payable related to purchases of property and equipment	211	165	121

7. PENSION AND OTHER POSTRETIREMENT BENEFITS

We have several funded and unfunded defined benefit pension plans and other postretirement benefit (OPEB) plans. These plans cover U.S. employees and certain foreign employees. The measurement date of our plans is October 31. The funded status as of October 31, 2023 of the significant plans follows:

	Funded Status	Enrollment Status
Pensions		
U.S. salaried qualified	\$ 1,511	Closed
U.S. hourly qualified	1,042	Open
Other	(477)	Varies
Total	<u>\$ 2,076</u>	
OPEB		
U.S. salaried	\$ (1,086)	Closed
U.S. hourly	178	Closed
Other	(93)	Varies
Total	<u>\$ (1,001)</u>	

The components of net periodic pension and OPEB cost excluding the service component are included in the line item "Other operating expenses."

The components of net periodic pension (benefit) cost and the related assumptions consisted of the following:

	2023	2022	2021
Pensions			
Service cost	\$ 246	\$ 349	\$ 332
Interest cost	533	330	276
Expected return on plan assets	(878)	(726)	(799)
Amortization of actuarial (gain) loss	(13)	132	259
Amortization of prior service cost	38	34	12
Settlements/curtailment	37	45	21
Net (benefit) cost	<u>\$ (37)</u>	<u>\$ 164</u>	<u>\$ 101</u>
Weighted-average assumptions			
Discount rates - service cost	5.2%	3.0%	2.5%
Discount rates - interest cost	5.1%	2.6%	2.1%
Rate of compensation increase	3.8%	3.7%	3.7%
Expected long-term rates of return	6.3%	5.1%	6.0%
Interest crediting rate - U.S. cash balance plans	4.3%	2.1%	1.7%

In November 2021, employees represented by the UAW approved a new collective bargaining agreement. We remeasured the U.S. hourly pension plan, which increased the 2022 pension expense by nearly \$80 with \$35 negatively impacting operating profit.

The 2024 net periodic pension benefit is expected to increase by \$130 due to an increase in the expected long-term rates of return on plan assets (estimated to be 7.0 percent) and the Canadian pension settlement charge recognized in 2023, described below.

The components of net periodic OPEB cost and the assumptions related to the cost consisted of the following:

	2023	2022	2021
OPEB			
Service cost	\$ 27	\$ 45	\$ 48
Interest cost	176	99	102
Expected return on plan assets	(117)	(110)	(77)
Amortization of actuarial (gain) loss	(59)	(18)	27
Amortization of prior service credit	(3)	(4)	(4)
Net cost	\$ 24	\$ 12	\$ 96
Weighted-average assumptions			
Discount rates - service cost	6.1%	3.6%	3.4%
Discount rates - interest cost	5.4%	2.3%	2.1%
Expected long-term rates of return	5.7%	4.4%	5.4%

The benefit plan obligations, funded status, and the assumptions related to the obligations at October 29, 2023 and October 30, 2022 follow:

	Pensions		OPEB	
	2023	2022	2023	2022
Change in benefit obligations				
Beginning of year balance	\$ (10,529)	\$ (14,525)	\$ (3,341)	\$ (4,930)
Service cost	(246)	(349)	(27)	(45)
Interest cost	(533)	(330)	(176)	(99)
Actuarial gain	504	4,122	285	1,492
Prior service cost		(505)		(12)
Benefits paid	838	757	260	282
Health care subsidies			(27)	(33)
Settlement	112			
Foreign exchange and other	(74)	301	(3)	4
End of year balance	<u>(9,928)</u>	<u>(10,529)</u>	<u>(3,029)</u>	<u>(3,341)</u>
Change in plan assets (fair value)				
Beginning of year balance	13,219	17,190	2,136	1,755
Actual loss on plan assets	(387)	(3,070)	(8)	(495)
Employer contribution	70	85	158	1,155
Benefits paid	(838)	(757)	(260)	(282)
Settlement	(112)			
Foreign exchange and other	52	(229)	2	3
End of year balance	<u>12,004</u>	<u>13,219</u>	<u>2,028</u>	<u>2,136</u>
Funded status	\$ 2,076	\$ 2,690	\$ (1,001)	\$ (1,205)
Weighted-average assumptions				
Discount rates	5.9%	5.4%	6.0%	5.6%
Rate of compensation increase	3.8%	3.8%		
Interest crediting rate - U.S. cash balance plans	4.9%	4.4%		

The actuarial gain for pension for 2023 was due to an increase in discount rates. The actuarial gain for OPEB for 2023 was due to changes to health care assumptions. The actuarial gains for pension and OPEB for 2022 were due to an increase in discount rates. The pension prior service cost for 2022 was due to the new UAW collective bargaining agreement.

During 2023, we irrevocably transferred to an insurance company \$112 of a Canadian pension plan's defined benefit obligations and related plan assets. The transaction resulted in no changes to the benefits to be received by the retired participants. We recognized a one-time, non-cash, pretax pension settlement charge of \$36 related to the accelerated recognition of actuarial losses included within "Accumulated other comprehensive income (loss)."

The discount rate assumptions used to determine the pension and OPEB obligations for all periods presented were based on hypothetical AA yield curves represented by a series of annualized individual discount rates. These discount rates represent the rates at which our benefit obligations could effectively be settled at the October 31 measurement dates.

The mortality assumptions for the 2023 and 2022 U.S. benefit plan obligations used the most recent tables and scales issued by the Society of Actuaries at that time. The 2023 and 2022 mortality assumptions included an adjustment to the scale related to COVID for some plans.

The weighted-average annual rates of increase in the per capita cost of covered health care benefits (the health care cost trend rates) for medical and prescription drug claims for pre- and post-65 age groups used to determine the October 29, 2023 and October 30, 2022 accumulated postretirement benefit obligations were as follows:

	2023	2022
Initial year	18.7% (2023 to 2024)	0.0% (2022 to 2023)
Second year	8.8% (2024 to 2025)	12.6% (2023 to 2024)
Ultimate	4.7% (2032 to 2033)	4.7% (2032 to 2033)

An increase in Medicare Advantage premiums and prescription drug trends impacted the weighted-average annual rates of increase for the initial year in 2023. A decrease in Medicare Advantage premiums impacted the weighted-average annual rates of increase for the initial year in 2022.

Information related to pension plans benefit obligations at October 29, 2023 and October 30, 2022 follows:

	2023	2022
Total accumulated benefit obligations for all plans	\$ 9,453	\$ 10,068
Plans with accumulated benefit obligation exceeding fair value of plan assets:		
Accumulated benefit obligations	1,147	1,116
Fair value of plan assets	704	672
Plans with projected benefit obligation exceeding fair value of plan assets:		
Projected benefit obligations	1,261	1,225
Fair value of plan assets	729	692

The pension and OPEB amounts recognized in the balance sheet at October 29, 2023 and October 30, 2022 consisted of the following:

	Pensions		OPEB	
	2023	2022	2023	2022
Noncurrent asset	\$ 2,608	\$ 3,223	\$ 399	\$ 507
Less: Current liability	59	42	40	39
Less: Noncurrent liability	473	491	1,360	1,673
Total	<u>\$ 2,076</u>	<u>\$ 2,690</u>	<u>\$ (1,001)</u>	<u>\$ (1,205)</u>

The retirement benefits and other liabilities recognized in the balance sheet at October 29, 2023 and October 30, 2022 consisted of the following:

	2023	2022
Deferred compensation - current	\$ 25	\$ 30
Deferred compensation and other - noncurrent	183	182
Pensions and OPEB - current	99	81
Pensions and OPEB - noncurrent	1,833	2,164
Total	<u>\$ 2,140</u>	<u>\$ 2,457</u>

The amounts recognized in accumulated other comprehensive income – pretax at October 29, 2023 and October 30, 2022 consisted of the following:

	Pensions		OPEB	
	2023	2022	2023	2022
Net actuarial (gain) loss	\$ 1,660	\$ 926	\$ (921)	\$ (820)
Prior service (credit) cost	406	446	(1)	(4)
Total	<u>\$ 2,066</u>	<u>\$ 1,372</u>	<u>\$ (922)</u>	<u>\$ (824)</u>

Actuarial gains and losses are recorded in accumulated other comprehensive income (loss). To the extent unamortized gains and losses exceed 10 percent of the higher of the market-related value of assets or the benefit obligation, the excess is amortized as a component of net periodic (benefit) cost over the remaining service period of the active participants. For plans in which all or almost all of the plan's participants are inactive, the amortization period is the remaining life expectancy of the inactive participants.

Contributions

We make any required contributions to the plan assets under applicable regulations and voluntary contributions after evaluating our liquidity position and ability to make tax-deductible contributions. Total contributions to the plans were \$228 in 2023 and \$1,240 in 2022, which included both required and voluntary contributions and direct benefit payments. 2022 OPEB contributions included a voluntary contribution of \$1,000 to a U.S. plan.

We expect to contribute approximately \$85 to our pension plans and approximately \$140 to our OPEB plans in 2024. The contributions include required and voluntary contributions and direct benefit payments from company funds. We have no significant required contributions to U.S. pension plan assets in 2024 under applicable funding regulations.

Expected Future Benefit Payments

The expected future benefit payments at October 29, 2023 were as follows:

	Pensions	OPEB*
2024	\$ 746	\$ 249
2025	726	252
2026	727	257
2027	720	257
2028	708	257
2029 to 2033	3,564	1,251

* Net of prescription drug group benefit subsidy under Medicare Part D.

Plan Asset Information

The fair values of the pension plan assets at October 29, 2023 follow:

	Total	Level 1	Level 2	Level 3
Cash and short-term investments	\$ 513	\$ 470	\$ 43	
Equity:				
U.S. equity securities	342	330	12	
International equity securities and funds	199	197	2	
Fixed Income:				
Government and agency securities	1,017	759	258	
Corporate debt securities	4,389		4,389	
Mortgage-backed securities	285		285	
Private equity	18			\$ 18
Other investments	50	30	20	
Derivative contracts - assets	53	17	36	
Derivative interest rate contracts - liabilities	(309)	(215)	(94)	
Receivables, prepaids, and payables	(137)	(137)		
Securities lending collateral	615		615	
Securities lending liability	(615)		(615)	
Securities sold short	(73)	(69)	(4)	
Total of Level 1, Level 2, and Level 3 assets	<u>6,347</u>	<u>\$ 1,382</u>	<u>\$ 4,947</u>	<u>\$ 18</u>
Investments at net asset value:				
Short-term investments	362			
U.S. equity funds	92			
International equity funds	151			
Fixed income funds	1,418			
Real estate funds	462			
Hedge funds	491			
Private equity	1,306			
Venture capital	1,341			
Other investments	34			
Total net assets	<u>\$ 12,004</u>			

The fair values of the OPEB health care assets at October 29, 2023 follow:

	Total	Level 1	Level 2
Cash and short-term investments	\$ 76	\$ 76	
Fixed Income:			
Government and agency securities	637	596	\$ 41
Corporate debt securities	515		515
Mortgage-backed securities	89		89
Other	8	5	3
Securities lending collateral	122		122
Securities lending liability	(122)		(122)
Total of Level 1 and Level 2 assets	1,325	\$ 677	\$ 648
Investments at net asset value:			
Fixed income funds	392		
Real estate funds	104		
Hedge funds	104		
Private equity	43		
Venture capital	43		
Other investments	17		
Total net assets	\$ 2,028		

The fair values of the pension plan assets at October 30, 2022 follow:

	Total	Level 1	Level 2
Cash and short-term investments	\$ 338	\$ 283	\$ 55
Equity:			
U.S. equity securities	311	290	21
International equity securities and funds	196	195	1
Fixed Income:			
Government and agency securities	1,296	1,053	243
Corporate debt securities	4,587		4,587
Mortgage-backed securities	213		213
Other investments	49	31	18
Derivative contracts - assets	92	54	38
Derivative contracts - liabilities	(209)	(106)	(103)
Receivables, prepaids, and payables	(207)	(207)	
Securities lending collateral	684		684
Securities lending liability	(684)		(684)
Securities sold short	(64)	(58)	(6)
Total of Level 1 and Level 2 assets	6,602	\$ 1,535	\$ 5,067
Investments at net asset value:			
Short-term investments	633		
U.S. equity funds	54		
International equity funds	125		
Fixed income funds	1,736		
Real estate funds	592		
Hedge funds	569		
Private equity	1,322		
Venture capital	1,553		
Other investments	33		
Total net assets	\$ 13,219		

The fair values of the OPEB health care assets at October 30, 2022 follow:

	Total	Level 1	Level 2
Cash and short-term investments	\$ 79	\$ 79	
Fixed Income:			
Government and agency securities	629	597	\$ 32
Corporate debt securities	516		516
Mortgage-backed securities	83		83
Other	(4)	(7)	3
Securities lending collateral	98		98
Securities lending liability	(98)		(98)
Total of Level 1 and Level 2 assets	1,303	\$ 669	\$ 634
Investments at net asset value:			
U.S. equity funds	40		
International equity funds	22		
Fixed income funds	347		
Real estate funds	140		
Hedge funds	188		
Private equity	41		
Venture capital	48		
Other investments	7		
Total net assets	\$ 2,136		

Investments at net asset value in the preceding tables are measured at fair value using the net asset value per share practical expedient and are not classified in the fair value hierarchy. Fair value measurement levels in the preceding tables are defined in Note 25.

Fair values are determined as follows:

Cash and Short-Term Investments – The investments include (1) cash accounts that are valued based on the account value, which approximates fair value; (2) investments that are valued at quoted prices in the active markets in which the investment trades or using a market approach (matrix pricing model) in which all significant inputs are observable or can be derived from or corroborated by observable market data; and (3) investment funds that are valued based on a constant fund net asset value, which is based on quoted prices in the active market in which the investment fund trades, or the fund's net asset value using the net asset value per share practical expedient (NAV), which is based on the fair value of the underlying securities.

Equity Securities and Funds – The values are determined by quoted prices in the active market in which the equity investment trades, or the fund's NAV, based on the fair value of the underlying securities.

Fixed Income Securities and Funds and Other Funds – The securities are valued using either a market approach (matrix pricing model) in which all significant inputs are observable or can be derived from or corroborated by observable market data such as interest rates, yield curves, volatilities, credit risk, and prepayment speeds, or they are valued using the quoted prices in the active market in which the fixed income investment trades. Fixed income and other funds are valued using the fund's NAV, based on the fair value of the underlying securities.

Real Estate, Venture Capital, Private Equity, and Hedge Funds – The investments that are structured as limited partnerships, excluding the private equity investments classified as Level 3, are valued at estimated fair value based on their proportionate share of the limited partnership's fair value that is determined by the respective general partner. These investments are valued using the fund's NAV, which is based on the fair value of the underlying investments. Valuations may be lagged up to six months. The NAV is adjusted for cash flows (additional investments or contributions, and distributions) and any known substantive valuation changes through year end. The private equity investments classified as Level 3 are valued based on the current market pricing of the assets related to an expected secondary sale. The investments were transferred into Level 3 as of October 29, 2023.

Derivative Instruments – The derivatives are valued using either an income approach (discounted cash flow) using market observable inputs, including swap curves and both forward and spot exchange rates, or a market approach (quoted prices in the active market in which the derivative instrument trades).

The investment objective for the pension and health care plan assets is to fulfill the projected obligations to the beneficiaries over a long period of time, while meeting our fiduciary responsibilities. The asset allocation policy is the most important decision in managing the assets, and it is reviewed regularly. The asset allocation policy considers our long-term asset class risk/return expectations for each plan since the obligations are long-term in nature. The target asset allocations as of October 29, 2023 are as follows:

	Pension Assets	Health Care Assets
Equity	5%	9%
Debt	68%	83%
Real estate	4%	2%
Other investments	23%	6%

The assets are diversified and are managed by professional investment firms as well as by investment professionals who are company employees. As a result of our diversified investment policy, there were no significant concentrations of risk.

A market related value of plan assets is used to calculate the expected return on assets. The market related value recognizes changes in the fair value of pension plan assets systematically over a five-year period. The market related value of the health care plan assets equals fair value.

The expected long-term rate of return on plan assets reflects management's expectations of long-term average rates of return on funds invested to provide for benefits included in the projected benefit obligations. The expected return is based on the outlook for inflation and for returns in multiple asset classes, while also considering historical returns, asset allocation, and investment strategy. Our approach has emphasized the long-term nature of the return estimate such that the return assumption is not changed significantly unless there are fundamental changes in capital markets that affect our expectations for returns over an

extended period of time (i.e., 10 to 20 years). The average annual return of our U.S. pension fund was approximately 6.8 percent during the past ten years and approximately 7.8 percent during the past 20 years.

We have created a Voluntary Employees' Beneficiary Association trust (VEBA) for the funding of hourly postretirement health care benefits. The future expected asset returns for the VEBA is lower than the expected return on the other pension and health care plan assets due to investment in a higher proportion of liquid securities. These assets are in addition to the other postretirement health care plan assets that have been funded under Section 401(h) of the U.S. Internal Revenue Code and maintained in a separate account in the John Deere Pension Trust.

Defined Contribution Plans

We have defined contribution plans related to employee investment and savings plans primarily in the U.S. Our contributions and costs under these plans were \$288 in 2023, \$263 in 2022, and \$207 in 2021. The contribution rate varies based on employee participation in the plans.

8. INCOME TAXES

We are subject to income taxes in a number of jurisdictions. We determine our income tax provision using the asset and liability method. The provision for income taxes by taxing jurisdiction and by significant component consisted of the following:

	2023	2022	2021
Current:			
U.S.:			
Federal	\$ 1,803	\$ 514	\$ 899
State	386	136	183
Foreign	1,472	1,423	1,017
Total current	3,661	2,073	2,099
Deferred:			
U.S.:			
Federal	(485)	29	(303)
State	(65)	24	(45)
Foreign	(240)	(119)	(93)
Total deferred	(790)	(66)	(441)
Provision for income taxes	\$ 2,871	\$ 2,007	\$ 1,658

Based upon the location of our operations, the consolidated income before income taxes in the U.S. in 2023, 2022, and 2021 was \$7.8 billion, \$5.0 billion, and \$4.1 billion, respectively, and in foreign countries was \$5.2 billion, \$4.1 billion, and \$3.5 billion, respectively. Certain foreign operations are branches or partnerships of Deere & Company and are subject to U.S. as well as foreign income tax regulations. The pretax income by location and the preceding analysis of the income tax provision by taxing jurisdiction are not directly related.

A comparison of the statutory and effective income tax provision and reasons for related differences follow:

	2023	2022	2021
U.S. federal income tax provision at the U.S. statutory rate (21 percent)	\$ 2,734	\$ 1,917	\$ 1,597
State and local taxes, net of federal effect	266	133	119
Other impacts of Tax Cuts and Jobs Act of 2017	(58)	(29)	(85)
Rate differential on foreign subsidiaries	142	121	148
Research and business tax credits	(107)	(65)	(48)
Excess tax benefits on equity compensation	(49)	(55)	(79)
Valuation allowances	9	179	18
Other - net	(66)	(194)	(12)
Provision for income taxes	\$ 2,871	\$ 2,007	\$ 1,658

At October 29, 2023, undistributed profits of subsidiaries outside the U.S. of approximately \$5.1 billion are considered indefinitely reinvested. Determination of the amount of a foreign withholding tax liability on these unremitted earnings is not practicable.

Deferred income taxes arise because there are certain items that are treated differently for financial accounting than for income tax reporting purposes. An analysis of the deferred income tax assets and liabilities at October 29, 2023 and October 30, 2022 follows:

	2023		2022	
	Deferred Tax Assets	Deferred Tax Liabilities	Deferred Tax Assets	Deferred Tax Liabilities
Accrual for employee benefits	\$ 439		\$ 304	
Accrual for sales allowances	884		579	
Allowance for credit losses	79		90	
Amortization of R&D expenditures	492			
Deferred compensation	45		44	
Goodwill and other intangible assets		\$ 166		\$ 178
Lessee lease transactions	68	61	62	57
Lessor lease transactions		581		310
OPEB - net	193		213	
Pension - net		424		532
Share-based compensation	38		41	
Tax loss and tax credit carryforwards	1,518		1,405	
Tax over book depreciation		198		174
Unearned revenue	177		154	
Other items	681	278	487	254
Less: valuation allowances	(1,612)		(1,545)	
Deferred income tax assets and liabilities	\$ 3,002	\$ 1,708	\$ 1,834	\$ 1,505

Deere & Company files a consolidated federal income tax return in the U.S., which includes the wholly-owned financial services subsidiaries. These subsidiaries account for income taxes as if they filed separate income tax returns, with a modification for realizability of certain tax benefits.

At October 29, 2023, tax loss and tax credit carryforwards of \$1,518 were available with \$1,031 expiring from 2024 through 2043 and \$487 with an indefinite carryforward period.

A reconciliation of unrecognized tax benefits at October 29, 2023, October 30, 2022, and October 31, 2021 follows:

	2023	2022	2021
Beginning of year balance	\$ 891	\$ 811	\$ 668
Increases to tax positions taken during the current year	68	98	81
Increases to tax positions taken during prior years	164	29	100
Decreases to tax positions taken during the current year	(3)		
Decreases to tax positions taken during prior years	(209)	(18)	(23)
Decreases due to lapse of statute of limitations	(10)	(7)	(12)
Other	(4)	2	(3)
Foreign exchange	10	(24)	
End of year balance	\$ 907	\$ 891	\$ 811

The amount of unrecognized tax benefits at October 29, 2023 and October 30, 2022 that would impact the effective tax rate if the tax benefits were recognized was \$329 and \$303, respectively. The remaining liability was related to tax positions for which there are offsetting tax receivables, or the uncertainty was only related to timing. We expect that any reasonably possible change in the amounts of unrecognized tax benefits in the next twelve months would not be significant.

We file our tax returns according to the tax laws of the jurisdictions in which we operate, which includes the U.S. federal jurisdiction and various state and foreign jurisdictions. The U.S. Internal Revenue Service (IRS) has completed the examination of our federal income tax returns for periods prior to 2015. The federal income tax returns for years 2015 to 2020 are currently under examination. Various state and foreign income tax returns also remain subject to examination by taxing authorities.

9. OTHER INCOME AND OTHER OPERATING EXPENSES

The major components of other income and other operating expenses consisted of the following:

	2023	2022	2021
Other income			
Revenues from services	\$ 312	\$ 283	\$ 322
Extended warranty premiums earned	312	289	227
Trademark licensing income	95	89	87
Operating lease disposition gains	33	72	65
Gain on previously held equity investment		326	
Investment income	29	14	41
Other	222	222	249
Total	\$ 1,003	\$ 1,295	\$ 991
Other operating expenses			
Depreciation of equipment on operating leases	\$ 853	\$ 827	\$ 983
Extended warranty claims	309	267	235
Cost of services	227	214	202
Pension and OPEB benefit, excluding the service cost component	(286)	(218)	(183)
Foreign exchange loss	122	132	59
Other	67	53	47
Total	\$ 1,292	\$ 1,275	\$ 1,343

10. MARKETABLE SECURITIES

Most marketable securities are classified as available-for-sale. Realized gains or losses are based on specific identification.

The amortized cost and fair value of marketable securities at the end of 2023 and 2022 follow:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
2023				
International equity securities				\$ 3
International mutual funds securities				101
U.S. equity fund				86
U.S. fixed income fund				32
Total equity securities				222
Corporate debt securities	\$ 285		\$ 41	244
International debt securities	5		4	1
Mortgage-backed securities*	225		40	185
Municipal debt securities	87		12	75
U.S. government debt securities	260		41	219
Total debt securities	\$ 862		\$ 138	724
Marketable securities				\$ 946
2022				
International equity securities				\$ 3
U.S. equity fund				70
Total equity securities				73
Corporate debt securities	\$ 236		\$ 36	200
International debt securities	64		4	60
Mortgage-backed securities*	186		31	155
Municipal debt securities	74		11	63
U.S. government debt securities	220		37	183
Total debt securities	\$ 780		\$ 119	661
Marketable securities				\$ 734

* Primarily issued by U.S. government sponsored enterprises.

The purchases, maturities, and sale proceeds for marketable securities during 2023, 2022, and 2021 follow:

	2023	2022	2021
Purchases	\$ 491	\$ 250	\$ 194
Maturities and sale proceeds	186	79	109

Equity Securities

Proceeds of equity securities sold during 2023, 2022, and 2021 were not material. Unrealized gain (loss) on equity securities during 2023 and 2022 follow:

	2023	2022
Net gain (loss) recognized on equity securities	\$	(11)
Less: Net gain (loss) on equity securities sold	\$ (1)	
Unrealized gain (loss) on equity securities	<u>\$ 1</u>	<u>\$ (11)</u>

Debt Securities

The contractual maturities of debt securities at October 29, 2023 follow:

	Amortized Cost	Fair Value
Due in one year or less	\$ 20	\$ 19
Due after one through five years	147	136
Due after five through 10 years	249	214
Due after 10 years	221	170
Mortgage-backed securities	225	185
Debt securities	\$ 862	\$ 724

Actual maturities may differ from contractual maturities because some securities may be called or prepaid. Mortgage-backed securities contain prepayment provisions and are not categorized by contractual maturity.

The following debt security items were not material in 2023, 2022, and 2021:

- realized gains,
- realized losses, and
- unrealized losses that have been continuous for over twelve months.

Unrealized losses at October 29, 2023 and October 30, 2022 were not recognized in income due to the ability and intent to hold to maturity. There were no significant impairment write-downs in the periods reported.

11. RECEIVABLES

Trade Accounts and Notes Receivable

Trade accounts and notes receivable arise from sales of goods to independent dealers. See Note 2 for our revenue recognition policy. We evaluate and assess dealers' credit worthiness on an ongoing basis. Receivables are secured with collateral or other credit enhancements. Trade accounts and notes receivable at the end of 2023 and 2022 follow:

	2023	2022
Trade accounts and notes receivable:		
Production & precision ag	\$ 2,642	\$ 2,397
Small ag & turf	2,344	2,065
Construction & forestry	2,753	1,948
Trade accounts and notes receivable – net	\$ 7,739	\$ 6,410

These receivables have significant concentrations of credit risk in the agriculture and turf and construction and forestry markets. Credit losses have been historically low. There is not a disproportionate concentration of credit risk with any single dealer. On a geographic basis, 53 percent of our trade accounts and notes receivable are located in the U.S. and Canada at October 29, 2023.

At October 29, 2023 and October 30, 2022 trade and notes receivables balances outstanding greater than 12 months were \$107 and \$49, respectively.

The allowance for credit losses on trade accounts and notes receivable at October 29, 2023, October 30, 2022, and October 31, 2021, as well as the related activity, follow:

	2023	2022	2021
Beginning of year balance	\$ 36	\$ 41	\$ 39
ASU No. 2016-13			(2)
Provision	7	1	10
Write-offs	(8)	(5)	(7)
Translation adjustments		(1)	1
End of year balance	<u>\$ 35</u>	<u>\$ 36</u>	<u>\$ 41</u>

The equipment operations sell a significant portion of their trade receivables to financial services. Compensation is provided to financial services at market interest rates.

Financing Receivables – Overall

Financing receivables originate under the following circumstances:

- Retail customers purchase (or lease) equipment from a dealer and finance the equipment through John Deere Financial.
- We sell the equipment to a dealer under trade terms. Trade terms end, and the dealer finances the equipment on a wholesale receivable. Shown as wholesale notes in “Financing Receivables related to the Sale of Equipment.”
- A dealer finances the purchase of used equipment through John Deere Financial.
- We sell (or lease) the equipment directly to a retail customer with terms typically greater than 12 months. Shown as retail notes or sales-type leases in the “Financing Receivables related to the Sale of Equipment.”
- The customer utilizes a revolving credit product to finance parts, service, or input costs.

Financing receivables at the end of 2023 and 2022 follow:

	2023		2022	
	Unrestricted/Securitized		Unrestricted/Securitized	
Retail notes:				
Agriculture and turf	\$ 26,955	\$ 6,052	\$ 23,830	\$ 4,868
Construction and forestry	4,623	1,442	4,396	1,179
Total	31,578	7,494	28,226	6,047
Wholesale notes	6,947		3,285	
Revolving charge accounts	4,789		4,316	
Financing leases (direct and sales-type)	2,906		2,832	
Total financing receivables	46,220	7,494	38,659	6,047
Less:				
Unearned finance income:				
Retail notes	1,906	137	1,358	95
Wholesale notes	25		12	
Revolving charge accounts	91		61	
Financing leases	350		285	
Total	2,372	137	1,716	95
Allowance for credit losses	175	22	309	16
Financing receivables – net	<u>\$ 43,673</u>	<u>\$ 7,335</u>	<u>\$ 36,634</u>	<u>\$ 5,936</u>

Assets managed by financial services continue to be evaluated by market, rather than by operating segment. Financing receivables have significant concentrations of credit risk in the agriculture and turf and construction and forestry markets. On a geographic basis,

84 percent of our financing receivables were located in the U.S. and Canada at October 29, 2023. There is no disproportionate concentration of credit risk with any single customer or dealer. We retain as collateral security in the equipment associated with most financing receivables. Theft and physical damage insurance are required for this equipment.

Financing Receivables – Related to the Sale of Equipment

Financing receivables related to the sale of equipment are presented in the operating section of the cash flow statement. The balances at the end of 2023 and 2022 were as follows:

	2023	2022
Retail notes*:		
Agriculture and turf	\$ 1,084	\$ 1,392
Construction and forestry	320	304
Total	1,404	1,696
Wholesale notes	6,947	3,285
Direct financing and sales-type leases*	494	799
Total	<u>8,845</u>	<u>5,780</u>
Less:		
Unearned finance income:		
Retail notes	137	133
Wholesale notes	25	12
Direct financing and sales-type leases	60	67
Total	<u>222</u>	<u>212</u>
Financing receivables related to our sales of equipment	<u>\$ 8,623</u>	<u>\$ 5,568</u>

* These balances arise from sales and direct financing leases of equipment by company-owned dealers or through direct sales.

Financing Receivables – Contractual Installment Payments

Financing receivable installments, including unearned finance income, at October 29, 2023 and October 30, 2022 were scheduled as follows:

	2023		2022	
	Unrestricted/Securitized		Unrestricted/Securitized	
Due in months:				
0 – 12	\$ 22,176	\$ 2,820	\$ 17,032	\$ 2,226
13 – 24	8,646	2,089	7,975	1,667
25 – 36	6,692	1,509	5,987	1,209
37 – 48	4,844	824	4,297	709
49 – 60	2,920	241	2,559	227
Thereafter	942	11	809	9
Total	<u>\$ 46,220</u>	<u>\$ 7,494</u>	<u>\$ 38,659</u>	<u>\$ 6,047</u>

Financing Receivables – Credit Quality Analysis

We monitor the credit quality of financing receivables based on delinquency status, defined as follows:

- Past due balances represent any payments 30 days or more past the due date.
- Non-performing financing receivables represent receivables for which we have stopped accruing finance income. This generally occurs when receivables are 90 days delinquent.
- Write-offs generally occur when receivables are 120 days delinquent. In these situations, the estimated uncollectible amount is written off to the allowance for credit losses. Any expected recovery is presented as non-performing.

Finance income for non-performing receivables is recognized on a cash basis. Accrual of finance income is resumed when the receivable becomes contractually current and collections are reasonably assured.

The credit quality analysis of retail notes, financing leases, and revolving charge accounts (collectively, retail customer receivables) by year of origination was as follows:

October 29, 2023				
	2023	2022	2021	2020
Retail customer receivables:				
Agriculture and turf				
Current	\$ 15,191	\$ 8,430	\$ 5,120	\$ 2,334
30-59 days past due	62	75	39	21
60-89 days past due	18	26	18	10
90+ days past due	2	1	3	3
Non-performing	30	78	62	33
Construction and forestry				
Current	2,927	1,961	1,084	353
30-59 days past due	49	34	27	9
60-89 days past due	19	14	12	5
90+ days past due		6	1	
Non-performing	42	80	55	23
Total retail customer receivables	<u>\$ 18,340</u>	<u>\$ 10,705</u>	<u>\$ 6,421</u>	<u>\$ 2,791</u>
October 29, 2023				
	2019	Prior Years	Revolving Charge Accounts	Total
Retail customer receivables:				
Agriculture and turf				
Current	\$ 853	\$ 280	\$ 4,526	\$ 36,734
30-59 days past due	9	3	29	238
60-89 days past due	4	2	9	87
90+ days past due				9
Non-performing	22	22	8	255
Construction and forestry				
Current	84	29	119	6,557
30-59 days past due	4		4	127
60-89 days past due	2		2	54
90+ days past due		1		8
Non-performing	9	4	1	214
Total retail customer receivables	<u>\$ 987</u>	<u>\$ 341</u>	<u>\$ 4,698</u>	<u>\$ 44,283</u>

October 30, 2022				
	2022	2021	2020	2019
Retail customer receivables:				
Agriculture and turf				
Current	\$ 13,500	\$ 7,984	\$ 4,091	\$ 1,875
30-59 days past due	46	63	36	17
60-89 days past due	14	25	13	6
90+ days past due	1			
Non-performing	27	60	44	28
Construction and forestry				
Current	2,964	1,974	842	292
30-59 days past due	53	52	23	9
60-89 days past due	19	16	7	3
90+ days past due	1	4	1	3
Non-performing	25	61	34	19
Total retail customer receivables	<u>\$ 16,650</u>	<u>\$ 10,239</u>	<u>\$ 5,091</u>	<u>\$ 2,252</u>

October 30, 2022				
	2018	Prior Years	Revolving Charge Accounts	Total
Retail customer receivables:				
Agriculture and turf				
Current	\$ 785	\$ 200	\$ 4,111	\$ 32,546
30-59 days past due	7	3	19	191
60-89 days past due	2	1	5	66
90+ days past due				1
Non-performing	18	19	8	204
Construction and forestry				
Current	73	12	108	6,265
30-59 days past due	2	1	3	143
60-89 days past due	1		1	47
90+ days past due		1		10
Non-performing	7	3		149
Total retail customer receivables	<u>\$ 895</u>	<u>\$ 240</u>	<u>\$ 4,255</u>	<u>\$ 39,622</u>

The credit quality analysis of wholesale receivables by year of origination was as follows:

	October 29, 2023			
	2023	2022	2021	2020
Wholesale receivables:				
Agriculture and turf				
Current	\$ 631	\$ 93	\$ 21	\$ 4
30+ days past due				
Non-performing				
Construction and forestry				
Current	23	5	20	
30+ days past due				
Non-performing				
Total wholesale receivables	\$ 654	\$ 98	\$ 41	\$ 4

	October 29, 2023			
	2019	Prior Years	Revolving	Total
Wholesale receivables:				
Agriculture and turf				
Current	\$ 1	\$ 160	\$ 5,175	\$ 6,085
30+ days past due				
Non-performing	1			1
Construction and forestry				
Current		76	712	836
30+ days past due				
Non-performing				
Total wholesale receivables	\$ 2	\$ 236	\$ 5,887	\$ 6,922

	October 30, 2022			
	2022	2021	2020	2019
Wholesale receivables:				
Agriculture and turf				
Current	\$ 387	\$ 64	\$ 27	\$ 4
30+ days past due				
Non-performing				1
Construction and forestry				
Current	7	29	2	1
30+ days past due				
Non-performing				
Total wholesale receivables	\$ 394	\$ 93	\$ 29	\$ 6

	October 30, 2022			
	2018	Prior Years	Revolving	Total
Wholesale receivables:				
Agriculture and turf				
Current	\$ 2	\$ 2,371	\$ 2,855	
30+ days past due				
Non-performing				1
Construction and forestry				
Current		1	377	417
30+ days past due				
Non-performing				
Total wholesale receivables	\$ 3	\$ 2,748	\$ 3,273	

Financing Receivables – Allowance for Credit Losses

An analysis of the allowance for credit losses and investment in financing receivables follows:

	Retail Notes & Financing Leases	Revolving Charge Accounts	Wholesale Receivables	Total
2023				
Allowance:				
Beginning of year balance	\$ 299	\$ 22	\$ 4	\$ 325
Provision	97	22		119
Provision transferred to held for sale	(142)			(142)
Provision (credit)	(45)	22		(23)
Write-offs	(84)	(45)		(129)
Recoveries	21	22		43
Translation adjustments	(19)			(19)
End of year balance*	\$ 172	\$ 21	\$ 4	\$ 197

Financing receivables:				
End of year balance	\$ 39,585	\$ 4,698	\$ 6,922	\$ 51,205

2022				
Allowance:				
Beginning of year balance	\$ 138	\$ 21	\$ 7	\$ 166
Provision (credit)	197	(2)	(3)	192
Write-offs	(61)	(27)		(88)
Recoveries	22	30		52
Translation adjustments	3			3
End of year balance*	\$ 299	\$ 22	\$ 4	\$ 325

Financing receivables:				
End of year balance	\$ 35,367	\$ 4,255	\$ 3,273	\$ 42,895

2021				
Allowance:				
Beginning of year balance	\$ 133	\$ 43	\$ 8	\$ 184
ASU No. 2016-13	44	(13)		31
Provision (credit)		(17)	(1)	(18)
Write-offs	(60)	(28)		(88)
Recoveries	20	36		56
Translation adjustments	1			1
End of year balance*	\$ 138	\$ 21	\$ 7	\$ 166

Financing receivables:				
End of year balance	\$ 32,233	\$ 3,825	\$ 2,566	\$ 38,624

* Individual allowances were not significant.

We monitor the economy as part of the allowance setting process, including potential impacts of inflation and rising interest rates. Adjustments to the allowance are incorporated, as necessary.

During 2023, we determined that the financial services business in Russia met the held for sale criteria. The financing receivables in Russia were reclassified to "Other assets" and the associated allowance for credit losses was reversed. These operations were sold in the second quarter of 2023 (see Note 3). Excluding the portfolio in Russia, the allowance increased in 2023, primarily driven by growth in the retail notes and financing lease portfolios

and higher expected losses on turf and construction customer accounts.

In 2022, the allowance for credit losses on retail notes and financing lease receivables increased due to higher reserves related to the events in Russia / Ukraine and higher portfolio balances. These increases were partially offset by continued positive agricultural market conditions. The revolving portfolio experienced low write-offs and solid recoveries.

Financing receivable analysis metrics follow:

	2023	2022
Percent of the overall financing receivable portfolio:		
Past-due amounts	1.02	1.07
Non-performing	.92	.83
Allowance for credit losses	.38	.76
Deposits held as credit enhancements	\$ 154	\$ 158

The allowance for credit losses as a percent of the overall financing receivable portfolio follow:

	2023	2022	2021
Deere & Company	.38	.76	.43
Closest comparators*	.90	.93	1.15

* Peer companies from the 6153 and 6159 standard industrial classification (SIC) codes.

Financing Receivables – Troubled Debt Restructurings

Infrequently, a customer experiences financial difficulties, and we grant a concession. These concessions may include:

- a reduction of the stated interest rate,
- an extension of the maturity dates,
- a reduction of the amount of the debt, or
- a reduction of accrued interest.

A troubled debt restructuring is a significant modification of the receivable. The following table quantifies troubled debt restructurings:

	2023	2022	2021
Number of receivable contracts	209	276	397
Pre-modification balance	\$ 10	\$ 12	\$ 18
Post modification balance	9	10	17

Troubled debt restructurings for the presented periods related to retail notes. In 2023, 2022, and 2021, there were no significant troubled debt restructurings that subsequently defaulted and were written off. At October 29, 2023, we had no commitments to lend to customers whose accounts were modified in troubled debt restructurings.

Other Receivables

Other receivables at the end of 2023 and 2022 consisted of:

	2023	2022
Taxes receivable	\$ 1,626	\$ 1,450
Collateral on derivatives	667	709
Receivables from unconsolidated affiliates	3	
Other	327	333
Other receivables	\$ 2,623	\$ 2,492

12. SECURITIZATION OF FINANCING RECEIVABLES

Our funding strategy includes receivable securitizations, which allows us to receive cash for financing receivables immediately. While these securitization programs are administered in various forms, they are accomplished in the following basic steps:

1. We transfer financing receivables into a bankruptcy-remote special purpose entity (SPE).
2. The SPE issues debt to investors. The debt is secured by the financing receivables.
3. Investors are paid back based on cash receipts from the financing receivables.

As part of step 1, these receivables are legally isolated from the claims of our general creditors. This ensures cash receipts from the financing receivables are accessible to pay back securitization program investors. The structure of these transactions does not meet the accounting criteria for a sale of receivables. As a result, they are accounted for as a secured borrowing. The receivables and borrowings remain on our balance sheet and are separately reported as "Financing receivables securitized – net" and "Short-term securitization borrowings," respectively.

We offer securitization programs to institutional investors and other financial institutions through public issuances or privately through a revolving credit agreement. At October 29, 2023, the revolving agreement had a financing limit of up to \$1,500. At October 29, 2023, \$1,281 of securitization borrowings were outstanding under the revolving agreement. In November 2023, the agreement was renewed for one year with a capacity of \$2,000.

Restricted cash held by the SPE serves as a credit enhancement. It would be used to satisfy receivable payment deficiencies, if any. The cash restriction is removed either after all secured borrowing payments are made or proportionally as the secured receivables are collected and the borrowing obligations are reduced.

The components of the securitization programs were as follows at the end of 2023 and 2022:

	2023	2022
Financing receivables securitized (retail notes)	\$ 7,357	\$ 5,952
Allowance for credit losses	(22)	(16)
Other assets (primarily restricted cash)	152	155
Total restricted securitized assets	\$ 7,487	\$ 6,091
Short-term securitization borrowings	\$ 6,995	\$ 5,711
Accrued interest on borrowings	13	6
Total liabilities related to restricted securitized assets	\$ 7,008	\$ 5,717

The weighted-average interest rates on short-term securitization borrowings at October 29, 2023 and October 30, 2022 were 4.7 percent and 2.8 percent, respectively.

Although these securitization borrowings are classified as short-term since payment is required if the financing receivables are liquidated early, the payment schedule for these borrowings at October 29, 2023 based on the expected liquidation of the retail notes is as follows: 2024 - \$3,278, 2025 - \$2,076, 2026 - \$1,187, 2027 - \$417, 2028 - \$44, and later years - \$4.

13. INVENTORIES

Inventories were valued at the lower of cost or net realizable value, as follows:

	2023	2022
Raw materials and supplies	\$ 4,080	\$ 4,442
Work-in-process	1,010	1,190
Finished goods and parts	5,435	5,363
Total FIFO value	10,525	10,995
Excess of FIFO over LIFO	2,365	2,500
Inventories	\$ 8,160	\$ 8,495
Percent valued on LIFO basis	53%	57%

14. PROPERTY AND DEPRECIATION

A summary of property and equipment at October 29, 2023 and October 30, 2022 follows:

	Useful Lives* (Years)	2023	2022
Land		\$ 338	\$ 274
Buildings and building equipment	22	4,735	4,386
Machinery and equipment	11	6,613	6,208
Dies, patterns, tools, etc.	8	1,658	1,558
All other	5	1,323	1,205
Construction in progress		1,266	818
Total at cost		15,933	14,449
Less: accumulated depreciation		9,054	8,393
Property and equipment - net		\$ 6,879	\$ 6,056

* Weighted-averages

Property and equipment additions and depreciation follows:

	2023	2022	2021
Additions	\$ 1,597	\$ 1,197	\$ 897
Depreciation	838	806	830

For property and equipment, more than 10 percent resides in the U.S. and Germany, separately disclosed below:

	2023	2022
U.S.	\$ 3,807	\$ 3,452
Germany	1,192	991
Other countries	1,880	1,613
Total	\$ 6,879	\$ 6,056

15. GOODWILL AND OTHER INTANGIBLE ASSETS – NET

The changes in amounts of goodwill by operating segments were as follows. There are no accumulated goodwill impairment losses.

	PPA	SAT	CF	Total
October 31, 2021	\$ 542	\$ 265	\$ 2,484	\$ 3,291
Acquisitions (Note 3)	132	69	599	800
Translation adjustments and other	(28)	(16)	(360)	(404)
October 30, 2022	646	318	2,723	3,687
Acquisitions (Note 3)	41	40		81
Translation adjustments and other	15	5	112	132
October 29, 2023	\$ 702	\$ 363	\$ 2,835	\$ 3,900

The components of other intangible assets were as follows:

	2023	2022
Customer lists and relationships	\$ 501	\$ 493
Technology, patents, trademarks, and other	1,387	1,301
Total at cost	1,888	1,794
Less accumulated amortization:		
Customer lists and relationships	195	166
Technology, patents, trademarks, and other	560	410
Total accumulated amortization	755	576
Other intangible assets - net	\$ 1,133	\$ 1,218

Actual amortization expense for the past three years and the estimated amortization expense for the next five years follows:

Year	Amortization
2021	\$ 116
2022	145
2023	169
Estimated - 2024	170
2025	142
2026	119
2027	117
2028	85

16. OTHER ASSETS

Other assets at October 29, 2023 and October 30, 2022 consisted of the following:

	2023	2022
Operating lease asset (Note 24)	\$ 283	\$ 299
Capitalized software, net	450	372
Investment in unconsolidated affiliates	126	117
Deferred charges (including prepaids)	426	383
Derivative assets (Note 26)	292	373
Prepaid taxes	167	185
Parts return asset	127	119
Restricted cash	162	167
Matured lease & repossessed inventory	59	44
Other	411	358
Other Assets	\$ 2,503	\$ 2,417

Capitalized software has an estimated useful life of three years. Amortization of these software costs in 2023, 2022, and 2021 was \$144, \$117, and \$121, respectively.

17. SHORT-TERM BORROWINGS

Short-term borrowings at the end of 2023 and 2022 consisted of:

	2023	2022
Commercial paper	\$ 9,100	\$ 4,703
Notes payable to banks	483	402
Finance lease obligations due within one year	25	21
Long-term borrowings due within one year	8,331	7,466
Short-term borrowings	\$ 17,939	\$ 12,592

The weighted-average interest rates at the end of 2023 and 2022 were:

	2023	2022
Short-term borrowings:		
Commercial paper	5.4%	3.4%
Notes payable to banks	31.6%	11.9%
Notes payable to banks, excluding Argentina	8.8%	6.6%

Worldwide lines of credit were \$10.5 billion at October 29, 2023, consisting primarily of:

- a 364-day credit facility agreement of \$5.0 billion, expiring in the second quarter of 2024,
- a credit facility agreement of \$2.5 billion, expiring in the second quarter of 2027, and
- a credit facility agreement of \$2.5 billion, expiring in the second quarter of 2028.

At October 29, 2023, \$.8 billion of these worldwide lines of credit were unused. For the purpose of computing the unused credit lines, commercial paper and short-term bank borrowings were considered to constitute utilization. The credit agreements governing these lines of credit require us to maintain certain covenants. All of these credit agreement requirements have been met during the periods included in the consolidated financial statements.

18. ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses at the end of 2023 and 2022 consisted of the following:

	2023	2022
Accounts payable:		
Trade payables	\$ 3,467	\$ 3,894
Dividends payable	388	343
Operating lease liabilities	281	302
Deposits withheld from dealers and merchants	163	163
Payables to unconsolidated affiliates	6	11
Other	153	214
Accrued expenses:		
Employee benefits	2,152	1,528
Product warranties	1,610	1,427
Accrued taxes	1,558	1,255
Derivative liabilities	1,130	1,231
Dealer sales discounts	1,243	1,044
Extended warranty premium	1,021	866
Unearned revenue (contractual liability)	676	557
Unearned operating lease revenue	451	399
Accrued interest	434	288
Other	1,397	1,300
Accounts payable and accrued expenses	\$ 16,130	\$ 14,822

Amounts are presented net of eliminations, which primarily consist of dealer sales incentives with a right of set-off against trade receivables of \$2,228 at October 29, 2023 and \$1,280 at October 30, 2022. Other eliminations were made for accrued taxes and other accrued expenses.

19. LONG-TERM BORROWINGS

Long-term borrowings at the end of 2023 and 2022 consisted of:

	2023	2022
Underwritten term debt		
U.S. dollar notes and debentures:		
2.75% notes due 2025	\$ 700	\$ 700
6.55% debentures due 2028	200	200
5.375% notes due 2029	500	500
3.10% notes due 2030	700	700
8.10% debentures due 2030	250	250
7.125% notes due 2031	300	300
3.90% notes due 2042	1,250	1,250
2.875% notes due 2049	500	500
3.75% notes due 2050	850	850
Euro notes:		
1.375% notes due 2024 (€800 principal)		797
1.85% notes due 2028 (€600 principal)	634	598
2.20% notes due 2032 (€600 principal)	634	598
1.65% notes due 2039 (€650 principal)	687	648
Serial issuances		
Medium-term notes	29,638	24,604
Other notes and finance lease obligations	1,769	1,223
Less: debt issuance costs and debt discounts	(135)	(122)
Long-term borrowings	\$ 38,477	\$ 33,596

Medium-term notes due through 2033 are offered by prospectus. All outstanding notes and debentures are senior unsecured borrowings and rank equally with each other. The outstanding principal and average interest rates at the end of 2023 and 2022 follow:

	2023	2022
Medium-term notes:		
Principal	\$ 30,902	\$ 25,629
Average interest rates	4.9%	2.9%

The principal amounts of our long-term borrowings maturing in each of the next five years are as follows: 2024 - \$8,319, 2025 - \$9,195, 2026 - \$7,867, 2027 - \$3,724, and 2028 - \$6,080.

20. COMMITMENTS AND CONTINGENCIES

A standard warranty is provided as assurance that the equipment will function as intended. The standard warranty period varies by product and region. At the time a sale is recognized, we record an estimate of future warranty costs based on historical claims rate experience and estimated population under warranty. The warranty reconciliation follows:

	2023	2022
Beginning of year balance	\$ 1,427	\$ 1,312
Warranty claims paid	(1,181)	(951)
New product warranty accruals	1,347	1,090
Foreign exchange	17	(24)
End of year balance	\$ 1,610	\$ 1,427

The costs for extended warranty programs are recognized as incurred. See Note 9 for extended warranty claim costs.

In certain international markets, we provide guarantees to banks for the retail financing of John Deere equipment. At the end of

2023, the notional value of these guarantees was \$239. We may repossess the equipment collateralizing the receivables. At October 29, 2023, the accrued losses under these guarantees were not material.

We also had other miscellaneous contingent liabilities totaling approximately \$105 at October 29, 2023. The accrued liability for these contingencies was not material.

At October 29, 2023, we had commitments of approximately \$634 for the construction and acquisition of property and equipment.

We have commitments to extend credit to customers. The commitments are in the form of lines of credit and other pre-approved credit arrangements. We have the right to cancel or amend the terms of these commitments at any time. These commitments are not expected to be fully drawn upon; therefore, the total commitment amounts likely do not represent a future cash requirement. The commitments to extend credit at October 29, 2023 were:

- \$9.3 billion to John Deere dealers, and
- \$32.4 billion to retail customers.

We are subject to various unresolved legal actions. The accrued losses on these matters are not material. We believe the reasonably possible range of losses for these unresolved legal actions would not have a material effect on our financial statements. The most prevalent legal claims relate to:

- product liability (including asbestos-related matters),
- retail credit,
- employment,
- patent,
- trademark, and
- antitrust matters.

21. CAPITAL STOCK

Our stock is listed on the New York Stock Exchange under the symbol "DE." At the end of 2023, there were 17,158 holders of record of our common stock.

The number of common shares we are authorized to issue is 1.2 billion. The common shares issued at October 29, 2023, October 30, 2022, and October 31, 2021 were 536.4 million. 281.6 million common shares were outstanding at October 29, 2023, with the remainder held in treasury stock.

The number of authorized preferred shares is 9 million. No preferred shares have been issued.

In December 2022, the Board of Directors authorized the repurchase of up to \$18.0 billion of common stock. At the end of fiscal year 2023, this repurchase program had \$13.0 billion (35.9 million shares based on our fiscal year end closing NYSE common stock price of \$361.15 per share) remaining to be repurchased. Repurchases of our common stock under this plan are made from time to time, at our discretion, in the open market.

A reconciliation of basic and diluted net income per share attributable to Deere & Company follows in millions, except per share amounts:

	2023	2022	2021
Net income attributable to Deere & Company	\$ 10,166	\$ 7,131	\$ 5,963
Average shares outstanding	292.2	304.5	311.6
Basic per share	\$ 34.80	\$ 23.42	\$ 19.14
Average shares outstanding	292.2	304.5	311.6
Effect of dilutive stock options	1.4	1.8	2.4
Total potential shares outstanding	293.6	306.3	314.0
Diluted per share	\$ 34.63	\$ 23.28	\$ 18.99
Shares excluded as antidilutive	.1	.2	

22. SHARE-BASED COMPENSATION

We issue stock options and restricted stock units to key employees. Restricted stock units are also issued to nonemployee directors for their services as directors. Restricted stock units consist of service-based and performance/service-based awards.

In 2023, we changed the accounting treatment of the Long-Term Incentive Cash that is granted to certain employees. As the performance metric related to this incentive plan is based, in part, on the price of our shares, we now account for it in accordance with FASB ASC Topic 718. At October 29, 2023, we are authorized to grant an additional 16.6 million shares related to stock options or restricted stock units. We currently use shares that have been repurchased through our stock repurchase programs to satisfy share option exercises. The stock awards vesting periods and the dividend equivalents earned during the vesting period follow:

	Vesting Period	Dividend Equivalents
Stock options	1-3 years	Not included
Service-based RSUs	1-3 years	Included
Performance/service-based RSUs	3 years	Not included

Stock options expire ten years from the grant date. Performance/service-based awards are subject to a performance metric. The performance metric is based on our compound annual revenue growth rate, compared to a benchmark group of companies. The performance/service-based units award common stock in a range of zero to 200 percent for each unit granted based on the level of the metric achieved.

The fair value of stock options and restricted stock units is determined using our closing price on the grant date. These awards are expensed over the shorter of the award vesting period or the employee's retirement eligibility period. The performance/service-based units' expense is adjusted quarterly for the probable number of shares to be awarded. We recognize the effect of award forfeitures as an adjustment to compensation expense in the period the forfeiture occurs.

The total share-based compensation expense, recognized income tax benefits, and total grant-date fair values of stock options and restricted stock units vested consisted of the following:

	2023	2022	2021
Share-based compensation expense	\$ 130	\$ 85	\$ 82
Income tax benefits	21	17	16
Stock options and restricted stock units vested	84	74	93

At October 29, 2023, there was \$93 of total unrecognized compensation cost from share-based compensation arrangements. This compensation is expected to be recognized over a weighted-average period of approximately 1.5 years.

Stock Options

The fair value of each stock option award was estimated on the date of grant using a binomial lattice option valuation model. The assumptions used for the binomial lattice model to determine the fair value of options follow:

	2023	2022	2021
Risk-free interest rate*	2.68%	1.27%	.47%
Expected dividends	1.1%	1.2%	1.2%
Volatility*	33.0%	32.0%	31.0%
Expected term (in years)*	5.1	5.1	5.5

* Weighted-averages

The risk-free rates are based on U.S. Treasury security yields at the time of grant. Expected volatilities are based on implied volatilities from traded call options on our stock. We use historical data to estimate option exercise behavior representing the weighted-average period that options granted are expected to be outstanding.

The activity for outstanding stock options at October 29, 2023, and changes during 2023 follow:

	Shares (millions)	Exercise Price* (per share)	Remaining Contractual Term (years)	Aggregate Intrinsic Value (millions)
Outstanding at beginning of year	2.0	\$ 153.11		
Granted	.2	438.44		
Exercised	(.5)	118.54		
Outstanding at end of year	1.7	190.08	4.62	\$ 302.3
Exercisable at end of year	1.3	144.71	3.66	292.3

* Weighted-averages

The amounts related to stock options were as follows in millions of dollars unless otherwise noted:

	2023	2022	2021
Weighted-average grant date fair value (per share)	\$ 136.46	\$ 89.20	\$ 62.73
Intrinsic value of options exercised	153	169	318
Cash received from exercises	60	63	148
Tax benefit from exercises	34	39	71

Restricted Stock Units

The weighted-average grant date fair values were as follows:

	2023	2022	2021
Service-based	\$ 428.35	\$ 347.59	\$ 258.86
Performance/service-based	424.93	331.47	245.73

Our restricted stock units at October 29, 2023 and changes during 2023 in dollars and thousands of shares follow:

	Shares	Grant-Date Fair Value*
Service-based		
Nonvested at beginning of year	404	\$ 251.42
Granted	126	428.35
Vested	(211)	211.03
Forfeited	(9)	333.29
Nonvested at end of year	310	348.82
Performance/service based		
Nonvested at beginning of year	143	227.70
Granted	41	424.93
Vested	(130)	160.81
Performance change	65	160.81
Nonvested at end of year	119	331.78

* Weighted-averages

23. OTHER COMPREHENSIVE INCOME ITEMS

The after-tax components of accumulated other comprehensive income (loss) follow:

	2023	2022	2021
Retirement benefits adjustment	\$ (845)	\$ (389)	\$ (1,034)
Cumulative translation adjustment	(2,151)	(2,594)	(1,478)
Unrealized gain (loss) on derivatives	(8)	21	(42)
Unrealized gain (loss) on debt securities	(110)	(94)	15
Total accumulated other comprehensive income (loss)	\$ (3,114)	\$ (3,056)	\$ (2,539)

The following tables reflect amounts recorded in other comprehensive income (loss), as well as reclassifications out of other comprehensive income (loss).

	Before Tax Amount	Tax (Expense) Credit	After Tax Amount
2023			
Cumulative translation adjustment			
Unrealized translation gain (loss)	\$ 424	\$ (2)	\$ 422
Reclassification of realized (gain) loss to:			
SA&G expenses	10		10
Other operating expenses	11		11
Net unrealized translation gain (loss)	445	(2)	443
Unrealized gain (loss) on derivatives:			
Unrealized hedging gain (loss)	25	(5)	20
Reclassification of realized (gain) loss to:			
Interest rate contracts – Interest expense	(62)	13	(49)
Net unrealized gain (loss) on derivatives	(37)	8	(29)
Unrealized gain (loss) on debt securities:			
Unrealized holding gain (loss)	(20)	4	(16)
Net unrealized gain (loss) on debt securities	(20)	4	(16)
Retirement benefits adjustment:			
Net actuarial gain (loss)	(589)	139	(450)
Reclassification to Other operating expenses through amortization of:			
Actuarial (gain) loss	(81)	20	(61)
Prior service (credit) cost	37	(9)	28
Settlements	37	(10)	27
Net unrealized gain (loss) on retirement benefits adjustment	(596)	140	(456)
Total other comprehensive income (loss)	\$ (208)	\$ 150	\$ (58)

	Before Tax Amount	Tax (Expense) Credit	After Tax Amount
2022			
Cumulative translation adjustment	\$ (1,105)	\$ (11)	\$ (1,116)
Unrealized gain (loss) on derivatives:			
Unrealized hedging gain (loss)	89	(19)	70
Reclassification of realized (gain) loss to:			
Interest rate contracts – Interest expense	(9)	2	(7)
Net unrealized gain (loss) on derivatives	80	(17)	63
Unrealized gain (loss) on debt securities:			
Unrealized holding gain (loss)	(140)	30	(110)
Reclassification of realized (gain) loss –			
Other income	1		1
Net unrealized gain (loss) on debt securities	(139)	30	(109)
Retirement benefits adjustment:			
Net actuarial gain (loss)	1,192	(298)	894
Prior service credit (cost)	(517)	124	(393)
Reclassification to Other operating expenses through amortization of:			
Actuarial (gain) loss	116	(29)	87
Prior service (credit) cost	30	(7)	23
Settlements/curtailment	45	(11)	34
Net unrealized gain (loss) on retirement benefits adjustment	866	(221)	645
Total other comprehensive income (loss)	\$ (298)	\$ (219)	\$ (517)

	Before Tax Amount	Tax (Expense) Credit	After Tax Amount
2021			
Cumulative translation adjustment:			
Unrealized translation gain (loss)	\$ 112		\$ 112
Reclassification of realized (gain) loss to:			
Equity in (income) loss of unconsolidated affiliates	6		6
Net unrealized translation gain (loss)	118		118
Unrealized gain (loss) on derivatives:			
Unrealized hedging gain (loss)	8	(2)	6
Reclassification of realized (gain) loss to:			
Interest rate contracts – Interest expense	13	(3)	10
Net unrealized gain (loss) on derivatives	21	(5)	16
Unrealized gain (loss) on debt securities:			
Unrealized holding gain (loss)	(21)	3	(18)
Net unrealized gain (loss) on debt securities	(21)	3	(18)
Retirement benefits adjustment:			
Net actuarial gain (loss)	3,492	(845)	2,647
Reclassification to Other operating expenses through amortization of:			
Actuarial (gain) loss	283	(69)	214
Prior service (credit) cost	8	(2)	6
Settlements	22	(5)	17
Net unrealized gain (loss) on retirement benefits adjustment	3,805	(921)	2,884
Total other comprehensive income (loss)	\$ 3,923	\$ (923)	\$ 3,000

24. LEASES

We are both a lessee and a lessor. We lease for our own use warehouse facilities, office space, production equipment, information technology equipment, and vehicles. The financial services operations lease equipment produced or sold by us and a limited amount of other equipment to retail customers. We determine if an arrangement is or contains a lease at the contract inception.

Lessee

The amounts of the lease liability and right of use asset are determined at lease commencement and are based on the present value of the lease payments over the lease term. The lease payments are discounted using our incremental borrowing rate since the rate implicit in the lease is not readily determinable. We determine the incremental borrowing rate for each lease based on the lease term and the economic environment of the country where the asset will be used, adjusted as if the borrowings were collateralized. Leases with contractual periods greater than one year and that do not meet the finance lease criteria are classified as operating leases.

We have elected to combine lease and nonlease components, such as maintenance and utilities costs included in a lease contract, for all asset classes. Leases with an initial term of one year or less are expensed on a straight-line basis over the lease term and recorded in short-term lease expense. Variable lease expense includes warehouse facilities leases with payments based on utilization exceeding contractual minimum amounts and leases with payments indexed to inflation when the index changes after lease commencement.

The lease expense by type consisted of the following:

	2023	2022	2021
Operating lease expense	\$ 129	\$ 114	\$ 116
Short-term lease expense	49	55	29
Variable lease expense	80	74	53
Finance lease:			
Depreciation expense	28	26	26
Interest on lease liabilities	2	1	1
Total lease expense	<u>\$ 288</u>	<u>\$ 270</u>	<u>\$ 225</u>

Operating and finance lease right of use assets and lease liabilities follow:

	2023	2022
Operating leases:		
Other assets	\$ 283	\$ 299
Accounts payable and accrued expenses	281	302
Finance leases:		
Property and equipment — net	\$ 66	\$ 49
Short-term borrowings	25	21
Long-term borrowings	49	30
Total finance lease liabilities	<u>\$ 74</u>	<u>\$ 51</u>

The weighted-average remaining lease terms in years and discount rates follows:

	2023	2022
Weighted-average remaining lease terms:		
Operating leases	7	7
Finance leases	4	3
Weighted-average discount rates:		
Operating leases	3.1%	2.4%
Finance leases	3.6%	1.9%

Lease payment amounts in each of the next five years at October 29, 2023 follow:

Due in:	Operating Leases	Finance Leases
2024	\$ 103	\$ 27
2025	71	22
2026	36	14
2027	24	8
2028	22	3
Later years	45	6
Total lease payments	301	80
Less: imputed interest	20	6
Total lease liabilities	<u>\$ 281</u>	<u>\$ 74</u>

Cash paid for amounts included in the measurement of lease liabilities follows:

	2023	2022	2021
Operating cash flows for operating leases	\$ 132	\$ 127	\$ 104
Operating cash flows for finance leases	2	1	1
Financing cash flows for finance leases	31	28	25

Right of use assets obtained in exchange for lease liabilities follow:

	2023	2022
Operating leases	\$ 97	\$ 135
Finance leases	54	17

Lessor

We lease equipment manufactured by us through John Deere Financial. Sales-type and direct financing leases are reported in "Financing receivables — net." Operating leases are reported in "Equipment on operating leases — net."

At the end of the majority of leases, the lessee has the option to purchase the underlying equipment for the contractual residual value or return it to the dealer. If the equipment is returned to the dealer, the dealer also has the option to purchase the equipment or return it to us for remarketing.

We estimate the residual values for operating leases at lease inception based on several factors, including lease term, expected hours of usage, historical wholesale sale prices, return experience, intended use of the equipment, market dynamics and trends, and dealer residual guarantees. We review residual value estimates during the lease term and test the carrying value of our operating lease assets for impairment when events or circumstances necessitate. The depreciation is adjusted on a straight-line basis over the remaining lease term if residual value estimates change. Lease agreements include usage limits and specifications on

machine condition, which allow us to assess lessees for excess use or damages to the underlying equipment.

We have elected to combine lease and nonlease components. The nonlease components relate to preventative maintenance and extended warranty agreements financed by the retail customer. We have also elected to report consideration related to sales and value added taxes net of the related tax expense. Property taxes on leased assets are recorded on a gross basis in "Finance and interest income" and "Other operating expenses." Variable lease revenues relate to property taxes on leased assets in certain markets and late fees.

Lease revenues earned by us follow:

	2023	2022	2021
Sales-type and direct finance lease revenues	\$ 165	\$ 154	\$ 145
Operating lease revenues	1,312	1,318	1,423
Variable lease revenues	16	26	30
Total lease revenues	<u>\$ 1,493</u>	<u>\$ 1,498</u>	<u>\$ 1,598</u>

At the time of accepting a lease that qualifies as a sales-type or direct financing lease, we record the gross amount of lease payments receivable, estimated residual value of the leased equipment, and unearned finance income. The unearned finance income is recognized as revenue over the lease term using the interest method.

Sales-type and direct financing lease receivables by market follow:

	2023	2022
Agriculture and turf	\$ 1,078	\$ 1,118
Construction and forestry	1,048	1,167
Total	2,126	2,285
Guaranteed residual values	723	491
Unguaranteed residual values	57	56
Less: unearned finance income	(350)	(285)
Financing lease receivables	<u>\$ 2,556</u>	<u>\$ 2,547</u>

Scheduled payments, including guaranteed residual values, on sales-type and direct financing lease receivables at October 29, 2023 follow:

Due in:	2023
2024	\$ 1,453
2025	642
2026	378
2027	214
2028	142
Later years	20
Total	<u>\$ 2,849</u>

Lease payments from operating leases are recorded as income on a straight-line method over the lease terms. Operating lease assets are recorded at cost and depreciated to their estimated residual value on a straight-line method over the terms of the leases.

The cost of equipment on operating leases by market follow:

	2023	2022
Agriculture and turf	\$ 7,168	\$ 6,912
Construction and forestry	1,212	1,342
Total	8,380	8,254
Less: accumulated depreciation	(1,463)	(1,631)
Equipment on operating leases - net	<u>\$ 6,917</u>	<u>\$ 6,623</u>
Operating lease residual values	\$ 4,864	\$ 4,640
First-loss residual value guarantees	1,188	1,025

The equipment is depreciated on a straight-line basis over the term of the lease. The corresponding depreciation expense was \$853 in 2023, \$827 in 2022, and \$983 in 2021.

Lease payments for operating leases are scheduled as follows:

Due in:	2023
2024	\$ 1,044
2025	797
2026	490
2027	258
2028	65
Later years	10
Total	<u>\$ 2,664</u>

25. FAIR VALUE MEASUREMENTS

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. To determine fair value, we use various methods including market and income approaches. We utilize valuation models and techniques that maximize the use of observable inputs. The models are industry-standard models that consider various assumptions including time values and yield curves as well as other economic measures. These valuation techniques are consistently applied.

Level 1 measurements consist of quoted prices in active markets for identical assets or liabilities. Level 2 measurements include significant other observable inputs such as quoted prices for similar assets or liabilities in active markets; identical assets or liabilities in inactive markets; observable inputs such as interest rates and yield curves; and other market-corroborated inputs. Level 3 measurements include significant unobservable inputs.

Fair values of the financing receivables that were issued long-term were based on the discounted values of their related cash flows at interest rates currently being offered by us for similar financing receivables. The fair values of the remaining financing receivables approximated the carrying amounts.

Fair values of long-term borrowings and short-term securitization borrowings were based on current market quotes for identical or similar borrowings and credit risk, or on the discounted values of their related cash flows at current market interest rates.

The fair values of financial instruments that do not approximate the carrying values at October 29, 2023 and October 30, 2022 follow:

	2023		2022	
	Carrying Value	Fair Value*	Carrying Value	Fair Value*
Financing receivables – net	\$ 43,673	\$ 42,777	\$ 36,634	\$ 35,526
Financing receivables				
securitized – net	7,335	7,056	5,936	5,698
Short-term securitization borrowings	6,995	6,921	5,711	5,577
Long-term borrowings due within one year**	8,331	8,156	7,466	7,322
Long-term borrowings**	38,428	36,873	33,566	31,852

* Fair value measurements above were Level 3 for all financing receivables and Level 2 for all borrowings.

** Values exclude finance lease liabilities that are presented as borrowings (see Note 24).

Assets and liabilities measured at October 29, 2023 and October 30, 2022 at fair value on a recurring basis follow, excluding our cash equivalents, which were carried at a cost that approximates fair value and consisted of money market funds and time deposits:

	2023	2022
Level 1:		
Marketable securities		
International equity securities	\$ 3	\$ 3
International mutual funds securities	101	
U.S. equity fund	86	70
U.S. fixed income fund	32	
U.S. government debt securities	78	62
Total Level 1 marketable securities	300	135
Level 2:		
Marketable securities		
Corporate debt securities	244	200
International debt securities	1	60
Mortgage-backed securities*	185	155
Municipal debt securities	75	63
U.S. government debt securities	141	121
Total Level 2 marketable securities	646	599
Other assets - Derivatives	292	373
Accounts payable and accrued expenses - Derivatives	1,130	1,231
Level 3:		
Accounts payable and accrued expenses – Deferred consideration	186	236

* Primarily issued by U.S. government sponsored enterprises.

Fair value, nonrecurring level 3 measurements from impairments at October 29, 2023 and October 30, 2022 follow:

	Fair Value		Losses		
	2023	2022 ¹	2023	2022	2021
Inventories	\$ 19		\$ 19		
Property and equipment – net	15		41	\$ 44	
Other intangible assets – net			28		
Other assets					6

¹ Related to assessments on the Russian operations, performed at May 1, 2022 and updated on July 31, 2022 and October 30, 2022.

The following is a description of the valuation methodologies we use to measure certain financial instruments on the balance sheets at fair value. For more information on asset impairments, see Note 4.

Marketable securities – The portfolio of investments is valued on a market approach (matrix pricing model) in which all significant inputs are observable or can be derived from or corroborated by observable market data such as interest rates, yield curves, volatilities, credit risk, and prepayment speeds. Funds are valued using the fund's net asset value, based on the fair value of the underlying securities.

Derivatives – Our derivative financial instruments consist of interest rate contracts (swaps), foreign currency exchange contracts (futures, forwards and swaps), and cross-currency interest rate contracts (swaps). The portfolio is valued based on an income approach (discounted cash flow) using market observable inputs, including swap curves and both forward and spot exchange rates for currencies.

Financing receivables – Specific reserve impairments are based on the fair value of the collateral, which is measured using a market approach (appraisal values or realizable values). Inputs include a selection of realizable values (see Note 11).

Inventories – The impairment was based on net realizable value, less reasonably predictable selling and disposal costs.

Property and equipment – net – The valuations were based on cost and market approaches. The inputs include replacement cost estimates adjusted for physical deterioration and economic obsolescence, or quoted prices when available.

Other intangible assets – net – In 2022, we considered external valuations based on our probability weighted cash flow analysis.

Other assets – In 2021, the impairments were measured at the fair value of a right of use operating lease asset.

26. DERIVATIVE INSTRUMENTS

Fair values of our derivative instruments and the associated notional amounts at the end of 2023 and 2022 were as follows. Assets are recorded in "Other assets," while liabilities are recorded in "Accounts payable and accrued expenses."

	Notional	Fair Value	
		Assets	Liabilities
2023			
Cash flow hedges:			
Interest rate contracts	\$ 1,500	\$ 45	
Fair value hedges:			
Interest rate contracts	12,691		\$ 970
Not designated as hedging instruments:			
Interest rate contracts	13,853	169	98
Foreign exchange contracts	8,117	75	54
Cross-currency interest rate contracts	176	3	8
2022			
Cash flow hedges:			
Interest rate contracts	\$ 1,950	\$ 87	
Fair value hedges:			
Interest rate contracts	10,112		\$ 1,004
Not designated as hedging instruments:			
Interest rate contracts	10,568	212	107
Foreign exchange contracts	8,185	66	118
Cross-currency interest rate contracts	260	8	2

The amounts recorded, at October 29, 2023 and October 30, 2022, in the consolidated balance sheets related to borrowings designated in fair value hedging relationships were as follows. Fair value hedging adjustments are included in the carrying amount of the hedged item.

	Active Hedging Relationships		Discontinued Hedging Relationships	
	Carrying Amount of Hedged Item	Cumulative Fair Value Hedging Amount	Carrying Amount of Formerly Hedged Item	Cumulative Fair Value Hedging Amount
2023				
Short-term borrowings		\$ 1,814	\$ 15	
Long-term borrowings	\$ 11,660	\$ (976)	7,144	(288)
2022				
Short-term borrowings		\$ 2,515	\$ 15	
Long-term borrowings	\$ 9,060	\$ (1,006)	5,520	(19)

The classification and gains (losses), including accrued interest expense, related to derivative instruments on the statements of consolidated income consisted of the following:

	2023	2022	2021
Fair Value Hedges			
Interest rate contracts – Interest expense	\$ (542)	\$ (1,144)	\$ (236)
Cash Flow Hedges			
Recognized in OCI:			
Interest rate contracts – OCI (pretax)	\$ 25	\$ 89	\$ 8
Reclassified from OCI:			
Interest rate contracts – Interest expense	62	9	(13)
Not Designated as Hedges			
Interest rate contracts – Net sales	\$ 1	\$ 53	\$ 13
Interest rate contracts – Interest expense	40	81	14
Foreign exchange contracts – Net sales	(6)	(6)	
Foreign exchange contracts – Cost of sales	8	(64)	(101)
Foreign exchange contracts – Other operating expenses	100	402	(262)
Total not designated	<u>\$ 143</u>	<u>\$ 466</u>	<u>\$ (336)</u>

The amount of gain recorded in OCI at October 29, 2023 that is expected to be reclassified to "Interest expense" or "Other operating expenses" in the next twelve months if interest rates or exchange rates remain unchanged is \$31 after-tax. There were no gains or losses reclassified from OCI to earnings based on the probability that the original forecasted transaction would not occur.

Counterparty Risk and Collateral

Derivative instruments are subject to significant concentrations of credit risk to the banking sector. We manage individual counterparty exposure by setting limits that consider the credit rating of the counterparty, the credit default swap spread of the counterparty, and other financial commitments and exposures between us and the counterparty banks. All interest rate derivatives are transacted under International Swaps and Derivatives Association (ISDA) documentation. Some of these agreements include credit support provisions. Each master agreement permits the net settlement of amounts owed in the event of default or termination.

Certain of our derivative agreements contain credit support provisions that may require us to post collateral based on the size of the net liability positions and credit ratings. The aggregate fair value of all derivatives with credit-risk-related contingent features that were in a net liability position at October 29, 2023 and October 30, 2022, was \$1.1 billion and \$1.1 billion, respectively. In accordance with the limits established in these agreements, we posted \$659 of cash collateral at October 29, 2023 and \$701 at October 30, 2022. In addition, we paid \$8 of collateral that was outstanding at both October 29, 2023 and October 30, 2022 to participate in an international futures market to hedge currency exposure, not included in the table below.

Derivatives are recorded without offsetting for netting arrangements or collateral. The impact on the derivative assets and liabilities related to netting arrangements and collateral at October 29, 2023 and October 30, 2022 follows:

	Gross Amounts Recognized	Netting Arrangements	Collateral	Net Amount
2023				
Assets	\$ 292	\$ (152)		\$ 140
Liabilities	1,130	(152)	\$ (659)	319
2022				
Assets	\$ 373	\$ (179)	\$ (54)	\$ 140
Liabilities	1,231	(179)	(701)	351

27. SEGMENT DATA

Our operations are presently organized and reported in four business segments. This presentation is consistent with how the chief operating decision maker (the CEO) assesses the performance of the segments and makes decisions about resource allocations.

The PPA segment defines, develops, and delivers global equipment and technology solutions to unlock customer value for production-scale growers of large grains, small grains, cotton, and sugarcane. The main products include large and certain mid-size tractors, combines, cotton pickers, sugarcane harvesters and loaders, and soil preparation, seeding, application, and crop care equipment.

The SAT segment defines, develops, and delivers global equipment and technology solutions to unlock customer value for dairy and livestock producers, high-value crop producers, and turf and utility customers. The segment's primary products include certain mid-size, utility, and compact utility tractors, as well as hay and forage equipment, riding and commercial lawn equipment, golf course equipment, and utility vehicles.

The CF segment defines, develops, and delivers a broad range of machines and technology solutions organized along the earthmoving, forestry, and roadbuilding production systems. The segment's primary products include crawler dozers and loaders, four-wheel-drive loaders, excavators, skid-steer loaders, milling machines, and log harvesters.

The products and services produced by the segments above are marketed through independent retail dealer networks and major retail outlets. For roadbuilding products in certain markets outside the U.S. and Canada, the products are sold through company-owned sales and service subsidiaries.

The financial services segment finances sales and leases by John Deere dealers of new and used production and precision agriculture equipment, small agriculture and turf equipment, and construction and forestry equipment. In addition, the financial services segment provides wholesale financing to dealers of the foregoing equipment, finances retail revolving charge accounts, and offers extended equipment warranties.

Because of integrated manufacturing operations and common administrative and marketing support, a substantial number of allocations must be made to determine operating segment data.

Identifiable assets assigned to the operating segments are those the units actively manage, consisting of trade receivables, inventories, property and equipment, intangible assets, and certain other assets. Corporate assets are managed collectively, including cash and cash equivalents, retirement benefit net assets, goodwill, and deferred income tax assets.

Information relating to operations by operating segment follows for the years ended October 29, 2023, October 30, 2022, and October 31, 2021.

OPERATING SEGMENTS	2023	2022	2021
Net sales and revenues			
Unaffiliated customers:			
Production & precision ag net sales	\$ 26,790	\$ 22,002	\$ 16,509
Small ag & turf net sales	13,980	13,381	11,860
Construction & forestry net sales	14,795	12,534	11,368
Financial services revenues	4,721	3,625	3,548
Other revenues*	965	1,035	739
Total	<u>\$ 61,251</u>	<u>\$ 52,577</u>	<u>\$ 44,024</u>

* Other revenues are primarily the production and precision ag, small ag and turf, and construction and forestry revenues for finance and interest income and other income.

Operating profit			
Production & precision ag	\$ 6,996	\$ 4,386	\$ 3,334
Small ag & turf	2,472	1,949	2,045
Construction & forestry	2,695	2,014	1,489
Financial services*	795	1,159	1,144
Total operating profit*	<u>12,958</u>	<u>9,508</u>	<u>8,012</u>
Interest income	559	159	82
Interest expense	(411)	(390)	(368)
Foreign exchange gain (loss) from equipment operations' financing activities	(114)	(103)	(45)
Pension and OPEB benefit (cost), excluding service cost component	286	218	183
Corporate expenses – net	(252)	(255)	(241)
Income taxes	(2,871)	(2,007)	(1,658)
Total	<u>(2,803)</u>	<u>(2,378)</u>	<u>(2,047)</u>
Net income	10,155	7,130	5,965
Less: Net income (loss) attributable to noncontrolling interests	(11)	(1)	2
Net income attributable to Deere & Company	<u>\$ 10,166</u>	<u>\$ 7,131</u>	<u>\$ 5,963</u>

* Operating profit of the financial services business segment includes the effect of its interest expense and foreign exchange gains or losses.

OPERATING SEGMENTS	2023	2022	2021
Interest income*			
Production & precision ag	\$ 29	\$ 22	\$ 21
Small ag & turf	35	24	21
Construction & forestry	13	8	10
Financial services	3,731	2,245	1,999
Corporate	559	159	82
Intercompany	(1,008)	(431)	(279)
Total	<u>\$ 3,359</u>	<u>\$ 2,027</u>	<u>\$ 1,854</u>

* Does not include finance rental income for equipment on operating leases.

Interest expense			
Production & precision ag	\$ 282	\$ 122	\$ 84
Small ag & turf	236	105	87
Construction & forestry	169	72	46
Financial services	2,362	799	687
Corporate	411	390	368
Intercompany	(1,007)	(426)	(279)
Total	<u>\$ 2,453</u>	<u>\$ 1,062</u>	<u>\$ 993</u>

Depreciation* and amortization expense

Production & precision ag	\$ 581	\$ 523	\$ 495
Small ag & turf	241	236	245
Construction & forestry	301	282	303
Financial services	1,016	1,050	1,140
Intercompany	(135)	(196)	(133)
Total	<u>\$ 2,004</u>	<u>\$ 1,895</u>	<u>\$ 2,050</u>

* Includes depreciation for equipment on operating leases.

Identifiable operating assets

Production & precision ag	\$ 8,734	\$ 8,414	\$ 7,021
Small ag & turf	4,348	4,451	3,959
Construction & forestry	7,139	6,754	6,457
Financial services	70,732	58,864	51,624
Corporate	13,134	11,547	15,053
Total	<u>\$ 104,087</u>	<u>\$ 90,030</u>	<u>\$ 84,114</u>

Capital additions

Production & precision ag	\$ 896	\$ 649	\$ 458
Small ag & turf	386	329	253
Construction & forestry	311	217	183
Financial services	4	2	3
Total	<u>\$ 1,597</u>	<u>\$ 1,197</u>	<u>\$ 897</u>

28. SUBSEQUENT EVENT

On December 6, 2023, a quarterly dividend of \$1.47 per share was declared at the Board of Directors meeting, payable on February 8, 2024 to stockholders of record on December 29, 2023.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Deere & Company:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Deere & Company and subsidiaries (the "Company") as of October 29, 2023 and October 30, 2022, the related statements of consolidated income, consolidated comprehensive income, changes in consolidated stockholders' equity and consolidated cash flows for each of the three years in the period ended October 29, 2023, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of October 29, 2023 and October 30, 2022, and the results of its operations and its cash flows for each of the three years in the period ended October 29, 2023, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of October 29, 2023, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated December 15, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

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

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

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Sales Incentives — Refer to Note 2 to the financial statements

Critical Audit Matter Description

The Company provides retail discount or financing sales incentives programs to dealers that are due when the dealer sells the equipment to a retail customer.

The estimated cost of these programs is based on:

- historical data,
- announced and expected incentive programs,
- field inventory levels, and
- forecasted sales volumes.

At the time a sale is recognized, the Company records an estimate of the sales incentive costs. The final cost is determined at the time of the retail sale.

There are numerous programs available at any time, and new programs may be announced after the Company records the equipment sale to the dealer. Changes in the mix and types of sales incentive programs affect these estimates, which are reviewed quarterly. Actual cost differences from the original cost estimate are recognized in "Net sales." A key assumption is the predictive value of the historical percentage of retail sales incentive costs to retail sales.

We identified the United States and Canada sales incentive accrual as a critical audit matter because estimating sales incentive costs requires significant judgment by management and changes in historical percentage of sales incentive costs to retail sales by dealers could have a material impact on the sales incentive accrual. Auditing management's assumptions about the predictive nature of historical sales incentive costs involves a high degree of auditor judgment and an increased extent of effort to evaluate the reasonableness of management's estimates.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to testing management's assumption that historical sales incentive costs are predictive of future incentive costs included the following, among others:

- We tested the effectiveness of management's controls over the assumptions used to estimate the sales incentive accrual.
- We evaluated management's ability to accurately forecast future incentive costs by performing a retrospective review that involved comparing actual incentive costs to management's historical forecasts.
- We tested the completeness of the population used in the accrual calculation by inspecting incentive program communications to dealers to ensure programs offered were appropriately included in the calculation. We tested the accuracy of sales incentives transactions by verifying amounts settled with dealers.
- We evaluated the reasonableness of management's assumption that historical sales incentive costs are predictive of future incentive costs by:
 - Considering the impact of changes in the current economic conditions and competitive environment.
 - Comparing historical and current sales incentive data for eligible products in the following manner:
 - Type and number of programs
 - Geography
 - Program size and duration

Allowance for Credit Losses – Refer to Notes 2 and 11 to the financial statements

Critical Audit Matter Description

The allowance for credit losses is an estimate of the credit losses expected over the life of the Company's receivable portfolio. The allowance is measured on a collective basis for receivables with similar risk characteristics. Receivables that do not share risk characteristics are evaluated on an individual basis. Risk characteristics include:

- finance product category,
- market,
- geography,
- credit risk, and
- remaining balance.

The Company utilizes loss forecast models to estimate expected credit losses. Transition matrix models are used for large and complex retail customer receivable pools. These models are used for more than 90 percent of retail customer receivables. Historical portfolio performance and current delinquency levels are used to forecast future defaults. Estimated recovery rates are applied to the estimated default balance to calculate the expected credit losses.

The model output is adjusted for forecasted economic conditions, which may include the following economic indicators:

- commodity prices,
- industry equipment sales,
- unemployment rates, and
- housing starts.

Management reviews each model's output quarterly, and qualitative adjustments are incorporated as necessary.

We identified the allowance for credit losses estimated for the Company's United States and Canada receivable portfolios by the transition matrix models and related reasonable and supportable forecasts and qualitative adjustments as a critical audit matter because determining the appropriate methodology and assumptions used in the estimate requires significant judgment by management. Given the subjective nature and judgment applied by management to determine the allowance for credit losses, auditing the methodology and assumptions requires a high degree of auditor judgment and an increased extent of effort, including the need to involve credit specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures to test the allowance for credit losses estimated for the Company's United States and Canada receivable portfolios by the transition matrix models and related reasonable and supportable forecasts and qualitative adjustments included the following, among others:

- We tested the effectiveness of management's controls over the methodology, data and assumptions used to estimate the allowance for credit losses.
- We tested the accuracy and evaluated the relevance of the underlying historical data used in the Company's transition matrix models.

-
- With the assistance of our credit specialists, we evaluated the reasonableness and accuracy of the transition matrix models used to estimate the allowance for credit losses, including model assumptions and the selection and application of relevant risk characteristics and use of qualitative adjustments.
 - We evaluated qualitative adjustments to the model estimate. Our evaluation included:
 - Comparison of qualitative factors used by the Company to source data provided by the Company and/or to externally available data.
 - Consideration and evaluation of contradictory evidence.
 - We evaluated management's ability to accurately forecast credit losses by performing a retrospective review, which involved comparing actual credit losses to historical estimates.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois

December 15, 2023

We have served as the Company's auditor since 1910.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Deere & Company:

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Deere & Company and subsidiaries (the "Company") as of October 29, 2023, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of October 29, 2023, based on criteria established in Internal Control — Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended October 29, 2023 of the Company and our report dated December 15, 2023, expressed an unqualified opinion on those financial statements.

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 Management's Report on Internal Control over Financial Reporting appearing under Item 9A. 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/ DELOITTE & TOUCHE LLP

Chicago, Illinois

December 15, 2023

- 3.1 [Certificate of Incorporation \(Exhibit 3.1 to Form 10-Q of registrant for the quarter ended July 28, 2019, Securities and Exchange Commission File Number 1-4121*\)](#)
- 3.2 [Certificate of Designation Preferences and Rights of Series A Participating Preferred Stock \(Exhibit 3.2 to Form 10-K of registrant for the year ended October 31, 1998, Securities and Exchange Commission File Number 1-4121*\)](#)
- 3.3 [Bylaws, as amended \(Exhibit 3.2 to Form 10-Q of registrant for the quarter ended July 30, 2023, Securities and Exchange Commission File Number 1-4121*\)](#)
- 4.1 [Form of common stock certificate \(Exhibit 4.6 to Form 10-K of registrant for the year ended October 31, 1998, Securities and Exchange Commission File Number 1-4121*\)](#)
- 4.2 [Indenture, dated September 25, 2008, between the registrant and The Bank of New York Mellon, as Trustee \(Exhibit 4.1 to the registration statement on Form S-3ASR no. 333-153704 filed September 26, 2008, Securities and Exchange Commission File Number 1-4121*\)](#)
- 4.3 [Indenture, dated June 15, 2020, among Deere Funding Canada Corporation, as issuer, the registrant, as guarantor, and The Bank of New York Mellon, as Trustee \(Exhibit 4.3 to the registration statement on Form S-3ASR no. 333-239165 filed June 15, 2020, Securities and Exchange Commission File Number 1-4121*\)](#)
- 4.4 [Terms and Conditions of the Euro Medium Term Notes, published March 31, 2022, applicable to the U.S. \\$6,000,000,000 Euro Medium Term Note Programme of the registrant, John Deere Capital Corporation, John Deere Bank S.A., and John Deere Cash Management \(Exhibit 4.5 to Form 10-K of registrant for the year ended October 30, 2022, Securities and Exchange Commission File Number 1-4121*\)](#)
- 4.5 [Description of Deere & Company's Common Stock \(Exhibit 4.4 to Form 10-K of registrant for the year ended November 3, 2019, Securities and Exchange Commission File number 1-4121*\)](#)
- 4.6 [Description of Deere & Company's 6.55% Debentures Due 2028 \(Exhibit 4.6 to Form 10-K of registrant for the year ended November 3, 2019, Securities and Exchange Commission File Number 1-4121*\)](#)

Certain instruments relating to long-term debt constituting less than 10 percent of the registrant's total assets are not filed as exhibits herewith pursuant to Item 601(b)(4)(iii)(A) of Regulation S-K. The registrant will furnish copies of such instruments to the Commission upon request.

- 10.1 [Agreement, as amended November 1, 1994, between the registrant and John Deere Capital Corporation concerning agricultural retail notes \(Exhibit 10.1 to Form 10-K of registrant for the year ended October 31, 1998, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.2 [Agreement, as amended November 1, 1994, between the registrant and John Deere Capital Corporation concerning lawn and grounds care retail notes \(Exhibit 10.2 to Form 10-K of registrant for the year ended October 31, 1998, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.3 [Agreement, as amended November 1, 1994, between John Deere Construction Equipment Company and John Deere Capital Corporation concerning construction retail notes \(Exhibit 10.3 to Form 10-K of registrant for the year ended October 31, 1998, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.4 [Agreement, dated July 14, 1997, between John Deere Construction Equipment Company and John Deere Capital Corporation concerning construction retail notes \(Exhibit 10.4 to Form 10-K of registrant for the year ended October 31, 2003, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.5 [Second Amended Agreement, dated March 27, 2023, between the registrant and John Deere Capital Corporation relating to fixed charges ratio, ownership, and minimum net worth of John Deere Capital Corporation \(Exhibit 10.4 to Form 10-Q of registrant for the quarter ended April 30, 2023, Securities and Exchange Commission File Number 1-4121*\)](#)

- 10.6† [Deere & Company Voluntary Deferred Compensation Plan, as amended October 31, 2023](#)
- 10.7† [John Deere Short-Term Incentive Bonus Plan, as amended October 27, 2023 \(Exhibit 10.1 to Form 8-K of registrant filed October 30, 2023, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.8† [John Deere Long-Term Incentive Cash Plan \(Appendix C to Proxy Statement of registrant filed January 12, 2018, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.9† [John Deere Omnibus Equity and Incentive Plan, as amended February 25, 2015 \(Appendix D to Proxy Statement of registrant filed January 14, 2015, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.10† [Form of Terms and Conditions for John Deere Nonqualified Stock Options granted fiscal 2023](#)
- 10.11† [Form of Terms and Conditions for John Deere Restricted Stock Units and Performance Stock Units granted fiscal 2023](#)
- 10.12† [Form of Terms and Conditions for John Deere Nonqualified Stock Options granted fiscal 2022. \(Exhibit 10.10 to Form 10-K of registrant for the year ended October 31, 2022, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.13† [Form of Terms and Conditions for John Deere Restricted Stock Units and Performance Stock Units granted fiscal 2022 \(Exhibit 10.11 to Form 10-K of registrant for the year ended October 31, 2022, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.14† [Form of Terms and Conditions for John Deere Nonqualified Stock Options granted fiscal 2021 \(Exhibit 10.10 to Form 10-K of registrant for the year ended October 31, 2021, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.15† [Form of Terms and Conditions for John Deere Restricted Stock Units and Performance Stock Units granted fiscal 2021 \(Exhibit 10.11 to Form 10-K of registrant for the year ended October 31, 2021, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.16† [Form of John Deere Restricted Stock Unit Grant for Directors granted fiscal 2023](#)
- 10.17† [Form of John Deere Restricted Stock Unit Grant for Directors \(Exhibit 10.13 to Form 10-K of the registrant for the year ended October 31, 2008, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.18† [Form of Terms and Conditions for Deere & Company Nonemployee Director Stock Ownership Plan \(Exhibit 10.13 to Form 10-K of registrant for the year ended October 31, 2021, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.19† [John Deere Defined Contribution Restoration Plan, as amended October 31, 2023](#)
- 10.20† [John Deere Supplemental Pension Benefit Plan, as amended December 31, 2020 \(Exhibit 10.15 to Form 10-K of registrant for the year ended October 31, 2021, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.21† [John Deere Senior Supplementary Pension Benefit Plan, as amended October 15, 2014 \(Exhibit 10.16 to Form 10-K of registrant for the year ended October 31, 2014, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.22† [John Deere ERISA Supplementary Pension Benefit Plan, as amended October 31, 2022 \(Exhibit 10.1 to Form 10-Q of registrant for the quarter ended January 29, 2023, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.23† [Deere & Company Nonemployee Director Stock Ownership Plan, as amended February 29, 2012 \(Appendix A to Proxy Statement of registrant filed on January 13, 2012, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.24† [Deere & Company Nonemployee Director Stock Ownership Plan, February 23, 2022 \(Appendix C to Proxy Statement of registrant filed on January 7, 2022, Securities and Exchange Commission File Number 1-4121*\)](#)
- 10.25† [Deere & Company Nonemployee Director Deferred Compensation Plan, as amended October 31, 2023](#)

10.26†	<u>Amended and Restated Change in Control Severance Program of Deere & Company, effective August 29, 2023 (Exhibit 10.1 to Form 10-Q of registrant for the quarter ended July 30, 2023, Securities and Exchange Commission File number 1-4121*)</u>
10.27†	<u>Incentive Compensation Recovery Policy effective August 29, 2023</u>
10.28†	<u>John Deere 2020 Equity and Incentive Plan (Appendix C to Proxy Statement of registrant filed January 10, 2020, Securities and Exchange Commission File Number 1-4121*)</u>
10.29	<u>Asset Purchase Agreement, dated October 29, 2001, between the registrant and Deere Capital, Inc. concerning the sale of trade receivables (Exhibit 10.19 to Form 10-K of registrant for the year ended October 31, 2001, Securities and Exchange Commission File Number 1-4121*)</u>
10.30	<u>Second Amendment, dated February 21, 2020, to the Asset Purchase Agreement dated October 29, 2001, between the registrant and Deere Capital, Inc. (including conformed copy of the Asset Purchase Agreement as Exhibit A thereto) (Exhibit 10.1 to Form 10-Q of registrant for the quarter ended February 2, 2020, Securities and Exchange Commission File Number 1-4121*)</u>
10.31	<u>Asset Purchase Agreement, dated October 29, 2001, between John Deere Construction & Forestry Company and Deere Capital, Inc. concerning the sale of trade receivables (Exhibit 10.20 to Form 10-K of registrant for the year ended October 31, 2001, Securities and Exchange Commission File Number 1-4121*)</u>
10.32	<u>Second Amendment, dated February 21, 2020, to the Asset Purchase Agreement dated October 29, 2001, between John Deere Construction & Forestry Company and Deere Capital, Inc. (including conformed copy of the Asset Purchase Agreement as Exhibit A thereto) (Exhibit 10.2 to Form 10-Q of registrant for the quarter ended February 2, 2020, Securities and Exchange Commission File Number 1-4121*)</u>
10.33	<u>2027 Credit Agreement, dated March 27, 2023, among the registrant, John Deere Capital Corporation, John Deere Bank S.A., various financial institutions, JPMorgan Chase Bank, N.A., as Administrative Agent, Bank of America, N.A. and Citibank, N.A., as Co-Syndication Agents, and J.P. Morgan Securities LLC, as Sustainability Structuring Agent (Exhibit 10.2 to Form 10-Q of registrant for the quarter ended April 30, 2023, Securities and Exchange Commission File Number 1-4121*)</u>
10.34	<u>2028 Credit Agreement, dated March 27, 2023, among the registrant, John Deere Capital Corporation, John Deere Bank S.A., various financial institutions, JPMorgan Chase Bank, N.A., as Administrative Agent, Bank of America, N.A. and Citibank, N.A., as Co-Syndication Agents, and J.P. Morgan Securities LLC, as Sustainability Structuring Agent (Exhibit 10.3 to Form 10-Q of registrant for the quarter ended April 30, 2023, Securities and Exchange Commission File Number 1-4121*)</u>
10.35	<u>364-Day Credit Agreement, dated March 27, 2023, among the registrant, John Deere Capital Corporation, John Deere Bank S.A., various financial institutions, JPMorgan Chase Bank, N.A., as Administrative Agent, Bank of America, N.A. and Citibank, N.A., as Co-Syndication Agents, and J.P. Morgan Securities LLC as Sustainability Structuring Agent (Exhibit 10.1 to Form 10-Q of registrant for the quarter ended April 30, 2023, Securities and Exchange Commission File Number 1-4121*)</u>
21.	<u>Subsidiaries</u>
22.	<u>List of Guarantors and Subsidiary Issuers of Guaranteed Securities</u>
23.	<u>Consent of Deloitte & Touche LLP</u>
24.	<u>Power of Attorney (included on signature page)</u>
31.1	<u>Rule 13a-14(a)/15d-14(a) Certification</u>
31.2	<u>Rule 13a-14(a)/15d-14(a) Certification</u>
32.	<u>Section 1350 Certifications (furnished herewith)</u>
101.INS	Inline 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	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104.	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Incorporated by reference.

† Management contract or compensatory plan or arrangement.

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.

DEERE & COMPANY

By: /s/ John C. May
John C. May
Chairman and Chief Executive Officer
(Principal Executive Officer)

Date: December 15, 2023

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 and in the capacities and on the date indicated.

Each person signing below also hereby appoints John C. May, Joshua A. Jepsen, and Edward R. Berk, and each of them singly, his or her lawful attorney-in-fact with full power to execute and file any and all amendments to this report together with exhibits thereto and generally to do all such things as such attorney-in-fact may deem appropriate to enable Deere & Company to comply with the provisions of the Securities Exchange Act of 1934 and all requirements of the Securities and Exchange Commission.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Leanne G. Caret</u> Leanne G. Caret	Director	December 15, 2023
)	
)	
<u>/s/ Tamra A. Erwin</u> Tamra A. Erwin	Director	
)	
)	
<u>/s/ Alan C. Heuberger</u> Alan C. Heuberger	Director	
)	
)	
<u>/s/ Charles O. Holliday, Jr.</u> Charles O. Holliday, Jr.	Director	
)	
)	
<u>/s/ L. Neil Hunn</u> L. Neil Hunn	Director	
)	
)	
<u>/s/ Joshua A. Jepsen</u> Joshua A. Jepsen	Senior Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	
)	
)	
<u>/s/ Michael O. Johanns</u> Michael O. Johanns	Director	
)	
)	
<u>/s/ Clayton M. Jones</u> Clayton M. Jones	Director	
)	
)	
)	

<u>/s/ John C. May</u>	Chairman and Chief Executive Officer)
John C. May	(Principal Executive Officer))
)
<u>/s/ Gregory R. Page</u>	Director)
Gregory R. Page)
)
<u>/s/ Sherry M. Smith</u>	Director)
Sherry M. Smith)
)
<u>/s/ Dmitri L. Stockton</u>	Director)
Dmitri L. Stockton)
)
<u>/s/ Sheila G. Talton</u>	Director)
Sheila G. Talton)

**DEERE & COMPANY
AND CONSOLIDATED SUBSIDIARIES**

SUBSIDIARIES OF THE REGISTRANT

As of October 29, 2023

Subsidiary companies of Deere & Company are listed below. Except where otherwise indicated, 100 percent of the voting securities of the companies named is owned directly or indirectly by Deere & Company.

Name of subsidiary	Organized under the laws of
<hr/>	
Subsidiaries included in consolidated financial statements *	
Deere Credit Services, Inc.	Delaware
Hamm AG	Germany
John Deere Asia (Singapore) Private Limited	Singapore
John Deere Brasil Ltda.	Brazil
John Deere Canada ULC	Canada
John Deere Capital Corporation	Delaware
John Deere Cash Management	Luxembourg
John Deere Construction & Forestry Company	Delaware
John Deere GmbH & Co. KG	Germany
John Deere Holding (Barbados) SRL	Barbados
John Deere Holding France S.A.S.	France
John Deere India Private Limited	India
John Deere International Manufacturing S.à.r.l.	Luxembourg
John Deere Limited	Australia
John Deere Limited	Scotland
John Deere Luxembourg Investment S.à.r.l.	Luxembourg
John Deere Sales Hispanoamerica, S. de R.L. de C.V.	Mexico
John Deere Shared Services LLC	Iowa
John Deere Technologies S.C.S.	Luxembourg
John Deere Walldorf GmbH & Co. KG	Germany
John Deere Walldorf International GmbH & Co. KG	Germany
Joseph Vögele Aktiengesellschaft	Germany
Wirtgen GmbH	Germany
Wirtgen America, Inc.	Tennessee

* One-hundred ninety-six consolidated subsidiaries and twenty-three unconsolidated affiliates, whose names are omitted, considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary.

LIST OF SUBSIDIARY ISSUERS OF GUARANTEED SECURITIES

From time to time, the following 100%-owned subsidiaries of Deere & Company, a Delaware corporation (the "Company"), may issue debt securities that are fully and unconditionally guaranteed by the Company under a registration statement on Form S-3 filed with the Securities and Exchange Commission.

Name of Subsidiary Issuer	Jurisdiction
Deere Funding Canada Corporation	Ontario

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-273045 on Form S-3 and Registration Statement Nos. 333-165069, 333-62669, 333-132013, 333-140980, 333-140981, 333-202299 and 333-236655 on Form S-8 of our reports dated December 15, 2023, relating to the consolidated financial statements of Deere & Company, and the effectiveness of Deere & Company's internal control over financial reporting, appearing in this Annual Report on Form 10-K for the year ended October 29, 2023.

/s/ DELOITTE & TOUCHE LLP
Chicago, Illinois

December 15, 2023

CERTIFICATIONS

I, John C. May, certify that:

1. I have reviewed this annual report on Form 10-K of Deere & Company;
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(s) 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(s) 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: December 15, 2023

By: /s/ John C. May

John C. May
Chairman and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATIONS

I, Joshua A. Jepsen, certify that:

1. I have reviewed this annual report on Form 10-K of Deere & Company;
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(s) 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(s) 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: December 15, 2023

By: /s/ Joshua A. Jepsen

Joshua A. Jepsen
Senior Vice President and Chief Financial Officer
(Principal Financial Officer and Principal
Accounting Officer)

STATEMENT PURSUANT TO
18 U.S.C. SECTION 1350
AS REQUIRED BY
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Deere & Company (the "Company") on Form 10-K for the period ended October 29, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certify that to the best of our knowledge:

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.

December 15, 2023	<u>/s/ John C. May</u> John C. May	Chairman and Chief Executive Officer (Principal Executive Officer)
December 15, 2023	<u>/s/ Joshua A. Jepsen</u> Joshua A. Jepsen	Senior Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

A signed original of this written statement required by Section 906 has been provided to Deere & Company and will be retained by Deere & Company and furnished to the Securities and Exchange Commission or its staff upon request.