

SNAP-ON MAKES WORK EASIER FOR SERIOUS PROFESSIONALS

PERFORMING CRITICAL TASKS
WHERE THE PENALTIES
FOR FAILURE ARE HIGH.

DIVIDENDS PER SHARE



Since 1939, paid without interruption or reduction

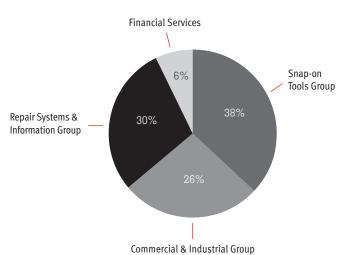
EARNINGS PER DILUTED SHARE



*As adjusted. See "Non-GAAP Financial Measures" on page 10 for a definition of, further explanation about, and reconciliations related to earnings per diluted share, as adjusted.

OPERATING SEGMENTS

2022 REVENUES BY SEGMENT



SNAP-ON FACTS

FOUNDED IN 1920

SERVES PROFESSIONALS IN OVER 130 COUNTRIES

12,900 ASSOCIATES

S&P 500 COMPANY

2022 NET SALES OF \$4.5 BILLION

NYSE: SNA







Snap-on is rooted in the critical, wielding insight and experience, forged by the decades, sharpened by the new, and guided by the work . . . enabling the ever-evolving tasks of the days and the years to come.

We connect with our customers, working men and women, whose jobs are critical, providing them the repeatability and reliability to get the job done. We make work easier, offering solutions for essential tasks where the penalties for failure are high. And, we enable the makers and the fixers who, day in and day out, move the world forward . . . a focus of special importance, particularly in turbulent times.

As we moved beyond the pandemic, navigating through new uncertainties, the continuing momentum of our operations throughout 2022 demonstrated our diverse and ample opportunities, confirmed the resilience of our markets, and underscored the considerable capabilities of our experienced team to overcome the demands of this varied environment. With the virus, inflation, and supply chain inefficiencies still lingering, we believe we are firmly positioned to engage these difficulties and to rise on a continuing upward trajectory into the future, enabled by our powerful array of innovative products, by our strong brand position, and by our challenge-tested teams.

Since our founding in 1920, our principal value-creating mechanism has been to observe work and translate the insights gained into creative solutions that make essential tasks easier. Opportunities to leverage this approach, both within and beyond vehicle repair, are embodied in our runways for growth: enhance the franchise network; expand with repair shop owners and managers; extend to critical industries, and build in emerging markets. In 2022, we continued investing in each of these strategically decisive areas, positioning Snap-on for ongoing growth, increasing profitability, and rising prosperity for years to come.

At the same time, we remain committed to our runways for improvement, applying our Snap-on Value Creation Processes, a suite of principles we use every day in the areas of safety, quality, customer connection, innovation and rapid continuous improvement (RCI). The contributions of these efforts were evident in multiple ways throughout 2022. For example, we again received recognition for a number of our new products, earning awards from both *Motor Magazine* and Professional Tool & Equipment News, reflecting our strong commitment to customer connection and exhibiting our ability to translate the associated insights into winning innovations. On another note, since it was established in 2005, Snap-on's RCI framework, a structured set of tools and processes used across the company to eliminate waste and improve operations, has contributed significantly in advancing our operating margin. This year, RCI continued to serve us well, combating inflationary and supply chain pressures, and helping to deliver new levels of profitability.

Our performance in 2022 was once again encouraging as it reflects our ongoing and upward operating momentum, and confirms the resilience of our markets in the continued turbulence. Net sales of \$4,492.8 million, the highest in our long history, increased \$240.8 million, or 5.7%, including a \$357.2 million, or 8.7%, organic sales¹ gain and \$8.5 million of acquisition-related sales, partially offset by \$124.9 million of unfavorable foreign currency translation. With respect to our end markets, sales in our automotive repair sector were robust, and our industrial sector was strong but somewhat attenuated by lower activity with the military. From a geographic perspective, growth was mixed, with significant gains in North America, but lower year-over-year

sales in Europe and China, as these regions were more afflicted by economic and political turbulence, as well as the protracted effects of COVID. Despite these geographic challenges, our businesses have demonstrated clear momentum along a sustained upward trend. In that regard, as compared to the pre-pandemic period of 2019, net sales grew \$762.8 million, or 20.5%, including a \$741.4 million, or 20.2%, organic sales gain and \$87.0 million of acquisition-related sales, partially offset by \$65.6 million of unfavorable foreign currency translation.

With respect to profitability, increased activity and the operating improvement driven by our Snap-on Value Creation Processes delivered diluted earnings per share of \$16.82, up 12.7% versus 2021, and rising 35.5% versus 2019. Operating margin before financial services of 20.9% improved 90 basis points from 20.0% in 2021, with the benefits of higher sales and pricing actions, along with RCI, overcoming increased material and other costs. For the overall company, operating margin including financial services of 24.9% in 2022 improved from 24.4% last year.

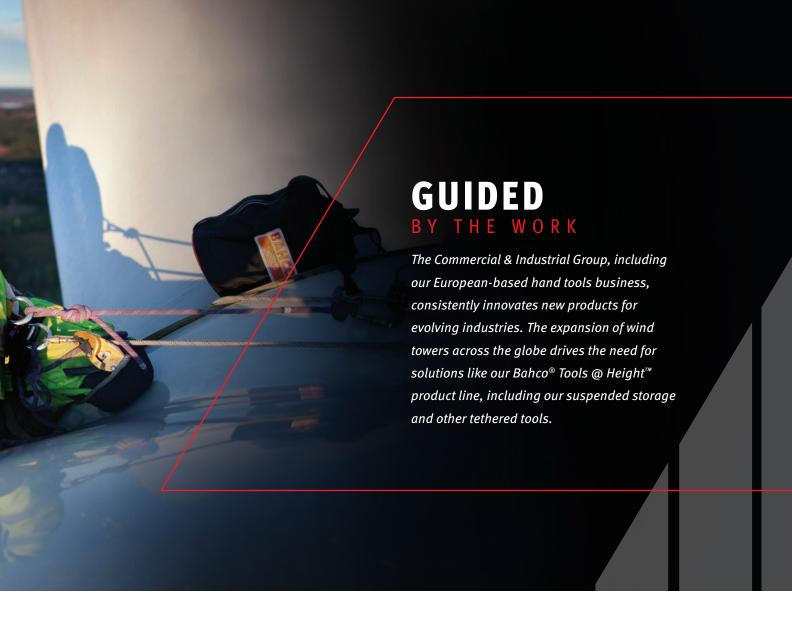
Our **COMMERCIAL & INDUSTRIAL (C&I) GROUP** serves a broad range of customers, including professionals in critical industries and emerging markets, primarily through direct and distributor channels. Net sales of \$1,399.2 million decreased 0.5% as compared to 2021, reflecting a \$60.8 million, or 4.5%, organic gain, more than offset by \$67.9 million of unfavorable foreign currency translation. The organic increase included gains in our specialty tools – or torque-related – business, in our Asia Pacific operations, and in sales to customers in critical industries, despite lower activity with the military. The group's operating margin of 14.1% compared to 14.9% in 2021, reflecting increased material and other costs, partially offset by the benefits of higher sales volumes, pricing actions, and RCI activities.

The operating environment for C&I, which has our largest international presence, continued to face headwinds associated with rising material costs, supply disruption, political turbulence, COVID-related restrictions, and varying economic impacts across its geographies. While overall year-over-year organic sales gains were realized across the group, activity at a more-localized level was mixed. At our European-based hand tools business, sales were higher in Spain and France, but were down in the United Kingdom and Sweden. Our Asia Pacific operations achieved higher sales in most geographies, except for China, which continued to be impacted by the fluctuating government policy on COVID-19. In our business with customers in critical industries, sales to the United States (U.S.) military were lower than in 2021, while volumes in the international aviation, heavy duty, oil and gas, and technical education sectors were up over last



year. Even in this varied environment, we believe there are plentiful opportunities to further penetrate this arena as we introduce innovative productivity solutions aimed at solving the essential tasks of customers in these critical sectors.

Sharpened by the new, including emerging technologies, we're investing in our product development and in our facilities to meet the needs of the changing workplace. In that regard, confirming our commitment to extending in critical industries, we strengthened our 14.4 volt Micro Lithium power tool lineup with our innovative 3/8-inch cordless impact wrench. The new tool features a compact design to reach tight spaces, a special nylon-based housing for rugged durability, and a toggle-switch trigger for precise control. The unit also includes our tri-beam headlight for broad illumination of the entire work area, making complex multipoint jobs easier. This powerful impact delivers a robust 225 ft. lbs. of bolt breakaway torque and it is controlled by a variable-speed drive, allowing the operator to apply just the right force for each job . . . making even challenging tasks



possible. In addition, a 14.4 volt battery with 2.5 amp hours ensures consistent output and extended runtime, which translates into a more efficient workday. Also in the critical task arena, our Snap-on® Automated Tool Control (ATC) solutions were originally developed for the aviation industry to manage concerns regarding foreign object debris (FOD) in aircraft maintenance and repair operations. Today, based on customer connection, our ATC solutions have been extended for use across many critical industries for a variety of applications, including to standardize work, improve productivity, control inventory, enhance security, implement an audit trail, and automate calibration scheduling. With advanced digital imaging technology and proprietary software, our ATCs scan the tool drawer and record which units are removed and replaced . . . all in real time. The ATC is a powerful example of our trend toward customized tool solutions bringing differentiated advantages in solving critical tasks. In fact, the growth of bespoke products including ATC units have been a significant driver of our gains

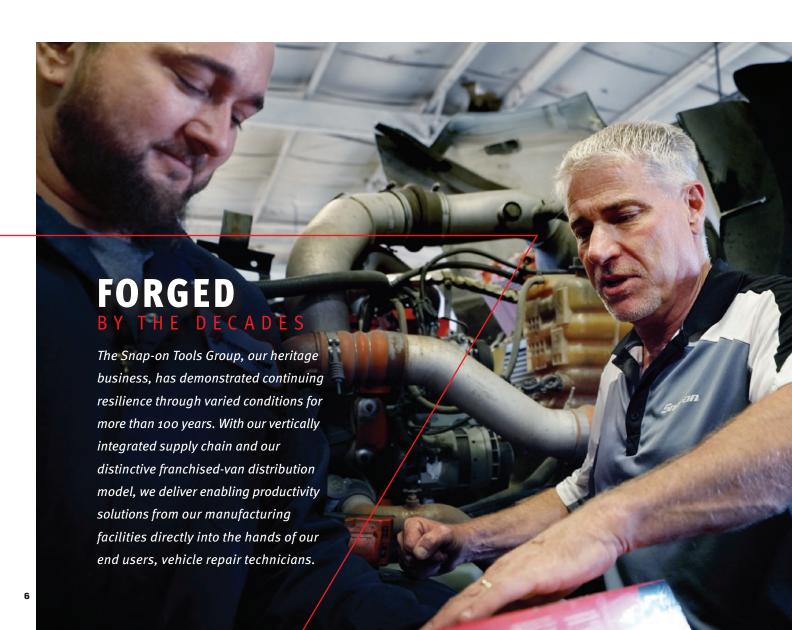
across a range of critical industries. In 2022, to support that strategic thrust in customized solutions, we opened a 90,000 square foot product staging and kitting center addition to our Kenosha, Wisconsin campus to better serve our customers in the industrial sector.

In the **SNAP-ON TOOLS GROUP**, net sales to our franchised mobile van network, primarily serving vehicle repair technicians, reached \$2,072.0 million, increasing 6.9% as compared to 2021, reflecting a \$162.5 million, or 8.5%, organic gain, partially offset by \$29.1 million of unfavorable foreign currency translation. The organic increase reflects higher sales in our U.S. franchise business, while activity in our international operations was essentially flat. The group's operating margin of 22.1%, including 20 basis points of unfavorable currency effects, improved 90 basis points from the 21.2% registered in 2021.

Sales in the U.S. were again robust and grew double digits from last year. In our international operations, sales gains in Australia and Canada were offset by a decline in the United Kingdom, reflecting the economic uncertainty in that country. The group overcame the mixed environment, achieving a positive performance through increasing its product advantage, strengthening its brands, and further enabling its franchisees by enhancing their selling capacity. Our franchisees have broad confidence in their businesses both individually and collectively, and we see the reasons for that positive perspective reflected clearly in the franchisee health metrics, the financial and physical indicators we monitor regularly. Based on that quantitative confirmation and on the enthusiastic qualitative feedback from ongoing interactions with franchisees and customers, we believe that the vehicle repair arena is a continuous considerable opportunity. In fact, given the rapid changes in vehicle technologies and the increases in the number and the age of vehicles on the road, combined with the strength and resilience of our direct model,

we believe that our Tools Group is well-positioned to take full advantage of the favorable environment and continue its positive trajectory in both the near and long term.

Our ability to make work easier for technicians in the changing and increasingly challenging repair shop of today is a critical source of success for our franchisees. Leveraging our engineering and manufacturing expertise, forged by the decades, sharpened by the new, and guided by our customer connections with critical work, we've introduced a continuous stream of new products, designed and built with the highest quality, and centered on increasing technician productivity. In that regard, we launched our new powerful nine-inch long-nose slip-joint pliers with a precisely machined three-position pivot, enabling the tool to keep the jaws tightly parallel, creating a significantly stronger hold. With a relocated joint for more leverage, our optimized handle shape for better ergonomics, and serrated jaws for a solid contact, our innovative offering provides up to a 57% increase in pulling power. The machine-



hardened teeth are sharp and strong, and are configured in three different geometries, from heavy serrations at the base to fine grooves at the tip, enabling just the right grip in a wide variety of situations. The unit is manufactured in our Milwaukee facility with special cold-forged alloy steel providing greater durability and strength . . . essential features for any technician performing critical repairs. Innovative new products like this and others introduced during the year reinforce our brand and contribute to the distinct strength that is our franchise business model.

In 2022, we received external recognition, confirming that a Snap-on Tools franchise provides a significant opportunity to build a successful and sustainable business. In its annual ranking of the top 500 franchises, *Entrepreneur Magazine* ranked Snap-on 21st overall and second among homebased networks. In addition, the Franchise Business Review once again identified Snap-on on its annual list of top franchises based on operator satisfaction. Building on those



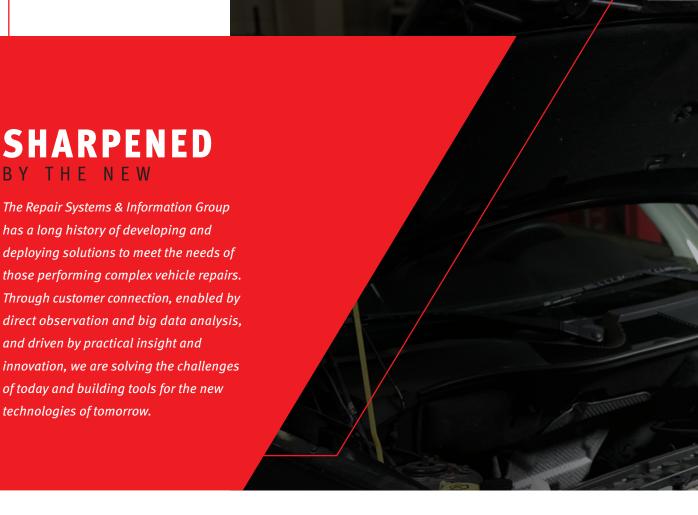
opportunities, a key success factor for our van network is ongoing training, which was delivered throughout the year and with a special effort at our Snap-on Franchisee Conference (SFC) held in August. This year's event saw a clear increase in the routes represented and those in attendance were undeniably energetic, enthusiastic, and focused on breaking barriers to advance forward.

which serves the owners and managers of both OEM dealerships and independent repair shops, net sales of \$1,666.9 million increased 10.9% as compared to 2021, reflecting a \$188.8 million, or 12.8%, organic gain and \$8.5 million of acquisition-related activity, partially offset by

In the REPAIR SYSTEMS & INFORMATION (RS&I) GROUP,

\$33.5 million of unfavorable foreign currency translation. The organic rise reflects higher volume in undercar equipment and an uplift in activity focused on OEM dealerships, as well as gains in diagnostic and repair information products to independent repair shop owners and managers. The group's operating margin of 23.6%, including 80 basis points of favorable currency effects and the impact of increased sales in lower gross margin businesses, compared with 23.2% in 2021.

Across our RS&I businesses, we're propelled by continuing industry evolution, reflected in changing technologies and increasing vehicle complexity. New cars and trucks are being released with a greater assortment of drivetrains than ever before, from internal combustion engines to hybrids to plug-in hybrids to full electric, and the range of sophisticated options is growing, with more Advanced Driver Assistance Systems (ADAS) and more vehicle automation, all providing an increasing array of opportunities across a variety of repair situations. In that regard, collision shop solutions are an expanding part of the RS&I lineup, and we believe there is significant additional potential as we go forward in that arena. Similar to our existing vehicle repair solutions, we utilize broad databases with deep content and big data, aimed specifically at the collision shop, with vehicle measurements to guide body work, with repair information to aid in standard shop work, and with calibrations to restore the sensor networks that support ADAS. It's a combination that is increasingly essential for body shops, and that will author significant possibilities in the near and long term. In addition, to address the needs of independent general service shops, we launched the Hofmann® geoliner® 609, specifically designed for those locations where alignment is not currently a primary focus. The new offering helps garages keep the alignment business in-house with its compact footprint and optional portability kit allowing for easy storage when not in use and efficient deployment when the procedure is required. With the latest 3-D system, OEM-approved accuracy, and an attractive price point, this solution enables the handling of more complex alignments, is intended to generate a high



return on financial investment, and fortifies the shop's reputation for technical capability . . . providing an important growth opportunity for this consequential segment of repair and service providers.

BY THE NEW

technologies of tomorrow.

In 2022, we introduced our new top-of-the-line ZEUS+™ Fast-Track® Intelligent Diagnostics platform. Building on the previous generation's capabilities, and providing technicians with rapid and pinpoint guidance for vehicle repair using our proprietary database developed from over 200 billion unique vehicle events, this state-of-the-art handheld is also equipped with a number of significant hardware enhancements. These include a larger and brighter screen, making it easier to read even in full sunlight, a faster processor, with more on-board memory for quick startup and diagnosis, an enhanced scope, providing more accurate component testing, and a nine-hour battery, allowing for all-day operation without a recharge . . . all packaged in a lighter, thinner, and more convenient to carry housing. It's faster, easier, and smarter, and as the flagship unit in the Snap-on® diagnostic lineup, the ZEUS+ is the most powerful handheld in the market, intended for the most difficult tasks. And, the new unit joins a compelling lineup which includes the Triton-D10™, combining diagnosis with direct component testing, and the Apollo-Do[™], offering speed on everyday jobs. As vehicle electronics have expanded, our complete line of advanced diagnostic platforms, coupled with our sophisticated automotive repair information product, Mitchell 1's ProDemand®, have become of rising importance across the full spectrum of garages and repair shops, providing abundant opportunities for ongoing growth as we move into the future.

FINANCIAL SERVICES operating earnings of \$266.0 million on revenue of \$349.7 million compared to operating earnings of \$272.0 million on revenue of \$349.7 million a year ago. Originations of \$1,153.1 million in 2022 increased 7.4% versus last year, aligned with the growth of the Snap-on Tools Group. Financial Services expenses increased in 2022 primarily due to higher provisions for credit losses, reflecting a return to more normal levels as compared to those recorded in 2021. Aimed at supporting essential big-ticket purchases by technicians and shops, as well as enabling our franchisees' investment in their businesses, our Financial Services operation, with a strong connection to the Snap-on Tools Group, has a decades-long track record of effectively and efficiently providing customized financing in a wide variety of economic environments.

During the year, under our existing programs, we repurchased 899,000 shares for \$198.1 million, and we believe we have



ample availability for future share repurchases within our current authorizations. In November 2022, our Board of Directors raised our quarterly cash dividend by 14.1% to \$1.62 per share. This thirteenth consecutive annual dividend increase confirms our commitment to create longterm value for our shareholders and demonstrates our firm belief that we're well positioned for the future. Our dividend is an important component of our approach to capital allocation, and it is a testament to the continuing resilience and strength of our operations as evidenced by our payment of consecutive quarterly cash dividends, without interruption or reduction since 1939, even during periods of significant disruption. Our strong financial position and robust cash generation enables both our return of capital to shareholders, and our support of ongoing strategic investment, organically and through acquisitions.

In 2023, despite the ongoing uncertainties, we expect to make continued progress along our runways for both growth and improvement. We will maintain and expand our advantages in our products, our brands, and our people... a commitment that has served us well even in times of unprecedented turbulence. We will leverage our Snap-on Value Creation Processes, creating productivity

and efficiency. We will maintain our responsibility to our communities by pursuing gains in the environmental, social, and governance arenas. We will remain deeply dedicated to honoring and celebrating the dignity of work, providing the makers and the fixers with the innovative products to solve their critical tasks. And, we will endeavor with great emphasis to maintain the Snap-on brand as the visible sign of the considerable pride working men and women take in their essential efforts that make it possible for our society to move forward. Finally, as we turn to the prospects of our future, I thank our franchisees and associates around the world for their dedication and contributions, our Board of Directors for their counsel and support, and our customers and shareholders for their faith and confidence.

Chairman and Chief Executive Officer

WHO WE ARE:

OUR MISSION

THE MOST VALUED PRODUCTIVITY SOLUTIONS IN THE WORLD

BELIEFS

WE DEEPLY BELIEVE IN:

Non-negotiable Product and Workplace Safety

Uncompromising Quality

Passionate Customer Care

Fearless Innovation

Rapid Continuous Improvement

VALUES

OUR BEHAVIORS DEFINE OUR SUCCESS:

We demonstrate Integrity.

We tell the Truth.

We respect the Individual.

We promote Teamwork.

We Listen.

VISION

TO BE ACKNOWLEDGED AS THE:

Brands of Choice

Employer of Choice

Franchisor of Choice

Business Partner of Choice

Investment of Choice

SNAP-ON VALUE CREATION

PRINCIPLES AND PROCESSES WE APPLY TO CREATE VALUE

Founded on our mission and beliefs, these are strategic processes we use daily to create value across our Corporation.

SAFETY

QUALITY

CUSTOMER CONNECTION

INNOVATION

RAPID CONTINUOUS IMPROVEMENT

NON-GAAP FINANCIAL MEASURES

For 2020, 2019, and 2018, the company is including diluted earnings per share, as adjusted, as a non-GAAP financial measure that excludes the items discussed in the reconciliations in this paragraph. In 2020, reported diluted earnings per share were \$11.44. Adjusted diluted earnings per share of \$11.63 excludes the impact of a pre-tax \$12.5 million charge (\$10.3 million after tax, or \$0.19 per diluted share) associated with exit and disposal activities. In 2019, reported diluted earnings per share were \$12.41. Adjusted diluted earnings per share of \$12.26 excludes the impact of a pre-tax \$11.6 million benefit (\$8.7 million after tax, or \$0.15 per diluted share) for a settlement of a litigation matter. In 2018, reported diluted earnings per share were \$11.87. Adjusted diluted earnings per share of \$11.81 excludes the impact of a pre-tax \$4.3 million benefit (\$3.2 million after tax, or \$0.06 per diluted share) for a settlement of a litigation matter, the impact of a net pre-tax \$5.5 million gain (\$4.1 million after tax, or \$0.07 per diluted share) related to the implementation of U.S. tax legislation.

Management believes that these are unusual events and therefore the non-GAAP financial measures provide more meaningful comparisons to the company's 2022 operating performance.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

×	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the fiscal year ended December 31, 2022, or

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

Commission File Number 1-7724

Snap-on Incorporated

~ 11.0F							
(Exact name of registrant as specified in its charter)							
Delaware		39-0622040					
(State of incorporation)		(I.R.S. Employer Identification No.)					
2801 80th Street Kenosha Wisconsin		53143					
(Address of principal executive offices)	(2(2) (5(5200	(Zip code)					
(Registr	(262) 656-5200 ant's telephone number, includin	ng area code)					
Securities regi	istered pursuant to Section	12(b) of the Act:					
Title of each class	Trading Symbol(s)	Name of each exchange on which registered					
Common Stock, \$1.00 par value	SNA	New York Stock Exchange					
Securities regi	stered pursuant to Section 12(g	g) of the Act: None					
Indicate by check mark if the registrant is a well-know	vn seasoned issuer, as defined i	in Rule 405 of the Securities Act. Yes ■ No □					
Indicate by check mark if the registrant is not required	d to file reports pursuant to Sec-	tion 13 or 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 \boxtimes No \square							
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 (\S 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 \boxtimes No \square							
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	■ Accelerated filer □ Non-	-accelerated filer					
Smaller repor	ting 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. \Box							
Indicate by check mark whether any of those errocompensation received by any of the registrant's exec		ts that required a recovery analysis of incentive-based nt recovery period pursuant to $\$240.10D-1(b)$. \square					
Indicate by check mark whether the registrant is a she	ll company (as defined in Rule	12b-2 of the Exchange Act). Yes \square No \blacksquare					
The aggregate market value of voting and non-voting common equity held by non-affiliates (excludes 861,593 shares held by directors and executive officers) computed by reference to the price (\$198.24) at which common equity was last sold as of the last business day of the registrant's most recently completed second fiscal quarter (July 2, 2022) was \$10.4 billion.							

The number of shares of Common Stock (\$1.00 par value) of the registrant outstanding as of February 3, 2023, was 53,114,455 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of this Annual Report on Form 10-K incorporates by reference certain information that will be set forth in Snap-on's Proxy Statement, which is expected to first be mailed to shareholders on or about March 10, 2023, prepared for the Annual Meeting of Shareholders scheduled for April 27, 2023.

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PART I

Safe Harbor

Statements in this document that are not historical facts, including statements that (i) are in the future tense, (ii) include the words "expects," "plans," "targets," "estimates," "believes," "anticipates," or similar words that reference Snap-on Incorporated ("Snap-on" or "the company") or its management, (iii) are specifically identified as forward-looking, or (iv) describe Snap-on's or management's future outlook, plans, estimates, objectives or goals, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Snap-on cautions the reader that any forward-looking statements included in this document that are based upon assumptions and estimates were developed by management in good faith and are subject to risks, uncertainties or other factors that could cause (and in some cases have caused) actual results to differ materially from those described in any such statement. Accordingly, forward-looking statements should not be relied upon as a prediction of actual results or regarded as a representation by the company or its management that the projected results will be achieved. For those forward-looking statements, Snap-on cautions the reader that numerous important factors, such as those listed below, as well as those factors discussed in this Annual Report on Form 10-K, particularly those in "Item 1A: Risk Factors," could affect the company's actual results and could cause its actual consolidated results to differ materially from those expressed in any forward-looking statement made by, or on behalf of, Snap-on.

Risks and uncertainties include, without limitation:

- Uncertainties related to estimates, assumptions and projections generally;
- The timing and progress with which Snap-on can attain value through its Snap-on Value Creation Processes, including its ability to (i) realize efficiencies and savings from its rapid continuous improvement and other cost reduction initiatives, (ii) improve workforce productivity, (iii) achieve improvements in the company's manufacturing footprint and greater efficiencies in its supply chain, and (iv) enhance machine maintenance, plant productivity and manufacturing line set-up and change-over practices, any or all of which could result in production inefficiencies, higher costs and/or lost revenues;
- Snap-on's capability to successfully implement future strategies with respect to its existing businesses;
- Snap-on's ability to refine its brand and franchise strategies, retain and attract franchisees, and further enhance service and value to franchisees in order to help improve the sales and profitability of franchisees;
- The company's ability to introduce successful new products;
- Significant changes in the current competitive environment;
- Risks related to pursuing, completing and integrating acquisitions;
- Inflation, interest rate changes and other monetary and market fluctuations;
- Price and supply fluctuations related to raw materials, components and certain purchased finished goods, such as steel, plastics, and electronics;
- The effects of external economic factors, including adverse developments in world financial markets, disruptions related to tariffs and other trade issues, and global supply chain inefficiencies, including as a result of the current war in Ukraine:
- Snap-on's ability to successfully manage changes in prices and the availability of energy sources, including gasoline;
- Snap-on's ability to withstand disruption arising from natural disasters, including climate-related events or other unusual occurrences:
- Risks associated with data security and technological systems and protections, including the effects of cyber incidents
 and from new legislation, regulations or government-related developments;
- The impact of labor interruptions or challenges, and Snap-on's ability to effectively manage human capital resources;
- Snap-on's ability to successfully manage planned facility closures or to withstand disruptions from unexpected closures;
- Weakness in certain geographic areas, including as a result of localized recessions, and the impact of matters related to the United Kingdom's exit from the European Union;
- Changes in tax rates, laws and regulations as well as uncertainty surrounding potential changes;
- The amount, rate and growth of health care and postretirement costs, including continuing and potentially increasing required contributions to pension and postretirement plans;

- The effects of new requirements, legislation, regulations or government-related developments or issues, as well as third party actions, including those addressing climate change;
- Potential reputational damages and costs related to litigation;
- The impact of the ongoing coronavirus ("COVID-19") pandemic and other outbreaks of infectious diseases, as well as the effects of governmental actions related thereto on Snap-on's business, which could have the potential to amplify the impact of the other risks facing the company; and
- Other world or local events outside Snap-on's control, including terrorist disruptions, armed conflicts and civil unrest.

Snap-on disclaims any responsibility to update any forward-looking statement provided in this document, except as required by law.

In addition, investors should be aware that generally accepted accounting principles in the United States of America ("GAAP") prescribe when a company should reserve for particular risks, including litigation exposures. Accordingly, results for a given reporting period could be significantly affected if and when a reserve is established for a major contingency. Reported results, therefore, may appear to be volatile in certain accounting periods.

Fiscal Year

Snap-on's fiscal year ends on the Saturday that is on or nearest to December 31. Unless otherwise indicated, references in this document to "fiscal 2022" or "2022" refer to the fiscal year ended December 31, 2022; references to "fiscal 2021" or "2021" refer to the fiscal year ended January 1, 2022; and references to "fiscal 2020" or "2020" refer to the fiscal year ended January 2, 2021. References in this document to 2022, 2021 and 2020 year end refer to December 31, 2022, January 1, 2022, and January 2, 2021, respectively. Snap-on's 2022 and 2021 fiscal years each contained 52 weeks of operating results. Snap-on's 2020 fiscal year contained 53 weeks of operating results with the extra week occurring in the fourth quarter.

Item 1: Business

Snap-on is a leading global innovator, manufacturer and marketer of tools, equipment, diagnostics, repair information and systems solutions for professional users performing critical tasks including those working in vehicle repair, aerospace, the military, natural resources, and manufacturing. From its founding in 1920, Snap-on has been recognized as the mark of the serious and the outward sign of the pride and dignity working men and women take in their professions. Products and services are sold through the company's network of widely recognized franchisee vans as well as through direct and distributor channels, under a variety of notable brands. The company also provides financing programs to facilitate the sales of its products and to support its franchise business.

Snap-on markets its products and brands worldwide in more than 130 countries. Snap-on's largest geographic markets include the United States, Europe, Canada and Asia Pacific.

The company began with the development of the original Snap-on interchangeable socket set and subsequently pioneered mobile tool distribution in the automotive repair market, where well-stocked vans sell to professional vehicle technicians at their place of business. Today, Snap-on defines its value proposition more broadly, extending its reach "beyond the garage" to deliver a broad array of unique solutions that make work easier for serious professionals. The company's "coherent growth" strategy focuses on developing and expanding its professional customer base in its legacy automotive market, as well as in adjacent markets, additional geographies and other areas, including in critical industries, where the cost and penalties for failure can be high. In addition to its coherent growth strategy, Snap-on is committed to its "Value Creation Processes" – a set of strategic principles and processes designed to create value and employed in the areas of (i) safety; (ii) quality; (iii) customer connection; (iv) innovation; and (v) rapid continuous improvement ("RCI"). Snap-on's RCI initiatives employ a structured set of tools and processes across multiple businesses and geographies intended to eliminate waste and improve operations. Savings from Snap-on's RCI initiatives reflect benefits from a wide variety of ongoing efficiency, productivity and process improvements, including savings generated from product design cost reductions, improved manufacturing line set-up and change-over practices, lower-cost sourcing initiatives and facility consolidations.

Snap-on's primary customer segments include: (i) commercial and industrial customers, including professionals in critical industries and emerging markets; (ii) professional vehicle repair technicians who purchase products through the company's mobile tool distribution network; and (iii) other professional customers related to vehicle repair, including owners and managers of independent and original equipment manufacturer ("OEM") dealership service and repair shops ("OEM dealerships"). Snap-on's Financial Services customer segment includes: (i) franchisees' customers, principally serving vehicle repair technicians, and Snap-on customers who require financing for the purchase or lease of tools, diagnostics, and equipment products on an extended-term payment plan; and (ii) franchisees who require financing options for vehicle and business needs.

Snap-on's business segments are based on the organization structure used by management for making operating and investment decisions and for assessing performance. Snap-on's reportable business segments are: (i) the Commercial & Industrial Group; (ii) the Snap-on Tools Group; (iii) the Repair Systems & Information Group; and (iv) Financial Services. The Commercial & Industrial Group consists of business operations serving a broad range of industrial and commercial customers worldwide, including customers in the aerospace, natural resources, government and military, power generation, transportation and technical education market segments (collectively, "critical industries"), primarily through direct and distributor channels. The Snap-on Tools Group consists of business operations primarily serving vehicle service and repair technicians through the company's multi-national mobile tool distribution channel. The Repair Systems & Information Group consists of business operations serving other professional vehicle repair customers worldwide, primarily owners and managers of independent repair shops and OEM dealerships, through direct and distributor channels. Financial Services consists of the business operations of Snap-on Credit LLC ("SOC"), the company's financial services business in the United States, and Snap-on's other financial services subsidiaries in those international markets where Snap-on has franchise operations. See Note 20 to the Consolidated Financial Statements for information on business segments and foreign operations.

Snap-on evaluates the performance of its operating segments based on segment revenues, including both external and intersegment net sales, and segment operating earnings. Snap-on accounts for intersegment sales and transfers based primarily on standard costs with reasonable mark-ups established between the segments. Identifiable assets by segment are those assets used in the respective reportable segment's operations. Corporate assets consist of cash and cash equivalents (excluding cash held at Financial Services), deferred income taxes and certain other assets. All intersegment amounts are eliminated to arrive at Snap-on's consolidated financial results.

Recent Acquisitions

Snap-on has continued to broaden its business through a series of coherent acquisitions, which have expanded and enhanced Snap-on's capabilities in a variety of critical industries and in its business operations serving primarily owners and managers of independent repair shops and OEM dealerships. For information regarding recent acquisitions, see Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 3 to the Consolidated Financial Statements.

Information Available on the Company's Website

Additional information about Snap-on, including its products and its environmental, health and safety, social responsibility, governance and sustainability (collectively, "ESG") commitment, is available on the company's website at www.snapon.com. Snap-on is not including the information contained on its website as a part of, or incorporating it by reference into, this Annual Report on Form 10-K. Snap-on's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Proxy Statements on Schedule 14A and Current Reports on Form 8-K, as well as any amendments to those reports, are made available to the public at no charge through the "Investors" section of the company's website at www.snapon.com. Snap-on makes such material available on its website as soon as reasonably practicable after it electronically files such material with, or furnishes it to, the Securities and Exchange Commission ("SEC"). Copies of any materials the company files with the SEC can also be obtained free of charge through the SEC's website at www.sec.gov. In addition, Snap-on's (i) charters for the Audit, Corporate Governance and Nominating, and Organization and Executive Compensation Committees of the company's Board of Directors; (ii) Corporate Governance Guidelines; and (iii) Code of Business Conduct and Ethics are available on the company's website. Snap-on will also post any amendments to these documents, or information about any waivers granted to directors or executive officers with respect to the Code of Business Conduct and Ethics, on the company's website at www.snapon.com.

Products and Services

Tools; Diagnostics, Information and Management Systems; and Equipment

Snap-on offers a broad line of products and complementary services that are grouped into three product categories: (i) tools; (ii) diagnostics, information and management systems; and (iii) equipment. Further product line information is not presented as it is not practicable to do so. The following table shows the consolidated net sales of these product categories for the last three years:

	Net Sales						
(Amounts in millions)	2022		2021		2020		
Product Category:						_	
Tools	\$	2,399.4	\$	2,343.0	\$	1,984.7	
Diagnostics, information and management systems		942.4		892.5		783.8	
Equipment		1,151.0		1,016.5		824.0	
	\$	4,492.8	\$	4,252.0	\$	3,592.5	

The *tools* product category includes hand tools, power tools, tool storage products and other similar products. Hand tools include wrenches, sockets, ratchet wrenches, pliers, screwdrivers, punches and chisels, saws and cutting tools, pruning tools, torque measuring instruments and other similar products. Power tools include cordless (battery), pneumatic (air), hydraulic and corded (electric) tools, such as impact wrenches, ratchets, screwdrivers, drills, sanders, grinders and similar products. Tool storage includes tool chests, roll cabinets and other similar products. For many industrial customers, Snap-on creates specific, engineered solutions, including facility-level tool control and asset management hardware and software, custom kits in a wide range of configurations, and custom-built tools designed to meet customer requirements. The majority of products are manufactured by Snap-on and, in completing the product offering, other items are purchased from external manufacturers.

The diagnostics, information and management systems product category includes handheld and computer-based diagnostic products, service and repair information products, diagnostic software solutions, electronic parts catalogs, business management systems and services, point-of-sale systems, integrated systems for vehicle service shops, OEM purchasing facilitation services, and warranty management systems and analytics to help OEM dealerships manage and track performance.

The *equipment* product category includes solutions for the service of vehicles and industrial equipment. Products include wheel alignment equipment, wheel balancers, tire changers, vehicle lifts, test lane equipment, collision repair equipment, vehicle air conditioning service equipment, brake service equipment, fluid exchange equipment, transmission troubleshooting equipment, safety testing equipment, battery chargers and hoists.

Snap-on supports the sale of its diagnostics and vehicle service shop equipment by offering training programs as well as aftersales support for its customers, primarily focusing on the technologies and the application of specific products developed and marketed by Snap-on.

Products are marketed under a number of brand names and trademarks, many of which are well known in the vehicle service and industrial markets served. Some of the major trade names and trademarks and the products and services with which they are associated include the following:

Names Products and Services

Snap-on Hand tools, power tools, tool storage products (including tool control software and hardware), diagnostics, certain

equipment and related accessories, mobile tool stores, websites, electronic parts catalogs, warranty analytics solutions, business management systems and services, OEM specialty tools and equipment development and

distribution, and OEM facilitation services

ATI Aircraft hand tools and machine tools

AutoCrib Asset and tool control systems

autoVHC Vehicle inspection and training services

BAHCO Saw blades, cutting tools, pruning tools, hand tools, power tools and tool storage, including tool control systems

Blackhawk Collision repair equipment

Blue-Point Hand tools, power tools, tool storage, diagnostics, certain equipment and related accessories

Car-O-Liner Collision repair equipment, and information and truck alignment systems

Cartec Safety testing, brake testers, test lane equipment, dynamometers, suspension testers, emission testers and other

equipment

CDI Torque tools
Challenger Vehicle lifts

Cognitran OEM SaaS products

Dealer-FX Service operation solutions and OEM SaaS systems

Ecotechnics Vehicle air conditioning service equipment
Fastorq Hydraulic torque and tensioning products

Fish and Hook Saw blades, cutting tools, pruning tools, hand tools, power tools and tool storage

Hofmann Wheel balancers, vehicle lifts, tire changers, wheel aligners, brake testers and test lane equipment

Irimo Saw blades, cutting tools, hand tools, power tools and tool storage

John Bean Wheel balancers, vehicle lifts, tire changers, wheel aligners, brake testers and test lane equipment

Josam Heavy duty alignment and collision repair solutions

Lindström Hand tools

Mitchell1 Repair and service information, shop management systems and business services

Nexiq Diagnostic tools, information and program distributions for fleet and heavy duty equipment

Norbar Torque tools

Power Hawk Rescue tools and related equipment for military, government, fire and rescue

Pro-Cut Brake service equipment and accessories

Sandflex Hacksaw blades, bandsaws, saw blades, hole saws and reciprocating saw blades

ShopKey Repair and service information, shop management systems and business services

Sioux Power tools Sturtevant Richmont Torque tools

Sun Diagnostic tools, wheel balancers, vehicle lifts, tire changers, wheel aligners, air conditioning products and

emission testers

TreadReader Automotive tire drive-over ramps and handheld devices

TruckCam Commercial vehicle OEM factory solutions

Williams Hand tools, tool storage, certain equipment and related accessories

Financial Services

Snap-on also generates revenue from various financing programs that include: (i) installment sales and lease contracts arising from franchisees' customers and Snap-on customers who require financing for the purchase or lease of tools, diagnostics, and equipment products on an extended-term payment plan; and (ii) business and vehicle loans and leases to franchisees. The decision to finance through Snap-on or another financing source is solely by election of the customer. When assessing customers for potential financing, Snap-on considers various factors regarding ability to pay, including the customers' financial condition, debt-servicing ability, past payment experience, and credit bureau and proprietary Snap-on credit model information, as well as the value of the underlying collateral.

Snap-on offers financing through SOC and the company's international finance subsidiaries in most markets where Snap-on has franchise operations. Financing revenue from contract originations is recognized over the life of the underlying contracts, with interest or finance charges computed primarily on the average daily balances of the underlying contracts.

Markets

Sales and Distribution

Snap-on markets and distributes its products and related services principally to professional tool and equipment users around the world. The two largest market sectors are the vehicle service and repair sector and the industrial sector.

Vehicle Service and Repair Sector

The vehicle service and repair sector has three main customer groups: (i) professional technicians who purchase tools, diagnostics, and equipment products for use in their work; (ii) other professional customers related to vehicle repair, including owners and managers of independent repair shops and OEM dealerships who purchase tools, diagnostics, and equipment products for use by multiple technicians within a service or repair facility; and (iii) OEMs.

Snap-on provides innovative tool, equipment and business solutions, as well as technical sales support and training, designed to meet technicians' evolving needs. Snap-on's mobile tool distribution system offers technicians the convenience of purchasing quality tools at their place of business with minimal disruption of their work routine. Snap-on also provides owners and managers of repair shops, where technicians work, with tools, diagnostics, equipment, and repair and service information, including electronic parts catalogs and shop management products. Snap-on's OEM facilitation business provides OEMs with products and services including special and essential tools as well as consulting and facilitation services, which include product procurement, distribution and administrative support to customers for their dealership equipment programs.

The market for vehicle service and repair is driven by an increasing rate of technological change, car and truck population growth and increasing unit life, and the resulting effects of these changes on the businesses of both our suppliers and customers. In recent years, there has been an increase in the development and sales of electric and hybrid vehicles and this trend is expected to continue. Snap-on has historically benefited from the increasing complexity of car and truck fleets and the changing tools, technologies and data needed to monitor, calibrate, service and repair evolving vehicle platforms. While new technologies, including those associated with alternative energy drivetrains and greater vehicle autonomy, may alter the nature of certain service and repair for particular vehicle types, we believe many of these new technologies provide opportunities to fulfill requirements for enhanced solutions or increased precision. Snap-on believes it is well-positioned to innovate new products to address these changing needs and to extend its leadership position in the expanding vehicle service and repair market sector.

Industrial Sector

Snap-on markets its products and services globally to a broad cross-section of commercial and industrial customers, including maintenance and repair operations; manufacturing and assembly facilities; various government agencies, facilities and operations, including military operations; schools with vocational and technical programs; aviation and aerospace operations; oil and gas developers; mining operations; power generation operations, including those associated with alternative energies; equipment fabricators and operators; railroad manufacturing and maintenance; customers in agriculture; infrastructure construction companies; and other customers that require instrumentation, service tools and/or equipment for their products and business needs. The industrial sector for Snap-on focuses on providing value-added products and services to an increasingly expanding global base of customers in critical industries.

The industrial sector is characterized by a highly competitive environment with multiple suppliers offering either a full line or industry-specific portfolios for tools and equipment. Industrial customers increasingly require specialized solutions that provide repeatability and reliability in performing tasks of consequence that are specific to the particular end market in which they operate. Snap-on believes it is a meaningful participant in the industrial tools and equipment market sector.

Distribution Channels

Snap-on serves customers primarily through the following channels of distribution: (i) the mobile van channel; (ii) company direct sales; (iii) distributors; and (iv) e-commerce. The following discussion summarizes Snap-on's general approach for each channel and is not intended to be all-inclusive.

Mobile Van Channel

In the United States, a significant portion of sales to the vehicle service and repair sector is conducted through Snap-on's mobile franchise van channel. Snap-on's franchisees primarily serve vehicle repair technicians and vehicle service shop owners, generally providing weekly contact at the customer's place of business. Franchisees' sales are concentrated in hand and power tools, tool storage products, shop equipment, diagnostics, and repair information products, which can be transported in a van or trailer and demonstrated during a sales call. Franchisees purchase Snap-on's products at a discount from suggested list prices and resell them at prices established by the franchisee. U.S. franchisees are provided a list of calls that serves as the basis of the franchisee's sales route. Snap-on's franchisees also have the opportunity to add a limited number of additional franchises.

Snap-on charges nominal initial and ongoing monthly franchise fees. Franchise fee revenue, including nominal, non-refundable initial and ongoing monthly fees (primarily for sales and business training, marketing and product promotion programs, and technology support), is recognized as the fees are earned. Franchise fee revenue totaled \$18.4 million, \$17.3 million and \$16.2 million in fiscal 2022, 2021 and 2020, respectively.

Snap-on also has a company-owned route program that is designed to: (i) provide another pool of potential field organization personnel; (ii) service customers in select new and/or open routes not currently serviced by franchisees; and (iii) allow Snap-on to pilot new sales and promotional ideas prior to introducing them to franchisees. As of 2022 year end, company-owned routes comprised approximately 4% of the total route population. Snap-on may elect to increase or reduce the number of company-owned routes in the future.

In addition to its mobile van channel in the United States, Snap-on has franchise distribution models in certain other countries, including Canada, the United Kingdom, Japan, Australia, Germany, Netherlands, South Africa, New Zealand, Belgium and Ireland. In many of these markets, as in the United States, purchase decisions are generally made or influenced by professional vehicle service technicians as well as repair shop owners and managers. As of 2022 year end, Snap-on's worldwide route count was approximately 4,725, including approximately 3,400 routes in the United States.

Through SOC, financing is available to U.S. franchisees, including financing for van leases, working capital loans and loans to help enable new franchisees to fund the purchase of the franchise or the expansion of an existing franchise. In many international markets, Snap-on offers a variety of financing options to its franchisees and/or customer networks through its international finance subsidiaries. The decision to finance through Snap-on or another financing source is solely at the customer's election.

Snap-on supports its franchisees with a field organization of regional offices, franchise performance teams, customer care centers and distribution centers. Snap-on also provides sales and business training, and marketing and product promotion programs, as well as customer and franchisee financing programs through SOC and the company's international finance subsidiaries, all of which are designed to strengthen franchisee sales. National Franchise Advisory Councils in the United States, the United Kingdom, Canada and Australia, composed primarily of franchisees that are elected by franchisees, assist Snap-on in identifying and implementing enhancements to the franchise program.

Company Direct Sales

A significant proportion of shop equipment sales in North America under the John Bean, Hofmann, Blackhawk, Car-O-Liner, Challenger and Pro-Cut brands, diagnostic products under the Snap-on brand, and information and shop management products under the Mitchell1 brand are made by direct and independent sales forces that have responsibility for national and other accounts. As the vehicle service and repair sector consolidates (with more business conducted by national chains and franchised service centers), Snap-on believes these larger organizations can be serviced most effectively by sales people who can demonstrate and sell the full line of diagnostics, equipment, and services. Snap-on also sells these products and services directly to OEMs and their franchised dealers.

Snap-on brand tools and equipment are marketed to industrial and governmental customers worldwide through both industrial sales associates and independent distributors. Selling activities focus on industrial customers whose main purchase criteria are quality and integrated solutions. As of 2022 year end, Snap-on had industrial sales associates and independent distributors primarily in the United States, Canada and in various European, Latin American, Middle Eastern, Asian and African countries, with the United States representing the majority of Snap-on's total industrial sales.

Snap-on also sells software, services and solutions to the automotive, commercial, heavy duty, agriculture, power equipment and power sports segments. Products and services are marketed to targeted groups, including OEMs and their dealerships, fleets and individual repair shops. To effectively reach OEMs, which frequently have a multi-national presence, Snap-on has deployed focused business teams globally.

Distributors

Sales of certain tools and equipment are made through independent distributors who purchase the items from Snap-on and resell them to end users. Hand tools marketed under the BAHCO, Irimo, Lindström, CDI, ATI, Fastorq, Norbar, Sioux, Sturtevant Richmont and Williams brands and trade names, for example, are sold through distributors worldwide. Asset and tool control solutions are sold under the AutoCrib brand primarily through distributors worldwide. Wheel service and other vehicle service equipment are sold through distributors primarily under brands including Hofmann, John Bean, Car-O-Liner, Challenger, Pro-Cut, Cartec, Blackhawk and Ecotechnics. Diagnostics and equipment products are marketed through distributors in South America and Asia, and through both a direct sales force and distributors in Europe under the Snap-on, Sun and Blue-Point brands.

E-commerce

Snap-on offers current and prospective customers online access to research and purchase products through its public website, www.snapon.com. The site features an online catalog of Snap-on hand tools, power tools, tool storage units and diagnostic equipment available to customers in the United States, the United Kingdom, Canada and Australia. E-commerce and certain other system enhancement initiatives are designed to improve productivity and further leverage the one-on-one relationships and service Snap-on has with its current and prospective customers. Sales through the company's e-commerce distribution channel were not significant in any of the last three years.

Competition

Snap-on competes on the basis of its product quality and performance, product line breadth and depth, service, brand awareness and imagery, technological innovation and availability of financing (through SOC or its international finance subsidiaries). While Snap-on does not believe that any single company competes with it across all of its product lines and distribution channels, various companies compete in one or more product categories and/or distribution channels.

Snap-on believes it is a leading manufacturer and distributor of professional tools, tool storage, diagnostics, equipment products, and repair software and solutions, offering a broad line of these products to both vehicle service and industrial marketplaces. Various competitors target and sell to professional technicians in the vehicle service and repair sector through the mobile tool distribution channel. Snap-on also competes with companies that sell tools and equipment to vehicle service and repair technicians online and through retail stores, vehicle parts supply outlets and tool supply warehouses/distributorships. Within the power tools category and the industrial sector, Snap-on has various other competitors, including companies with offerings that overlap with other areas discussed herein. Major competitors selling diagnostics, shop equipment, and information to vehicle dealerships and independent repair shops include OEMs and their proprietary electronic parts catalogs and diagnostics and information systems, and other companies that offer products serving this sector.

Resources

Raw Materials and Purchased Product

Snap-on's supply of raw materials, including steel, and purchased components are generally available from numerous suppliers and the company continuously works to expand and enhance supplier relationships to meet its supply needs. Snap-on believes it has secured a sufficient amount of raw materials and purchased components for the near future to meet the expected general sales demand. While the company does experience raw material and component cost fluctuations, as well as availability variations from time to time and from operation to operation, including due to the ongoing COVID-19 pandemic and its impact on the global supply chain, Snap-on endeavors to employ its RCI processes to improve efficiencies and reduce waste to minimize the impact of any cost increases. The company does not currently anticipate experiencing any significant impact in 2023 from raw material and purchased component cost or availability issues.

To date, the company has not observed any meaningful supply shortages or cost increases directly or indirectly resulting from climate change factors.

Patents, Trademarks and Other Intellectual Property

Snap-on vigorously pursues and relies on patent protection to safeguard its intellectual property and position in its markets. As of 2022 year end, Snap-on and its subsidiaries held approximately 870 active and pending patents in the United States and approximately 2,780 active and pending patents outside of the United States. Sales relating to any single patent did not represent a material portion of Snap-on's revenues in any of the last three years.

Examples of products that have features or designs that benefit from patent protection include hand tools (including sealed ratchets and ratcheting screwdrivers), power tools, wheel alignment systems, wheel balancers, tire changers, vehicle lifts, tool storage, tool control, collision measurement, test lane equipment, brake lathes, electronic torque instruments, emissions-sensing devices and diagnostic equipment.

Much of the technology used in the manufacture of vehicle service tools and equipment is in the public domain. Snap-on relies primarily on trade secret protection for proprietary processes used in manufacturing. Methods and processes are patented when appropriate. Snap-on leverages trade secret and other protections, as well as contractual arrangements and confidentiality procedures, for its proprietary software and other innovative solutions. Copyright protection is also utilized when appropriate.

Trademarks used by Snap-on are of continuing importance in the marketplace. Trademarks have been registered in the United States and many other countries, and additional applications for trademark registrations are pending. Snap-on vigorously polices proper use of its trademarks. Snap-on's right to manufacture and sell certain products is dependent upon licenses from others; however, these products under license do not represent a material portion of Snap-on's net sales.

Domain names are a valuable corporate asset for companies around the world, including Snap-on. Domain names often contain a trademark or service mark or even a corporate name and are often considered intellectual property. The recognition and value of the Snap-on name, trademark and domain name are core strengths of the company.

Snap-on strategically licenses the Snap-on brand to carefully selected manufacturing and distribution companies for items such as apparel and a variety of other goods, in order to further build brand awareness and market presence for the company's strongest brand.

Government Regulations

Snap-on is subject to various federal, state and local laws, such as those related to international trade, data privacy, tax and government contracts, as well as environmental laws, ordinances, regulations, and requirements of government authorities in the United States and other nations. At Snap-on, environmental liabilities are managed through the Snap-on Environmental, Health and Safety Management System ("EH & SMS"), which is applied worldwide. The system is based upon continual improvement and is certified to ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018, verified through Det Norske Veritas (DNV) Certification, Inc.

Snap-on believes that it complies with applicable environmental and government requirements in its operations. Expenditures on environmental and governmental matters through EH & SMS have not had a material effect upon Snap-on's capital expenditures, earnings or competitive position. However, the increasing global focus on climate change may result in new or more stringent environmental or climate-related regulations or standards. While such regulations have historically created select opportunities for our business operations, the company continually monitors developments in this area.

Human Capital Management

As of December 31, 2022, Snap-on employed approximately 12,900 people worldwide, of which approximately 7,200 were employed in the United States and approximately 5,700 were outside the United States. Based on Snap-on's most recently filed EEO-1 data, which is available under "ESG Reporting" in the "Investors" section of the company's website at www.snapon.com, females constitute 26.0% and minorities constitute 23.5% of the company's workforce in the United States. Additionally, on a global basis, approximately 2,600 employees are represented by unions and/or covered under collective bargaining agreements with varying expiration dates through 2025. In recent years, Snap-on has not experienced any significant work slowdowns, stoppages or other labor disruptions.

Snap-on is guided by the beliefs and values in the company's "Who We Are" mission statement and strives to be the "employer of choice" for its current and future associates. Our "Who We Are" beliefs serve as the guidepost against which we evaluate performance in operating reviews throughout the company. Furthermore, through our Snap-on Value Creation Processes, a suite of principles we use every day, the company remains committed to the areas of safety, quality, customer connection, innovation and RCI, which are closely linked to and contribute to improving employee engagement, productivity, and efficiency.

Successful execution of our way forward is dependent on attracting, developing and retaining key employees and members of our management team, which we achieve through the following:

- Snap-on believes strongly in workplace safety. As a permanent priority agenda item at all operational meetings, safety comes first. Snap-on strives to maintain a safe workplace and expects its employees to broadly embrace the company's safety programs. Snap-on invests in its strong safety culture and in elevating the importance of worker safety throughout all levels of the organization. For 2022, Snap-on had an overall safety incident rate of 1.12 (number of injuries and illnesses multiplied by 200,000, divided by hours worked).
- Snap-on is committed to its employees and provides developmental opportunities, as well as competitive pay and benefits. Leadership reviews to identify high potential talent in the organization are conducted on an ongoing basis with all business units and on an annual basis with the Board of Directors. Snap-on offers pension, postretirement health care benefits and stock-based compensation as well as other stock plans, including an employee stock purchase plan for associates in the United States and Canada. Additional information related to these plans is included in Notes 12, 13 and 14 to the Consolidated Financial Statements. Other benefits, including skill training and tuition assistance programs, are available to employees, but vary from location to location.
- Snap-on seeks to advance our progress on diversity and inclusion within our company and is committed to providing equal opportunities. The company does not tolerate discrimination. As part of our efforts, Snap-on has instituted company-wide training on inclusion and unconscious bias, and has expanded internship, mentorship and recruitment activities for underrepresented groups. Additionally, to further our support of makers and fixers, both within and outside our company, Snap-on is partnering with national nonprofit organizations and community colleges to leverage career and technical education to expand the opportunities for underrepresented groups in our facilities, as well as in the critical industries we serve and beyond. The company is also investing in and building relationships with several Historically Black Colleges and Universities (HBCUs) to help advance their missions and broaden the pipeline of Black engineers and other technically trained graduates.
- Snap-on's people and the behaviors they display define our success, including integrity, respect and teamwork. Annual employee training is used to reinforce ethics, environmental matters, health and safety, human rights, information security and regulatory compliance, which includes anti-corruption training for all relevant employees.

Social Responsibility and Sustainability Commitment

Snap-on is deeply dedicated to honoring and celebrating the dignity of work. The company supports upskilling the workforce through collaborations with Career and Technical Education (CTE) schools across the United States and throughout the world, and with SkillsUSA and World Skills to engage youth in order to enable and promote technical careers. Additionally, the company is a founding partner of the National Coalition of Certification Centers (NC3), which aims to more effectively match technical school curricula with the precise needs of the current and future workplace by developing, implementing, and sustaining industry-recognized certifications with programs in automotive, aviation, energy, oil and gas, manufacturing and other critical industries. To date, over 250,000 students have earned Snap-on certifications, preparing them for successful and satisfying careers across various technical disciplines.

Snap-on is committed to conducting business and making decisions honestly, ethically, fairly and within the law, and is guided by the company's "Who We Are" mission statement, which is translated into multiple languages and prominently displayed in its facilities around the world. Snap-on is dedicated to earning and keeping the trust and confidence of its shareholders, customers, franchisees, distributors, retirees and associates, as well as of the communities where the company does business. Snap-on's Code of Business Conduct and Ethics provides guidelines and a framework for conducting business in an ethical manner. These beliefs go beyond Snap-on and are expected of suppliers as detailed in the company's Supplier Code of Conduct. Snap-on has adopted policies that seek to eliminate human trafficking, slavery, forced labor and child labor from its global supply chain, and has formalized its commitment to protecting human rights in the company's Human Rights Policy.

Snap-on prioritizes continuous improvement in all facets of its operations, including environmental matters and health and safety. The company strives to protect environmental quality and human welfare in its workplaces and in its communities by implementing sound policies designed to prevent, mitigate and reduce the company's impact on the environment. The company has voluntarily reported Scope 1 and Scope 2 greenhouse gas ("GHG") emissions to the CDP (formerly known as the Carbon Disclosure Project) on an annual basis since 2008. In 2022, the company's total GHG emissions of 101,805 metric tons of carbon dioxide equivalent ("CO2e") reflected an intensity of 22.7 (metric tons of CO2e, divided by net sales in millions), which is over 40% lower than when initially reported in 2008.

Snap-on's sustainability framework is focused on key areas impacting our industry, including energy management, employee health and safety, and material management, and is aligned with the standards of the Value Reporting Foundation (formerly known as the Sustainability Accounting Standards Board or "SASB"), which has been consolidated into the International Financial Reporting Standards Foundation. Snap-on's SASB Index is available under "ESG Reporting" in the "Investors" section on the company's website at www.snapon.com.

Feedback on the evaluation of risks and/or opportunities related to ESG matters identified by the company's internal Environmental, Social and Governance Committee (the "ESGC") and by the company's operating units is included and discussed as part of the company's quarterly operations reviews with senior management. The ESGC reports to the company's Chief Executive Officer and updates the Corporate Governance and Nominating Committee about its plans and actions at least two times per year. The full Board has ultimate oversight of the company's strategy related to ESG matters and receives regular reports on the subject from the Corporate Governance and Nominating Committee.

Additional information regarding the company's sustainability commitment is available in the "Investors" section of the company's website at www.snapon.com.

Customers and Seasonality

Snap-on does not have any single customer or government on which its business was substantially dependent in any of the indicated periods. Most of Snap-on's businesses are not seasonal and their inventory needs are relatively constant.

Item 1A: Risk Factors

In evaluating the company, careful consideration should be given to the following risk factors, in addition to the other information included in this Annual Report on Form 10-K, including the Consolidated Financial Statements and the related notes. Each of these risk factors could adversely affect, and in some cases may have already affected, the company's business, operating results, cash flows and/or financial condition, as well as adversely affect the value of an investment in the company's common stock.

Business Risks

The sales of many of our products are dependent on the health of the vehicle repair market and the changing requirements of vehicle repair.

We believe sales of many of our products are dependent on the changing vehicle repair requirements, the number of vehicles on the road, the general aging of vehicles and the number of miles driven. These factors affect the frequency, type and amount of service and repair performed on vehicles by technicians, and therefore affect the demand for the number of technicians, the prosperity of technicians and, consequently, the demand technicians have for our tools, other products and services, as well as the value technicians place on those products and services. The use of other methods of transportation, including more frequent use of public transportation in the future, could result in a decrease in the use of privately-operated vehicles. A decrease in the use of privately-operated vehicles may lead to fewer repairs and less demand for our products.

In addition, the number of electric and hybrid vehicles developed and sold has risen in recent years, and is expected to continue to increase in the future. While we believe that advances in vehicle technologies provide us with opportunities to develop innovative products and solutions for the vehicle repair market, if we are not able to execute on those possibilities, our business and results of operations could suffer.

The performance of Snap-on's mobile tool distribution business depends on the success of its franchisees.

Approximately 43% of our consolidated net revenues in 2022 were generated by the Snap-on Tools Group, which consists of Snap-on's business operations primarily serving vehicle service and repair technicians through the company's multi-national mobile tool distribution channel. Snap-on's success is dependent on its relationships with franchisees, individually and collectively, as they are the primary sales and service link between the company and vehicle service and repair technicians, who are an important class of end users for Snap-on's products and services.

If our franchisees are not successful, or if we do not maintain an effective relationship with our franchisees, the delivery of products, the collection of receivables and/or our relationship with end users could be adversely affected and thereby negatively impact our business, financial condition, results of operations and cash flows.

In addition, if we are unable to maintain effective relationships with franchisees, Snap-on or the franchisees may choose to terminate the relationship, which may result in: (i) open routes, in which end-user customers are not provided reliable service; (ii) litigation resulting from termination; (iii) reduced collections or increased charge-offs of franchisee receivables owed to Snap-on; and/or (iv) reduced collections or increased charge-offs of finance and contract receivables.

The inability to continue to introduce new products that respond to customer needs and achieve market acceptance could result in lower revenues and reduced profitability.

Sales from new products represent a significant portion of our net sales and are expected to continue to represent a significant component of our future net sales. We may not be able to compete effectively unless we continue to enhance existing products or introduce new products to the marketplace in a timely manner. Product improvements and new product introductions require significant financial and other resources, including planning, design, development, sourcing and testing at the technological, product and manufacturing process levels. Our competitors' new products may beat our products to market, be more effective, contain more features, be less expensive than our products, and/or render our products obsolete. Any new products that we develop may not receive market acceptance or otherwise generate any meaningful net sales or profits for us relative to our expectations based on, among other factors, existing and anticipated investments in manufacturing capacity and commitments to fund advertising, marketing, promotional programs and research and development.

Failure to adequately protect intellectual property, or claims of infringement, could adversely affect our business, reputation, financial condition, results of operations and cash flows.

Intellectual property rights are an important and integral component of our business and failure to obtain or maintain adequate protection of our intellectual property rights for any reason could have a material adverse effect on our business. We attempt to protect our intellectual property rights through a combination of patent, trademark, copyright and trade secret laws, as well as licensing agreements and third-party nondisclosure and assignment agreements. In addition, we have been, and in the future may be, subject to claims of intellectual property infringement against us by third parties; whether or not these claims have merit, we could be required to expend significant resources in defense of those claims. Adverse determinations in a judicial or administrative proceeding or via a settlement could prevent us from manufacturing and selling our products, prevent us from stopping others from manufacturing and selling competing products, and/or result in payments for damages. In the event of an infringement claim, we may also be required to spend significant resources to develop alternatives or obtain licenses, which may not be available on reasonable terms or at all, and may reduce our sales and disrupt our production. Failure to obtain or maintain adequate protection of our intellectual property rights for any reason could have a material adverse effect on our business.

The global tool, equipment, diagnostics, and repair information industries are competitive.

We face strong competition in all of our market segments. Price competition in our various industries is intense and pricing pressures from competitors and customers continue to increase. In general, as a manufacturer and marketer of premium products and services, the expectations of Snap-on's customers and its franchisees are high. Any inability to maintain customer satisfaction could diminish Snap-on's premium image and reputation and could result in a lessening of our ability to command premium pricing. We expect that the level of competition will remain high in the future, which could limit our ability to maintain or increase market share or profitability.

Foreign operations are subject to political, economic, trade and other risks that could adversely affect our business, financial condition, results of operations and cash flows.

Approximately 28% of our revenues in 2022 were generated outside of the United States. Future growth rates and success of our business depends in large part on continued growth in our non-U.S. operations, including growth in emerging markets and critical industries. Numerous risks and uncertainties affect our non-U.S. operations. These include political, economic and social instability, such as acts of war, armed conflicts, civil disturbance or acts of terrorism, local labor conditions, trade relations with China, changes in government policies and regulations, including those intended to address climate change, imposition or increases in withholding and other taxes on remittances and other payments by international subsidiaries, as well as exposure to liabilities under anti-bribery and anti-corruption laws in various countries, such as the U.S. Foreign Corrupt Practices Act, currency volatility, transportation delays or interruptions, sovereign debt uncertainties and difficulties in enforcement of contract and intellectual property rights, reputational risks related to, among other factors, different standards and practices among countries, as well as natural disasters, weather events and outbreaks of infectious diseases. Should the economic environment in our non-U.S. markets deteriorate from current levels, our results of operations and financial position could be materially impacted, including as a result of the effects of potential impairment write-downs of goodwill and/or other intangible assets related to these businesses.

The United Kingdom ("U.K.") has formally left the European Union ("Brexit"). As part of the agreement between the U.K. and the European Union regarding Brexit, there is a new series of customs and regulatory checks, including rules of origin and stringent local content requirements. There are also restrictions on the free movement of people and temporary visas for work-related purposes have been re-introduced. The implications of Brexit, including disruptions to trade and the movement of goods, services and people between the U.K. and the European Union or other countries, may lead to additional cost, delays and volatility in currency exchange rates, as well as create legal and global economic uncertainty. These and other potential implications could adversely affect our business and results of operations.

The February 2022 Russian invasion of Ukraine and the ongoing conflict in the region has led to sanctions and actions taken against Russia and Belarus by the United States, the U.K., the European Union and others. The war in Ukraine has not had a material impact on our business and operations; however, expansion of the conflict beyond its current geographic, political and economic scope could adversely impact our business, results of operations and financial condition. Risks related to this situation include supply chain inefficiencies, price increases and shortages of raw materials and components, exchange rate volatility, energy shortages in Europe, an increase in cybersecurity incidents, and potential impairment of certain assets.

Our foreign operations are also subject to other risks and challenges, such as the need to staff and manage diverse workforces, respond to the needs of multiple national and international marketplaces, and differing business climates and cultures in various countries.

Operational Risks

Risks associated with the disruption of manufacturing operations could adversely affect our profitability or competitive position.

We manufacture a significant portion of the products we sell. Any prolonged disruption in the operations of our existing manufacturing facilities, whether due to technical or labor difficulties, facility consolidation or closure actions, lack of raw material or component availability, destruction of or damage to any facility (as a result of natural disasters, climate or weather events, use and storage of hazardous materials, armed conflicts, sabotage, terrorism, civil unrest or other events), or other reasons, including outbreaks of infectious diseases, such as the ongoing COVID-19 pandemic, could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Price inflation and shortages of raw materials, components, certain purchased finished goods and energy sources have impacted, and in the future could adversely affect, the ability to obtain, as well as the cost of, needed materials or products and, in turn, our results of operations.

Snap-on's supply of raw materials and purchased components are generally available from numerous suppliers, and the company continuously works to expand its supplier base to ensure availability. The principal raw material used in the manufacture of our products is steel, which we purchase in competitive, price-sensitive markets. To meet Snap-on's high quality standards, our steel needs range from specialized alloys, which are available only from a limited group of approved suppliers, to common alloys, which are available from multiple suppliers. Some of these materials have been, and in the future may be, in short supply, particularly in the event of mill shutdowns or production cut backs. In addition, outbreaks of infectious diseases, weather events, armed conflicts or other circumstances beyond our control could also impact the availability of raw materials and components. Physical risks of climate change may also impact the availability and cost of materials, sources and supply of energy and could also increase operating costs. Raw materials, components and certain purchased finished goods can exhibit price and demand cyclicality, including as a result of tariffs, other trade protection measures, inflationary factors, and supply chain inefficiencies. Associated unexpected variability has resulted, and in the future could result, in an increase in product costs and require Snap-on to increase prices to maintain margins.

We use various energy sources to transport, produce and distribute products, and some of our products have components that are petroleum based. Petroleum and energy prices have periodically increased significantly over short periods of time; future volatility and changes may be caused by market fluctuations, supply and demand, currency fluctuations, production and transportation disruptions, climate change regulations, world events, including armed conflicts, and changes in governmental programs. Energy price increases raise both our operating costs and the costs of our materials, and we may not be able to increase our prices enough to offset these costs in certain areas. Higher prices also may reduce the level of future customer orders and our profitability.

Failure to maintain effective distribution of products and services could adversely impact revenue, gross margin and profitability.

We use a variety of distribution methods to sell our products and services. Successfully managing the interaction of our distribution efforts to reach various potential customer segments for our products and services is a complex process. Moreover, since each distribution method has distinct risks, costs and gross margins, our failure to implement the most advantageous balance in the delivery model for our products and services could adversely affect our revenue, gross margins and profitability.

Data security and information technology infrastructure and security are critical to supporting business objectives; failure of our systems to operate effectively could adversely affect our business and reputation.

We depend heavily on information technology infrastructure to achieve our business objectives and to protect sensitive data, and we continually invest in improving such systems. In the ordinary course of business, we collect and store sensitive data and information, including personally identifiable information about our employees and the company's proprietary and regulated business information, as well as that of our customers, suppliers and business partners. Our information systems, like those of other companies, are susceptible to malicious damage, intrusions and outages due to, among other events, viruses, cyber attacks, industrial espionage, phishing attempts, hacking, break-ins and similar events, as well as other breaches of security, natural disasters, power loss or telecommunications failures. Techniques used to breach information technology systems are growing in sophistication and increasingly come from threat actors of all types, including individuals, criminal organizations and state-sponsored operatives. In early March 2022, as previously disclosed, Snap-on detected unusual activity in some areas of its information technology environment, quickly took down its network connections as part of the company's defense protocols, launched a comprehensive analysis assisted by a leading external forensics firm, and notified law enforcement. The company continued to pursue its commercial activities and restored connections as system interfaces were cleared. The information technology incident did not significantly affect the company's financial results.

In response to the evolving cyber threat environment, we continue to invest in data security and address these risks and uncertainties by implementing security technologies, internal controls, network and data center resiliency, and redundancy and recovery processes, as well as by securing insurance. Future problems that impair or compromise the company's information technology infrastructure, including those due to natural disasters, power outages, major network failures, security breaches or malicious attacks, or those occurring during system upgrades and/or new system implementations could impede our operations. Such impacts could interfere with our ability to record or process orders, manufacture and ship in a timely manner, manage our financial services operations including originating, processing, accounting for and collecting receivables, protect sensitive data of the company, our customers, our suppliers and business partners, or otherwise carry on business in the normal course. The March 2022 incident did not have a significant impact on the results of our operations; however, future cyber events could cause us to lose customers and/or revenue and could require us to incur significant expense to remediate, including as a result of legal or regulatory claims, proceedings, fines or penalties, and could also damage our reputation.

In association with initiatives to better integrate business units, rationalize our operating footprint and improve responsiveness to franchisees and customers, Snap-on is continually enhancing its global Enterprise Resource Planning (ERP) management information systems. As we integrate, implement and deploy new information technology processes and enhance our information infrastructure across our global operations, we could experience disruptions in our business that could have an adverse effect on our business, financial condition, results of operations and cash flows.

Failure to attract, retain and effectively manage qualified personnel could lead to a loss of revenue and/or profitability.

Snap-on's success depends, in part, on the efforts and abilities of its senior management team and other key employees whose skills, experience and industry contacts significantly benefit our operations and administration. The failure to attract and retain members of our senior management team and other key employees, to effectively develop personnel and to execute succession plans could have a negative effect on our operating results. In addition, transitions of important responsibilities to new individuals inherently include the possibility of disruptions to our business and operations, which could negatively affect our business, financial condition, results of operations and cash flows.

We may not successfully integrate businesses we acquire, which could have an adverse impact on our business, financial condition, results of operations and cash flows.

The pursuit of growth through acquisitions, including participation in joint ventures, involves significant risks that could have a material adverse effect on our business, financial condition, results of operations and cash flows. These risks include:

- Loss of the acquired businesses' customers;
- Inability to integrate successfully the acquired businesses' operations;
- Inability to coordinate management and integrate and retain employees of the acquired businesses;
- Unforeseen or contingent liabilities of the acquired businesses;
- Large write-offs or write-downs, or the impairment of goodwill or other intangible assets;
- Difficulties in implementing and maintaining consistent standards, controls, procedures, policies and information systems;
- Failure to realize anticipated synergies, economies of scale or other anticipated benefits, or to maintain operating margins;
- Strain on our personnel, systems and resources, and diversion of attention from other priorities;
- · Incurrence of additional debt and related interest expense; and
- The dilutive effect in the event of the issuance of additional equity securities.

The steps taken to restructure operations, rationalize operating footprint, lower operating expenses and achieve greater efficiencies in the supply chain could disrupt business.

We have taken steps in the past, and may take additional steps in the future, intended to improve customer service and drive further efficiencies as well as reduce costs, some of which could be disruptive to our business. Future efforts to reduce components of expense could result in the recording of charges for inventory and technology-related write-offs, workforce reduction costs or other charges relating to the consolidation or closure of facilities. If we were to incur a substantial charge or are unable to effectively manage our cost reduction and restructuring efforts, our business, financial condition, results of operations and cash flows could be adversely affected in certain periods.

Financial Risks

Our inability to provide acceptable financing alternatives to franchisees and other end-user customers could adversely impact our operating results.

An integral component of our business and profitability is our ability to offer competitive financing alternatives to franchisees and other end-user customers. The lack of our ability to offer such alternatives or obtain capital resources or other financing to support our receivables on terms that we believe are attractive, whether resulting from the state of the financial markets, our own operating performance, or other factors, would negatively affect our operating results and financial condition. Adverse fluctuations in interest rates and/or our ability to provide competitive financing programs could also have an adverse impact on our revenue and profitability.

Exposure to credit risks of customers and resellers may make it difficult to collect receivables, and our allowances for credit losses for receivables may prove inadequate, which could adversely affect operating results and financial condition.

A decline in industry and/or economic conditions could have the potential to weaken the financial position of some of our customers, including financial services customers. If circumstances surrounding our customers' ability to repay their credit obligations were to deteriorate and result in the write-down or write-off of such receivables, it would negatively affect our operating results for the relevant period and, if large, could have a material adverse effect on our business, financial condition, results of operations and cash flows.

The company maintains allowances for credit losses for receivables to provide for defaults and nonperformance. These allowances represent an estimate of expected credit losses over the remaining contractual life of the receivables, using historical loss experience, asset specific risk characteristics, current conditions, reasonable and supportable forecasts, and an appropriate reversion period, when applicable. The determination of the appropriate levels of the allowances for credit losses involves a high degree of subjectivity and judgement, and requires the company to make estimates of credit risks, which may undergo material changes as a result of economic conditions and other factors. The company's allowances may not be adequate to cover actual losses, and future provisions for credit losses could materially and adversely affect our financial condition, results of operations and cash flows.

Foreign operations are subject to currency exchange, inflation, interest and other risks that could adversely affect our business, financial condition, results of operations and cash flows.

The reporting currency for Snap-on's consolidated financial statements is the U.S. dollar. Certain of the company's assets, liabilities, expenses and revenues are denominated in currencies other than the U.S. dollar. In preparing Snap-on's Consolidated Financial Statements, those assets, liabilities, expenses and revenues are translated into U.S. dollars at applicable exchange rates. Increases or decreases in exchange rates between the U.S. dollar and other currencies affect the U.S. dollar value of those items, as reflected in the Consolidated Financial Statements. Substantial fluctuations in the value of the U.S. dollar or other transactional currencies have had and, in the future, could have a significant impact on the company's financial condition and results of operations. We are also affected by changes in inflation and interest rates in non-U.S. jurisdictions. Cash generated in certain non-U.S. jurisdictions may be difficult to repatriate to the United States in a tax-efficient manner.

Adverse developments in the credit and financial markets could negatively impact the availability of credit that we and our customers need to operate our businesses.

We depend upon the availability of credit to operate our business, including the financing of receivables from end-user customers that are originated by our financial services businesses. Our end-user customers, franchisees and suppliers also require access to credit for their businesses. At times, world financial markets have been unstable and subject to uncertainty. Adverse developments in the credit and financial markets, or unfavorable changes in Snap-on's credit rating, could negatively impact the availability of future financing and the terms on which it might be available to Snap-on, its end-user customers, franchisees and suppliers. Inability to access credit or capital markets, or a deterioration in the terms on which financing might be available, could have an adverse impact on our business, financial condition, results of operations and cash flows.

Increasing our financial leverage could affect our operations and profitability.

The maximum available credit under our multi-currency revolving credit facility is \$800 million. The company's leverage ratio may affect both our availability of additional capital resources as well as our operations in several ways, including:

- The terms on which credit may be available to us could be less attractive, both in the economic terms of the credit and the covenants stipulated by the credit terms;
- The possible lack of availability of additional credit or access to the commercial paper market;
- The potential for higher levels of interest expense to service or maintain our outstanding debt;
- The possibility of additional borrowings in the future to repay our indebtedness when it comes due; and
- The possible diversion of capital resources from other uses.

While we believe we will have the ability to service our debt and obtain additional resources in the future if and when needed, that will depend upon our results of operations and financial position at the time, the then-current state of the credit and financial markets, and other factors that may be beyond our control. Therefore, we cannot give assurances that credit will be available on terms that we consider attractive, or at all, if and when necessary or beneficial to us.

Failure to achieve expected investment returns on pension plan assets, as well as changes in interest rates or plan demographics, could adversely impact our results of operations, financial condition and cash flows.

Snap-on sponsors various defined benefit pension plans (the "pension plans"). The assets of the pension plans are diversified in an attempt to mitigate the risk of a large loss. Required funding for the company's domestic defined benefit pension plans is determined in accordance with guidelines set forth in the federal Employee Retirement Income Security Act ("ERISA"); foreign defined benefit pension plans are funded in accordance with local statutes or practice. Additional contributions to enhance the funded status of the pension plans can be made at the company's discretion. However, there can be no assurance that the value of the pension plan assets, or the investment returns on those plan assets, will be sufficient to meet the future benefit obligations of such plans. In addition, during periods of adverse investment market conditions and declining interest rates, the company may be required to make additional cash contributions to the pension plans that could reduce our financial flexibility. Changes in plan demographics, including an increase in the number of retirements or changes in life expectancy assumptions, may also increase the costs and funding requirements of the obligations related to the company's pension plans.

Our pension plan obligations are affected by changes in market interest rates. Significant fluctuations in market interest rates have added, and may further add, volatility to our pension plan obligations. In periods of declining market interest rates, our pension plan obligations generally increase; in periods of increasing market interest rates, our pension plan obligations generally decrease. While our plan assets are broadly diversified, there are inherent market risks associated with investments; if adverse market conditions occur, our plan assets could incur significant or material losses. Since we may need to make additional contributions to address changes in obligations and/or a loss in plan assets, the combination of declining market interest rates, past or future plan asset investment losses, and/or changes in plan demographics could adversely impact our results of operations, financial condition and cash flows.

The company's pension plan expense is comprised of the following factors: (i) service cost; (ii) interest on projected benefit obligations; (iii) expected return on plan assets; (iv) the amortization of prior service costs and credits; (v) effects of actuarial gains and losses; and (vi) settlement/curtailment costs, when applicable. The accounting for pensions involves the estimation of a number of factors that are highly uncertain. Certain factors, such as the interest on projected benefit obligations and the expected return on plan assets, are impacted by changes in market interest rates and the value of plan assets. A significant decrease in market interest rates and a decrease in the fair value of plan assets would increase net pension expense and may adversely affect the company's future results of operations. See Note 12 to the Consolidated Financial Statements for further information on the company's pension plans.

The recognition of impairment charges on goodwill or other intangible assets would adversely impact our future financial condition and results of operations.

We have a substantial amount of goodwill and purchased intangible assets, almost all of which are booked in the Commercial & Industrial Group and in the Repair Systems & Information Group. We are required to perform impairment tests on our goodwill and other intangibles annually or at any time when events occur that could impact the value of our business segments. Our determination of whether impairment has occurred is based on a comparison of each of our reporting units' fair market value with its carrying value.

Significant and unanticipated changes in circumstances, such as declines in profitability and cash flow due to long-term deterioration in macroeconomic, industry and market conditions, the loss of key customers, changes in technology or markets, changes in key personnel or litigation, a sustained decrease in share price and/or other events, could require a provision for impairment in a future period that could substantially impact our reported earnings and reduce our consolidated net worth and shareholders' equity. Should the economic environment in these markets deteriorate, our results of operations and financial position could be materially impacted, including as a result of the effects of potential impairment write-downs of goodwill and/or other intangible assets related to these businesses.

Legal and Regulatory Risks

Legislation and regulations relating to our business and the countries where we operate, including those related to sustainability matters, as well as any changes to such legislation or regulations, in addition to new compliance obligations or a failure to maintain existing compliance requirements, may, if significant, affect our business, reputation, results of operations and financial condition.

Significant changes to legislative and regulatory activity, and compliance burdens, including those associated with: (i) sales to our government, military and defense contractor customers; and (ii) classification of third parties, including our franchisees, as independent from the company, as well as the manner in which they are applied, could significantly impact our business and the economy as a whole.

Financial services businesses of all kinds are subject to significant and complex regulations and enforcement. In addition to potentially increasing the costs and other requirements of doing business due to compliance obligations, new laws and regulations, or changes to existing laws and regulations, as well as the enforcement thereof, may affect the relationships between creditors and debtors, inhibit the rights of creditors to collect amounts owed to them, expand liability for certain actions or inaction, or limit the types of financial products or services offered, any or all of which could have a material adverse effect on our financial condition, results of operations and cash flows. Failure to comply with any of these laws or regulations could also result in civil, criminal, monetary and/or non-monetary penalties, damage to our reputation, and/or the incurrence of remediation costs.

In recent years there has been increased public awareness, concern and focus on environmental and sustainability issues, including matters related to global climate change. The current focus on these matters is expected to result in additional and/or more restrictive regulations, requirements and/or industry or third-party standards to reduce or mitigate global warming and other environmental or sustainability risks, though the timing is uncertain.

Increased regulatory requirements or standards may result in increased compliance or input costs, including those related to energy or raw materials, for us and our suppliers. If environmental laws or regulations or industry standards are either changed or adopted, and impose significant operational restrictions and compliance requirements upon the company, the company's business, reputation, results of operations, financial condition and competitive position could be negatively impacted. For example, if significant increases in fuel economy requirements or changes to vehicle emissions requirements for internal combustion engine vehicles were imposed, there could be a decrease in demand for such vehicles and a reduction in miles driven, which could adversely impact the demand for certain of our products and services. Furthermore, an inability to successfully manage climate change or sustainability matters, or to effectively respond to new, or changes in, legal or regulatory requirements concerning sustainability matters, or increased operating or manufacturing costs due to changes in the regulatory environment, could adversely affect our business.

These developments, and other potential future legislation and regulations, including the increasing global regulation of privacy rights, may also adversely affect the customers to which, and the markets into which, we sell our products, and increase our costs and otherwise negatively affect our business, reputation, results of operations and financial condition, including in ways that cannot yet be foreseen.

Product liability claims and litigation could affect our business, reputation, financial condition, results of operations and cash flows.

The products that we design and/or manufacture, and/or the services we provide, can lead to product liability claims or other legal claims being filed against us. To the extent that plaintiffs are successful in showing that a defect in a product's design, manufacture or warnings led to personal injury or property damage, or that our provision of services resulted in similar injury or damage, we may be subject to claims for damages. Although we are insured for damages above a certain amount, we bear the costs and expenses associated with defending claims, including frivolous lawsuits, and are responsible for damages up to the insurance retention amount. In addition to claims concerning individual products, as a manufacturer, we can be subject to costs, potential negative publicity and lawsuits related to product recalls, which could adversely impact our results of operations and damage our reputation.

Legal disputes could adversely affect our business, reputation, financial condition, results of operations and cash flows.

In the ordinary course of our business, we are subject to legal disputes that are litigated and/or settled. Disputes or future lawsuits could result in the diversion of management's time and attention away from business operations. Additionally, negative developments with respect to legal disputes and the costs incurred in defending ourselves, even if successful, could have an adverse impact on the company and its reputation. Successful outcomes, at trial or on appeal, can never be assured. Adverse outcomes or settlements could also require us to pay damages, potentially in excess of amounts reserved, or incur liability for other remedies that could have a material adverse effect on our business, reputation, financial condition, results of operations and cash flows.

Our operations expose us to the risk of environmental liabilities, costs, litigation and violations that could adversely affect our financial condition, results of operations and reputation.

Certain of our operations are subject to environmental laws and regulations in the jurisdictions in which they operate, which impose limitations on the discharge of pollutants into the ground, air and water and establish standards for the generation, treatment, use, storage and disposal of hazardous wastes. We must also comply with various health and safety regulations in the United States and abroad in connection with our operations. Failure to comply with any of these laws could result in civil and criminal, monetary and non-monetary penalties and damage to our reputation. In addition, we may incur costs related to remedial efforts or alleged environmental damage associated with past or current waste disposal practices. We cannot provide assurance that our costs of complying with current or future environmental protection and health and safety laws will not exceed our estimates.

The inability to successfully defend claims from taxing authorities and changes in tax laws and rules could adversely affect our financial condition, results of operations and cash flows.

We conduct business in many countries, which requires us to interpret the income tax laws and rulings in each of those taxing jurisdictions. Due to the subjectivity of tax laws in and between jurisdictions, as well as the subjectivity of factual interpretations, our estimates of income tax liabilities may differ from actual payments or assessments. Claims from taxing authorities related to these differences could have an adverse impact on our financial condition, results of operations and cash flows.

Risk related to COVID-19 and Other Infectious Diseases

The ongoing COVID-19 pandemic continues to pose risks to our business, results of operations, financial condition and cash flows, and other epidemics or outbreaks of infectious diseases may have a similar impact.

We face risks related to outbreaks of infectious diseases, including the ongoing COVID-19 pandemic. In response to COVID-19 and its variants, national and local governments around the world have instituted certain protective measures at various times. While such restrictions have generally eased in many countries where we have operations, existing measures may be extended in certain regions and additional measures may be imposed to combat the COVID-19 pandemic or future outbreaks of infectious diseases.

The effects of COVID-19 or other similar outbreaks on the company could include reduced consumer and investor confidence, instability in the credit and financial markets, volatile corporate profits, supply chain inefficiencies, and reduced business and consumer spending, which could adversely affect our results of operations by reducing our sales, margins and/or net income as a result of rising costs, a slowdown in customer orders or order cancellations. To the extent the ongoing COVID-19 pandemic, or a future outbreak of an infectious disease, adversely affects our business, financial condition, results of operations and cash flows, it may also heighten many of the other risks described in this section.

General Risk Factor

Economic conditions and world events could affect our operating results.

In addition to the specific risks above, we, our franchisees and our customers, may be adversely affected by changing economic conditions, including conditions that may particularly impact specific regions. These conditions may result in reduced consumer and investor confidence, instability in the credit and financial markets, volatile corporate profits, and reduced business and consumer spending. We, our franchisees and our customers, and the economy as a whole, also may be affected by future world or local events outside our control, such as tariffs and other trade protection measures put in place by the United States or other countries, acts of terrorism, developments in the war on terrorism, armed conflicts (including the current war in Ukraine), civil unrest, conflicts in international situations, weather events and natural disasters, outbreaks of infectious diseases such as the ongoing COVID-19 pandemic, as well as government-related developments or issues, including changes in tax laws and regulations, new or enhanced regulations related to climate change and other sustainability matters, and changes in financial accounting standards. These factors may affect the results of operations by reducing our sales, margins and/or net earnings as a result of a slowdown in customer orders or order cancellations, impact the availability and/or pricing of raw materials and/or the supply chain, and could potentially lead to future impairment of goodwill or other intangible assets. In addition, political, social turmoil, international conflicts and terrorist acts may put pressure on global economic conditions. Unstable political, social and economic conditions may make it difficult for our franchisees, customers, suppliers and us to accurately forecast and plan future business activities. If such conditions persist, our business, financial condition, results of operations and cash flows could be negatively affected.

Item 1B: Unresolved Staff Comments

None.

Item 2: Properties

Snap-on maintains leased and owned manufacturing, software development, warehouse, distribution, research and development and office facilities throughout the world. Snap-on believes that its facilities currently in use are suitable and have adequate capacity to meet its present and foreseeable future demand. Snap-on's facilities in the United States occupy approximately 4.1 million square feet, of which 73% is owned, including its corporate and general office facility located in Kenosha, Wisconsin. Snap-on's facilities outside the United States occupy approximately 4.4 million square feet, of which approximately 73% is owned. Certain Snap-on facilities are leased through operating and finance lease agreements. See Note 17 to the Consolidated Financial Statements for information on the company's operating and finance leases. Snap-on management continually monitors the company's capacity needs and makes adjustments as dictated by market and other conditions.

The following table provides information about our corporate headquarters and financial services operations, and each of Snap-on's principal active manufacturing locations, distribution centers and software development locations (exceeding 50,000 square feet) as of 2022 year end:

Location	Principal Property Use	Owned/Leased	Segment*	
U.S. Locations:				
Elkmont, Alabama	Manufacturing	Owned	SOT	
Conway, Arkansas	Manufacturing and distribution	Owned and leased	RS&I	
City of Industry, California	Manufacturing	Leased	C&I	
San Diego, California	Software development	Owned	RS&I	
San Jose, California	Software development	Leased	RS&I	
Tustin, California	Manufacturing and distribution	Leased	C&I	
Columbus, Georgia	Distribution	Owned	C&I	
Crystal Lake, Illinois	Distribution	Owned and leased	SOT	
Libertyville, Illinois	Financial services	Leased	FS	
Algona, Iowa	Manufacturing and distribution	Owned	SOT	
Louisville, Kentucky	Manufacturing and distribution	Leased	RS&I	
Olive Branch, Mississippi	Distribution	Owned	SOT	
Carson City, Nevada	Distribution	Owned and leased	SOT	
Murphy, North Carolina	Manufacturing and distribution	Owned and leased	C&I	
Richfield, Ohio	Software development	Owned	RS&I	
Robesonia, Pennsylvania	Distribution	Owned	SOT	
Elizabethton, Tennessee	Manufacturing	Owned	SOT	
Kenosha, Wisconsin	Distribution and corporate	Owned	SOT, C&I, RS&I	
Milwaukee, Wisconsin	Manufacturing	Owned	SOT	
Pleasant Prairie, Wisconsin	Distribution	Owned	SOT, C&I, RS&I	
Non-U.S. Locations:				
Santo Tome, Argentina	Manufacturing	Owned	C&I	
New South Wales, Australia	Distribution and financial services	Leased	SOT, FS	
Minsk, Belarus	Manufacturing	Owned	C&I	
Santa Bárbara d'Oeste, Brazil	Manufacturing and distribution	Owned	RS&I	
Calgary, Canada	Distribution	Leased	SOT	
Mississauga, Canada	Distribution	Leased	SOT, RS&I	
Beijing, China	Manufacturing and distribution	Leased	C&I	
Kunshan, China	Manufacturing	Owned	C&I	
Xiaoshan, China	Manufacturing	Owned	C&I	
Banbury, England	Manufacturing and distribution	Owned	C&I	
Bramley, England	Manufacturing	Owned	C&I	
Kettering, England	Distribution and financial services	Owned and leased	SOT, C&I, FS	
Bauge-en-Anjou, France	Manufacturing	Owned	C&I	
Sopron, Hungary	Manufacturing	Owned	RS&I	
Correggio, Italy	Manufacturing	Owned	RS&I	
Tokyo, Japan	Distribution	Leased	C&I	
Helmond, Netherlands	Distribution	Owned	C&I	
Vila do Conde, Portugal	Manufacturing	Owned	C&I	
Irun, Spain	Manufacturing	Owned	C&I	
Placencia, Spain	Manufacturing	Owned	C&I	
Vitoria, Spain	Manufacturing and distribution	Owned	C&I	
Edsbyn, Sweden	Manufacturing	Owned	C&I	
Kungsör, Sweden	Manufacturing and distribution	Owned	RS&I	
Lidköping, Sweden	Manufacturing	Owned	C&I	

Item 3: Legal Proceedings

Snap-on is involved in various legal matters that are being litigated and/or settled in the ordinary course of business. Although it is not possible to predict the outcome of these legal matters, management believes that the results of these legal matters will not have a material impact on Snap-on's consolidated financial position, results of operations or cash flows.

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

Snap-on had 53,002,580 shares of common stock outstanding as of 2022 year end. Snap-on's stock is listed on the New York Stock Exchange under the ticker symbol "SNA." At February 3, 2023, there were 4,113 registered holders of Snap-on common stock.

Issuer Purchases of Equity Securities

The following chart discloses information regarding the shares of Snap-on's common stock repurchased by the company during the fourth quarter of fiscal 2022, all of which were purchased pursuant to the Board's authorizations that the company has publicly announced. Snap-on has undertaken stock repurchases from time to time to offset dilution related to equity plan issuances and for other corporate purposes, as well as when the company believes market conditions are favorable. The repurchase of Snap-on common stock is at the company's discretion, subject to prevailing financial and market conditions, and pursuant to the Board's authorizations that the company has publicly announced.

Period	Shares purchased	6 I		value of shares that may yet be purchased under publicly announced plans or programs*	
10/02/22 to 10/29/22	50,000	\$216.45	50,000	\$385.6 million	
10/30/22 to 11/26/22	87,000	\$231.48	87,000	\$387.6 million	
11/27/22 to 12/31/22	147,000	\$233.07	147,000	\$362.4 million	
Total/Average	284,000	\$229.66	284,000	N/A	

N/A: Not applicable

- In 1996, the Board authorized the company to repurchase shares of the company's common stock periodically in the open market or in privately negotiated transactions ("the 1996 Authorization"). The 1996 Authorization allows the repurchase of up to the number of shares issued or delivered from treasury under the various plans the company has in place that call for the issuance of the company's common stock. Because the number of shares that are purchased pursuant to the 1996 Authorization will change as (i) the company issues shares under its various plans; and (ii) shares are repurchased pursuant to this authorization, the number of shares authorized to be repurchased will vary from time to time. The 1996 Authorization will expire when terminated by the Board.
- On November 4, 2021, the Board authorized the repurchase of up to \$500 million of the company's common stock (the "2021 Authorization"). The 2021 Authorization will expire when the aggregate repurchase price limit is met, unless terminated earlier by the Board.

^{*} Subject to further adjustment pursuant to the 1996 Authorization described below, as of December 31, 2022, the approximate value of shares that may yet be purchased pursuant to the outstanding Board authorizations discussed below is \$362.4 million.

Other Purchases or Sales of Equity Securities

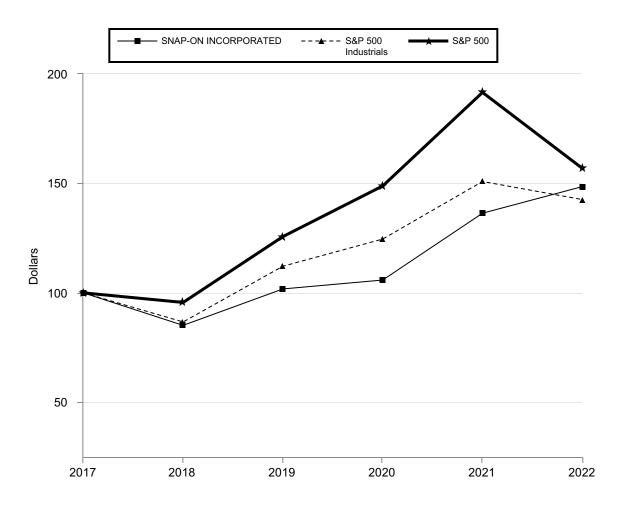
The following chart discloses information regarding transactions in shares of Snap-on's common stock by Citibank, N.A. ("Citibank") during the fourth quarter of 2022 pursuant to a prepaid equity forward agreement (the "Agreement") with Citibank that is intended to reduce the impact of market risk associated with the stock-based portion of the company's deferred compensation plans. The company's stock-based deferred compensation liabilities, which are impacted by changes in the company's stock price, increase as the company's stock price rises and decrease as the company's stock price declines. Pursuant to the Agreement, Citibank may purchase or sell shares of the company's common stock (for Citibank's account) in the market or in privately negotiated transactions. The Agreement has no stated expiration date and does not provide for Snap-on to purchase or repurchase its shares.

Citibank Purchases (Sales) of Snap-on Stock

Period	Shares Purchased (Sold)	Average Price per Share
10/02/22 to 10/29/22	_	_
10/30/22 to 11/26/22	(6,400)	\$228.61
11/27/22 to 12/31/22	500	\$235.45
Total/Average	(5,900)	\$229.11

Five-year Stock Performance Graph

The graph below illustrates the cumulative total shareholder return on Snap-on common stock since December 31, 2017, of a \$100 investment, assuming that dividends were reinvested quarterly. The graph compares Snap-on's performance to that of the Standard & Poor's 500 Industrials Index ("S&P 500 Industrials") and Standard & Poor's 500 Stock Index ("S&P 500").



Fiscal Year Ended (1)	Snap-on Incorporated	S&P 500 Industrials	S&P 500
December 31, 2017	\$100.00	\$100.00	\$100.00
December 31, 2018	\$85.15	\$86.71	\$95.62
December 31, 2019	\$101.79	\$112.17	\$125.72
December 31, 2020	\$105.86	\$124.59	\$148.85
December 31, 2021	\$136.40	\$150.89	\$191.58
December 31, 2022	\$148.55	\$142.63	\$156.89

⁽¹⁾ The company's fiscal year ends on the Saturday that is on or nearest to December 31 of each year; for ease of calculation, the fiscal year end is assumed to be December 31.

Item 6: [Reserved]

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

Management Overview

We believe our 2022 operating performance demonstrates the continued momentum of our operations, confirms the resilience of our markets, and reflects the considerable capabilities of our experienced team to overcome the uncertainties of the current environment. Throughout the turbulence, we maintained and further extended our ongoing advantages in our products, brands and people. At the same time, we leveraged existing proficiencies to focus on expanding our professional customer base, not only in automotive repair, but in adjacent markets, additional geographies and other areas, including critical industries, where the cost and penalties for failure can be high. Snap-on's value proposition of making work easier for serious professionals is an ongoing strength as we move forward along our runways for coherent growth:

- Enhancing the franchise network, where we continued to focus on helping our franchisees extend their reach through innovative selling processes and productivity initiatives that break the traditional time and space barriers inherent in a mobile van;
- Expanding with repair shop owners and managers, where we continued to make progress in connecting with customers and translating the resulting insights into innovation that solves specific challenges in the repair facility;
- Further extending to critical industries, where we continued to grow our lines of products customized for specific industries, including through further integration of acquisitions; and
- Building in emerging markets, where we continued to maintain manufacturing capacity, as well as refine product lines and distribution capabilities.

Our strategic priorities and plans for 2023 involve continuing to build on our Snap-on Value Creation Processes – our suite of strategic principles and processes we employ every day designed to create value, and employed in the areas of safety, quality, customer connection, innovation and rapid continuous improvement ("Rapid Continuous Improvement" or "RCI"). We expect to continue to deploy these processes in our existing operations as well as into our recently acquired businesses.

Snap-on's RCI initiatives employ a structured set of tools and processes across multiple businesses and geographies intended to eliminate waste and improve operations. Savings from Snap-on's RCI initiatives reflect benefits from a wide variety of ongoing efficiency, productivity and process improvements, including savings generated from product design cost reductions, improved manufacturing line set-up and change-over practices, lower-cost sourcing initiatives and facility consolidations. Unless individually significant, it is not practicable to disclose each RCI activity that generated savings and/or segregate RCI savings embedded in sales volume increases.

Our global financial services operations continue to serve a significant strategic role in offering financing options to our franchisees, to their customers, and to customers in other parts of our business. We expect that our global financial services business, which includes both Snap-on Credit LLC ("SOC") in the United States and our other international finance subsidiaries, will continue to be a meaningful contributor to our operating earnings going forward.

Snap-on has significant international operations and is subject to risks inherent with foreign operations, including foreign currency translation fluctuations.

Recent Acquisitions

On August 1, 2021, Snap-on acquired AutoCrib EMEA GmbH ("AutoCrib Germany"), for a cash purchase price of \$4.4 million (or \$4.2 million, net of cash acquired). AutoCrib Germany, based in Hamburg, Germany, distributes asset and tool control solutions for a variety of aerospace, automotive, military, natural resources and general industry operations. The acquisition of AutoCrib Germany, a former independent distributor, enhanced and expanded Snap-on's capabilities in providing solutions for the company's existing tool control offerings.

On July 1, 2021, Snap-on exchanged its 35% equity interest in Deville S.A., valued at \$21.8 million, for 100% ownership of Secateurs Pradines ("Pradines"), a wholly owned subsidiary of Deville S.A. with a fair value of \$20.2 million (or \$15.7 million, net of cash acquired), and cash of \$1.6 million. Pradines, located in Bauge-en-Anjou, France, designs and manufactures horticultural hand tools for professionals and individuals. Pradines has been the primary supplier of pruning products to Snap-on and the acquisition allows the company to improve and expand its pruning tool offering.

On February 26, 2021, Snap-on acquired Dealer-FX Group, Inc. ("Dealer-FX") for a cash purchase price of \$200.1 million (or \$200.0 million, net of cash acquired). Dealer-FX, based in Markham, Ontario, is a leading developer, marketer and provider of service-operations software solutions for automotive original equipment manufacturer ("OEM") customers and their dealers. Dealer-FX specializes in software as a service (SaaS) management systems, communications platforms, extensive data integrations, and offers a digitalized solution that increases productivity and enhances the vehicle owners' experience. The acquisition of Dealer-FX complemented and expanded Snap-on's existing OEM and dealership business that provides electronic parts catalogs, essential tool and diagnostic programs, and custom analytics to OEMs and dealerships.

For segment reporting purposes, the results of operations and assets of Dealer-FX have been included in the Repair Systems & Information Group since the acquisition date, and the results of operations and assets of AutoCrib Germany and Pradines have been included in the Commercial & Industrial Group since the respective acquisition dates.

Pro forma financial information has not been presented for any of these acquisitions as the net effects, individually and collectively, were neither significant nor material to Snap-on's results of operations or financial position.

Fiscal Year

Snap-on's fiscal year ends on the Saturday that is on or nearest to December 31. Unless otherwise indicated, references in this document to "fiscal 2022" or "2022" refer to the fiscal year ended December 31, 2022; references to "fiscal 2021" or "2021" refer to the fiscal year ended January 1, 2022; and references to "fiscal 2020" or "2020" refer to the fiscal year ended January 2, 2021. References in this document to 2022, 2021 and 2020 year end refer to December 31, 2022, January 1, 2022, and January 2, 2021, respectively.

Snap-on's 2022 and 2021 fiscal years each contained 52 weeks of operating results. Snap-on's 2020 fiscal year contained 53 weeks of operating results with the extra week occurring in the fourth quarter. The impact of the additional week of operations in fiscal 2020 was not material to Snap-on's full year or fourth quarter total revenues or net earnings.

Fiscal 2021 as Compared to Fiscal 2020

A discussion regarding our financial condition and results of operations for fiscal 2021 compared to fiscal 2020 can be found under "Part II, Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations," in our Annual Report on the Form 10-K for the fiscal year ended January 1, 2022, which was filed with the SEC on February 10, 2022, and is available on the SEC's website at www.sec.gov as well as in the "Investors" section of our website at www.snapon.com.

Non-GAAP Measures

References in this Management's Discussion and Analysis of Financial Condition and Results of Operations to "organic sales" refer to sales from continuing operations calculated in accordance with generally accepted accounting principles in the United States of America ("GAAP"), adjusted to exclude acquisition-related sales and the impact of foreign currency translation. Management evaluates the company's sales performance based on organic sales growth, which primarily reflects growth from the company's existing businesses as a result of increased output, expanded customer base, geographic expansion, new product development and pricing changes, and excludes sales contributions from acquired operations the company did not own as of the comparable prior-year reporting period. Organic sales also exclude the effects of foreign currency translation as foreign currency translation is subject to volatility that can obscure underlying business trends. Management believes that the non-GAAP financial measure of organic sales is meaningful to investors as it provides them with useful information to aid in identifying underlying growth trends in the company's businesses and facilitates comparisons of its sales performance with prior periods.

Effect of COVID-19

Our markets and our operations possess and, indeed, have demonstrated considerable resilience against the effects of the pandemic. The company sustained the accommodation of its operations to the virus environment, continuing without significant disruption to serve its franchisees and other professional customers as they performed their essential work, while taking what it believes to be appropriate measures to ensure the health and safety of its people. Throughout the pandemic, Snap-on has generally maintained its workforce and manufacturing capacity, as well as its investments in brand building and product development. As the global supply chain inefficiencies and associated cost increases caused by the COVID-19 pandemic have developed, the company has taken steps to ensure access to raw materials, components and purchased finished goods, and to provide for counterbalancing price and efficiency offsets. See also Part I, Item 1A: Risk Factors - Risk related to COVID-19 and Other Infectious Diseases.

Summary of Consolidated Performance

Consolidated net sales of \$4,492.8 million in 2022 increased \$240.8 million, or 5.7%, from 2021 levels, reflecting a \$357.2 million, or 8.7%, organic gain and \$8.5 million of acquisition-related sales, partially offset by \$124.9 million of unfavorable foreign currency translation.

Operating earnings before financial services of \$941.2 million in 2022 increased \$89.7 million, or 10.5%, compared to \$851.5 million in 2021. As a percentage of net sales, operating earnings before financial services of 20.9% compared to 20.0% last year.

Operating earnings of \$1,207.2 million in 2022 increased \$83.7 million, or 7.4%, compared to \$1,123.5 million last year. As a percentage of revenues (net sales plus financial services revenue), operating earnings of 24.9% compared to 24.4% last year.

Net earnings attributable to Snap-on in 2022 of \$911.7 million, or \$16.82 per diluted share, increased \$91.2 million, or \$1.90 per diluted share, from 2021 levels. Net earnings attributable to Snap-on in 2021 were \$820.5 million, or \$14.92 per diluted share.

Summary of Segment Performance

The Commercial & Industrial Group consists of business operations serving a broad range of industrial and commercial customers worldwide, including customers in the aerospace, natural resources, government and military, power generation, transportation and technical education market segments (collectively, "critical industries"), primarily through direct and distributor channels. Segment net sales of \$1,399.2 million in 2022 decreased \$7.1 million, or 0.5%, from 2021 levels, reflecting a \$60.8 million, or 4.5%, organic sales increase, more than offset by \$67.9 million of unfavorable currency translation. The organic growth primarily reflects a double-digit gain in the segment's specialty tools business, a high single-digit increase in the segment's Asia Pacific operations, and low single-digit gains in the segment's European-based hand tools business and in sales to customers in critical industries, despite lower activity with the military. Operating earnings of \$197.6 million in 2022, including \$8.6 million of unfavorable foreign currency effects, decreased \$12.3 million, or 5.9%, compared to \$209.9 million in 2021.

The Commercial & Industrial Group intends to continue building on the following strategic priorities in 2023:

- Expanding our business with existing customers and reaching new customers in critical industries and other market segments;
- Continuing to invest in emerging market growth initiatives;
- Broadening our product offering designed particularly for critical industry segments;
- Increasing our customer-connection-driven understanding of work across multiple industries;
- Investing in innovation that, guided by that understanding of work, delivers an ongoing stream of productivity-enhancing custom engineered solutions; and
- Continuing to reduce structural and operating costs, as well as improve efficiencies, through RCI initiatives.

The **Snap-on Tools Group** consists of business operations primarily serving vehicle service and repair technicians through the company's multi-national mobile tool distribution channel. Segment net sales of \$2,072.0 million in 2022 increased \$133.4 million, or 6.9%, from 2021 levels, reflecting a \$162.5 million, or 8.5%, organic sales gain, partially offset by \$29.1 million of unfavorable foreign currency translation. The organic increase includes a double-digit gain in the U.S. franchise business, while sales in the segment's international operations were mixed, but overall essentially flat. Operating earnings of \$458.7 million in 2022, including \$10.1 million of unfavorable foreign currency effects, increased \$47.6 million, or 11.6%, compared to \$411.1 million in 2021.

In 2023, the Snap-on Tools Group intends to continue its expansion with specific focus on the following initiatives:

- Continuing to improve franchisee sales productivity, profitability, commercial health, and satisfaction;
- Developing new programs and products to expand market coverage, reaching new technician customers and increasing penetration with existing customers;
- Increasing investment in new product innovation and development; and
- Improving customer service levels and productivity in back office support functions, manufacturing and the supply chain through RCI initiatives and investment.

By focusing on these areas, we believe that Snap-on, as well as its franchisees, will have the opportunity to serve more customers, more effectively, more profitably and with improved satisfaction.

The **Repair Systems & Information Group** consists of business operations serving other professional vehicle repair customers worldwide, primarily owners and managers of independent repair shops and OEM dealership service and repair shops ("OEM dealerships") through direct and distributor channels. Segment net sales of \$1,666.9 million in 2022 increased \$163.8 million, or 10.9%, from 2021 levels, reflecting a \$188.8 million, or 12.8%, organic sales increase and \$8.5 million of acquisition-related sales, partially offset by \$33.5 million of unfavorable foreign currency translation. The organic gain is comprised of double-digit increases in sales of undercar equipment and in activity with OEM dealerships, and a mid single-digit increase in sales of diagnostic and repair information products to independent repair shop owners and managers. Operating earnings of \$393.3 million in 2022, including \$4.8 million of favorable foreign currency effects, increased \$44.7 million, or 12.8%, from \$348.6 million in 2021.

The Repair Systems & Information Group intends to focus on the following strategic priorities in 2023:

- Expanding the product offering with new products and services, thereby providing more to sell to repair shop owners and managers;
- Continuing software and hardware upgrades to further improve functionality, performance and efficiency;
- Leveraging integration of software solutions;
- Continuing productivity advancements through RCI initiatives and leveraging of resources; and
- Increasing penetration in geographic markets, including emerging markets.

Financial Services generates revenue from various financing programs and is a strategic partner of the company's mobile franchise van channel. Financial services revenue was \$349.7 million in both 2022 and 2021. Originations of \$1,153.1 million in 2022 increased \$79.9 million, or 7.4%, from 2021 levels. Operating earnings from financial services in 2022 of \$266.0 million, including \$2.5 million of unfavorable foreign currency effects, decreased \$6.0 million, or 2.2%, compared to \$272.0 million last year.

Financial Services intends to focus on the following strategic priorities in 2023:

- Delivering financial products and services that attract and sustain profitable franchisees and support Snap-on's strategies for expanding market coverage and penetration;
- Improving productivity levels and ensuring high quality in all financial products and processes through the use of RCI initiatives; and
- Maintaining healthy portfolio performance levels.

Cash Flows

Net cash provided by operating activities of \$675.2 million in 2022 decreased \$291.4 million from \$966.6 million in 2021. The \$291.4 million decrease is primarily due to a \$354.5 million change in net operating assets and liabilities, partially offset by a \$92.5 million increase in net earnings.

Net cash used by investing activities of \$206.2 million in 2022 included additions to finance receivables of \$955.8 million, partially offset by collections of \$826.9 million, as well as \$0.5 million of cash provided by acquisitions. Net cash used by investing activities of \$290.4 million in 2021 included additions to finance receivables of \$878.1 million, partially offset by collections of \$854.2 million, as well as \$199.7 million for the acquisitions of Dealer-FX, AutoCrib Germany and Pradines. Capital expenditures in 2022 and 2021 totaled \$84.2 million and \$70.1 million, respectively. Capital expenditures in both years included continued investments related to the company's execution of its strategic growth initiatives and Value Creation Processes around safety, quality, customer connection, innovation and RCI.

Net cash used by financing activities of \$485.0 million in 2022 included \$313.1 million for dividend payments to shareholders and \$198.1 million for the repurchase of 899,000 shares of Snap-on's common stock. These amounts were partially offset by \$55.0 million of proceeds from stock purchase and option plan exercises and net proceeds from other short-term borrowings of \$1.6 million. Net cash used by financing activities of \$818.8 million in 2021 included \$431.3 million for the repurchase of 1,943,900 shares of Snap-on's common stock, \$275.8 million for dividend payments to shareholders and the September 2021 repayment of \$250.0 million of 6.125% unsecured notes upon maturity (the "2021 Notes"). These amounts were partially offset by \$162.4 million of proceeds from stock purchase and option plan exercises and net proceeds from other short-term borrowings of \$3.3 million.

Results of Operations

2022 vs. 2021Results of operations for 2022 and 2021 are as follows:

(Amounts in millions)	202	2	202	1	Chang	ge
Net sales	\$ 4,492.8	100.0 %	\$ 4,252.0	100.0 %	\$ 240.8	5.7 %
Cost of goods sold	(2,311.7)	(51.5)%	(2,141.2)	(50.4)%	(170.5)	(8.0)%
Gross profit	2,181.1	48.5 %	2,110.8	49.6 %	70.3	3.3 %
Operating expenses	(1,239.9)	(27.6)%	(1,259.3)	(29.6)%	19.4	1.5 %
Operating earnings before financial services	941.2	20.9 %	851.5	20.0 %	89.7	10.5 %
Financial services revenue	349.7	100.0 %	349.7	100.0 %	_	_
Financial services expenses	(83.7)	(23.9)%	(77.7)	(22.2)%	(6.0)	(7.7)%
Operating earnings from financial services	266.0	76.1 %	272.0	77.8 %	(6.0)	(2.2)%
Operating earnings	1,207.2	24.9 %	1,123.5	24.4 %	83.7	7.4 %
Interest expense	(47.1)	(1.0)%	(53.1)	(1.2)%	6.0	11.3 %
Other income (expense) – net	42.5	0.9 %	16.5	0.4 %	26.0	NM
Earnings before income taxes and equity earnings	1,202.6	24.8 %	1,086.9	23.6 %	115.7	10.6 %
Income tax expense	(268.7)	(5.5)%	(247.0)	(5.3)%	(21.7)	(8.8)%
Earnings before equity earnings	933.9	19.3 %	839.9	18.3 %	94.0	11.2 %
Equity earnings, net of tax		_	1.5		(1.5)	NM
Net earnings	933.9	19.3 %	841.4	18.3 %	92.5	11.0 %
Net earnings attributable to noncontrolling interests	(22.2)	(0.5)%	(20.9)	(0.5)%	(1.3)	(6.2)%
Net earnings attributable to Snap-on Inc.	\$ 911.7	18.8 %	\$ 820.5	17.8 %	\$ 91.2	11.1 %

NM: Not meaningful

Percentage Disclosure: All income statement line item percentages below "Operating earnings from financial services" are calculated as a percentage of the sum of Net sales and Financial services revenue.

Net sales of \$4,492.8 million in 2022 increased \$240.8 million, or 5.7%, from 2021 levels, reflecting a \$357.2 million, or 8.7%, organic gain and \$8.5 million of acquisition-related sales, partially offset by \$124.9 million of unfavorable foreign currency translation.

Gross profit of \$2,181.1 million in 2022 increased \$70.3 million, or 3.3%, compared to \$2,110.8 million last year. Gross margin (gross profit as a percentage of net sales) of 48.5% in 2022 declined 110 basis points (100 basis points ("bps") equals 1.0 percent) from last year primarily due to higher material and other costs, partially offset by higher sales volumes and pricing actions, benefits from the company's RCI initiatives, and 20 bps of favorable foreign currency effects.

Operating expenses of \$1,239.9 million in 2022 compared to \$1,259.3 million in 2021. Operating expenses as a percentage of net sales of 27.6% in 2022 improved 200 bps from last year primarily due to higher sales volumes, savings from RCI initiatives, and lower costs associated with stock-based expenses.

Operating earnings before financial services of \$941.2 million in 2022 increased \$89.7 million, or 10.5%, compared to \$851.5 million in 2021. As a percentage of net sales, operating earnings before financial services of 20.9% compared to 20.0% last year.

Financial services revenue of \$349.7 million in 2022 was unchanged from 2021. Financial services operating earnings of \$266.0 million in 2022 compared to \$272.0 million last year.

Operating earnings of \$1,207.2 million in 2022 increased \$83.7 million, or 7.4%, compared to \$1,123.5 million last year. As a percentage of revenues, operating earnings of 24.9% compared to 24.4% last year.

Interest expense decreased \$6.0 million in 2022 compared to last year. See Note 10 to the Consolidated Financial Statements for information on Snap-on's debt and credit facilities.

Other income (expense) – net includes net gains and losses associated with hedging and currency exchange rate transactions, non-service components of net periodic benefit costs, and interest income. See Note 18 to the Consolidated Financial Statements for information on other income (expense) – net.

The effective income tax rate on earnings attributable to Snap-on was 22.8% in 2022 and 23.2% in 2021. See Note 9 to the Consolidated Financial Statements for information on income taxes.

Net earnings attributable to Snap-on in 2022 of \$911.7 million, or \$16.82 per diluted share, increased \$91.2 million, or \$1.90 per diluted share, from \$820.5 million, or \$14.92 per diluted share, in 2021.

Segment Results

Snap-on's business segments are based on the organization structure used by management for making operating and investment decisions and for assessing performance. Snap-on's reportable business segments are: (i) the Commercial & Industrial Group; (ii) the Snap-on Tools Group; (iii) the Repair Systems & Information Group; and (iv) Financial Services. The Commercial & Industrial Group consists of business operations serving a broad range of industrial and commercial customers worldwide, including customers in the aerospace, natural resources, government and military, power generation, transportation and technical education market segments, primarily through direct and distributor channels. The Snap-on Tools Group consists of business operations primarily serving vehicle service and repair technicians through the company's multi-national mobile tool distribution channel. The Repair Systems & Information Group consists of business operations serving other professional vehicle repair customers worldwide, primarily owners and managers of independent repair shops and OEM dealerships, through direct and distributor channels. Financial Services consists of the business operations of Snap-on's finance subsidiaries.

Snap-on evaluates the performance of its operating segments based on segment revenues, including both external and intersegment net sales, and segment operating earnings. Snap-on accounts for intersegment sales and transfers based primarily on standard costs with reasonable mark-ups established between the segments. Identifiable assets by segment are those assets used in the respective reportable segment's operations. Corporate assets consist of cash and cash equivalents (excluding cash held at Financial Services), deferred income taxes and certain other assets. All significant intersegment amounts are eliminated to arrive at Snap-on's consolidated financial results.

Commercial & Industrial Group

(Amounts in millions)	 2022		 2021		 Change	<u> </u>
External net sales	\$ 1,058.3	75.6 %	\$ 1,095.6	77.9 %	\$ (37.3)	(3.4)%
Intersegment net sales	 340.9	24.4 %	 310.7	22.1 %	 30.2	9.7 %
Segment net sales	1,399.2	100.0 %	 1,406.3	100.0 %	(7.1)	(0.5)%
Cost of goods sold	(880.5)	(62.9)%	 (868.9)	(61.8)%	 (11.6)	(1.3)%
Gross profit	518.7	37.1 %	537.4	38.2 %	(18.7)	(3.5)%
Operating expenses	(321.1)	(23.0)%	 (327.5)	(23.3)%	 6.4	2.0 %
Segment operating earnings	\$ 197.6	14.1 %	\$ 209.9	14.9 %	\$ (12.3)	(5.9)%

Segment net sales of \$1,399.2 million in 2022 decreased \$7.1 million, or 0.5%, from 2021 levels, reflecting a \$60.8 million, or 4.5%, organic sales gain, more than offset by \$67.9 million of unfavorable currency translation. The organic growth primarily reflects a double-digit gain in the segment's specialty tools business, a high single-digit increase in the segment's Asia Pacific operations, and low single-digit gains in the segment's European-based hand tools business and in sales to customers in critical industries, despite lower activity with the military.

Segment gross margin in 2022 of 37.1% declined 110 bps from last year, primarily due to increased material and other costs, partially offset by benefits from the higher sales volumes and pricing actions, as well as from the segment's RCI initiatives.

Segment operating expenses as a percentage of net sales in 2022 of 23.0% improved 30 bps as compared to 2021 primarily due to the effects of higher sales volumes.

As a result of these factors, segment operating earnings of \$197.6 million in 2022, including \$8.6 million of unfavorable foreign currency effects, decreased \$12.3 million, or 5.9%, compared to \$209.9 million in 2021. Operating margin (segment operating earnings as a percentage of segment net sales) for the Commercial & Industrial Group of 14.1% in 2022 compared to 14.9% last year.

Snap-on Tools Group

(Amounts in millions)	 2022	2	 2021		 Change	
Segment net sales	\$ 2,072.0	100.0 %	\$ 1,938.6	100.0 %	\$ 133.4	6.9 %
Cost of goods sold	 (1,141.7)	(55.1)%	 (1,055.0)	(54.4)%	 (86.7)	(8.2)%
Gross profit	930.3	44.9 %	883.6	45.6 %	46.7	5.3 %
Operating expenses	 (471.6)	(22.8)%	 (472.5)	(24.4)%	0.9	0.2 %
Segment operating earnings	\$ 458.7	22.1 %	\$ 411.1	21.2 %	\$ 47.6	11.6 %

Segment net sales of \$2,072.0 million in 2022 increased \$133.4 million, or 6.9%, from 2021 levels, reflecting a \$162.5 million, or 8.5%, organic sales gain, partially offset by \$29.1 million of unfavorable foreign currency translation. The organic increase includes a double-digit gain in the U.S. franchise business, while sales in the segment's international operations were mixed, but overall essentially flat.

Segment gross margin in 2022 of 44.9% declined 70 bps from last year primarily due to increased material and other costs, and 20 bps of unfavorable foreign currency effects. These declines were partially offset by benefits from the higher sales volumes and pricing actions.

Segment operating expenses as a percentage of net sales in 2022 of 22.8% improved 160 bps from last year and includes benefits from higher sales volumes, the effects of lower expenses related to the company's franchisee stock purchase plan, and savings associated with RCI initiatives.

As a result of these factors, segment operating earnings of \$458.7 million in 2022, including \$10.1 million of unfavorable foreign currency effects, increased \$47.6 million, or 11.6%, compared to \$411.1 million in 2021. Operating margin for the Snap-on Tools Group of 22.1% in 2022 compared to 21.2% last year.

Repair Systems & Information Group

(Amounts in millions)	 2022		 2021		 Chang	e
External net sales	\$ 1,362.5	81.7 %	\$ 1,217.8	81.0 %	\$ 144.7	11.9 %
Intersegment net sales	 304.4	18.3 %	 285.3	19.0 %	19.1	6.7 %
Segment net sales	 1,666.9	100.0 %	1,503.1	100.0 %	163.8	10.9 %
Cost of goods sold	 (934.8)	(56.1)%	 (813.3)	(54.1)%	(121.5)	(14.9)%
Gross profit	 732.1	43.9 %	689.8	45.9 %	42.3	6.1 %
Operating expenses	 (338.8)	(20.3)%	 (341.2)	(22.7)%	2.4	0.7 %
Segment operating earnings	\$ 393.3	23.6 %	\$ 348.6	23.2 %	\$ 44.7	12.8 %

Segment net sales of \$1,666.9 million in 2022 increased \$163.8 million, or 10.9%, from 2021 levels, reflecting a \$188.8 million, or 12.8%, organic sales increase and \$8.5 million of acquisition-related sales, partially offset by \$33.5 million of unfavorable foreign currency translation. The organic gain is comprised of double-digit increases in sales of undercar equipment and in activity with OEM dealerships, and a mid single-digit increase in sales of diagnostic and repair information products to independent repair shop owners and managers.

Segment gross margin in 2022 of 43.9% declined 200 bps from last year primarily due to higher material and other costs, and increased sales in lower gross margin businesses. These declines were partially offset by benefits from pricing actions and savings from RCI initiatives, as well as 50 bps of favorable foreign currency effects.

Segment operating expenses as a percentage of net sales in 2022 of 20.3% improved 240 bps from last year primarily due to benefits from sales volume leverage, higher activity in lower-expense businesses, and savings from RCI initiatives.

As a result of these factors, segment operating earnings of \$393.3 million in 2022, including \$4.8 million of favorable foreign currency effects, increased \$44.7 million, or 12.8%, from \$348.6 million in 2021. Operating margin for the Repair Systems & Information Group of 23.6% in 2022 compared to 23.2% last year.

Financial Services

(Amounts in millions)	 2022		 2021		 Change	
Financial services revenue	\$ 349.7	100.0 %	\$ 349.7	100.0 %	\$ _	_
Financial services expenses	 (83.7)	(23.9)%	 (77.7)	(22.2)%	 (6.0)	(7.7)%
Segment operating earnings	\$ 266.0	76.1 %	\$ 272.0	77.8 %	\$ (6.0)	(2.2)%

Financial services revenue is generally dependent on the size of the average financial services portfolio during the period, as well as on the average yield on receivables. Financial services revenue of \$349.7 million in 2022 was unchanged from 2021, as the benefits from the slightly larger average financial services portfolio were offset by the slightly lower average yield in 2022 as compared to last year. In 2022 and 2021, the respective average yields on finance receivables were 17.6% and 17.7%. In both 2022 and 2021, the average yield on contract receivables was 8.5%. Originations of \$1,153.1 million in 2022 increased \$79.9 million, or 7.4%, from 2021 levels.

Financial services expenses primarily include personnel-related and other general and administrative costs, as well as expenses for credit losses. These expenses are generally more dependent on changes in the financial services portfolio than they are on the revenue of the segment. Financial services expenses in 2022 increased \$6.0 million from last year primarily due to higher provisions for credit losses as compared to those recorded in 2021. As a percentage of the average financial services portfolio, financial services expenses were 3.7% and 3.5% in 2022 and 2021, respectively.

As a result of these factors, segment operating earnings of \$266.0 million in 2022, including \$2.5 million of unfavorable foreign currency effects, decreased \$6.0 million, or 2.2%, from 2021 levels.

See Note 1 and Note 4 to the Consolidated Financial Statements for further information on financial services.

Corporate

Snap-on's general corporate expenses in 2022 of \$108.4 million decreased \$9.7 million from \$118.1 million last year. The year-over-year decrease primarily reflects lower costs associated with the company's employee stock purchase plan.

Quarterly Data

(Amounts in millions, except per share data)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2022					
Net sales	\$ 1,097.8	\$ 1,136.6	\$ 1,102.5	\$ 1,155.9	\$ 4,492.8
Gross profit	534.3	553.5	532.6	560.7	2,181.1
Financial services revenue	87.7	86.4	87.3	88.3	349.7
Financial services expenses	(17.3)	(21.1)	(20.9)	(24.4)	(83.7)
Net earnings	222.7	237.2	229.5	244.5	933.9
Net earnings attributable to Snap-on Incorporated	217.4	231.5	223.9	238.9	911.7
Earnings per share – basic*	4.07	4.34	4.21	4.50	17.14
Earnings per share – diluted*	4.00	4.27	4.14	4.42	16.82
Cash dividends paid per share	1.42	1.42	1.42	1.62	5.88
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2021					
Net sales	\$ 1,024.6	\$ 1,081.4	\$ 1,037.7	\$ 1,108.3	\$ 4,252.0
Gross profit	513.6	543.1	520.7	533.4	2,110.8
Financial services revenue	88.6	86.9	87.3	86.9	349.7
Financial services expenses	(23.3)	(18.0)	(16.7)	(19.7)	(77.7)
Net earnings	197.6	213.2	201.5	229.1	841.4
Net earnings attributable to Snap-on Incorporated	192.6	208.0	196.2	223.7	820.5
Earnings per share – basic*	3.55	3.85	3.65	4.18	15.22
Earnings per share – diluted*	3.50	3.76	3.57	4.10	14.92
Cash dividends paid per share	1.23	1.23	1.23	1.42	5.11

^{*} Amounts may not total to annual earnings per share because each quarter and year are calculated separately based on basic and diluted weighted-average common shares outstanding during each respective period.

Fourth Quarter

Results of operations for the fourth quarters of 2022 and 2021 are as follows:

		Fourth	Quarter			
(Amounts in millions)	202	2	202	1	Chai	nge
Net sales	\$ 1,155.9	100.0 %	\$ 1,108.3	100.0 %	\$ 47.6	4.3 %
Cost of goods sold	(595.2)	(51.5)%	(574.9)	(51.9)%	(20.3)	(3.5)%
Gross profit	560.7	48.5 %	533.4	48.1 %	27.3	5.1 %
Operating expenses	(312.7)	(27.0)%	(301.2)	(27.1)%	(11.5)	(3.8)%
Operating earnings before financial services	248.0	21.5 %	232.2	21.0 %	15.8	6.8 %
Financial services revenue	88.3	100.0 %	86.9	100.0 %	1.4	1.6 %
Financial services expenses	(24.4)	(27.6)%	(19.7)	(22.7)%	(4.7)	(23.9)%
Operating earnings from financial services	63.9	72.4 %	67.2	77.3 %	(3.3)	(4.9)%
Operating earnings	311.9	25.1 %	299.4	25.1 %	12.5	4.2 %
Interest expense	(12.0)	(1.0)%	(11.3)	(0.9)%	(0.7)	(6.2)%
Other income (expense) – net	11.8	1.0 %	5.1	0.3 %	6.7	NM
Earnings before income taxes	311.7	25.1 %	293.2	24.5 %	18.5	6.3 %
Income tax expense	(67.2)	(5.4)%	(64.1)	(5.3)%	(3.1)	(4.8)%
Net earnings	244.5	19.7 %	229.1	19.2 %	15.4	6.7 %
Net earnings attributable to noncontrolling interests	(5.6)	(0.5)%	(5.4)	(0.5)%	(0.2)	(3.7)%
Net earnings attributable to Snap-on Inc.	\$ 238.9	19.2 %	\$ 223.7	18.7 %	\$ 15.2	6.8 %

NM: Not meaningful

Percentage Disclosure: All income statement line item percentages below "Operating earnings from financial services" are calculated as a percentage of the sum of Net sales and Financial services revenue.

Net sales of \$1,155.9 million in the fourth quarter of 2022 increased \$47.6 million, or 4.3%, from 2021 levels, reflecting an \$85.3 million, or 8.0%, organic gain, partially offset by \$37.7 million of unfavorable foreign currency translation.

Gross profit of \$560.7 million in the fourth quarter of 2022 increased \$27.3 million, or 5.1%, compared to \$533.4 million last year. Gross margin of 48.5% in the quarter improved 40 bps from the fourth quarter of 2021 primarily due to increased sales volumes and pricing actions, 40 bps of favorable foreign currency effects, and benefits from the company's RCI initiatives. These improvements were partially offset by higher material and other costs.

Operating expenses of \$312.7 million in the fourth quarter of 2022 compared to \$301.2 million last year. Operating expenses as a percentage of net sales of 27.0% in the quarter improved 10 bps from last year.

Operating earnings before financial services of \$248.0 million in the fourth quarter of 2022 increased \$15.8 million, or 6.8%, compared to \$232.2 million in the fourth quarter of 2021. As a percentage of net sales, operating earnings before financial services of 21.5% compared to 21.0% last year.

Financial services revenue of \$88.3 million in the fourth quarter of 2022 compared to \$86.9 million last year. Financial services operating earnings of \$63.9 million in the period compared to \$67.2 million in 2021.

Operating earnings of \$311.9 million in the fourth quarter of 2022, increased \$12.5 million, or 4.2%, compared to \$299.4 million last year. As a percentage of revenues, operating earnings of 25.1% in the quarter was unchanged from last year.

Interest expense in the fourth quarter of 2022 increased \$0.7 million compared to last year. See Note 10 to the Consolidated Financial Statements for information on Snap-on's debt and credit facilities.

Other income (expense) – net includes net gains and losses associated with hedging and currency exchange rate transactions, non-service components of net periodic benefit costs, and interest income. See Note 18 to the Consolidated Financial Statements for information on other income (expense) – net.

The effective income tax rate on earnings attributable to Snap-on was 22.0% in the fourth quarter of 2022 and 22.3% in the fourth quarter of 2021. See Note 9 to the Consolidated Financial Statements for information on income taxes.

Net earnings attributable to Snap-on in the fourth quarter of 2022 of \$238.9 million, or \$4.42 per diluted share, increased \$15.2 million, or \$0.32 per diluted share, as compared to \$223.7 million, or \$4.10 per diluted share, in the fourth quarter of 2021.

Segment Results

Commercial & Industrial Group

		Fourth	Quarte	er			
(Amounts in millions)	2022			2021		Change	;
External net sales	\$ 258.2	75.2 %	\$	278.1	77.5 %	\$ (19.9)	(7.2)%
Intersegment net sales	 85.0	24.8 %		80.6	22.5 %	 4.4	5.5 %
Segment net sales	343.2	100.0 %		358.7	100.0 %	(15.5)	(4.3)%
Cost of goods sold	(213.8)	(62.3)%		(227.8)	(63.5)%	14.0	6.1 %
Gross profit	129.4	37.7 %		130.9	36.5 %	(1.5)	(1.1)%
Operating expenses	(81.5)	(23.7)%		(80.8)	(22.5)%	(0.7)	(0.9)%
Segment operating earnings	\$ 47.9	14.0 %	\$	50.1	14.0 %	\$ (2.2)	(4.4)%

Segment net sales of \$343.2 million in the fourth quarter of 2022 decreased \$15.5 million, or 4.3%, from 2021 levels, reflecting a \$5.7 million, or 1.7%, organic sales increase, more than offset by \$21.2 million of unfavorable foreign currency translation. The organic increase primarily reflects a double-digit gain in the segment's specialty tools business, as well as a low single-digit increase in sales to customers in critical industries, despite lower activity with the military. These gains were partially offset by a mid single-digit decline in the segment's European-based hand tools business.

Segment gross margin in the fourth quarter of 37.7% improved 120 bps from last year primarily due to increased sales volumes and pricing actions, benefits from the segment's RCI initiatives, and 20 bps of favorable foreign currency effects, partially offset by higher material and other costs.

Segment operating expenses as a percentage of net sales of 23.7% in the fourth quarter increased 120 bps from last year primarily due to reduced sales in lower-expense businesses.

As a result of these factors, segment operating earnings of \$47.9 million in the fourth quarter of 2022, including \$2.3 million of unfavorable foreign currency effects, decreased \$2.2 million from 2021 levels. Operating margin for the Commercial & Industrial Group of 14.0% in the quarter was unchanged from last year.

Snap-on Tools Group

		Fourth	Quarte	er			
(Amounts in millions)	2022			2021		 Change	2
Segment net sales	\$ 542.7	100.0 %	\$	504.8	100.0 %	\$ 37.9	7.5 %
Cost of goods sold	 (308.3)	(56.8)%		(283.3)	(56.1)%	 (25.0)	(8.8)%
Gross profit	234.4	43.2 %		221.5	43.9 %	12.9	5.8 %
Operating expenses	 (118.3)	(21.8)%		(111.0)	(22.0)%	 (7.3)	(6.6)%
Segment operating earnings	\$ 116.1	21.4 %	\$	110.5	21.9 %	\$ 5.6	5.1 %

Segment net sales of \$542.7 million in the fourth quarter of 2022 increased \$37.9 million, or 7.5%, from 2021 levels, reflecting a \$47.4 million, or 9.6%, organic sales gain, partially offset by \$9.5 million of unfavorable foreign currency translation. The organic increase is due to a double-digit gain in the U.S. franchise business and a low single-digit increase in the segment's international operations.

Segment gross margin in the fourth quarter of 43.2% declined 70 bps from last year primarily due to 40 bps of unfavorable foreign currency effects, increased sales of lower gross margin products, and higher material and other costs. These declines were partially offset by benefits from the higher sales volumes and pricing actions.

Segment operating expenses as a percentage of net sales of 21.8% in the fourth quarter improved 20 bps from last year.

As a result of these factors, segment operating earnings of \$116.1 million in the fourth quarter of 2022, including \$4.5 million of unfavorable foreign currency effects, increased \$5.6 million, or 5.1%, from 2021 levels. Operating margin for the Snap-on Tools Group of 21.4% in the quarter compared to 21.9% last year.

Repair Systems & Information Group

	Fourth Quarter								
(Amounts in millions)		2022	2		2021			Chang	e
External net sales	\$	355.0	81.1 %	\$	325.4	82.9 %	\$	29.6	9.1 %
Intersegment net sales		82.9	18.9 %		67.1	17.1 %		15.8	23.5 %
Segment net sales		437.9	100.0 %		392.5	100.0 %		45.4	11.6 %
Cost of goods sold		(241.0)	(55.0)%		(211.5)	(53.9)%		(29.5)	(13.9)%
Gross profit		196.9	45.0 %		181.0	46.1 %		15.9	8.8 %
Operating expenses		(86.3)	(19.7)%		(83.8)	(21.3)%		(2.5)	(3.0)%
Segment operating earnings	\$	110.6	25.3 %	\$	97.2	24.8 %	\$	13.4	13.8 %

Segment net sales of \$437.9 million in the fourth quarter of 2022 increased \$45.4 million, or 11.6%, from 2021 levels, reflecting a \$54.9 million, or 14.3%, organic sales increase, partially offset by \$9.5 million of unfavorable foreign currency translation. The organic gain is comprised of double-digit increases in sales of undercar equipment, in activity with OEM dealerships, and in sales of diagnostic and repair information products to independent repair shop owners and managers.

Segment gross margin in the fourth quarter of 45.0% declined 110 bps from last year primarily due to higher material and other costs and increased sales in lower gross margin businesses. These declines were partially offset by benefits from pricing actions and savings from RCI initiatives, as well as 80 bps of favorable foreign currency effects.

Segment operating expenses as a percentage of net sales in the fourth quarter of 19.7% improved 160 bps from last year primarily due to benefits from sales volume leverage, higher activity in lower-expense businesses, and savings from RCI initiatives.

As a result of these factors, segment operating earnings of \$110.6 million in the fourth quarter of 2022, including \$2.1 million of favorable foreign currency effects, increased \$13.4 million, or 13.8%, from \$97.2 million in 2021. Operating margin for the Repair Systems & Information Group of 25.3% in the quarter compared to 24.8% last year.

Financial Services

		Fourth (
(Amounts in millions)	2022		2021		Chang	e
Financial services revenue	\$ 88.3	100.0 %	\$ 86.9	100.0 %	\$ 1.4	1.6 %
Financial services expenses	 (24.4)	(27.6)%	 (19.7)	(22.7)%	 (4.7)	(23.9)%
Segment operating earnings	\$ 63.9	72.4 %	\$ 67.2	77.3 %	\$ (3.3)	(4.9)%

Financial services revenue of \$88.3 million in the fourth quarter of 2022 increased \$1.4 million, or 1.6%, from \$86.9 million last year. In the fourth quarters of 2022 and 2021, the respective average yields on finance receivables were 17.6% and 17.7%. In the fourth quarters of 2022 and 2021, the average yields on contract receivables were 8.6% and 8.5%, respectively. Originations of \$299.7 million in the fourth quarter of 2022 increased \$43.4 million, or 16.9%, from 2021 levels.

Financial services expenses in the fourth quarter of 2022 increased \$4.7 million from last year primarily due to higher provisions for credit losses as compared to those recorded in the fourth quarter of 2021. As a percentage of the average financial services portfolio, financial services expenses were 1.1% and 0.9% for the fourth quarters of 2022 and 2021, respectively.

As a result of these factors, segment operating earnings of \$63.9 million in the fourth quarter of 2022, including \$0.9 million of unfavorable foreign currency effects, decreased \$3.3 million, or 4.9%, from 2021 levels.

See Note 1 and Note 4 to the Consolidated Financial Statements for further information on financial services.

Corporate

Snap-on's fourth quarter 2022 general corporate expenses of \$26.6 million compared to \$25.6 million last year.

Non-GAAP Supplemental Data

The following non-GAAP supplemental data is presented for informational purposes to provide readers with insight into the information used by management for assessing the operating performance of Snap-on's non-financial services ("Operations") and "Financial Services" businesses.

The supplemental Operations data reflects the results of operations and financial position of Snap-on's tools, diagnostics, equipment products, software, and other non-financial services operations with Financial Services presented on the equity method. The supplemental Financial Services data reflects the results of operations and financial position of Snap-on's U.S. and international financial services operations. The financing needs of Financial Services are met through intersegment borrowings and cash generated from Operations; Financial Services is charged interest expense on intersegment borrowings at market rates. Income taxes are charged to Financial Services on the basis of the specific tax attributes generated by the U.S. and international financial services businesses. Transactions between the Operations and Financial Services businesses were eliminated to arrive at the Consolidated Financial Statements.

Non-GAAP Supplemental Consolidating Data – Supplemental Statements of Earnings information for 2022, 2021 and 2020 is as follows:

		Operations*		Financial Services				
(Amounts in millions)	2022	2021	2020	2022	2021	2020		
Net sales	\$ 4,492.8	\$ 4,252.0	\$ 3,592.5	\$ —	\$ —	\$ —		
Cost of goods sold	(2,311.7)	(2,141.2)	(1,844.0)		_	_		
Gross profit	2,181.1	2,110.8	1,748.5					
Operating expenses	(1,239.9)	(1,259.3)	(1,116.6)					
Operating earnings before financial services	941.2	851.5	631.9		_	_		
Financial services revenue		_	_	349.7	349.7	349.7		
Financial services expenses				(83.7)	(77.7)	(101.1)		
Operating earnings from financial services				266.0	272.0	248.6		
Operating earnings	941.2	851.5	631.9	266.0	272.0	248.6		
Interest expense	(47.1)	(53.0)	(53.8)		(0.1)	(0.2)		
Intersegment interest income (expense) – net	59.3	57.1	68.5	(59.3)	(57.1)	(68.5)		
Other income (expense) – net	42.3	16.4	8.5	0.2	0.1	0.2		
Earnings before income taxes and equity earnings	995.7	872.0	655.1	206.9	214.9	180.1		
Income tax expense	(215.6)	(193.3)	(142.7)	(53.1)	(53.7)	(46.4)		
Earnings before equity earnings	780.1	678.7	512.4	153.8	161.2	133.7		
Financial services – net earnings attributable to Snap-on	153.8	161.2	133.7	_	_	_		
Equity earnings, net of tax	_	1.5	0.3		_	_		
Net earnings	933.9	841.4	646.4	153.8	161.2	133.7		
Net earnings attributable to noncontrolling interests	(22.2)	(20.9)	(19.4)					
Net earnings attributable to Snap-on	\$ 911.7	\$ 820.5	\$ 627.0	\$ 153.8	\$ 161.2	\$ 133.7		

^{*} Snap-on with Financial Services presented on the equity method.

Non-GAAP Supplemental Consolidating Data – Supplemental Balance Sheet Information as of 2022 and 2021 year end is as follows:

	Operations*					Financial Services			
(Amounts in millions)		2022		2021		2022		2021	
ASSETS									
Current assets:									
Cash and cash equivalents	\$	757.1	\$	779.9	\$	0.1	\$	0.1	
Intersegment receivables		13.4		12.5		_		_	
Trade and other accounts receivable – net		761.1		681.7		0.6		0.6	
Finance receivables – net		_		_		562.2		542.3	
Contract receivables – net		5.9		6.4		104.0		104.0	
Inventories – net		1,033.1		803.8		_		_	
Prepaid expenses and other assets		149.2		136.8		5.8		7.4	
Total current assets		2,719.8		2,421.1		672.7		654.4	
Property and equipment – net		510.7		516.5		1.9		1.7	
Operating lease right-of-use assets		60.1		50.0		1.4		1.9	
Investment in Financial Services		363.9		350.6		_		_	
Deferred income tax assets		48.4		26.5		21.6		23.0	
Intersegment long-term notes receivable		635.9		570.1		_		_	
Long-term finance receivables – net		_		_		1,170.8		1,114.0	
Long-term contract receivables – net		9.6		9.7		374.2		368.5	
Goodwill		1,045.3		1,116.5		_		_	
Other intangibles – net		275.6		301.7		_		_	
Pension assets		70.6		160.7		_		_	
Other assets		27.1		27.9		0.1		0.1	
Total assets	\$	5,767.0	\$	5,551.3	\$	2,242.7	\$	2,163.6	

^{*} Snap-on with Financial Services presented on the equity method.

Non-GAAP Supplemental Consolidating Data – Supplemental Balance Sheet Information (continued):

	Operations*			Financial Services				
(Amounts in millions)		2022		2021		2022		2021
LIABILITIES AND EQUITY								
Current liabilities:								
Notes payable	\$	17.2	\$	17.4	\$	_	\$	
Accounts payable		285.8		276.6		1.2		1.0
Intersegment payables						13.4		12.5
Accrued benefits		58.6		67.4		_		_
Accrued compensation		95.6		110.9		3.0		3.9
Franchisee deposits		73.8		80.7		_		_
Other accrued liabilities		420.8		407.1		25.8		26.8
Total current liabilities		951.8		960.1		43.4		44.2
Long-term debt and intersegment long-term debt		_		_		1,819.7		1,753.0
Deferred income tax liabilities		82.1		122.7		_		_
Retiree health care benefits		23.4		31.1		_		_
Pension liabilities		78.6		104.9		_		_
Operating lease liabilities		43.6		32.5		1.1		1.7
Other long-term liabilities		84.0		96.2		14.6		14.1
Total liabilities		1,263.5		1,347.5		1,878.8		1,813.0
Total shareholders' equity attributable to Snap-on		4,481.3		4,181.9		363.9		350.6
Noncontrolling interests		22.2		21.9				
Total equity		4,503.5		4,203.8		363.9		350.6
Total liabilities and equity	\$	5,767.0	\$	5,551.3	\$	2,242.7	\$	2,163.6

^{*} Snap-on with Financial Services presented on the equity method.

Liquidity and Capital Resources

Snap-on's growth has historically been funded by a combination of cash provided by operating activities and debt financing. Snap-on believes that its cash from operations and collections of finance receivables, coupled with its sources of borrowings and available cash on hand, are sufficient to fund its currently anticipated requirements for scheduled debt repayments, payments of interest and dividends, new receivables originated by our financial services businesses, capital expenditures, working capital, the funding of pension plans, and funding for share repurchases and acquisitions, if and as they arise.

Due to Snap-on's credit rating over the years, external funds have been available at an acceptable cost. As of February 3, 2023, Snap-on's long-term debt and commercial paper were rated, respectively, A2 and P-1 by Moody's Investors Service; A- and A-2 by Standard & Poor's; and A and F1 by Fitch Ratings. Snap-on believes that its current credit arrangements are sound and that the strength of its balance sheet affords the company the financial flexibility, including through access to financial markets for potential new financing, to respond to both internal growth opportunities and those available through acquisitions. However, Snap-on cannot provide any assurance that financing will be available in the future on acceptable terms, or that its debt ratings will not decrease.

The following discussion focuses on information included in the accompanying Consolidated Balance Sheets.

As of 2022 year end, working capital (current assets less current liabilities) of \$2,397.3 million increased \$326.1 million from \$2,071.2 million as of 2021 year end primarily as a result of other net changes in working capital discussed below.

The following represents the company's working capital position as of 2022 and 2021 year end:

(Amounts in millions)	 2022	2021
Cash and cash equivalents	\$ 757.2	\$ 780.0
Trade and other accounts receivable – net	761.7	682.3
Finance receivables – net	562.2	542.3
Contract receivables – net	109.9	110.4
Inventories – net	1,033.1	803.8
Prepaid expenses and other assets	 144.8	134.6
Total current assets	3,368.9	3,053.4
Notes payable	(17.2)	(17.4)
Accounts payable	(287.0)	(277.6)
Other current liabilities	 (667.4)	(687.2)
Total current liabilities	(971.6)	(982.2)
Working capital	\$ 2,397.3	\$ 2,071.2

Cash and cash equivalents of \$757.2 million as of 2022 year end decreased \$22.8 million from 2021 year-end levels primarily due to: (i) the funding of \$955.8 million of new finance receivables; (ii) dividend payments to shareholders of \$313.1 million; (iii) the repurchase of 899,000 shares of the company's common stock for \$198.1 million; and (iv) the funding of \$84.2 million for capital expenditures. These decreases in cash and cash equivalents were partially offset by: (i) \$826.9 million of cash from collections of finance receivables; (ii) \$675.2 million of cash generated from operations; (iii) \$55.0 million of cash proceeds from stock purchase and option plan exercises; and (iv) \$1.6 million of net proceeds from other short-term borrowings.

Of the \$757.2 million of cash and cash equivalents as of 2022 year end, \$244.1 million was held outside of the United States. Snap-on maintains non-U.S. funds in its foreign operations to: (i) provide adequate working capital; (ii) satisfy various regulatory requirements; and/or (iii) take advantage of business expansion opportunities as they arise. Although the Tax Cuts and Jobs Act ("Tax Act") generally eliminated U.S. federal taxation of dividends from foreign subsidiaries, such dividends may still be subject to state income taxation and foreign withholding taxes. Snap-on periodically evaluates its cash held outside the United States and may pursue opportunities to repatriate certain foreign cash amounts to the extent that it can be accomplished in a tax efficient manner.

Trade and other accounts receivable – net of \$761.7 million as of 2022 year end increased \$79.4 million from 2021 year-end levels primarily due to higher sales, partially offset by \$18.2 million of foreign currency translation. Days sales outstanding (trade and other accounts receivable – net as of the respective period end, divided by the respective trailing 12 months sales, times 360 days) was 61 days and 58 days at the respective 2022 and 2021 year ends.

The current portions of net finance and contract receivables of \$672.1 million as of 2022 year end compared to \$652.7 million at 2021 year end. The long-term portions of net finance and contract receivables of \$1,554.6 million as of 2022 year end compared to \$1,492.2 million at 2021 year end. The combined \$81.8 million increase in net current and long-term finance and contract receivables compared to 2021 year-end levels is primarily due to an increase in net receivable originations, partially offset by \$20.5 million of foreign currency translation.

Inventories – net of \$1,033.1 million as of 2022 year end increased \$229.3 million from 2021 year-end levels primarily due to higher demand, increased costs and from efforts to manage the current supply chain situation, partially offset by \$29.3 million of foreign currency translation. As of 2022 and 2021 year end, inventory turns (trailing 12 months of cost of goods sold, divided by the average of the beginning and ending inventory balance for the trailing 12 months) were 2.5 turns and 2.8 turns, respectively. Inventories accounted for using the first-in, first-out ("FIFO") method as of 2022 and 2021 year end approximated 61% and 60% of total inventories, respectively. All other inventories are accounted for using the last-in, first-out ("LIFO") method. The company's LIFO reserve was \$108.6 million and \$87.2 million at 2022 and 2021 year end, respectively.

Notes payable of \$17.2 million as of 2022 year end compared to \$17.4 million as of 2021 year end.

Average notes payable outstanding were \$18.6 million and \$16.7 million in 2022 and 2021, respectively. The 2022 weighted-average interest rate on such borrowings of 9.93% compared with 8.39% in 2021. At 2022 year end, the weighted-average rate on outstanding notes payable of 10.89% compared with 8.39% in 2021. The 2022 year-end rate increased primarily due to higher rates on local borrowings in emerging markets.

Accounts payable of \$287.0 million as of 2022 year end increased \$9.4 million from 2021 year-end levels, primarily due to the timing of payments, partially offset by \$7.4 million of foreign currency translation.

Other accrued liabilities of \$436.4 million as of 2022 year end increased \$12.1 million from 2021 year-end levels, primarily due to higher income tax accruals, partially offset by \$11.7 million of foreign currency translation.

Long-term debt of \$1,183.8 million as of 2022 year end consisted of: (i) \$300.0 million of unsecured 3.25% notes that mature on March 1, 2027 (the "2027 Notes"); (ii) \$400.0 million of unsecured 4.10% notes that mature on March 1, 2048 ("the 2048 Notes"); and (iii) \$500.0 million of 3.10% notes that mature on May 1, 2050 (the "2050 Notes"), partially offset by \$16.2 million of unamortized debt issuance costs.

Snap-on has an \$800 million multi-currency revolving credit facility that terminates on September 16, 2024 (the "Credit Facility"); no amounts were borrowed or outstanding under the Credit Facility during the year ended and as of December 31, 2022 or January 1, 2022. Borrowings under the Credit Facility bear interest at varying rates based on either: (i) Snap-on's thencurrent, long-term debt ratings; or (ii) Snap-on's then-current ratio of consolidated debt net of certain cash adjustments ("Consolidated Net Debt") to earnings before interest, taxes, depreciation, amortization and certain other adjustments for the preceding four fiscal quarters then ended (the "Consolidated Net Debt to EBITDA Ratio"). The Credit Facility's financial covenant requires that Snap-on maintain, as of each fiscal quarter end, either (i) a ratio not greater than 0.60 to 1.00 of Consolidated Net Debt to the sum of Consolidated Net Debt plus total equity and less accumulated other comprehensive income or loss (the "Leverage Ratio"); or (ii) a Consolidated Net Debt to EBITDA Ratio not greater than 3.50 to 1.00. Snap-on may, up to two times during any five-year period during the term of the Credit Facility (including any extensions thereof), elect to increase the maximum Leverage Ratio to 0.65 to 1.00 and/or increase the maximum Consolidated Net Debt to EBITDA Ratio to 4.00 to 1.00 for four consecutive fiscal quarters in connection with certain material acquisitions (as defined in the related credit agreement). As of December 31, 2022, the company's actual ratios of 0.09 and 0.37 respectively, were both within the permitted ranges set forth in this financial covenant. Snap-on generally issues commercial paper to fund its financing needs on a short-term basis and uses the Credit Facility as back-up liquidity to support such commercial paper issuances. There was no commercial paper issued or outstanding during the year ended and as of December 31, 2022 or January 1, 2022.

Snap-on's Credit Facility and other debt agreements also contain certain usual and customary borrowing, affirmative, negative and maintenance covenants. As of 2022 year end, Snap-on was in compliance with all covenants of its Credit Facility and other debt agreements.

Snap-on believes it has sufficient available cash and access to both committed and uncommitted credit facilities to cover its expected funding needs on both a short-term and long-term basis. Snap-on manages its aggregate short-term borrowings so as not to exceed its availability under the Credit Facility. Snap-on believes that it can access short-term debt markets, predominantly through commercial paper issuances and existing lines of credit, to fund its short-term requirements and to ensure near-term liquidity. Snap-on regularly monitors the credit and financial markets and, if it believes conditions are favorable, it may take advantage of such conditions to issue long-term debt to further improve its liquidity and capital resources. Near-term liquidity requirements for Snap-on include payments of interest and dividends, funding to support new receivables originated by our financial services businesses, capital expenditures, working capital, the funding of pension plans, and funding for share repurchases and acquisitions, if and as they arise. Snap-on intends to make contributions of \$6.9 million to its foreign pension plans and \$2.4 million to its domestic pension plans in 2023, as required by law. Depending on market and other conditions, Snap-on may make discretionary cash contributions to its pension plans in 2023.

Snap-on's long-term financing strategy is to maintain continuous access to the debt markets to accommodate its liquidity needs, including the potential use of commercial paper, additional fixed-term debt and/or securitizations.

The following discussion focuses on information included in the accompanying Consolidated Statements of Cash Flows.

Operating Activities

Net cash provided by operating activities of \$675.2 million in 2022 decreased \$291.4 million from \$966.6 million in 2021. The \$291.4 million decrease is primarily due to a \$354.5 million change in net operating assets and liabilities, partially offset by a \$92.5 million increase in net earnings.

Depreciation expense was \$71.5 million in 2022 and \$75.6 million in 2021. Amortization expense was \$28.7 million in 2022 and \$29.2 million in 2021. See Note 6 and Note 7 to the Consolidated Financial Statements for information on property and equipment, goodwill and other intangible assets.

Investing Activities

Net cash used by investing activities of \$206.2 million in 2022 included additions to finance receivables of \$955.8 million, partially offset by collections of \$826.9 million. Net cash used by investing activities of \$290.4 million in 2021 included additions to finance receivables of \$878.1 million, partially offset by collections of \$854.2 million. Finance receivables are comprised of extended-term installment payment contracts to both technicians and independent shop owners (i.e., franchisees' customers) to enable them to purchase tools, diagnostics, and equipment products on an extended-term payment plan, with average payment terms of approximately four years.

Net cash used by investing activities in 2022 also included \$0.5 million of cash provided by acquisitions. Net cash used by investing activities in 2021 included \$199.7 million for the acquisitions of Dealer-FX, AutoCrib Germany and Pradines. See Note 3 to the Consolidated Financial Statements for information about acquisitions.

Capital expenditures in 2022 and 2021 totaled \$84.2 million and \$70.1 million, respectively. Capital expenditures in both years included continued investments related to the company's execution of its strategic Value Creation Processes. The company also invested in: (i) new product, efficiency, safety and cost reduction initiatives that are intended to expand and improve its manufacturing and distribution capabilities worldwide; (ii) new production and machine tooling to enhance manufacturing operations, as well as ongoing replacements of manufacturing and distribution equipment, particularly in the United States; and (iii) the ongoing enhancement of the company's global enterprise resource planning (ERP) management information systems. Snap-on believes that its cash generated from operations, as well as its available cash on hand and funds available from its credit facilities will be sufficient to fund the company's capital expenditure requirements in 2023.

Financing Activities

Net cash used by financing activities of \$485.0 million in 2022 included net proceeds from other short-term borrowings of \$1.6 million. Net cash used by financing activities of \$818.8 million in 2021 included the \$250.0 million repayment of the 2021 Notes at maturity and net proceeds from other short-term borrowings of \$3.3 million.

Proceeds from stock purchase and option plan exercises totaled \$55.0 million in 2022 and \$162.4 million in 2021. In 2022, Snap-on repurchased 899,000 shares of its common stock for \$198.1 million under its previously announced share repurchase programs. As of 2022 year end, Snap-on had remaining availability to repurchase up to an additional \$362.4 million in common stock pursuant to its Board's authorizations. Snap-on repurchased 1,943,900 shares of its common stock for \$431.3 million in 2021. The repurchase of Snap-on common stock to offset dilution related to equity plan issuances or for other corporate purposes is at the company's discretion, subject to prevailing financial and market conditions. Snap-on believes that its cash generated from operations, available cash on hand, and funds available from its credit facilities, will be sufficient to fund the company's additional share repurchases, if any.

Snap-on has paid consecutive quarterly cash dividends, without interruption or reduction, since 1939. Cash dividends paid in 2022 and 2021 totaled \$313.1 million and \$275.8 million, respectively. On November 4, 2022, the company announced that its Board increased the quarterly cash dividend by 14.1% to \$1.62 per share (\$6.48 per share annualized). Quarterly dividends in 2022 were \$1.62 per share in the fourth quarter and \$1.42 per share in the first three quarters (\$5.88 per share for the year). Quarterly dividends in 2021 were \$1.42 per share in the fourth quarter and \$1.23 per share in the first three quarters (\$5.11 per share for the year).

	 2022	2021
Cash dividends paid per common share	\$ 5.88	\$ 5.11
Cash dividends paid as a percentage of prior-year retained earnings	5.5%	5.3%

Snap-on believes that its cash generated from operations, available cash on hand, and funds available from its credit facilities, will be sufficient to pay dividends in 2023.

Contractual Obligations and Commitments

Snap-on's contractual obligations for long-term debt and operating and finance leases are reflected in the Consolidated Balance Sheets; see Note 10 and Note 17 to the Consolidated Financial Statements for information on the company's long-term debt and leases. Snap-on also enters into contracts for future purchases in the normal course of business. As of year-end 2022, the company had \$165.2 million in purchase commitments to be paid in 2023 and \$10.9 million to be paid thereafter.

Snap-on intends to make contributions of \$6.9 million to its foreign pension plans and \$2.4 million to its domestic pension plans in 2023, as required by law. Depending on market and other conditions, Snap-on may make additional discretionary cash contributions to its pension plans in 2023; see Note 12 and Note 13 to the Consolidated Financial Statements for information on the company's benefit plans and payments.

Due to the uncertainty of the timing of settlements with taxing authorities, Snap-on is unable to make reasonably reliable estimates of the period of cash settlement of unrecognized tax benefits totaling \$5.6 million for its remaining uncertain tax liabilities. See Note 9 to the Consolidated Financial Statements for information on income taxes.

Environmental Matters

Snap-on is subject to various federal, state and local government requirements regulating the discharge of materials into the environment or otherwise relating to the protection of the environment. Snap-on's policy is to comply with these requirements and the company believes that, as a general matter, its policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage, and of resulting financial liability, in connection with its business. Some risk of environmental damage is, however, inherent in some of Snap-on's operations and products, as it is with other companies engaged in similar businesses.

Snap-on is and has been engaged in the handling, manufacture, use and disposal of many substances classified as hazardous or toxic by one or more regulatory agencies. Snap-on believes that, as a general matter, its handling, manufacture, use and disposal of these substances are in accordance with environmental laws and regulations. It is possible, however, that future knowledge or other developments, such as improved capability to detect substances in the environment or increasingly strict environmental laws and standards and enforcement policies, could affect the company's handling, manufacture, use or disposal of these substances.

In recent years there has been increased public awareness, concern and focus on environmental and sustainability issues, including matters related to global climate change. The current focus on these matters is expected to result in additional and/or more restrictive regulations, requirements and/or industry or third-party standards to reduce or mitigate global warming and other environmental or sustainability risks, though the timing is uncertain. Snap-on continues to monitor developments in this area.

New Accounting Standards

See Note 1 to the Consolidated Financial Statements for information on new accounting standards.

Critical Accounting Policies and Estimates

The Consolidated Financial Statements and related notes contain information that is pertinent to management's discussion and analysis. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. These estimates are generally based on historical experience, current conditions and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily available from other sources, as well as identifying and assessing our accounting treatment with respect to commitments and contingencies. Actual results could differ from those estimates.

In addition to the company's significant accounting policies described in Note 1 to the Consolidated Financial Statements, Snap-on considers the following policies and estimates to be the most critical in understanding the judgments that are involved in the preparation of the company's consolidated financial statements and the uncertainties that could impact the company's financial position, results of operations and cash flows.

Allowance for Credit Losses on Finance Receivables: The allowance for credit losses on finance receivables is maintained at a level management believes is adequate to cover expected losses in Snap-on's finance receivables portfolio as of the reporting date. The allowance represents management's estimate of the expected losses in the company's finance receivables portfolio based on ongoing assessments and evaluations of credit losses over the remaining contractual life of the receivables portfolio considering collectability, historical loss experience, current conditions and future market changes. Determination of the proper level of allowance requires management to exercise judgment about the timing, frequency and severity of credit losses that could materially affect the provision for credit losses and, as a result, net earnings. The allowance takes into consideration numerous quantitative and qualitative factors that include receivable type, historical loss experience, delinquency trends, collection experience, current and future economic conditions and credit risk characteristics. Some of these factors are influenced by items such as the customers' financial condition, past payment experience, credit bureau and proprietary Snap-on credit model information, as well as the value of the underlying collateral. Changes in economic conditions and assumptions, including the resulting credit quality metrics relative to the performance of the finance receivables portfolio, create uncertainty and could result in changes to both the allowance for credit losses and provision for credit losses.

Management utilizes established policies and procedures in an effort to ensure the estimates and assumptions are well controlled, reviewed and consistently applied. As of December 31, 2022, the ratio of the allowance for credit losses to finance receivables was 3.39%. As of January 1, 2022, the allowance ratio was 3.90%. While management believes it exercises prudent judgment and applies reasonable assumptions in establishing its estimates for allowances for finance receivables, there can be no assurance that changes in economic conditions or other factors would not adversely impact the financial health of our customers and result in changes to the estimates used in the allowance calculation. For reference, a 100 bps increase in the allowance ratios for finance receivables as of December 31, 2022, would have increased Snap-on's 2022 provision for credit losses and related allowance for credit losses by approximately \$17.9 million.

For additional information on Snap-on's allowances for credit losses, see Note 1 and Note 4 to the Consolidated Financial Statements.

Impairment of Goodwill: Goodwill: Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the assets might be impaired. Annual impairment tests are performed by the company in the second quarter of each year using information available as of April month end.

Snap-on evaluates the recoverability of goodwill by estimating the future discounted cash flows of the businesses to which the goodwill relates. Estimated cash flows and related goodwill are grouped at the reporting unit level. The company has determined that its reporting units for testing goodwill impairment are its operating segments or components of an operating segment that constitute a business for which discrete financial information is available and for which segment management regularly reviews the operating results. Within its four reportable operating segments, the company has identified 11 reporting units.

Snap-on evaluates the recoverability of goodwill by utilizing an income approach that estimates the fair value of the future discounted cash flows of the reporting units to which the goodwill relates. The future projections, which are based on both past performance and the projections and assumptions used in the company's operating plans, are subject to change as a result of changing economic and competitive conditions. This approach reflects management's internal outlook at the reporting units, which management believes provides the best determination of value due to management's insight and experience with the reporting units. Significant estimates used by management in the discounted cash flows methodology include estimates of future cash flows based on expected growth rates, price increases, working capital levels, expected benefits from RCI initiatives, and a weighted-average cost of capital that reflects the specific risk profile of the reporting unit being tested. The company's methodologies for valuing goodwill are applied consistently on a year-over-year basis; the assumptions used in performing the second quarter 2022 impairment calculations were evaluated in light of then-current market and business conditions. Snap-on continues to believe that the future discounted cash flow valuation model provides the most reasonable and meaningful fair value estimate based upon the reporting units' projections of future operating results and cash flows and replicates how market participants would value the company's reporting units in an orderly transaction.

In the event the fair value of a reporting unit is less than the carrying value, including goodwill, the company would then record an impairment charge based on the excess of a reporting units carrying amount over its fair value.

Inherent in fair value determinations are significant judgments and estimates, including material assumptions about future revenue, profitability and cash flows, the company's operational plans and its interpretation of current economic indicators. Should the operations of the businesses with which goodwill is associated incur significant and unanticipated changes in circumstances, such as declines in profitability and cash flow due to long-term deterioration in macroeconomic, industry and market conditions, the loss of key customers, changes in technology or markets, changes in key personnel or litigation, a sustained decrease in share price and/or other events, some or all of the recorded goodwill could be subject to impairment and could result in a material adverse effect on Snap-on's financial position or results of operations.

Snap-on completed its annual impairment testing of goodwill in the second quarter of 2022, which did not result in any impairment. As of 2022 year end, the company has no accumulated impairment losses. Although the company consistently uses the same methods in developing the assumptions and estimates underlying the fair value calculations, such estimates are uncertain by nature and can vary from actual results. In performing its annual impairment testing the company performed a sensitivity analysis on the material assumptions used in the discounted cash flow valuation models for each of its 11 reporting units. Based on the company's second quarter 2022 impairment testing, and assuming a hypothetical 10% decrease in the estimated fair values of each of its 11 reporting units, the hypothetical fair value of each of the company's 11 reporting units would have been greater than its carrying value. See Note 7 to the Consolidated Financial Statements for further information about goodwill.

Pension Benefits: The pension benefit obligation and related pension expense are calculated in accordance with GAAP and are impacted by certain actuarial assumptions. Changes in these assumptions are primarily influenced by factors outside of Snap-on's control, such as changes in economic conditions, and can have a significant effect on the amounts reported in the financial statements. Snap-on believes that the two most critical assumptions are (i) the expected return on plan assets; and (ii) the assumed discount rate.

Snap-on's domestic pension plans have a long-term investment horizon and a total return strategy that emphasizes a capital growth objective. In 2022, the long-term investment performance objective for Snap-on's domestic plans' assets was to achieve net of expense returns that met or exceeded the 6.5% domestic expected return on plan assets assumption. Snap-on uses a three-year, market-related value asset method of amortizing the difference between actual and expected returns on its domestic plans' assets. As of 2022 year end, Snap-on's domestic pension plans' assets comprised approximately 87% of the company's worldwide pension plan assets.

Based on forward-looking capital market expectations, Snap-on selected an expected return on plan assets assumption for its U.S. pension plans of 7.5%, an increase of 100 bps from 2022, to be used in determining pension expense for 2023. In estimating the domestic expected return on plan assets, Snap-on utilizes a nominal returns forecasting method. For each asset class, future returns are estimated by identifying the premium of riskier asset classes over lower risk alternatives. The methodology constructs expected returns using a "building block" approach to the individual components of total return. These forecasts are stated in both nominal and real (after inflation) terms. This process first considers the long-term historical return premium based on the longest set of data available for each asset class. These premiums, calculated using the geometric mean, are then adjusted based on current relative valuation levels, macro-economic conditions, and the expected alpha related to active investment management. The asset return assumption is also adjusted by an implicit expense load for estimated administrative and investment-related expenses. Since asset allocation is a key determinant of expected investment returns, the current and expected mix of plan assets are also considered when setting the assumption.

Pension expense increases as the expected rate of return on plan assets decreases. Lowering the expected rate of return assumption for Snap-on's domestic pension plans' assets by 50 bps would have increased Snap-on's 2022 domestic pension expense by approximately \$6.8 million.

The objective of Snap-on's discount rate assumption is to reflect the rate at which the pension benefits could be effectively settled. In making this determination, the company takes into account the timing and amount of benefits that would be available under the plans. The domestic discount rate as of 2022 and 2021 year end was selected based on a cash flow matching methodology developed by the company's outside actuaries that incorporates a review of current economic conditions. This methodology matches the plans' yearly projected cash flows for benefits and service costs to those of hypothetical bond portfolios using high-quality, AA rated or better, corporate bonds from either Moody's Investors Service or Standard & Poor's credit rating agencies available at the measurement date. This technique calculates bond portfolios that produce adequate cash flows to pay the plans' projected yearly benefits and then selects the portfolio with the highest yield and uses that yield as the recommended discount rate.

The selection of the 5.5% weighted-average discount rate for Snap-on's domestic pension plans as of 2022 year end (compared to 2.9% as of 2021 year end) represents the single rate that produces the same present value of cash flows as the estimated benefit plan payments. Lowering Snap-on's domestic discount rate assumption by 50 bps would have increased Snap-on's 2022 domestic pension expense and projected benefit obligation by approximately \$4.5 million and \$48.6 million, respectively. As of 2022 year end, Snap-on's domestic projected benefit obligation comprised approximately 85% of Snap-on's worldwide projected benefit obligation. The weighted-average discount rate for Snap-on's foreign pension plans of 4.8% (compared to 2.0% as of 2021 year end) represents the single rate that produces the same present value of cash flows as the estimated benefit plan payments. Lowering Snap-on's foreign discount rate assumption by 50 bps would have increased Snap-on's 2022 foreign pension expense and projected benefit obligation by approximately \$1.4 million and \$12.3 million, respectively.

Actuarial gains and losses in excess of 10 percent of the greater of the projected benefit obligation or market-related value of assets are amortized on a straight-line basis over the average remaining service period of active participants or over the average remaining life expectancy for plans with primarily inactive participants. Prior service costs and credits resulting from plan amendments are amortized in equal annual amounts over the average remaining service period of active participants or over the average remaining life expectancy for plans with primarily inactive participants.

To determine the 2023 net periodic benefit cost, Snap-on is using weighted-average discount rates for its domestic and foreign pension plans of 5.5% and 4.8%, respectively, and an expected return on plan assets for its domestic pension plans of 7.5%. The expected returns on plan assets for foreign pension plans ranged from 2.2% to 6.9% as of 2022 year end. Due to the net change in these two key assumptions, in addition to the overall benefit plan status, Snap-on expects to have pension income in 2023. Other factors, such as changes in plan demographics and discretionary contributions, may further increase or decrease pension income in 2023. See Note 12 to the Consolidated Financial Statements for further information on pension plans.

Outlook

We believe that our markets and our operations possess and have demonstrated considerable resilience against the varying turbulence evident in the current environment. In 2023, despite the uncertainties, Snap-on expects to make continued progress along its defined runways for coherent growth, leveraging capabilities already demonstrated in the automotive repair arena and developing and expanding its professional customer base, not only in automotive repair, but in adjacent markets, additional geographies and other areas, including extending in critical industries, where the cost and penalties for failure can be high. In pursuit of these initiatives, it is projected that capital expenditures in 2023 will be in a range of \$90 million to \$100 million. Snap-on continues to respond to global macroeconomic challenges through its RCI process and other cost reduction initiatives.

Snap-on currently anticipates that its full year 2023 effective income tax rate will be in the range of 23% to 24%.

Item 7A: Quantitative and Qualitative Disclosures About Market Risk

Market, Credit and Economic Risks

Market risk is the potential economic loss that may result from adverse changes in the fair value of financial instruments. Snap-on is exposed to market risk from changes in interest rates and foreign currency exchange rates. Snap-on is also exposed to market risk associated with the stock-based portion of its deferred compensation plans. Snap-on monitors its exposure to these risks and attempts to manage the underlying economic exposures through the use of financial instruments such as foreign currency forward contracts, interest rate swap agreements, treasury lock agreements and prepaid equity forward agreements ("equity forwards"). Snap-on does not use derivative instruments for speculative or trading purposes. Snap-on's broad-based business activities help to reduce the impact that volatility in any particular area or related areas may have on its operating earnings as a whole. Snap-on's management takes an active role in the risk management process and has developed policies and procedures that require specific administrative and business functions to assist in the identification, assessment and control of various risks.

Foreign Currency Risk Management

Snap-on has significant international operations and is subject to certain risks inherent with foreign operations that include currency fluctuations. Foreign currency exchange risk exists to the extent that Snap-on has payment obligations or receipts denominated in currencies other than the functional currency, including intercompany loans denominated in foreign currencies. To manage these exposures, Snap-on identifies naturally offsetting positions and then purchases hedging instruments to protect the residual net exposures. See Note 11 to the Consolidated Financial Statements for information on foreign currency risk management.

Interest Rate Risk Management

Snap-on may manage the exposure created by the differing maturities and interest rate structures of Snap-on's borrowings through the use of interest rate swap agreements. Treasury lock agreements may be used to manage the potential change in interest rates in anticipation of the issuance of fixed rate debt. See Note 11 to the Consolidated Financial Statements for information on interest rate risk management.

Snap-on utilizes a Value-at-Risk ("VAR") model to determine the potential one-day loss in the fair value of its interest rate and foreign exchange-sensitive financial instruments from adverse changes in market factors. The VAR model estimates were made assuming normal market conditions and a 95% confidence level. Snap-on's computations are based on the inter-relationships among movements in various currencies and interest rates (variance/co-variance technique). These inter-relationships were determined by observing interest rate and foreign currency market changes over the preceding quarter.

The estimated maximum potential net one-day loss in fair value, calculated using the VAR model, as of 2022 and 2021 year end was \$18.0 million and \$20.6 million, respectively, on interest rate-sensitive financial instruments, and \$0.2 million and \$0.3 million, respectively, on foreign currency-sensitive financial instruments. The VAR model is a risk management tool and does not purport to represent actual losses in fair value that will be incurred by Snap-on, nor does it consider the potential effect of favorable changes in market factors.

Stock-based Deferred Compensation Risk Management

Snap-on manages market risk associated with the stock-based portion of its deferred compensation plans through the use of equity forwards. Equity forwards are used to aid in offsetting the potential mark-to-market effect on stock-based deferred compensation from changes in Snap-on's stock price. Since stock-based deferred compensation liabilities increase as the company's stock price rises and decrease as the company's stock price declines, the equity forwards are intended to mitigate the potential impact on deferred compensation expense that may result from such mark-to-market changes. See Note 11 to the Consolidated Financial Statements for additional information on stock-based deferred compensation risk management.

Credit Risk

Credit risk is the possibility of loss from a customer's failure to make payments according to contract terms. Prior to extending credit, each customer is evaluated, taking into consideration various factors, including the customer's financial condition, past payment experience, credit bureau information, and other financial and qualitative factors that may affect the customer's ability to repay, as well as the value of the underlying collateral. Finance receivable credit risk is also monitored regularly through the use of internal proprietary custom scoring models to evaluate each transaction at the time of the application for credit. Snap-on evaluates credit quality through the use of an internal proprietary measuring system that provides a framework to analyze finance receivables on the basis of risk factors of the individual obligor as well as transaction specific risk. The finance receivables are typically monitored through an asset quality review process that closely monitors past due accounts and initiates a progressive collection action process when appropriate.

Counterparty Risk

Snap-on is exposed to credit losses in the event of non-performance by the counterparties to its various financial agreements, including its foreign currency forward contracts, interest rate swap agreements, treasury lock agreements and prepaid equity forward agreements. Snap-on does not obtain collateral or other security to support financial instruments subject to credit risk, but monitors the credit standing of the counterparties and generally enters into agreements with financial institution counterparties with a credit rating of A- or better. Snap-on does not anticipate non-performance by its counterparties, but cannot provide assurances.

Economic Risk

Economic risk is the possibility of loss resulting from economic instability in certain areas of the world. Snap-on continually monitors its exposure in these markets. For example, the company is monitoring the impact of and developments related to Russia's invasion of Ukraine and the ongoing COVID-19 pandemic, which continue to have an impact on the global economy. While inflation has become more prevalent in the world economy, Snap-on has taken steps to control and offset associated cost increases through its supply chain management, pricing actions, and deployment of Rapid Continuous Improvement ("RCI"). In addition, the company continues to monitor developments resulting from the United Kingdom's exit from the European Union, and the effects this may have on the world economy and the company.

As a result of the above market, credit and economic risks, net earnings and revenues in any particular period may not be representative of full-year results and may vary significantly from year to year.

Commodity Risk

Snap-on is a purchaser of certain commodities such as steel, natural gas and electricity. The company is also a purchaser of components and parts that are integrated into the company's end products, as well as the purchaser of certain finished goods, all of which may contain various commodities including steel, aluminum, nickel, copper and others. Snap-on's supply of raw materials and purchased components are generally and readily available from numerous suppliers, and the company continuously works to expand and enhance supplier relationships to meet its supply needs.

The principal raw material used in the manufacture of the company's products is steel, which the company purchases in competitive, price-sensitive markets. To meet Snap-on's high quality standards, the company's steel requirements range from specialized alloys, which are available only from a limited group of approved suppliers, to common alloys, which are available from multiple suppliers. Some of these materials have been, and in the future may be, in short supply, particularly in the event of mill shutdowns or production cut backs, as well as from supply chain disruptions or inefficiencies, some of which may be associated with significant weather or climate-related events. As some steel alloys require specialized manufacturing procedures, Snap-on could experience shortages if it were required to use an alternative manufacturer on short notice. Steel and other raw materials, components and certain finished goods can exhibit price and demand cyclicality, including as a result of tariffs and other trade protection measures. Associated unexpected price increases could result in an erosion of product margins or require Snap-on to increase prices to customers to maintain margins.

To the extent that commodity prices increase and the company does not have firm pricing agreements with its suppliers, the company may experience margin declines to the extent that it is not able to increase the selling prices of its products.

Item 8: Financial Statements and Supplementary Data

The financial statements and schedules are listed in Part IV, Item 15(a) and are incorporated by reference into this Item 8.

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

None.

Item 9A: Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Snap-on maintains a system of disclosure controls and procedures that is designed to provide reasonable assurance that material information relating to the company and its consolidated subsidiaries is timely communicated to the officers who certify Snap-on's financial reports and to other members of senior management and the Board, as appropriate.

In accordance with Rule 13a-15(b) of the Securities Exchange Act of 1934 (the "Exchange Act"), the company's management evaluated, with the participation of the Chief Executive Officer and Chief Financial Officer, the effectiveness of the design and operation of the company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2022. Based upon their evaluation of these disclosure controls and procedures, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of December 31, 2022, to ensure that information required to be disclosed by the company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time period specified in the Securities and Exchange Commission rules and forms, and to ensure that information required to be disclosed by the company in the reports it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control

There has not been any change in the company's internal control over financial reporting during the quarter ended December 31, 2022, that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting (as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f)).

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of our internal control over financial reporting based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control - Integrated Framework (2013)*. Based on this assessment, the company's management believes that, as of December 31, 2022, our internal control over financial reporting was effective at a reasonable assurance level. The company's internal control over financial reporting as of December 31, 2022, has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in its attestation report, which is included herein.

Our management, including the Chief Executive Officer and Chief Financial Officer, does not expect that our internal control over financial reporting will prevent all errors or fraud. Because of inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Further, because of changes in conditions, the effectiveness of internal control over financial reporting may vary over time.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Snap-on Incorporated:

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Snap-on Incorporated and subsidiaries (the "Company") as of December 31, 2022, 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 December 31, 2022, 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 December 31, 2022, of the Company and our report dated February 9, 2023, expressed an unqualified opinion on those financial statements and included an explanatory paragraph regarding the Company's adoption of Accounting Standard Update No. 2016-13, *Financial Instruments – Credit Losses* (Topic 326).

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ DELOITTE & TOUCHE LLP Milwaukee, Wisconsin February 9, 2023

Item 9B: Other Information

None.

Item 9C: Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10: Directors, Executive Officers and Corporate Governance

Incorporated by reference to the sections entitled "Item 1: Election of Directors," "Corporate Governance Practices and Board Information" and "Other Information" in Snap-on's 2023 Annual Meeting Proxy Statement, which is expected to be mailed to shareholders on or about March 10, 2023 (the "2023 Proxy Statement").

The Section 16(a) filing compliance disclosure pursuant to Item 405 of Regulation S-K is contained in Snap-on's 2023 Proxy Statement in the section entitled "Other Information – Delinquent Section 16(a) Reports," and is incorporated herein by reference.

Information about our Executive Officers

Information regarding Snap-on's executive officers, including their ages, business experience (for at least the last five years) and titles as of December 31, 2022, is presented below:

Nicholas T. Pinchuk (76) – Chairman of the Board of Directors since 2009, President and Chief Executive Officer since December 2007, and President and Chief Operating Officer during 2007. Senior Vice President and President – Worldwide Commercial & Industrial Group from 2002 to 2007. Prior to joining Snap-on, Mr. Pinchuk held various positions, including President of Global Refrigeration Operations and President of Asia Pacific Operations, at Carrier Corporation, a producer of air conditioning, heating and refrigeration systems, and a subsidiary of United Technologies Corporation. Mr. Pinchuk served as an officer of the U.S. Army in Vietnam.

Aldo J. Pagliari (68) - Senior Vice President - Finance and Chief Financial Officer since 2010.

Jesus M. Arregui (57) – Senior Vice President and President – Commercial Group since 2019. President of SNA Europe from 2015 to 2019.

Anup R. Banerjee (72) – Senior Vice President – Human Resources and Chief Development Officer since 2015.

Iain Boyd (60) – Vice President – Operations Development since 2015.

Timothy L. Chambers (58) – Senior Vice President and President – Snap-on Tools Group since 2019. President of Commercial Group from 2015 to 2019.

June C. Lemerand (60) – Vice President and Chief Information Officer since 2017.

Richard T. Miller (52) – Vice President, General Counsel and Secretary since 2018. Associate General Counsel from 2012 to 2018.

Marty V. Ozolins (51) – Vice President and Controller since 2021. Vice President, and formerly Director, of Internal Audit from 2016 to 2021.

Thomas J. Ward (70) – Senior Vice President and President – Repair Systems & Information Group since 2010.

Snap-on's executive officers include a woman, a veteran of the U.S. Army, and two executives who are ethnically diverse.

Additionally, there is no family relationship among the executive officers and there has been no involvement in legal proceedings during the past 10 years that would be material to the evaluation of the ability or integrity of any of the executive officers. Executive officers may either be elected by the Board or may be appointed by the Chief Executive Officer at the regular meeting of the Board that follows the Annual Shareholders' Meeting, which is ordinarily held in April each year, or at such other times as new positions are created or vacancies must be filled.

Code of Ethics and Website Disclosure

Snap-on has adopted a written code of ethics that applies to its Chief Executive Officer, Chief Financial Officer, Vice President and Controller, and all other financial officers and executives performing similar functions. Snap-on has posted a copy of the code of ethics in the "Investors" section on the company's website at www.snapon.com. Snap-on will also post any amendments to these documents, or information about any waivers granted to directors or executive officers with respect to the Code of Business Conduct and Ethics, on the company's website at www.snapon.com.

Snap-on intends to satisfy the disclosure requirements under Item 10 of Form 8-K regarding amendments to, or waivers from, the code of ethics by posting such information in the "Investors" section of its corporate website at www.snapon.com.

Item 11: Executive Compensation

The information required by Item 11 is contained in Snap-on's 2023 Proxy Statement in the sections entitled "Executive Compensation," "Board Compensation," "Compensation Committee Report," and "Other Information" and is incorporated herein by reference.

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

The following table sets forth information about Snap-on's equity compensation plans at 2022 year end:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	2,798,989 (1)	\$164.06 ⁽²⁾	3,897,146 (3)
Equity compensation plans not approved by security holders	58,092 (4)	Not Applicable	_ (5)
Total	2,857,081	\$164.06 ⁽²⁾	3,897,146 ⁽⁵⁾

- (1) Includes (i) options and stock appreciation rights ("SARs") to acquire 2,733,876 shares granted under the 2011 Incentive Stock and Awards Plan (the "2011 Plan"); (ii) 58,275 shares represented by time-based restricted stock units granted under the 2011 Plan; and (iii) 6,838 shares represented by deferred share units under the Directors' Fee Plan. Excludes 261,275 shares issuable in connection with the vesting of performance share awards under the 2011 Plan. Also excludes shares of common stock that may be issuable under the employee and franchisee stock purchase plans.
- (2) Reflects only the weighted-average exercise price of outstanding stock options and SARs granted under the 2011 Plan and does not include shares represented by deferred share units under the Directors' Fee Plan and shares issuable in connection with the vesting of restricted stock units or performance units under the 2011 Plan for which there are no exercise prices. Also excludes shares of common stock that may be issuable under the employee and franchisee stock purchase plans.
- (3) Includes (i) 3,122,593 shares reserved for issuance under the 2011 Plan; (ii) 195,730 shares reserved for issuance under the Directors' Fee Plan; and (iii) 578,823 shares reserved for issuance under the employee stock purchase plan.
- (4) Consists of deferred share units under Snap-on's Deferred Compensation Plan, which allows elected and appointed officers of Snap-on to defer all or a percentage of their respective annual salary and/or incentive compensation. The deferred share units are payable in shares of Snap-on common stock on a one-for-one basis and are calculated at fair market value. Shares of common stock delivered under the Deferred Compensation Plan are previously issued shares reacquired and held by Snap-on.
- (5) The Deferred Compensation Plan provides that Snap-on will make available, as and when required, a sufficient number of shares of common stock to meet the needs of the plan. It further provides that such shares shall be previously issued shares reacquired and held by Snap-on.

The additional information required by Item 12 is contained in Snap-on's 2023 Proxy Statement in the sections entitled "Executive Compensation," "Security Ownership of Certain Beneficial Owners and Management," and "Other Information," and is incorporated herein by reference.

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

Incorporated by reference to the sections entitled "Corporate Governance Practices and Board Information – Board Information" and "Other Information – Transactions with the Company" in Snap-on's 2023 Proxy Statement.

Item 14: Principal Accountant Fees and Services

Incorporated by reference to the section entitled "Deloitte & Touche LLP Fee Disclosure" in Snap-on's 2023 Proxy Statement.

PART IV

Item 15: Exhibit and Financial Statement Schedules

Item 15(a): Documents Filed as Part of This Report:

1. List of Financial Statements

Unless otherwise indicated, references to "fiscal 2022" or "2022" refer to the fiscal year ended December 31, 2022; references to "fiscal 2021" or "2021" refer to the fiscal year ended January 1, 2022; and references to "fiscal 2020" or "2020" refer to the fiscal year ended January 2, 2021. References to 2022, 2021 and 2020 year end refer to December 31, 2022, January 1, 2022, and January 2, 2021, respectively.

The following consolidated financial statements of Snap-on and the Report of Independent Registered Public Accounting Firm thereon, are filed as part of this report:

- Report of Independent Registered Public Accounting Firm (PCAOB ID No. 34).
- Consolidated Statements of Earnings for the 2022, 2021 and 2020 fiscal years.
- Consolidated Statements of Comprehensive Income for the 2022, 2021 and 2020 fiscal years.
- Consolidated Balance Sheets as of 2022 and 2021 year end.
- Consolidated Statements of Equity for the 2022, 2021 and 2020 fiscal years.
- Consolidated Statements of Cash Flows for the 2022, 2021 and 2020 fiscal years.
- Notes to Consolidated Financial Statements.

2. Financial Statement Schedules

All schedules are omitted because they are not applicable, or the required information is included in the consolidated financial statements or notes thereto.

3. List of Exhibits^(*)

- (3) Restated Certificate of Incorporation of Snap-on Incorporated, as amended through April 25, 2013 (incorporated by reference to Exhibit 3.1 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended September 28, 2013 (Commission File No. 1-7724))
 - (b) Bylaws of Snap-on Incorporated, as amended and restated as of April 6, 2020 (incorporated by reference to Exhibit 3.1 to Snap-on's Current Report on Form 8-K dated April 6, 2020 (Commission File No. 1-7724))
- (4) (a) Indenture, dated as of January 8, 2007, between Snap-on Incorporated and U.S. Bank National Association as trustee (incorporated by reference to Exhibit (4)(b) to Form S-3 Registration Statement (Registration No. 333-139863))
 - (b) Officer's Certificate, dated as of February 21, 2017, providing for the \$300,000,000 3.25% Notes due 2027 (the "2027 Notes") (incorporated by reference to Exhibit 4.2 to Snap-on's Current Report on Form 8-K dated February 15, 2017 (Commission File No. 1-7724))
 - (c) Officer's Certificate, dated as of February 26, 2018, providing for the \$400,000,000 4.10% Notes due 2048 (the "2048 Notes") (incorporated by reference to Exhibit 4.2 to Snap-on's Current Report on Form 8-K dated February 20, 2018 (Commission File No. 1-7724))
 - (d) Officer's Certificate, dated as of April 30, 2020, providing for the \$500,000,000 3.10% Notes due 2050 (the "2050 Notes") (incorporated by reference to Exhibit 4.2 to Snap-on's Current Report on Form 8-K dated April 27, 2020 (Commission File No. 1-7724))
 - (e) Description of Securities
 - Description of Common Stock (incorporated by reference to Exhibit 4(e)(1) to Snap-on's Annual Report on Form (e)(1) 10-K for the fiscal year ended December 28, 2019 (Commission File No. 1-7724))
 - Description of 2027 Notes (incorporated by reference to Exhibit 4(e)(3) to Snap-on's Annual Report on Form 10-K
 - (e)(2) for the fiscal year ended December 28, 2019 (Commission File No. 1-7724))

 Description of 2048 Notes (incorporated by reference to Exhibit 4(e)(4) to Snap-on's Annual Report on Form 10-K
 - (e)(3) for the fiscal year ended December 28, 2019 (Commission File No. 1-7724))
 - Description of 2050 Notes (incorporated by reference to Exhibit 4(f)(5) to Snap-on's Annual Report on Form 10-K (e)(4) for the fiscal year ended January 2, 2021 (Commission File No. 1-7724))

Except for the foregoing, Snap-on and its subsidiaries have no unregistered long-term debt agreement for which the related outstanding debt exceeds 10% of consolidated total assets as of December 31, 2022. Copies of debt instruments for which the related debt is less than 10% of consolidated total assets will be furnished to the Commission upon request.

(10) Material Contracts

- (a) Amended and Restated Snap-on Incorporated 2001 Incentive Stock and Awards Plan (Amended and Restated as of April 27, 2006, as further amended on August 6, 2009) (incorporated by reference to Exhibit 10.1 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended October 3, 2009 (Commission File No. 1-7724))** (superseded except as to outstanding awards)
- (b) Snap-on Incorporated 2011 Incentive Stock and Awards Plan (As Amended and Restated) (incorporated by reference to Exhibit 10.1 to Snap-on's Current Report on Form 8-K dated April 29, 2021 (Commission File No. 1-7724))**
- (c) Form of Restated Executive Agreement between Snap-on Incorporated and each of its executive officers** (incorporated by reference to Exhibit 10(c) to Snap-on's Annual Report on Form 10-K for the fiscal year ended December 30, 2017 (Commission File No. 1-7724))**
- (d)(1) Form of Indemnification Agreement between Snap-on Incorporated and certain executive officers (incorporated by reference to Exhibit 10.1 to Snap-on's Annual Report on Form 10-K for the fiscal year ended January 1, 2011 (Commission File No. 1-7724))**
- (d)(2) Form of Indemnification Agreement between Snap-on Incorporated and directors (incorporated by reference to Exhibit 10.1 to Snap-on's Annual Report on Form 10-K for the fiscal year ended January 1, 2011 (Commission File No. 1-7724))**
- (e)(1) Amended and Restated Snap-on Incorporated Directors' 1993 Fee Plan (as amended through August 5, 2010) (incorporated by reference to Exhibit 10.1 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended October 2, 2010 (Commission File No. 1-7724))**
- (e)(2) Amendment to Amended and Restated Snap-on Incorporated Directors' 1993 Fee Plan (incorporated by reference to Exhibit 10(e)(2) to Snap-on's Annual Report on Form 10-K for the fiscal year ended December 28, 2013 (Commission File No. 1-7724))**
- (f)(1) Snap-on Incorporated Deferred Compensation Plan (as amended and restated as of September 1, 2011) (incorporated by reference to Exhibit 10(g) to Snap-on's Annual Report on Form 10-K for the fiscal year ended December 31, 2011 (Commission File No. 1-7724))**
- (f)(2) Amendment to Snap-on Incorporated Deferred Compensation Plan (incorporated by reference to Exhibit 10(f)(2) to Snap-on's Annual Report on Form 10-K for the fiscal year ended December 28, 2013 (Commission File No. 1-7724))**
- (g) Snap-on Incorporated Supplemental Retirement Plan for Officers (as amended through June 11, 2010) (incorporated by reference to Exhibit 10.2 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended July 3, 2010 (Commission File No. 1-7724))**
- (h) Form of Restricted Stock Unit Agreement for Directors under the 2001 Incentive Stock and Awards Plan (and accompanying Restricted Stock Unit Offer Letter) (incorporated by reference to Exhibit 10.2 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended October 3, 2009 (Commission File No. 1-7724))** (superseded except as to outstanding awards)
- (i) Form of Non-Qualified Stock Option Agreement under the 2011 Incentive Stock and Awards Plan (and accompanying Non-Qualified Stock Option Grant Offer Letter) (incorporated by reference to Exhibit 10.1 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended October 1, 2011 (Commission File No. 1-7724))**
- (j) Form of Performance Share Unit Award Agreement under the 2011 Incentive Stock and Awards Plan (incorporated by reference to Exhibit 10.1 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (Commission File No. 1-7724))**
- (k) Form of Performance-Based Restricted Unit Award Agreement for Executive Officers under the 2011 Incentive Stock and Awards Plan (incorporated by reference to Exhibit 10.1 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (Commission File No. 1-7724))**
- (1) Form of Restricted Unit Award Agreement for Directors under the 2011 Incentive Stock and Awards Plan (incorporated by reference to Exhibit 10.1 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 (Commission File No. 1-7724))**

- (m) Form of Restricted Stock Award Agreement for Directors under the 2011 Incentive Stock and Awards Plan (incorporated by reference to Exhibit 10.1 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended March 30, 2013 (Commission File No. 1-7724))**
- (n) Form of Restricted Stock Unit Award Agreement for Executive Officers and Key Employees under the 2011 Incentive Stock and Awards Plan (incorporated by reference to Exhibit 10(o) to Snap-on's Annual Report on Form 10-K for the fiscal year ended January 2, 2021 Commission File No. 1-7724))**
- (o)(1) Third Amended and Restated Five Year Credit Agreement, dated as of September 16, 2019, by and among Snap-on Incorporated and the lenders and agents listed on the signature pages thereof, and JPMorgan Chase Bank, N.A., Citibank N.A. and U.S. Bank National Association as joint lead arrangers and joint bookrunners (incorporated by reference to Exhibit 10.1 to Snap-on's Current Report on Form 8-K dated September 16, 2019 (Commission File No. 1-7724))
- (o)(2) Amendment No. 1, dated as of September 15, 2022, by and among Snap-on Incorporated, the lenders party thereto and JPMorgan Chase Bank, N.A., in its capacity as administrative agent for the lenders, to Third Amended and Restated Five Year Credit Agreement, dated as of September 16, 2019, by and among Snap-on Incorporated and the lenders and agents listed on the signature pages thereof, and JPMorgan Chase Bank, N.A., Citibank N.A. and U.S. Bank National Association as joint lead arrangers and joint bookrunners (incorporated by reference to Exhibit 10.1 to Snap-on's Quarterly Report on Form 10-Q for the quarterly period ended October 1, 2022 (Commission File No. 1-7724))
- (14) Snap-on Incorporated Section 406 of the Sarbanes-Oxley Act Code of Ethics (incorporated by reference to Exhibit 10(aa) to Snap-on's Annual Report on Form 10-K for the fiscal year ended January 3, 2004 (Commission File No. 1-7724))
- (21) Subsidiaries of the Corporation
- (23) Consent of Independent Registered Public Accounting Firm
- (31.1) Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- (31.2) Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- (32.1) Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- (32.2) Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- (101.INS) Inline XBRL Instance Document the instance document does not appear in the Interactive Data File because its XBRL (Extensible Business Reporting Language) 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 (contained in Exhibit 101)

Item 16: Form 10-K Summary

None.

^{*} Filed electronically or incorporated by reference as an exhibit to this Annual Report on Form 10-K. Copies of any materials the company files with the SEC can also be obtained free of charge through the SEC's website at www.sec.gov.

^{**} Represents a management compensatory plan or agreement.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Snap-on Incorporated:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Snap-on Incorporated and subsidiaries (the "Company") as of December 31, 2022 and January 1, 2022, the related consolidated statements of earnings, comprehensive income, equity, and cash flows for each of the three years in the period ended December 31, 2022, 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 December 31, 2022, and January 1, 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, 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 December 31, 2022, 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 February 9, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 4 to the consolidated financial statements, the Company changed its method of accounting for credit losses in the year ended January 2, 2021, due to the adoption of Accounting Standard Update No. 2016-13, *Financial Instruments – Credit Losses* (Topic 326) under the modified retrospective adoption method.

Basis for Opinion

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

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

Critical Audit Matter

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

Finance Receivables, Net - Allowance - Refer to Notes 1 and 4 to the financial statements

Critical Audit Matter Description

The Company's finance receivables are comprised of extended-term installment payment contracts to both technicians and independent shop owners (i.e., franchisees' customers) to enable them to purchase tools, diagnostics, and equipment products on an extended-term payment plan, with average payment terms of approximately four years. The receivables are generally secured by the underlying tools, diagnostics and/or equipment products financed. At December 31, 2022, these loans totaled \$1,793.9 million with an allowance of \$60.9 million recorded against the receivables. Determining the proper level of allowance requires management to exercise judgment about the timing, frequency and severity of credit losses expected to occur over the life of the contracts. The Company estimates and records an allowance for credit losses over the remaining contractual life of their contracts considering collectability, historical loss experience, current conditions and future market changes.

Evaluating the judgments related to the finance receivable allowance for credit losses is subjective and requires auditor judgment to effectively evaluate whether management's judgments were reasonable.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the finance receivables allowance for credit losses balance included the following procedures, among others:

- We tested the design, implementation and operating effectiveness of management's controls over the allowance for credit losses including controls over the completeness and accuracy of underlying data.
- Where appropriate, we assessed the reasonableness of, and evaluated support for, qualitative adjustments based on market conditions and/or portfolio performance metrics.
- We tested the completeness and accuracy and evaluated the relevance of the key data used as inputs in management's allowance for credit losses calculation, including loan balances, recoveries, charge-offs, portfolio characteristics and other data.
- We tested the mathematical accuracy of the allowance for credit losses calculation with the assistance of our credit specialists and developed an expectation of the allowance for credit losses and compared it to the recorded balance.
- 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 Milwaukee, Wisconsin February 9, 2023

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

(Amounts in millions, except per share data)	2022	2021	2020
Net sales	\$ 4,492.8	\$ 4,252.0	\$ 3,592.5
Cost of goods sold	(2,311.7)	(2,141.2)	(1,844.0)
Gross profit	2,181.1	2,110.8	1,748.5
Operating expenses	 (1,239.9)	(1,259.3)	(1,116.6)
Operating earnings before financial services	941.2	851.5	631.9
Financial services revenue	349.7	349.7	349.7
Financial services expenses	 (83.7)	(77.7)	(101.1)
Operating earnings from financial services	266.0	272.0	248.6
Operating earnings	1,207.2	1,123.5	880.5
Interest expense	(47.1)	(53.1)	(54.0)
Other income (expense) – net	 42.5	16.5	8.7
Earnings before income taxes and equity earnings	1,202.6	1,086.9	835.2
Income tax expense	 (268.7)	(247.0)	(189.1)
Earnings before equity earnings	933.9	839.9	646.1
Equity earnings, net of tax	 	1.5	0.3
Net earnings	933.9	841.4	646.4
Net earnings attributable to noncontrolling interests	 (22.2)	(20.9)	(19.4)
Net earnings attributable to Snap-on Incorporated	\$ 911.7	\$ 820.5	\$ 627.0
Net earnings per share attributable to Snap-on Incorporated:			
Basic	\$ 17.14	\$ 15.22	\$ 11.55
Diluted	16.82	14.92	11.44
Weighted-average shares outstanding:			
Basic	53.2	53.9	54.3
Effect of dilutive securities	 1.0	1.1	0.5
Diluted	54.2	55.0	54.8

Snap-on Incorporated – Consolidated Statements of Comprehensive Income

(Amounts in millions)	2022	2021	2020		
Comprehensive income (loss):					
Net earnings	\$ 933.9	\$ 841.4	\$	646.4	
Other comprehensive income (loss):					
Foreign currency translation	(127.4)	(69.4)		112.7	
Reclassification of foreign currency translation loss from sale of equity interest to net earnings		(1.0)		_	
Unrealized cash flow hedges, net of tax:					
Other comprehensive income before reclassifications		_		1.4	
Reclassification of cash flow hedges to net earnings	(1.6)	(1.6)		(1.6)	
Defined benefit pension and postretirement plans:					
Net prior service costs and credits and unrecognized gain (loss)	(92.8)	85.1		3.8	
Income tax benefit (expense)	 23.8	(18.6)		(0.3)	
Net of tax	(69.0)	66.5		3.5	
Amortization of unrecognized loss and net prior service	18.1	36.4		34.5	
costs included in net periodic benefit cost Income tax benefit					
	 (4.5)	 (9.0)		(8.4)	
Net of tax	13.6	 27.4		26.1	
Total comprehensive income	749.5	863.3		788.5	
Comprehensive income attributable to noncontrolling interests	(22.2)	(20.9)		(19.4)	
Comprehensive income attributable to Snap-on Incorporated	\$ 727.3	\$ 842.4	\$	769.1	

		Fiscal Y	ear I	End
(Amounts in millions, except share data)		2022		2021
ASSETS				
Current assets:				
Cash and cash equivalents	\$	757.2	\$	780.0
Trade and other accounts receivable – net	•	761.7	•	682.3
Finance receivables – net		562.2		542.3
Contract receivables – net		109.9		110.4
Inventories – net		1,033.1		803.8
Prepaid expenses and other assets		144.8		134.6
Total current assets		3,368.9		3,053.4
Property and equipment – net		512.6		518.2
Operating lease right-of-use assets		61.5		51.9
Deferred income tax assets		70.0		49.5
Long-term finance receivables – net		1,170.8		1,114.0
Long-term contract receivables – net		383.8		378.2
Goodwill		1,045.3		1,116.5
Other intangibles – net		275.6		301.7
Pension assets		70.6		160.7
Other assets		13.7		15.6
Total assets	\$	6,972.8	\$	6,759.7
LIABILITIES AND EQUITY				
Current liabilities:				
Notes payable	\$	17.2	\$	17.4
Accounts payable		287.0		277.6
Accrued benefits		58.6		67.4
Accrued compensation		98.6		114.8
Franchisee deposits		73.8		80.7
Other accrued liabilities		436.4		424.3
Total current liabilities		971.6		982.2
Long-term debt		1,183.8		1,182.9
Deferred income tax liabilities		82.1		122.7
Retiree health care benefits		23.4		31.1
Pension liabilities		78.6		104.9
Operating lease liabilities		44.7		34.2
Other long-term liabilities		85.1		97.9
Total liabilities		2,469.3		2,555.9
Commitments and contingencies (Note 16)				
Equity				
Shareholders' equity attributable to Snap-on Incorporated:				
Preferred stock (authorized 15,000,000 shares of \$1 par value; none outstanding)				
Common stock (authorized 250,000,000 shares of \$1 par value; issued 67,444,966				
and 67,438,129 shares, respectively)		67.4		67.4
Additional paid-in capital		499.9		472.7
Retained earnings		6,296.2		5,699.9
Accumulated other comprehensive loss		(528.3)		(343.9)
Treasury stock at cost (14,442,386 and 14,008,479 shares, respectively)		(1,853.9)		(1,714.2)
Total shareholders' equity attributable to Snap-on Incorporated		4,481.3		4,181.9
Noncontrolling interests		4,503.5		4,203.8
Total equity Total liabilities and equity	\$	6,972.8	\$	6,759.7
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Shareholders' Equity Attributable to Snap-on Incorporated

(Amounts in millions, except share data)	Comm Stock		P	ditional aid-in Capital	Retained Earnings	Other mprehensive Loss	Гreasury Stock	Noncon Inter		Total Equity
Balance at December 28, 2019	\$ (7.4	\$	379.1	\$ 4,779.7	\$ (507.9)	\$ (1,309.2)	\$	21.7	\$ 3,430.8
Impact of the Credit Loss Standard (ASU No. 2016-13)		_		_	(6.1)	_			_	(6.1)
Balance at December 29, 2019	-	7.4		379.1	4,773.6	(507.9)	(1,309.2)		21.7	3,424.7
Net earnings for 2020		_		_	627.0	_	_		19.4	646.4
Other comprehensive income		_		_	_	142.1	_		_	142.1
Cash dividends – \$4.47 per share		_		_	(243.3)	_	_		_	(243.3)
Stock compensation plans		_		12.6	_	_	58.2		_	70.8
Share repurchases – 1,109,000 shares		_		_	_	_	(174.3)		_	(174.3)
Other		_		_	(0.4)	_	_		(19.4)	(19.8)
Balance at January 2, 2021		7.4		391.7	5,156.9	(365.8)	(1,425.3)		21.7	3,846.6
Net earnings for 2021		—		_	820.5	_	_		20.9	841.4
Other comprehensive income		—		_	_	21.9	_		_	21.9
Cash dividends – \$5.11 per share		—		_	(275.8)	_	_		_	(275.8)
Stock compensation plans		—		81.0	_	_	142.4		_	223.4
Share repurchases – 1,943,900 shares		—		_	_	_	(431.3)		_	(431.3)
Other		_		_	(1.7)	_	_		(20.7)	(22.4)
Balance at January 1, 2022	(7.4		472.7	5,699.9	(343.9)	(1,714.2)		21.9	4,203.8
Net earnings for 2022		_		_	911.7	_	_		22.2	933.9
Other comprehensive loss		_		_	_	(184.4)	_		_	(184.4)
Cash dividends – \$5.88 per share		_		_	(313.1)	_	_		_	(313.1)
Stock compensation plans		_		27.2	_	_	58.4		_	85.6
Share repurchases – 899,000 shares		_		_	_	_	(198.1)		_	(198.1)
Other		_			(2.3)	_	_		(21.9)	(24.2)
Balance at December 31, 2022	\$ (7.4	\$	499.9	\$ 6,296.2	\$ (528.3)	\$ (1,853.9)	\$	22.2	\$ 4,503.5

(Amounts in millions)		2022	2021		2020
Operating activities:					
Net earnings	\$	933.9	\$ 841.4	\$	646.4
Adjustments to reconcile net earnings to net cash provided (used) by operating activities:					
Depreciation		71.5	75.6		73.3
Amortization of other intangibles		28.7	29.2		23.4
Provision for losses on finance receivables		37.7	32.1		54.6
Provision for losses on non-finance receivables		16.8	16.3		22.7
Stock-based compensation expense		34.0	41.4		19.5
Deferred income tax provision (benefit)		(10.3)	8.4		(8.2)
(Gain) loss on sales of assets		(3.1)	1.7		1.4
Settlement of treasury lock					1.4
Changes in operating assets and liabilities, net of effects of acquisitions:					
Trade and other accounts receivable		(120.0)	(61.4)		47.9
Contract receivables		(11.8)	(3.1)		(29.9)
Inventories		(272.1)	(75.4)		34.2
Prepaid expenses and other assets		(6.3)	(10.7)		8.5
Accounts payable		17.7	56.8		17.8
Accruals and other liabilities		(41.5)	14.3		95.6
Net cash provided by operating activities		675.2	966.6		1,008.6
Investing activities:					
Additions to finance receivables		(955.8)	(878.1)		(835.0)
Collections of finance receivables		826.9	854.2		750.3
Capital expenditures		(84.2)	(70.1)		(65.6)
Acquisitions of businesses, net of cash acquired		0.5	(199.7)		(41.5)
Disposals of property and equipment		5.1	2.1		1.8
Other		1.3	1.2		2.2
Net cash used by investing activities		(206.2)	(290.4)		(187.8)
Financing activities:					
Proceeds from issuance of long-term debt			_		489.9
Repayments of long-term debt		_	(250.0)		
Net increase (decrease) in other short-term borrowings		1.6	3.3		(187.2)
Cash dividends paid		(313.1)	(275.8)		(243.3)
Purchases of treasury stock		(198.1)	(431.3)		(174.3)
Proceeds from stock purchase and option plans		55.0	162.4		55.8
Other		(30.4)	(27.4)		(25.2)
Net cash used by financing activities		(485.0)	 (818.8)		(84.3)
Effect of exchange rate changes on cash and cash equivalents		(6.8)	 (0.8)	_	2.4
Increase (decrease) in cash and cash equivalents		(22.8)	(143.4)		738.9
Cash and cash equivalents at beginning of year	_	780.0	 923.4		184.5
Cash and cash equivalents at end of year	\$	757.2	\$ 780.0	\$	923.4
Supplemental cash flow disclosures:					
Cash paid for interest	\$	(44.7)	\$ (55.9)	\$	(49.8)
Net cash paid for income taxes		(261.2)	(249.0)		(188.4)

Note 1: Summary of Accounting Policies

Principles of consolidation and presentation: The Consolidated Financial Statements include the accounts of Snap-on Incorporated and its wholly-owned and majority-owned subsidiaries (collectively, "Snap-on" or "the company"). The Consolidated Financial Statements do not include the accounts of the company's independent franchisees. Snap-on's Consolidated Financial Statements are prepared in conformity with generally accepted accounting principles in the United States of America ("GAAP"). Intercompany accounts and transactions have been eliminated.

Fiscal year accounting period: Snap-on's fiscal year ends on the Saturday that is on or nearest to December 31. The 2022 fiscal year ended on December 31, 2022 ("2022") and contained 52 weeks of operating results. The 2021 fiscal year ended on January 1, 2022 ("2021") and contained 52 weeks of operating results. The 2020 fiscal year ended on January 2, 2021 ("2020") and contained 53 weeks of operating results, with the additional week occurring in the fourth quarter; the impact of the additional week of operations was not material to Snap-on's 2020 total revenues or net earnings.

Use of estimates: The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Financial instruments: The fair value of the company's derivative financial instruments is generally determined using quoted prices in active markets for similar assets and liabilities. The carrying value of the company's non-derivative financial instruments either approximates fair value, due to their short-term nature, or the amount disclosed for fair value is based upon a discounted cash flow analysis or quoted market values. See Note 11 for further information on financial instruments.

Revenue recognition: Snap-on recognizes revenue from the sale of tools, diagnostics, equipment, and related services based on when control of the product passes to the customer or the service is provided and is recognized at an amount that reflects the consideration expected to be received in exchange for such goods or services. See Note 2 for information on revenue recognition.

Financial services revenue: Snap-on generates revenue from various financing programs that include: (i) installment sales and lease contracts arising from franchisees' customers and Snap-on customers who require financing for the purchase or lease of tools, diagnostics, and equipment products on an extended-term payment plan; and (ii) business and vehicle loans and leases to franchisees. These financing programs are offered through Snap-on's wholly owned finance subsidiaries. Financial services revenue consists primarily of interest income on finance and contract receivables and is recognized over the life of the underlying contracts, with interest computed primarily on the average daily balances of the underlying contracts.

The decision to finance through Snap-on or another financing source is solely at the election of the customer. When assessing customers for potential financing, Snap-on considers various factors regarding ability to pay, including the customers' financial condition, past payment experience, and credit bureau and proprietary Snap-on credit model information, as well as the value of the underlying collateral. For finance and contract receivables, Snap-on assesses quantitative and qualitative factors through the use of credit quality indicators consisting primarily of collection experience and related internal metrics. Delinquency is the primary indicator of credit quality for finance and contract receivables. Snap-on conducts monthly reviews of credit and collection performance for both the finance and contract receivable portfolios, focusing on data such as delinquency trends, nonaccrual receivables, and write-off and recovery activity.

Financial services lease arrangements: Snap-on accounts for its financial services leases as sales-type leases. The company recognizes the net investment in the lease as the present value of the lease payments not yet received plus the present value of the unguaranteed residual value, using the interest rate implicit in the lease. The difference between the undiscounted lease payments received over the lease term and the related net investment in the lease is reported as unearned finance charges. Unearned finance charges are amortized to income over the life of the contract. The default covenants included in the lease arrangements are usual and customary, consistent with industry practice, and do not impact the lease classification. Except in circumstances where the company has concluded that a lessee's financial condition has deteriorated, the other default covenants under Snap-on's lease arrangements are objectively determinable. See Notes 4 and 17 for further information on finance and contract receivables and lessor accounting.

Research and engineering: Snap-on incurred research and engineering costs of \$60.1 million, \$61.1 million and \$57.4 million in 2022, 2021 and 2020, respectively. Research and engineering costs are included in "Operating expenses" on the accompanying Consolidated Statements of Earnings.

Internally developed software: Costs incurred in the development of software that will ultimately be sold are capitalized from the time technological feasibility has been attained and capitalization ceases when the related product is ready for general release. During 2022, 2021 and 2020, Snap-on capitalized \$10.2 million, \$10.9 million and \$12.0 million, respectively, of such costs. Amortization of capitalized software development costs, which is included in "Cost of goods sold" on the accompanying Consolidated Statements of Earnings, was \$11.6 million in 2022, \$11.4 million in 2021 and \$10.5 million in 2020. Unamortized capitalized software development costs of \$42.4 million as of 2022 year end and \$43.6 million as of 2021 year end are included in "Other intangibles – net" on the accompanying Consolidated Balance Sheets.

Internal-use software: Costs that are incurred in creating software solutions and enhancements to those solutions are capitalized only for the application development stage of the project.

Shipping and handling: Amounts billed to customers for shipping and handling are included as a component of sales. Costs incurred by Snap-on for shipping and handling are included as a component of cost of goods sold when the costs relate to manufacturing activities. In 2022, 2021 and 2020, Snap-on incurred shipping and handling charges of \$77.6 million, \$69.9 million and \$53.7 million, respectively, that were recorded in "Cost of goods sold" on the accompanying Consolidated Statements of Earnings. Shipping and handling costs incurred in conjunction with selling or distribution activities are included as a component of operating expenses. Shipping and handling charges were \$104.9 million in 2022, \$100.9 million in 2021 and \$94.2 million in 2020; these charges were recorded in "Operating expenses" on the accompanying Consolidated Statements of Earnings.

Advertising and promotion: Production costs of future media advertising are deferred until the advertising occurs. All other advertising and promotion costs are expensed when incurred. For 2022, 2021 and 2020, advertising and promotion expenses totaled \$39.3 million, \$33.2 million and \$38.0 million, respectively. Advertising and promotion costs are included in "Operating expenses" on the accompanying Consolidated Statements of Earnings.

Warranties: Snap-on provides product warranties for specific product lines and accrues for estimated future warranty costs in the period in which the sale is recorded. See Notes 2 and 16 for information on warranties.

Foreign currency: The financial statements of Snap-on's foreign subsidiaries are translated into U.S. dollars. Assets and liabilities of foreign subsidiaries are translated at current rates of exchange, and income and expense items are translated at the average exchange rates for the period. The resulting translation adjustments are recorded directly into "Accumulated other comprehensive loss" on the accompanying Consolidated Balance Sheets. Foreign exchange transactions, net of foreign currency hedges, resulted in pretax losses of \$7.5 million, \$1.2 million and \$3.9 million in 2022, 2021 and 2020, respectively. Foreign exchange transaction gains and losses are reported in "Other income (expense) – net" on the accompanying Consolidated Statements of Earnings.

Income taxes: Current tax assets and liabilities are based upon an estimate of taxes refundable or payable for each of the jurisdictions in which the company is subject to tax. In the ordinary course of business, there is inherent uncertainty in quantifying income tax positions. Snap-on assesses income tax positions and records tax benefits for all years subject to examination based upon management's evaluation of the facts, circumstances and information available at the reporting dates. For those tax positions where it is more-likely-than-not that a tax benefit will be sustained, Snap-on records the largest amount of tax benefit with a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is not more-likely-than-not that a tax benefit will be sustained, no tax benefit is recognized in the financial statements. When applicable, associated interest and penalties are recognized as a component of income tax expense. Accrued interest and penalties are included within the related tax asset or liability on the accompanying Consolidated Balance Sheets.

Deferred income taxes are provided for temporary differences arising from differences in bases of assets and liabilities for tax and financial reporting purposes. Deferred income taxes are recorded on temporary differences using enacted tax rates in effect for the year in which the temporary differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more-likely-than-not that some portion or all of the deferred tax assets will not be realized. See Note 9 for further information on income taxes.

Per share data: Basic earnings per share calculations were computed by dividing net earnings attributable to Snap-on Incorporated by the corresponding weighted-average number of common shares outstanding for the period. The dilutive effect of the potential exercise of outstanding options and stock-settled stock appreciation rights ("SARs") to purchase common shares is calculated using the treasury stock method. As of both December 31, 2022, and January 1, 2022, there were no awards outstanding that were anti-dilutive; as of January 2, 2021, there were 2,207,411 awards outstanding that were anti-dilutive. Performance-based equity awards are included in the diluted earnings per share calculation based on the attainment of the applicable performance metrics to date. Snap-on had dilutive securities totaling 945,250 shares, 1,058,553 shares and 473,196 shares, as of the end of 2022, 2021 and 2020, respectively. See Note 14 for further information on equity awards.

Stock-based compensation: Snap-on recognizes the cost of employee services in exchange for awards of equity instruments based on the grant date fair value of those awards. That cost, based on the estimated number of awards that are expected to vest, is recognized on a straight-line basis over the period during which the employee is required to provide the service in exchange for the award. No compensation cost is recognized for awards for which employees do not render the requisite service. The grant date fair value of employee stock options and similar instruments is estimated using the Black-Scholes valuation model.

The Black-Scholes valuation model requires the input of subjective assumptions, including the expected life of the stock-based award and stock price volatility. The assumptions used are management's best estimates, but the estimates involve inherent uncertainties and the application of management judgment. As a result, if other assumptions had been used, the recorded stock-based compensation expense could have been materially different from that depicted in the financial statements. See Note 14 for further information on stock-based compensation.

Derivatives: Snap-on may utilize derivative financial instruments, including foreign currency forward contracts, interest rate swap agreements, treasury lock agreements and prepaid equity forward agreements to manage its exposures to foreign currency exchange rate risks, interest rate risks, and market risk associated with the stock-based portion of its deferred compensation plans. Snap-on accounts for its derivative instruments at fair value. Snap-on does not use financial instruments for speculative or trading purposes. See Note 11 for further information on derivatives.

Cash equivalents: Snap-on considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. Cash and cash equivalents consisted of investments in money market funds and bank deposits at December 31, 2022 and January 1, 2022.

Receivables and allowances for credit losses: All trade, finance and contract receivables are reported on the Consolidated Balance Sheets at their amortized cost adjusted for any write-offs and net of allowances for credit losses. The amortized costs for finance and contract receivables is the amount originated adjusted for applicable accrued interest and net of deferred fees or costs, net of collections and write-offs.

Snap-on maintains allowances for credit losses, which represent an estimate of expected credit losses over the remaining contractual life of its receivables considering current conditions and supportable forecasts when appropriate. The estimate is a result of the company's ongoing assessments and evaluations of collectability, historical loss experience, and future expectations in estimating credit losses in each of its receivable portfolios (trade, finance and contract receivables). For trade receivables, Snap-on uses historical loss experience rates by portfolio and applies them to a related aging analysis while also considering customer and/or economic risk where appropriate. Snap-on uses a vintage loss experience methodology for finance receivables. For contract receivables, Snap-on primarily uses a Weighted-Average Remaining Maturity ("WARM") methodology. Determination of the proper amount of allowances by portfolio requires management to exercise judgment about the timing, frequency and severity of credit losses that could materially affect the provision for credit losses and, as a result, net earnings. The allowances take into consideration numerous quantitative and qualitative factors that include receivable type, historical loss experience, delinquency trends, collection experience, current conditions, supportable forecasts, when appropriate, and credit risk characteristics.

Snap-on evaluates the credit risk of the customer when extending credit based on a combination of various financial and qualitative factors that may affect its customers' ability to pay. These factors may include the customer's financial condition, past payment experience, and credit bureau and proprietary Snap-on credit model information, as well as the value of the underlying collateral.

Management performs detailed reviews of its receivables on a monthly and/or quarterly basis to assess the adequacy of the allowances and to determine if any impairment has occurred. Monthly reviews of credit and collection performance are conducted for both its finance and contract receivable portfolios focusing on data such as delinquency trends, non-performing assets, and write-off and recovery activity. These reviews allow for the formulation of collection strategies and potential collection policy modifications in response to changing risk profiles in the finance and contract receivable portfolios. A receivable generally has credit losses when it is expected that all amounts related to the receivable will not be collected according to the contractual terms of the agreement. Amounts determined to be uncollectable are charged directly against the allowances, while amounts recovered on previously written off accounts increase the allowances. For both finance and contract receivables, write-offs include the uncollectable principal amount of the receivable as well as the uncollectable accrued interest and fees, net of repossessions. For finance receivables only, write-offs are partially offset by recourse from franchisees. Recovered interest and fees previously written off are recorded through the allowances for credit losses and increase the allowances. Absent a repossession, finance receivables are generally written off when an account becomes 120 days past due. Repossessed accounts are typically written off within 60 days of asset repossession. Contract receivables related to equipment leases are generally written off when an account becomes 150 days past due, while contract receivables related to franchise finance and van leases are generally written off no later than when the receivable becomes 180 days past the asset return date. For finance and contract receivables, customer bankruptcies are generally written off upon notification that the associated debt is not being reaffirmed or, in any event, no later than when the receivable becomes 180 days past due. Changes to the allowances for credit losses are maintained through adjustments to the provisions for credit losses.

Actual amounts as of the balance sheet dates may be materially different than the amounts reported in future periods due to the uncertainty in the estimation process. Also, future amounts could differ materially from those estimates due to changes in circumstances after the balance sheet date.

Snap-on does not believe that its trade, finance or contract receivables represent significant concentrations of credit risk because of the diversified portfolio of individual customers and geographical areas. See Note 4 for further information on receivables and allowances for credit losses.

Other accrued liabilities: Supplemental balance sheet information for "Other accrued liabilities" as of 2022 and 2021 year end is as follows:

(Amounts in millions)	2022		2021	
Income taxes	\$	33.4	\$	18.9
Accrued warranty		14.3		17.3
Operating lease liabilities		19.4		19.6
Deferred subscription revenue		57.1		56.4
Accrued new tool return		53.9		55.0
Accrued property, payroll and other taxes		27.7		43.8
Accrued selling and promotion expense		37.7		41.0
Accrued restructuring expense		2.8		7.0
Other		190.1		165.3
Total other accrued liabilities	\$	436.4	\$	424.3

Inventories: Snap-on values its inventory at the lower of cost or market and adjusts for the value of inventory that is estimated to be excess, obsolete or otherwise unmarketable. Snap-on records allowances for excess and obsolete inventory based on historical and estimated future demand and market conditions. Allowances for raw materials are largely based on an analysis of raw material age and actual physical inspection of raw material for fitness for use. As part of evaluating the adequacy of allowances for work-in-progress and finished goods, management reviews individual product stock-keeping units (SKUs) by product category and product life cycle. Cost adjustments for each product category/product life-cycle state are generally established and maintained based on a combination of historical experience, forecasted sales and promotions, technological obsolescence, inventory age and other actual known conditions and circumstances. Should actual product marketability and raw material fitness for use be affected by conditions that are different from management estimates, further adjustments to inventory allowances may be required.

Snap-on adopted the "last-in, first-out" ("LIFO") inventory valuation method in 1973 for its U.S. locations. Snap-on's U.S. inventories accounted for on a LIFO basis consist of purchased product and inventory manufactured at the company's heritage U.S. manufacturing facilities (primarily hand tools and tool storage). Since Snap-on began acquiring businesses in the 1990's, the company has used the "first-in, first-out" ("FIFO") inventory valuation methodology for acquisitions; the company does not adopt the LIFO inventory valuation methodology for new acquisitions. See Note 5 for further information on inventories.

Property and equipment: Property and equipment is stated at cost less accumulated depreciation and amortization. Depreciation and amortization are provided on a straight-line basis over estimated useful lives. Major repairs that extend the useful life of an asset are capitalized, while routine maintenance and repairs are expensed as incurred. Capitalized software included in property and equipment reflects costs related to internally developed or purchased software for internal use and is amortized on a straight-line basis over their estimated useful lives. Long-lived assets, including operating lease right-of-use assets, are evaluated for impairment when events or circumstances indicate that the carrying amount of the long-lived asset may not be recoverable. See Note 6 for further information on property and equipment.

Goodwill and other intangible assets: Goodwill and other indefinite-lived assets are tested for impairment annually or more frequently if events or changes in circumstances indicate that the assets might be impaired. Annual impairment tests are performed by the company in the second quarter of each year using information available as of April month end. Snap-on evaluates the existence of goodwill and indefinite-lived intangible asset impairment on the basis of whether the assets are fully recoverable from projected, discounted cash flows of the related reportable unit or asset. Intangible assets with finite lives are amortized over their estimated useful lives using straight-line and accelerated methods depending on the nature of the particular asset. Intangible assets with finite lives are evaluated for impairment when events or circumstances indicate that the carrying amount of the intangible asset may not be recoverable. See Note 7 for further information on goodwill and other intangible assets.

New accounting standards: In March 2022, the FASB issued ASU No. 2022-02, Financial Instruments – Credit Losses (Topic 326): *Troubled Debt Restructurings and Vintage Disclosures*, which requires enhanced disclosure of certain loan refinancings and restructurings by creditors when a borrower is experiencing financial difficulty and eliminates certain current recognition and measurement accounting guidance. This ASU also requires the disclosure of current-period gross write-offs by year of origination for financing receivables and net investments in leases. ASU No. 2022-02 is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. The adoption of this ASU is not expected to have a material impact on Snap-on's Consolidated Financial Statements.

Note 2: Revenue Recognition

Snap-on recognizes revenue from the sale of tools, diagnostics, equipment, and related services based on when control of the product passes to the customer or the service is provided and is recognized at an amount that reflects the consideration expected to be received in exchange for such goods or services.

Revenue disaggregation

The following table shows the consolidated revenues by revenue source:

(Amounts in millions)	2022			2021
Revenue from contracts with customers	\$	4,468.6	\$	4,228.3
Other revenues		24.2		23.7
Total net sales		4,492.8		4,252.0
Financial services revenue		349.7		349.7
Total revenues	\$	4,842.5	\$	4,601.7

Snap-on evaluates the performance of its operating segments based on segment revenues, including both external and intersegment net sales, and segment operating earnings. Snap-on accounts for both intersegment sales and transfers based primarily on standard costs with reasonable mark-ups established between the segments. Intersegment amounts are eliminated to arrive at Snap-on's consolidated financial results.

The following table represents external net sales disaggregated by geography, based on the customers' billing addresses:

						2022						
	Co	mmercial &	5	Snap-on	Repa	air Systems						
	I	ndustrial		Tools	& I1	nformation	Financial				S	Snap-on
(Amounts in millions)		Group		Group	Group		Services		Elir	ninations	Incorporated	
Net sales:												
North America*	\$	498.3	\$	1,840.3	\$	1,046.1	\$		\$		\$	3,384.7
Europe		284.9		137.9		227.5						650.3
All other		275.1		93.8		88.9						457.8
External net sales		1,058.3		2,072.0		1,362.5						4,492.8
Intersegment net sales		340.9				304.4		_		(645.3)		
Total net sales		1,399.2		2,072.0		1,666.9				(645.3)		4,492.8
Financial services revenue								349.7				349.7
Total revenue	\$	1,399.2	\$	2,072.0	\$	1,666.9	\$	349.7	\$	(645.3)	\$	4,842.5
						2021						
	Cor		-									
	Coi	nmercial &	2	Snap-on	Repa	air Systems						
		nmercial & ndustrial	2	Snap-on Tools		air Systems nformation	Fir	nancial			S	Snap-on
(Amounts in millions)				•	& Iı	•		nancial rvices	Elin	ninations		Snap-on corporated
(Amounts in millions) Net sales:		ndustrial		Tools	& Iı	nformation			Elin	ninations		•
,		ndustrial		Tools	& Iı	nformation			Elin	ninations_		•
Net sales:	I	ndustrial Group		Tools Group	& I1	nformation Group	Se			ninations —	Inc	corporated
Net sales: North America*	I	ndustrial Group 494.9		Tools Group	& I1	Group 896.1	Se			ninations — — —	Inc	3,071.0
Net sales: North America* Europe	I	ndustrial Group 494.9 325.5		Tools Group 1,680.0 164.7	& I1	formation Group 896.1 249.7	Se			ninations — — — — —	Inc	3,071.0 739.9
Net sales: North America* Europe All other	I	1 dustrial Group 494.9 325.5 275.2		Tools Group 1,680.0 164.7 93.9	& I1	896.1 249.7 72.0	Se			ninations — — — — — — (596.0)	Inc	3,071.0 739.9 441.1
Net sales: North America* Europe All other External net sales	I	1,095.6		Tools Group 1,680.0 164.7 93.9	& I1	896.1 249.7 72.0 1,217.8	Se			_ _ _ _	Inc	3,071.0 739.9 441.1
Net sales: North America* Europe All other External net sales Intersegment net sales	I	1,095.6 310.7		Tools Group 1,680.0 164.7 93.9 1,938.6 —	& I1	896.1 249.7 72.0 1,217.8 285.3	Se				Inc	3,071.0 739.9 441.1 4,252.0

^{*} North America is comprised of the United States, Canada and Mexico.

The following table represents external net sales disaggregated by customer type:

						2022						
	Com	mercial &	5	Snap-on	Repa	ir Systems						
	In	dustrial		Tools	& In	formation	Fir	nancial			S	nap-on
(Amounts in millions)	(Group		Group		Group	Se	rvices	Elin	ninations	Inc	orporated
Net sales:												
Vehicle service professionals	\$	90.8	\$	2,072.0	\$	1,362.5	\$		\$		\$	3,525.3
All other professionals		967.5										967.5
External net sales		1,058.3		2,072.0		1,362.5						4,492.8
Intersegment net sales		340.9				304.4				(645.3)		
Total net sales		1,399.2		2,072.0		1,666.9				(645.3)		4,492.8
Financial services revenue								349.7				349.7
Total revenue	\$	1,399.2	\$	2,072.0	\$	1,666.9	\$	349.7	\$	(645.3)	\$	4,842.5
						2021						
	Con	nmercial &		Snap-on	Repa	air Systems						
	Iı	ndustrial		Tools	& I1	nformation	Fi	nancial			S	Snap-on
(Amounts in millions)		Group		Group		Group	S	ervices	Eliı	minations	Inc	orporated
Net sales:												
Vehicle service professionals	\$	99.9	\$	1,938.6	\$	1,217.8	\$		\$		\$	3,256.3
All other professionals		995.7				_						995.7
External net sales		1,095.6		1,938.6		1,217.8		_		_		4,252.0
Intersegment net sales		310.7				285.3				(596.0)		
Total net sales		1,406.3		1,938.6		1,503.1				(596.0)		4,252.0
Financial services revenue								349.7				349.7
Total revenue	\$	1,406.3	\$	1,938.6	\$	1,503.1	\$	349.7	\$	(596.0)	Φ.	4,601.7

Nature of goods and services: Snap-on derives net sales from a broad line of products and complementary services that are grouped into three categories: (i) tools; (ii) diagnostics, information and management systems; and (iii) equipment. The tools product category includes hand tools, power tools, tool storage products and other similar products. The diagnostics, information and management systems product category includes handheld and computer-based diagnostic products, service and repair information products, diagnostic software solutions, electronic parts catalogs, business management systems and services, point-of-sale systems, integrated systems for vehicle service shops, original equipment manufacturer ("OEM") purchasing facilitation services, and warranty management systems and analytics to help OEM dealership service and repair shops ("OEM dealerships") manage and track performance. The equipment product category includes solutions for the service of vehicles and industrial equipment. Snap-on supports the sale of its diagnostics and vehicle service shop equipment by offering training programs as well as after-sales support to its customers. Through its financial services businesses, Snap-on derives revenue from various financing programs designed to facilitate the sales of its products and support its franchise business.

Approximately 90% of Snap-on's net sales are products sold at a point in time through ship-and-bill performance obligations that also include repair services. The remaining sales revenue is earned over time primarily for software subscriptions, other subscription service agreements and extended warranty programs.

Snap-on enters into contracts related to the selling of tools, diagnostics, repair information, equipment and related services. At contract inception, an assessment of the goods and services promised in the contracts with customers is performed and a performance obligation is identified for each distinct promise to transfer to the customer a good or service (or bundle of goods or services). To identify the performance obligations, Snap-on considers all of the goods or services promised in the contract regardless of whether they are explicitly stated or are implied by customary business practices. Contracts with customers are comprised of customer purchase orders, invoices and written contracts.

For certain performance obligations related to software subscriptions, extended warranty and other subscription agreements that are settled over time, Snap-on has elected not to disclose the value of unsatisfied performance obligations for: (i) contracts that have an original expected length of one year or less; (ii) contracts where revenue is recognized as invoiced; and (iii) contracts with variable consideration related to unsatisfied performance obligations. The remaining duration of these unsatisfied performance obligations range from one month up to 60 months. Snap-on had approximately \$179.0 million of long-term contracts that have fixed consideration that extends beyond one year as of December 31, 2022. Snap-on expects to recognize approximately 75% of these contracts as revenue by the end of fiscal 2024, an additional 20% by the end of fiscal 2026 and the balance thereafter.

Snap-on typically expenses incremental direct costs of obtaining a contract (sales commissions) when incurred because the amortization period is generally 12 months or less. Capitalized long-term contract costs are not significant. Contract costs are expensed or amortized in "Operating expenses" on the accompanying Consolidated Statements of Earnings.

When performance obligations are satisfied: For performance obligations related to the majority of ship-and-bill products, including repair services contracts, control transfers at a point in time when title transfers upon shipment of the product to the customer, and for some sales, control transfers when title is transferred at time of receipt by customer. Once a product or repaired product has shipped or has been delivered, the customer is able to direct the use of, and obtain substantially all of the remaining benefits from the asset, revenue is recognized. Snap-on considers control to have transferred upon shipment or delivery when Snap-on has a present right to payment, the customer has legal title to the asset, Snap-on has transferred physical possession of the asset, and the customer has significant risk and rewards of ownership of the asset.

For performance obligations related to software subscriptions, extended warranties and other subscription agreements, Snap-on transfers control and recognizes revenue over time on a ratable basis using a time-based output method. The performance obligations are typically satisfied as services are rendered on a straight-line basis over the contract term, which is generally for 12 months but can be for a term up to 60 months.

Significant payment terms: For ship-and-bill type contracts with customers, the contract states the final terms of the sale, including the description, quantity, and price of each product or service purchased. Payment terms are typically due upon delivery or up to 30 days after delivery but can range up to 120 days after delivery.

For subscription contracts, payment terms are in advance or in arrears of services on a monthly, quarterly or annual basis over the contract term, which is generally for 12 months but can be for a term up to 60 months depending on the product or service. The customer typically agrees to a stated rate and price in the contract that does not vary over the contract term. In some cases, customers prepay for their licenses, or in other cases, pay on a monthly or quarterly basis. When the timing of the payment made by the customer precedes the delivery of the performance obligation, a contract liability is recognized.

Variable consideration: In some cases, the nature of Snap-on's contracts give rise to variable consideration, including rebates, credits, allowances for returns or other similar items that generally decrease the transaction price. These variable amounts generally are credited to the customer, based on achieving certain levels of sales activity, product returns and making payments within specific terms.

In the normal course of business, Snap-on allows franchisees to return product per the provisions in the franchise agreement that allow for the return of product in a saleable condition. For other customers, product returns are generally not accepted unless the item is defective as manufactured. Where applicable, Snap-on establishes provisions for estimated sales returns. Estimated product returns are recorded as a reduction in reported revenues at the time of sale based upon historical product return experience and is adjusted for known trends to arrive at the amount of consideration that Snap-on expects to receive.

Variable consideration is estimated at the most likely amount that is expected to be earned. Estimated amounts are included in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. Estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the anticipated performance and all information (historical, current and forecasted) that is reasonably available.

Warranties: Snap-on allows customers to return product when the product is defective as manufactured. Where applicable, Snap-on establishes provisions for estimated warranties. Estimated product warranties are provided for specific product lines and Snap-on accrues for estimated future warranty cost in the period in which the sale is recorded. The costs are included in "Cost of goods sold" on the accompanying Consolidated Statements of Earnings. Snap-on calculates its accrual requirements based on historic warranty loss experience that is periodically adjusted for recent actual experience, including the timing of claims during the warranty period and actual costs incurred. Snap-on does not typically provide customers with the right to a refund.

Contract liabilities: Contract liabilities are recorded when cash payments are received in advance of Snap-on's performance. The timing of payment is typically on a monthly, quarterly or annual basis. The balance of total contract liabilities was \$63.3 million and \$63.8 million at December 31, 2022, and January 1, 2022, respectively. The current portion of contract liabilities is included in "Other accrued liabilities" and the non-current portion of such liabilities is included in "Other long-term liabilities" on the accompanying Consolidated Balance Sheets. In 2022, Snap-on recognized revenue of \$55.0 million that was included in the contract liability balance at January 1, 2022, which was primarily from the amortization of software subscriptions, extended warranties and other subscription agreements. The decrease in the total contract liabilities balance was primarily driven by the timing of cash payments received or due in advance of satisfying Snap-on's performance obligations.

Franchise fee revenue, including nominal, non-refundable initial fees, is recognized upon the granting of a franchise, which is when the company has performed substantially all initial services required by the franchise agreement. Franchise fee revenue also includes ongoing monthly fees (primarily for sales and business training as well as marketing and product promotion programs) that are recognized as the fees are earned. Franchise fee revenue in 2022, 2021 and 2020 totaled \$18.4 million, \$17.3 million and \$16.2 million, respectively.

Note 3: Acquisitions

On August 1, 2021, Snap-on acquired AutoCrib EMEA GmbH ("AutoCrib Germany"), a former independent distributor, for a cash purchase price of \$4.4 million (or \$4.2 million, net of cash acquired). AutoCrib Germany, based in Hamburg, Germany, distributes asset and tool control solutions for a variety of aerospace, automotive, military, natural resources and general industry operations. In fiscal 2022, the company completed the purchase accounting valuations for the acquired net assets of AutoCrib Germany. The \$3.3 million excess of the purchase price over the fair value of the net assets acquired was recorded in "Goodwill" on the accompanying Consolidated Balance Sheets.

On July 1, 2021, Snap-on exchanged its 35% equity interest in Deville S.A., valued at \$21.8 million, for 100% ownership of Secateurs Pradines ("Pradines"), a wholly owned subsidiary of Deville S.A. with a fair value of \$20.2 million (or \$15.7 million, net of cash acquired), which reflects a \$0.5 million purchase accounting adjustment finalized in fiscal 2022, and cash of \$1.6 million. Pradines, located in Bauge-en-Anjou, France, designs and manufactures horticultural hand tools for professionals and individuals. In fiscal 2022, the company completed the purchase accounting valuations for the acquired net assets of Pradines. The \$10.2 million excess of the purchase price over the fair value of net assets acquired was recorded in "Goodwill" in the accompanying Consolidated Balance Sheets. Snap-on previously accounted for Deville S.A. as an equity method investment.

On February 26, 2021, Snap-on acquired Dealer-FX Group, Inc. ("Dealer-FX") for a cash purchase price of \$200.1 million (or \$200.0 million, net of cash acquired). Dealer-FX, based in Markham, Ontario, is a leading developer, marketer and provider of service-operations software solutions for automotive OEM customers and their dealers. Dealer-FX specializes in software as a service (SaaS) management systems, communications platforms, extensive data integrations, and offers a digitalized solution that increases productivity and enhances the vehicle owners' experience. In fiscal 2022, the company completed the purchase accounting valuations for the acquired net assets of Dealer-FX, and recorded \$32.6 million of net deferred tax changes. The \$118.2 million excess of the purchase price over the fair value of the net assets acquired was recorded in "Goodwill" on the accompanying Consolidated Balance Sheets.

The following is a summary of the values of the assets acquired and liabilities assumed of Dealer-FX, including adjustments recorded as of December 31, 2022, as a result of new information obtained about facts and circumstances that existed as of the February 26, 2021 acquisition date:

	Amounts as of				
(Amounts in millions)	Februar	y 26, 2021			
Assets acquired:					
Cash	\$	0.1			
Trade and other accounts receivable		8.0			
Property and equipment		0.7			
Deferred income tax assets		16.5			
Goodwill		118.2			
Other intangibles:					
Customer relationships		28.4			
Developed technology		14.8			
Non-amortized trademarks		17.7			
Other assets		0.8			
Total assets acquired		205.2			
Liabilities assumed:					
Accounts payable		2.6			
Accrued expenses		2.5			
Total liabilities acquired		5.1			
Net assets acquired	\$	200.1			

On September 28, 2020, Snap-on acquired substantially all of the assets of AutoCrib, Inc. ("AutoCrib") for a cash purchase price of \$35.4 million. AutoCrib, based in Tustin, California, designs, manufactures and markets asset and tool control solutions for a variety of aerospace, automotive, military, natural resources and general industry operations. In fiscal 2021, the company completed the purchase accounting valuations for the acquired net assets of AutoCrib. The \$18.3 million excess of the purchase price over the fair value of the net assets acquired was recorded in "Goodwill" on the accompanying Consolidated Balance Sheets.

On January 31, 2020, Snap-on acquired substantially all of the assets related to the TreadReader product line from Sigmavision Limited ("Sigmavision") for a cash purchase price of \$5.9 million. Sigmavision designs and manufactures handheld devices and drive-over ramps that provide tire information for use in the automotive industry. In fiscal 2020, the company completed the purchase accounting valuations for the acquired net assets of Sigmavision. The \$5.6 million excess of the purchase price over the fair value of the net assets acquired was recorded in "Goodwill" on the accompanying Consolidated Balance Sheets.

For segment reporting purposes, the results of operations and assets of Dealer-FX and Sigmavision have been included in the Repair Systems & Information Group since the respective acquisition dates, and the results of operations and assets of AutoCrib Germany, Pradines and AutoCrib have been included in the Commercial & Industrial Group since the respective acquisition dates

Pro forma financial information has not been presented for any of these acquisitions as the net effects, individually and collectively, were neither significant nor material to Snap-on's results of operations or financial position. See Note 7 for further information on goodwill and other intangible assets.

Note 4: Receivables

Trade and other accounts receivable: Snap-on's trade and other accounts receivable primarily arise from the sale of tools, diagnostics, and equipment products to a broad range of industrial and commercial customers and to Snap-on's independent franchise van channel with payment terms generally ranging from 30 to 120 days.

The components of Snap-on's trade and other accounts receivable as of 2022 and 2021 year end are as follows:

(Amounts in millions)	2022		2021		
Trade and other accounts receivable	\$ 792	8 \$	709.6		
Allowances for credit losses	(31)	1)	(27.3)		
Total trade and other accounts receivable – net	\$ 761	7 \$	682.3		

The following is a rollforward of the allowances for credit losses related to trade and other accounts receivable for 2022 and 2021:

(Amounts in millions)		2021		
Allowances for credit losses:				
Beginning of year	\$	27.3	\$	26.3
Provision for credit losses		16.3		15.5
Charge-offs		(11.8)		(13.6)
Recoveries		_		_
Currency translation		(0.7)		(0.9)
End of year	\$	31.1	\$	27.3

Finance and contract receivables: Snap-on Credit LLC ("SOC"), the company's financial services operation in the United States, originates extended-term finance and contract receivables on sales of Snap-on's products sold through the U.S. franchisee network and to certain other customers of Snap-on; Snap-on's foreign finance subsidiaries provide similar financing internationally. Interest income on finance and contract receivables is included in "Financial services revenue" on the accompanying Consolidated Statements of Earnings.

Snap-on's finance receivables are comprised of extended-term payment contracts to both technicians and independent shop owners (i.e., franchisees' customers) to enable them to purchase tools, diagnostics, and equipment products on an extended-term payment plan, with average payment terms of approximately four years.

Contract receivables, with payment terms of up to 10 years, are comprised of extended-term payment contracts to a broad base of customers worldwide, including shop owners, both independents and national chains, for their purchase of tools, diagnostics, and equipment products, as well as extended-term contracts to franchisees to meet a number of financing needs, including working capital loans, loans to enable new franchisees to fund the purchase of the franchise and van leases, or the expansion of an existing franchise. Finance and contract receivables are generally secured by the underlying tools, diagnostics and/or equipment products financed and, for contracts to franchisees, other franchisee assets.

The components of Snap-on's current finance and contract receivables as of 2022 and 2021 year end are as follows:

(Amounts in millions)	2022	2021
Finance installment receivables	\$ 578.6	\$ 557.0
Finance lease receivables, net of unearned finance charges of \$0.5 million and \$1.3 million, respectively	3.2	7.1
Total finance receivables	581.8	564.1
Contract installment receivables	51.3	55.2
Contract lease receivables, net of unearned finance charges of \$19.1 million and \$18.7 million, respectively	60.3	57.3
Total contract receivables	111.6	112.5
Total	693.4	676.6
Allowances for credit losses:		
Finance installment receivables	(19.5)	(21.7)
Finance lease receivables	(0.1)	(0.1)
Total finance allowance for credit losses	 (19.6)	(21.8)
Contract installment receivables	(0.8)	(0.9)
Contract lease receivables	(0.9)	(1.2)
Total contract allowance for credit losses	(1.7)	(2.1)
Total allowances for credit losses	(21.3)	(23.9)
Total current finance and contract receivables – net	\$ 672.1	\$ 652.7
Finance receivables – net	\$ 562.2	\$ 542.3
Contract receivables – net	109.9	110.4
Total current finance and contract receivables – net	\$ 672.1	\$ 652.7

The components of Snap-on's finance and contract receivables with payment terms beyond one year as of 2022 and 2021 year end are as follows:

(Amounts in millions)	2022	2021
Finance installment receivables	\$ 1,210.4	\$ 1,155.3
Finance lease receivables, net of unearned finance charges of \$0.2 million and \$0.5 million, respectively	1.7	4.2
Total finance receivables	1,212.1	1,159.5
Contract installment receivables	202.1	197.1
Contract lease receivables, net of unearned finance charges of \$30.7 million and \$30.3 million, respectively	186.6	187.4
Total contract receivables	388.7	384.5
Total	1,600.8	1,544.0
Allowances for credit losses:		
Finance installment receivables	(41.3)	(45.4)
Finance lease receivables	_	(0.1)
Total finance allowance for credit losses	(41.3)	(45.5)
Contract installment receivables	(3.1)	(3.2)
Contract lease receivables	(1.8)	(3.1)
Total contract allowance for credit losses	 (4.9)	(6.3)
Total allowances for credit losses	 (46.2)	(51.8)
Total long-term finance and contract receivables – net	\$ 1,554.6	\$ 1,492.2
Finance receivables – net	\$ 1,170.8	\$ 1,114.0
Contract receivables – net	383.8	378.2
Total long-term finance and contract receivables – net	\$ 1,554.6	\$ 1,492.2

Long-term finance and contract receivables installments, net of unearned finance charges, as of 2022 and 2021 year end are scheduled as follows:

	2	022	2021					
(Amounts in millions)	Finance Receivables	Contract Receivables	Finance Receivables	Contract Receivables				
Due in Months:			-					
13 - 24	\$ 441.6	\$ 92.6	\$ 428.1	\$ 91.7				
25 - 36	374.3	80.1	361.3	81.3				
37 - 48	256.2	67.5	246.2	66.6				
49 - 60	135.8	53.9	119.8	52.2				
Thereafter	4.2	94.6	4.1	92.7				
Total	\$ 1,212.1	\$ 388.7	\$ 1,159.5	\$ 384.5				

Credit quality: The company's receivable portfolio is comprised of two portfolio segments, finance and contract receivables, which are the same segments used to estimate expected credit losses reported in the allowances for credit losses. The amortized cost basis for finance and contract receivables is the amount originated adjusted for applicable accrued interest and net of deferred fees or costs, collection of cash, and write-offs. The company monitors and assesses credit risk based on the characteristics of each portfolio segment.

When extending credit, Snap-on evaluates the collectability of the receivables based on a combination of various financial and qualitative factors that may affect a customer's ability to pay. These factors may include the customer's financial condition, past payment experience, and credit bureau and proprietary Snap-on credit model information, as well as the value of the underlying collateral.

For finance and contract receivables, Snap-on assesses quantitative and qualitative factors through the use of credit quality indicators consisting primarily of collection experience and related internal metrics. Delinquency is the primary indicator of credit quality for finance and contract receivables. Snap-on conducts monthly reviews of credit and collection performance for both the finance and contract receivable portfolios focusing on data such as delinquency trends, nonaccrual receivables, and write-off and recovery activity. These reviews allow for the formulation of collection strategies and potential collection policy modifications in response to changing risk profiles in the finance and contract receivable portfolios. The other internal metrics include credit exposure by customer and delinquency classification to further monitor changing risk profiles. The company maintains a system that aggregates credit exposure and provides delinquency data by days past due aging categories. A receivable 30 days or more past due is considered delinquent. However, customers are monitored prior to becoming 30 days past due.

The amortized cost basis of finance and contract receivables by origination year as of 2022 year end is as follows:

(Amounts in millions)	2022	2021	2020	2019	2018		Prior		Total
Finance Receivables:									
Delinquent	\$ 16.3	\$ 14.9	\$ 9.5	\$ 4.2	\$ 2.1	\$	0.9	\$	47.9
Non-delinquent	1,175.9	342.6	156.2	53.2	15.4		2.7		1,746.0
Total Finance receivables	\$ 1,192.2	\$ 357.5	\$ 165.7	\$ 57.4	\$ 17.5	\$	3.6	\$	1,793.9
Contract receivables:									
Delinquent	\$ 0.7	\$ 0.9	\$ 1.1	\$ 0.6	\$ 0.2	\$	0.2	\$	3.7
Non-delinquent	177.4	118.5	84.0	56.9	32.9		26.9		496.6
Total Contract receivables	\$ 178.1	\$ 119.4	\$ 85.1	\$ 57.5	\$ 33.1	\$	27.1	\$	500.3

Allowances for credit losses: The allowances for credit losses are maintained at levels that are considered adequate to cover expected credit losses over the remaining contractual life of the receivables using historical loss experience, asset specific risk characteristics, current conditions, reasonable and supportable forecasts, and an appropriate reversion period, when applicable. Management performs detailed reviews of its receivables on a monthly and/or quarterly basis to assess the adequacy of the allowances and to determine if any impairment has occurred. A receivable generally has credit losses when it is expected that all amounts related to the receivable will not be collected according to the contractual terms of the agreement. Amounts determined to be uncollectable are charged directly against the allowances, while amounts recovered on previously written off accounts increase the allowances. For both finance and contract receivables, write-offs include the uncollectable principal amount of the receivable as well as the uncollectable accrued interest and fees, net of repossessions. For finance receivables only, write-offs are partially offset by recourse from franchisees. Recovered interest and fees previously written off are recorded through the allowances for credit losses and increase the allowances. Absent a repossession, finance receivables are typically written off when an account reaches 120 days past due. Repossessed accounts are typically written off within 60 days of asset repossession. Contract receivables related to equipment leases are generally written off when an account becomes 150 days past due, while contract receivables related to franchise finance and van leases are generally written off no later than when the receivable becomes 180 days past the asset return date. For finance and contract receivables, customer bankruptcies are generally written off upon notification that the associated debt is not being reaffirmed or, in any event, no later than when the receivable becomes 180 days past due. Changes to the allowances for credit losses are maintained through adjustments to the provisions for credit losses.

For finance receivables, the company uses a vintage loss rate methodology to determine expected losses. Vintage analysis aims to calculate losses based on the timing of the losses relative to the origination of the receivables. The finance receivable portfolio contains a substantial amount of homogeneous contracts which fits well with the vintage analysis.

For contract receivables the company primarily uses a WARM methodology. The WARM methodology calculates the average annual write-off rate and applies it to the remaining term of the receivables. The WARM methodology is used since the contract receivables have limited loss experience over generally longer terms and, therefore, the predictive loss patterns are more difficult to estimate.

The company performed a correlation analysis to compare historical losses to many economic factors. The primary economic factors considered were real gross domestic product, civilian unemployment, industrial production index, and repair and maintenance employment rate; the company determined that there is limited correlation between the historical losses and economic factors. As a result, consideration was given to qualitative factors to adjust the reserve balance for asset specific risk characteristics, current conditions and future expectations. Similar qualitative factors are considered for both finance and contract receivables. The qualitative factors used in determining the estimate of expected credit losses are influenced by the changes in the composition of the portfolio, underwriting practices, and other relevant conditions that were different from the historical periods.

The allowances for credit losses are adjusted each period for changes in the credit risk and expected lifetime credit losses. The following is a rollforward of the allowances for credit losses for finance and contract receivables for 2022 and 2021:

	 20	2021					
(Amounts in millions)	Finance Receivables				Finance ceivables	Contract Receivables	
Allowances for credit losses:							
Beginning of year	\$ 67.3	\$	8.4	\$	76.3	\$	9.0
Provision for credit losses	37.7		0.5		32.1		0.8
Charge-offs	(52.7)		(2.5)		(50.9)		(1.8)
Recoveries	8.9		0.3		9.8		0.4
Currency translation	(0.3)		(0.1)				
End of year	\$ 60.9	\$	6.6	\$	67.3	\$	8.4

Past due: Depending on the contract, payments for finance and contract receivables are due on a monthly or weekly basis. Weekly payments are converted into a monthly equivalent for purposes of calculating delinquency. Delinquencies are assessed at the end of each month following the monthly equivalent contractual payment due date. The entire receivable balance of a contract is considered delinquent when contractual payments become 30 days past due. Removal from delinquent status occurs when the cumulative amount of monthly contractual payments then due have been received by the company.

It is the general practice of Snap-on's financial services business not to engage in contract or loan modifications. In limited instances, Snap-on's financial services business may modify certain receivables in troubled debt restructurings. The amount and number of restructured finance and contract receivables as of 2022 and 2021 year end were immaterial to both the financial services portfolio and the company's results of operations and financial position.

The aging of finance and contract receivables as of 2022 and 2021 year end is as follows:

(Amounts in millions)	30-59 nys Past Due	60-90 ays Past Due	7	Greater Γhan 90 Pays Past Due	T	otal Past Due	Т	otal Not Past Due	Total		Steater Than 90 ays Past Oue and Accruing
2022 year end:											
Finance receivables	\$ 17.2	\$ 11.2	\$	19.5	\$	47.9	\$	1,746.0	\$ 1,793.9	\$	16.5
Contract receivables	1.2	0.3		2.2		3.7		496.6	500.3		0.3
2021 year end:											
Finance receivables	\$ 16.0	\$ 10.5	\$	18.0	\$	44.5	\$	1,679.1	\$ 1,723.6	\$	16.0
Contract receivables	1.7	0.9		0.9		3.5		493.5	497.0		0.1

Nonaccrual: SOC maintains the accrual of interest income during the progression through the various stages of delinquency prior to processing for write-off. At the time of write-off, the entire balance including the accrued but unpaid interest income amount is recorded as a loss.

Finance receivables are generally placed on nonaccrual status (nonaccrual of interest and other fees): (i) when a customer is placed on repossession status; (ii) upon receipt of notification of bankruptcy; (iii) upon notification of the death of a customer; or (iv) in other instances in which management concludes collectability is not reasonably assured.

Contract receivables are generally placed on nonaccrual status: (i) when a receivable is more than 90 days past due or at the point a customer's account is placed on terminated status regardless of its delinquency status; (ii) upon notification of the death of a customer; or (iii) in other instances in which management concludes collectability is not reasonably assured.

The accrual of interest and other fees is resumed when the finance or contract receivable becomes contractually current and collection of all remaining contractual amounts due is reasonably assured. A receivable may have credit losses when it is expected that all amounts related to the receivable will not be collected according to the contractual terms of the applicable agreement. Such finance and contract receivables are covered by the company's respective allowances for credit losses and are written off against the allowances when appropriate.

The amount of finance and contract receivables on nonaccrual status as of 2022 and 2021 year end is as follows:

(Amounts in millions)	20)22	2021		
Finance receivables	\$	8.7 \$	7.7		
Contract receivables		3.3	2.7		

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Note 5: Inventories

Inventories by major classification as of 2022 and 2021 year end are as follows:

(Amounts in millions)		2022	2021
Finished goods	\$	882.2	\$ 686.5
Work in progress		77.2	64.3
Raw materials		182.3	140.2
Total FIFO value	'	1,141.7	891.0
Excess of current cost over LIFO cost		(108.6)	 (87.2)
Total inventories – net	\$	1,033.1	\$ 803.8

Inventories accounted for using the FIFO method approximated 61% and 60% of total inventories as of 2022 and 2021 year end, respectively. The company accounts for its non-U.S. inventory on the FIFO method. As of 2022 year end, approximately 38% of the company's U.S. inventory was accounted for using the FIFO method and 62% was accounted for using the LIFO method. There were no LIFO inventory liquidations in 2022, 2021 or 2020.

Note 6: Property and Equipment

Property and equipment (which are carried at cost) as of 2022 and 2021 year end are as follows:

(Amounts in millions)	2022			2021
Land	\$	32.6	\$	33.8
Buildings and improvements		434.7		434.4
Machinery, equipment and computer software		1,069.3		1,059.2
Property and equipment – gross		1,536.6		1,527.4
Accumulated depreciation and amortization		(1,024.0)		(1,009.2)
Property and equipment – net	\$	512.6	\$	518.2

The estimated service lives of property and equipment are principally as follows:

Buildings and improvements

Machinery, equipment and computer software

3 to 50 years 2 to 15 years

Depreciation expense was \$71.5 million, \$75.6 million and \$73.3 million in 2022, 2021 and 2020, respectively.

Note 7: Goodwill and Other Intangible Assets

The changes in the carrying amount of goodwill by segment for 2022 and 2021 are as follows:

(Amounts in millions)	&	ommercial Industrial Group	Snap-on Tools Group				Total
Balance as of 2020 year end	\$	331.2	\$ 12.4	\$	638.8	\$	982.4
Currency translation		(19.4)			(11.3)		(30.7)
Acquisition adjustments		14.0	 		150.8		164.8
Balance as of 2021 year end	\$	325.8	\$ 12.4	\$	778.3	\$	1,116.5
Currency translation		(22.4)			(15.7)		(38.1)
Acquisition adjustments		(0.5)			(32.6)		(33.1)
Balance as of 2022 year end	\$	302.9	\$ 12.4	\$	730.0	\$	1,045.3

Goodwill of \$1,045.3 million as of 2022 year end included \$118.2 million from the acquisition of Dealer-FX, \$10.2 million from the acquisition of Pradines and \$3.3 million from the acquisition of AutoCrib Germany. The goodwill from Dealer-FX is included in the Repair Systems & Information Group and the goodwill from AutoCrib Germany and Pradines is included in the Commercial & Industrial Group.

The purchase accounting valuations for the acquired net assets of AutoCrib Germany, Dealer-FX and Pradines were completed in 2022. The purchase accounting valuations for the acquired net assets of Dealer-FX resulted in a reduction of goodwill of \$32.6 million from 2021 year end. The purchase accounting valuations for the acquired net assets of Pradines resulted in a reduction of goodwill of \$0.5 million from 2021 year end.

See Note 3 for additional information on acquisitions.

Additional disclosures related to other intangible assets as of 2022 and 2021 year end are as follows:

				2022			2021							
(Amounts in millions)	Gross Carrying Value		Accumulated Amortization		Net Carrying Value		Gross Carrying Value		Accumulated Amortization		Car	Net rying Value		
Amortized other intangible assets:				_						_				
Customer relationships	\$	212.1	\$	(150.8)	\$	61.3	\$	217.8	\$	(142.1)	\$	75.7		
Developed technology		35.8		(26.0)		9.8		36.6		(23.2)		13.4		
Internally developed software		179.6		(137.2)		42.4		182.7		(139.1)		43.6		
Patents		48.4		(25.6)		22.8		45.7		(25.1)		20.6		
Trademarks		3.9		(2.4)		1.5		3.9		(2.3)		1.6		
Other		7.7		(4.0)		3.7		8.3		(4.1)		4.2		
Total		487.5		(346.0)		141.5		495.0		(335.9)		159.1		
Non-amortized trademarks		134.1				134.1		142.6				142.6		
Total other intangible assets	\$	621.6	\$	(346.0)	\$	275.6	\$	637.6	\$	(335.9)	\$	301.7		

Provision for impairment of goodwill and/or other intangible assets could arise in a future period due to significant and unanticipated changes in circumstances, such as declines in profitability and cash flow due to long-term deterioration in macroeconomic, industry and market conditions, the loss of key customers, changes in technology or markets, changes in key personnel or litigation, a sustained decrease in share price and/or other events. As of 2022 year end, the company had no accumulated impairment losses.

The weighted-average amortization periods related to other intangible assets are as follows:

	In Years
Customer relationships	14
Developed technology	5
Internally developed software	6
Patents	14
Trademarks	9
Other	39

The weighted-average amortization period for all amortizable intangibles on a combined basis is 12 years. Intangible asset renewal costs are expensed as incurred.

The aggregate amortization expense was \$28.7 million in 2022, \$29.2 million in 2021 and \$23.4 million in 2020. Based on current levels of amortizable intangible assets and estimated weighted-average useful lives, estimated annual amortization expense is expected to be \$26.6 million in 2023, \$20.7 million in 2024, \$14.8 million in 2025, \$11.3 million in 2026, and \$10.0 million in 2027.

Note 8: Exit and Disposal Activities

Snap-on did not record any costs for exit and disposal activities during fiscal 2022 or fiscal 2021.

Snap-on's exit and disposal accrual activity for 2022 and 2021 are as follows:

	Balar	Balance at Balance at								Balance at			
(Amounts in millions)		20 End		vision 2021		age in		2021 ear End	vision 2022	sage in 2022		22 End	
Severance costs:								W Dit	 	 			
Commercial & Industrial Group	\$	5.8	\$		\$	(1.5)	\$	4.3	\$ 	\$ (2.7)	\$	1.6	
Snap-on Tools Group		0.4				(0.1)		0.3	_	(0.2)		0.1	
Repair System & Information Group		3.8				(1.4)		2.4		(1.3)		1.1	
Total	\$	10.0	\$		\$	(3.0)	\$	7.0	\$ 	\$ (4.2)	\$	2.8	

As of December 31, 2022, the company expects that approximately \$1.9 million of the \$2.8 million exit and disposal accrual will be utilized in 2023, and the remainder thereafter, primarily for longer-term severance payments.

Snap-on expects to fund the remaining cash requirements of its exit and disposal activities with available cash on hand, cash flows from operating activities and borrowings under the company's existing credit facilities. The estimated costs for the exit and disposal activities were based on management's best business judgement under prevailing circumstances.

2022

2021

2020

Note 9: Income Taxes

(Amounts in millions)

The source of earnings before income taxes and equity earnings consisted of the following:

United States	\$	1,028.7	\$	911.4	\$ 715.9
Foreign		173.9		175.5	119.3
Total	\$	1,202.6	\$	1,086.9	\$ 835.2
The provision (benefit) for income taxes consisted of the following:					
(Amounts in millions)	2022			2021	2020
Current:					
Federal	\$	185.4	\$	152.9	\$ 136.8
Foreign		45.2		48.2	29.9
State		48.4		37.5	30.6
Total current		279.0		238.6	197.3
Deferred:					
Federal		(8.5)		6.1	(10.0)
Foreign		(2.1)		(0.3)	3.0
State		0.3		2.6	(1.2)
Total deferred		(10.3)		8.4	(8.2)
Total income tax provision	\$	268.7	\$	247.0	\$ 189.1

The following is a reconciliation of the statutory federal income tax rate to Snap-on's effective tax rate:

	2022	2021	2020
Statutory federal income tax rate	21.0%	21.0%	21.0%
Increase (decrease) in tax rate resulting from:			
State income taxes, net of federal benefit	3.0	2.8	2.9
Noncontrolling interests	(0.4)	(0.4)	(0.5)
Repatriation of foreign earnings	(0.3)	(0.5)	(0.7)
Change in valuation allowance for deferred tax assets	0.3	0.2	0.5
Adjustments to tax accruals and reserves	(0.7)	0.3	(0.5)
Foreign rate differences	0.4	0.5	0.5
Excess tax benefits related to equity compensation	(0.5)	(1.0)	(0.5)
Other	(0.5)	(0.2)	(0.1)
Effective tax rate	22.3%	22.7%	22.6%

Snap-on's effective income tax rate on earnings attributable to Snap-on Incorporated was 22.8% in 2022, 23.2% in 2021, and 23.2% in 2020.

Temporary differences that give rise to the net deferred income tax liability as of 2022, 2021 and 2020 year end are as follows:

(Amounts in millions)	2022		2021	2020
Deferred income tax assets (liabilities):				
Inventories	\$	34.0 \$	37.5	\$ 41.4
Accruals not currently deductible		66.9	77.6	75.1
Tax credit carryforward		4.2	1.2	2.4
Employee benefits		16.7	6.4	32.4
Net operating losses		47.9	35.0	37.1
Depreciation and amortization		(170.1)	(213.2)	(192.0)
Valuation allowance		(23.5)	(24.5)	(26.7)
Equity-based compensation		14.7	13.1	14.3
Undistributed non-U.S. earnings		(4.2)	(4.4)	(5.4)
Other		1.3	(1.9)	1.3
Net deferred income tax liability	\$	(12.1) \$	(73.2)	\$ (20.1)

As of 2022 year end, Snap-on had tax net operating loss carryforwards totaling \$190.1 million as follows:

(Amounts in millions)	State		Federal	Foreign	Total	
Year of expiration:			_			
2023-2027	\$	0.3	\$ 	\$ 38.2	\$	38.5
2028-2032		11.8		17.5		29.3
2033-2037		_		15.4		15.4
2038-2042		_		60.7		60.7
2043-2047		_		9.3		9.3
Indefinite		_	 	36.9		36.9
Total net operating loss carryforwards	\$	12.1	\$ _	\$ 178.0	\$	190.1

A valuation allowance totaling \$23.5 million, \$24.5 million and \$26.7 million as of 2022, 2021 and 2020 year end, respectively, has been established for deferred income tax assets primarily related to certain subsidiary loss carryforwards that may not be realized. Realization of the net deferred income tax assets is dependent on generating sufficient taxable income prior to their expiration. Although realization is not assured, management believes it is more-likely-than-not that the net deferred income tax assets will be realized. The amount of the net deferred income tax assets considered realizable, however, could change in the near term if estimates of future taxable income during the carryforward period fluctuate.

The following is a reconciliation of the beginning and ending amounts of unrecognized tax benefits for 2022, 2021 and 2020:

2	2022	2021	2020
\$	8.9	\$ 9.1	\$ 10.3
	_	0.4	0.4
	(0.3)	(0.4)	_
	0.6	0.4	0.4
	(3.0)		(1.4)
	(0.6)	(0.6)	(0.6)
\$	5.6	\$ 8.9	\$ 9.1
	\$	(0.3) 0.6 (3.0) (0.6)	\$ 8.9 \$ 9.1 - 0.4 (0.3) (0.4) 0.6 0.4 (3.0) - (0.6) (0.6)

The unrecognized tax benefits of \$5.6 million, \$8.9 million and \$9.1 million as of 2022, 2021 and 2020 year end, respectively, would impact the effective income tax rate if recognized. As of December 31, 2022, unrecognized tax benefits of \$1.2 million and \$4.4 million were included in "Deferred income tax assets" and "Other long-term liabilities," respectively, on the accompanying Consolidated Balance Sheets. Interest and penalties related to unrecognized tax benefits are recorded in income tax expense. As of 2022, 2021 and 2020 year end, the company had provided for \$0.9 million, \$1.4 million and \$1.1 million, respectively, of accrued interest and penalties related to unrecognized tax benefits. As of December 31, 2022, \$0.9 million of accrued interest and penalties were included in "Other long-term liabilities" on the accompanying Consolidated Balance Sheets.

Snap-on and its subsidiaries file income tax returns in the United States and in various state, local and foreign jurisdictions. It is reasonably possible that certain unrecognized tax benefits may either be settled with taxing authorities or the statutes of limitations for such items may lapse within the next 12 months, causing Snap-on's gross unrecognized tax benefits to decrease by a range of zero to \$0.5 million. Over the next 12 months, Snap-on anticipates taking certain tax positions on various tax returns for which the related tax benefit does not meet the recognition threshold. Accordingly, Snap-on's gross unrecognized tax benefits may increase by a range of zero to \$0.7 million over the next 12 months for uncertain tax positions expected to be taken in future tax filings.

With few exceptions, Snap-on is no longer subject to U.S. federal and state/local income tax examinations by tax authorities for years prior to 2017, and Snap-on is no longer subject to non-U.S. income tax examinations by tax authorities for years prior to 2012.

In general, it is Snap-on's practice and intention to reinvest certain earnings of its non-U.S. subsidiaries in those operations. As of 2022 year end, the company has not made a provision for incremental U.S. income taxes or additional foreign withholding taxes on approximately \$416.4 million of such undistributed earnings that is deemed indefinitely reinvested. Determination of the amount of unrecognized deferred tax liability related to these earnings is not practicable. As a result of the Tax Act, which subjected the majority of the company's undistributed foreign earnings to taxation for the 2017 tax year, the company can now repatriate non-U.S. cash in a tax efficient manner. Accordingly, the company does not have an indefinitely reinvested assertion on the majority of undistributed earnings for its non-U.S. subsidiaries and has recorded a deferred tax liability of \$4.2 million for the incremental tax costs associated with the future potential repatriation of such earnings.

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Note 10: Short-term and Long-term Debt

Short-term and long-term debt as of 2022 and 2021 year end consisted of the following:

(Amounts in millions)	2022	2021
3.25% unsecured notes due 2027	300.0	300.0
4.10% unsecured notes due 2048	400.0	400.0
3.10% unsecured notes due 2050	500.0	500.0
Other debt*	1.0	0.3
	1,201.0	1,200.3
Less: notes payable	(17.2)	(17.4)
Total long-term debt	\$ 1,183.8	\$ 1,182.9

^{*} Includes unamortized debt issuance costs.

Snap-on's long-term debt and notes payable have no annual maturities in the next four years and \$300.0 million matures in 2027.

Average notes payable outstanding were \$18.6 million and \$16.7 million in 2022 and 2021, respectively. The 2022 weighted-average interest rate on such borrowings of 9.93% compared with 8.39% in 2021. At 2022 year end, the weighted-average rate on outstanding notes payable of 10.89% compared with 8.39% in 2021. The 2022 year-end rate increased primarily due to higher rates on local borrowings in emerging markets.

On April 27, 2020, Snap-on sold, at a discount, \$500 million of unsecured 3.10% notes that mature on May 1, 2050 (the "2050 Notes"). Interest on the 2050 Notes accrues at a rate of 3.10% and is paid semi-annually. Snap-on used the \$489.9 million net proceeds from the sale of the 2050 Notes, reflecting \$4.4 million of transaction costs, for general corporate purposes, which included working capital, capital expenditures and acquisitions.

Snap-on has an \$800 million multi-currency revolving credit facility that terminates on September 16, 2024 (the "Credit Facility"); no amounts were borrowed or outstanding under the Credit Facility during the year ended and as of December 31, 2022 or January 1, 2022. Borrowings under the Credit Facility bear interest at varying rates based on either: (i) Snap-on's thencurrent, long-term debt ratings; or (ii) Snap-on's then-current ratio of consolidated debt net of certain cash adjustments ("Consolidated Net Debt") to earnings before interest, taxes, depreciation, amortization and certain other adjustments for the preceding four fiscal quarters then ended (the "Consolidated Net Debt to EBITDA Ratio"). The Credit Facility's financial covenant requires that Snap-on maintain, as of each fiscal quarter end, either (i) a ratio not greater than 0.60 to 1.00 of Consolidated Net Debt to the sum of Consolidated Net Debt plus total equity and less accumulated other comprehensive income or loss (the "Leverage Ratio"); or (ii) a Consolidated Net Debt to EBITDA Ratio not greater than 3.50 to 1.00. Snap-on may, up to two times during any five-year period during the term of the Credit Facility (including any extensions thereof), elect to increase the maximum Leverage Ratio to 0.65 to 1.00 and/or increase the maximum Consolidated Net Debt to EBITDA Ratio to 4.00 to 1.00 for four consecutive fiscal quarters in connection with certain material acquisitions (as defined in the related credit agreement). As of December 31, 2022, the company's actual ratios of 0.09 and 0.37 respectively, were both within the permitted ranges set forth in this financial covenant. Snap-on generally issues commercial paper to fund its financing needs on a short-term basis and uses the Credit Facility as back-up liquidity to support such commercial paper issuances. There was no commercial paper issued or outstanding during the year ended and as of December 31, 2022 or January 1, 2022.

Note 11: Financial Instruments

Derivatives: All derivative instruments are reported in the Consolidated Financial Statements at fair value. Changes in the fair value of derivatives are recorded each period in earnings or on the accompanying Consolidated Balance Sheets, depending on whether the derivative is designated and effective as part of a hedged transaction. Gains or losses on derivative instruments recorded in earnings are presented in the same Consolidated Statement of Earnings line that is used to present the earnings effect of the hedged item. Gains or losses on derivative instruments in accumulated other comprehensive income (loss) ("Accumulated OCI") are reclassified to earnings in the period in which earnings are affected by the underlying hedged item.

The criteria used to determine if hedge accounting treatment is appropriate are: (i) the designation of the hedge to an underlying exposure; (ii) whether or not overall risk is being reduced; and (iii) if there is a correlation between the value of the derivative instrument and the underlying hedged item. Once a derivative contract is entered into, Snap-on designates the derivative as a fair value hedge, a cash flow hedge, a hedge of a net investment in a foreign operation, or a natural hedging instrument whose change in fair value is recognized as an economic hedge against changes in the value of the hedged item. Snap-on does not use derivative instruments for speculative or trading purposes.

Snap-on is exposed to global market risks, including the effects of changes in foreign currency exchange rates, interest rates, and the company's stock price. The company uses derivatives to manage financial exposures that occur in the normal course of business. The primary risks managed by using derivative instruments are foreign currency risk, interest rate risk and stock-based deferred compensation risk.

Foreign currency risk management: Snap-on has significant international operations and is subject to certain risks inherent with foreign operations that include currency fluctuations. Foreign currency exchange risk exists to the extent that Snap-on has payment obligations or receipts denominated in currencies other than the functional currency, including intercompany loans denominated in foreign currencies. To manage these exposures, Snap-on identifies naturally offsetting positions and then purchases hedging instruments to protect the residual net exposures. Snap-on manages most of these exposures on a consolidated basis, which allows for netting of certain exposures to take advantage of natural offsets. Foreign currency forward contracts ("foreign currency forwards") are used to hedge the net exposures. Gains or losses on net foreign currency hedges are intended to offset losses or gains on the underlying net exposures in an effort to reduce the earnings volatility resulting from fluctuating foreign currency exchange rates. Snap-on's foreign currency forwards are typically not designated as hedges. The fair value changes of these contracts are reported in earnings as foreign exchange gain or loss, which is included in "Other income (expense) - net" on the accompanying Consolidated Statements of Earnings. See Note 18 for additional information on Other income (expense) - net.

As of 2022 year end, Snap-on had \$92.7 million of net foreign currency forward sell contracts outstanding comprised of sell contracts including \$250.0 million in Canadian dollars, \$39.2 million in euros, \$8.5 million in Hungarian forints, \$5.4 million in Indian rupees, and \$3.9 million in other currencies, and buy contracts comprised of \$72.0 million in British pounds, \$41.3 million in Swedish kronor, \$36.5 million in Hong Kong dollars, \$26.8 million in Chinese renminbi, \$16.0 million in Singapore dollars, \$6.7 million in Australian dollars, \$5.9 million in Norwegian kroner, \$4.7 million in Danish kroner, and \$4.4 million in other currencies. As of 2021 year end, Snap-on had \$81.3 million of net foreign currency forward sell contracts outstanding comprised of sell contracts including \$290.0 million in Canadian dollars, \$10.3 million in euros, \$8.1 million in Indian rupees, \$6.3 million in Hungarian forints, and \$4.5 million in other currencies, and buy contracts comprised of \$79.6 million in British pounds, \$48.4 million in Swedish kronor, \$31.0 million in Chinese renminbi, \$30.0 million in Hong Kong dollars, \$14.3 million in Australian dollars, \$14.2 million in Singapore dollars, \$7.2 million in Norwegian kroner, \$4.9 million in Danish kroner, and \$8.3 million in other currencies.

Interest rate risk management: Snap-on may manage the exposure created by the differing maturities and interest rate structures of Snap-on's borrowings through the use of interest rate swap agreements ("interest rate swaps") and treasury lock agreements ("treasury locks").

Interest rate swaps: Snap-on may enter into interest rate swaps to manage risks associated with changing interest rates related to the company's fixed rate borrowings. Interest rate swaps are accounted for as fair value hedges. The differentials paid or received on interest rate swaps are recognized as adjustments to "Interest expense" on the accompanying Consolidated Statements of Earnings. The change in the fair value of the derivative is recorded in "Long-term debt" on the accompanying Consolidated Balance Sheets. There were no outstanding interest rate swaps as of both 2022 and 2021 year end.

Treasury locks: Snap-on may use treasury locks to manage the potential change in interest rates in anticipation of the issuance of fixed rate debt. Treasury locks are accounted for as cash flow hedges. The differentials to be paid or received on treasury locks related to the anticipated issuance of fixed rate debt are initially recorded in Accumulated OCI for derivative instruments that are designated and qualify as cash flow hedges. Upon the issuance of debt, the related amount in Accumulated OCI is released over the term of the debt and recognized as an adjustment to interest expense on the Consolidated Statements of Earnings. There were no treasury locks outstanding as of both 2022 and 2021 year end. See Note 18 for additional information on Other income (expense) - net.

Stock-based deferred compensation risk management: Snap-on manages market risk associated with the stock-based portion of its deferred compensation plans through the use of prepaid equity forward agreements ("equity forwards"). Equity forwards are used to aid in offsetting the potential mark-to-market effect on stock-based deferred compensation from changes in Snap-on's stock price. Since stock-based deferred compensation liabilities increase as the company's stock price rises and decrease as the company's stock price declines, the equity forwards are intended to mitigate the potential impact on deferred compensation expense that may result from such mark-to-market changes. As of 2022 and 2021 year end, Snap-on had equity forwards in place intended to manage market risk with respect to 64,900 shares and 72,100 shares, respectively, of Snap-on common stock associated with its deferred compensation plans.

Counterparty risk: Snap-on is exposed to credit losses in the event of non-performance by the counterparties to its various financial agreements, including its foreign currency forward contracts, interest rate swap agreements, treasury lock agreements and prepaid equity forward agreements. Snap-on does not obtain collateral or other security to support financial instruments subject to credit risk, but monitors the credit standing of the counterparties and generally enters into agreements with financial institution counterparties with a credit rating of A- or better. Snap-on does not anticipate non-performance by its counterparties, but cannot provide assurances.

Fair value measurements: The fair value measurement hierarchy prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority ("Level 1") to unadjusted quoted prices in active markets for identical assets and liabilities and the lowest priority ("Level 3") to unobservable inputs. Fair value measurements primarily based on observable market information are given a "Level 2" priority.

Snap-on has derivative assets and liabilities related to treasury locks, foreign currency forwards and equity forwards that are measured at Level 2 fair value on a recurring basis. The fair values of derivative instruments included within the accompanying Consolidated Balance Sheets as of 2022 and 2021 year end are as follows:

			2022			2021			
(Amounts in millions)	Balance Sheet Presentation		erivative Assets air Value		Derivative Liability air Value	Derivative Assets Fair Value]	Perivative Liability air Value
Derivatives not designated as hedging instruments:									
Foreign currency forwards	Prepaid expenses and other assets	\$	18.5	\$	_	\$	10.2	\$	_
Foreign currency forwards	Other accrued liabilities		_		16.9		_		5.3
Equity forwards	Prepaid expenses and other assets		14.8				15.5		
Total derivative instruments		\$	33.3	\$	16.9	\$	25.7	\$	5.3

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 participants at the measurement date. Level 2 fair value measurements for derivative assets and liabilities are measured using quoted prices in active markets for similar assets and liabilities. Interest rate swaps are valued based on the six-month LIBOR swap rate for similar instruments. Foreign currency forwards are valued based on exchange rates quoted by domestic and foreign banks for similar instruments. Equity forwards are valued using a market approach based primarily on the company's stock price at the reporting date. The company did not have any derivative assets or liabilities measured at Level 1 or Level 3, nor did it implement any changes in its valuation techniques in 2022 and 2021, respectively.

The effect of derivative instruments designated as cash flow hedges as included in the Accumulated OCI on the Consolidated Balance Sheets is as follows:

(Amounts in millions)	Amount of Gain (Loss) Recognized in Other Comprehensive Income on Derivative Instruments									
	2022		2021	2020						
Derivatives in Hedging Relationships:		-			_					
Treasury locks	\$	— \$		\$	1.4					

The effect of derivative instruments designated as fair value and cash flow hedges as included in the Consolidated Statements of Earnings is as follows:

and Cash Flow Hedging Relationships 2022 2021 2020 Other Other Other income income income Interest (expense) Interest (expense) Interest (expense) expense - net expense - net expense - net

8.7

Gain (Loss) Recognized in Income on Fair Value

Total amounts of income and expense presented in the Consolidated Statements of						
<u>*-</u>	\$ (47.1) \$	42.5	\$ (53.1) \$	16.5	\$ (54.0) \$	8

Gain (loss) on fair value hedging relationships:

(Amounts in millions)

Interest rate swaps						
Long-term debt	\$ \$	\$	(10.2) \$	\$	(15.7) \$	_
Derivatives designated as hedging instruments	_	_	2.7	_	3.9	

Gain on cash flow hedging relationships:

Treasury locks

Gain realessified from accumulated

Gain reclassified from accumulated OCI into income \$ 1.6 \$ — \$ 1.6 \$ — \$ 1.6 \$ —

During the next 12 months, Snap-on expects to reclassify into earnings net gains from Accumulated OCI of approximately \$1.2 million after tax at the time the underlying hedge transactions are realized.

The effects of derivative instruments not designated as hedging instruments as included in the Consolidated Statements of Earnings are as follows:

	Statement of Earnings Presentation	Gain (Loss) Recognized in Income on Derivatives					
(Amounts in millions)			2022		2021		2020
Gain (loss) on derivative relationships:							
Foreign currency forwards	Other income (expense) – net	\$	(17.6)	\$	(10.8)	\$	(6.6)
Net exposures	Other income (expense) – net		10.1		9.6		2.7
Equity forwards	Operating expenses	\$	1.4	\$	4.1	\$	1.0
Stock-based deferred compensation liabilities	Operating expenses		(1.4)		(4.3)		(1.2)

Snap-on's foreign currency forwards are typically not designated as hedges for financial reporting purposes. The fair value changes of foreign currency forwards not designated as hedging instruments are reported in earnings as foreign exchange gain or loss in "Other income (expense) – net" on the accompanying Consolidated Statements of Earnings. See Note 18 for additional information on "Other income (expense) – net."

Snap-on's equity forwards are not designated as hedges for financial reporting purposes. Fair value changes of both the equity forwards and related stock-based (mark-to-market) deferred compensation liabilities are reported in "Operating expenses" on the accompanying Consolidated Statements of Earnings.

Fair value of financial instruments: The fair values of financial instruments that do not approximate the carrying values in the financial statements as of 2022 and 2021 year end are as follows:

		2022				2021			
(Amounts in millions)		Carrying Value		Fair Value		Carrying Value		Fair Value	
Finance receivables – net	\$	1,733.0	\$	1,983.9	\$	1,656.3	\$	1,988.6	
Contract receivables - net		493.7		520.4		488.6		542.5	
Long-term debt and notes payable		1,201.0		982.1		1,200.3		1,339.7	

The following methods and assumptions are used in estimating the fair value of financial instruments:

- Finance and contract receivables include both short-term and long-term receivables. The fair value estimates of finance and contract receivables are derived utilizing discounted cash flow analyses performed on groupings of receivables that are similar in terms of loan type and characteristics. The cash flow analyses consider recent prepayment trends where applicable. The cash flows are discounted over the average life of the receivables using a current market discount rate of a similar term adjusted for credit quality. Significant inputs to the fair value measurements of the receivables are unobservable and, as such, are classified as Level 3.
- Fair value of long-term debt is estimated, using Level 2 fair value measurements, based on quoted market values of Snap-on's publicly traded senior debt. The carrying value of long-term debt includes unamortized debt issuance costs. The fair value of notes payable approximates such instruments' carrying value due to their short-term nature.
- The fair value of all other financial instruments, including trade and other accounts receivable, accounts payable and other financial instruments, approximates such instruments' carrying value due to their short-term nature.

Note 12: Pension Plans

Snap-on has several non-contributory defined benefit pension plans covering most U.S. employees and certain employees in foreign countries. Snap-on also has foreign contributory defined benefit pension plans covering certain foreign employees. Retirement benefits are generally provided based on employees' years of service and average earnings or stated amounts for years of service. Normal retirement age is 65, with provisions for earlier retirement.

The status of Snap-on's pension plans as of 2022 and 2021 year end is as follows:

(Amounts in millions)	2022		2021	
Change in projected benefit obligation:		_	_	
Benefit obligation at beginning of year	\$	1,667.1	\$ 1,710.0	
Service cost		26.5	28.8	
Interest cost		44.4	42.3	
Plan participant contributions		0.4	0.5	
Benefits paid		(77.7)	(75.6)	
Actuarial gain		(382.4)	(30.2)	
Foreign currency impact		(23.7)	(8.7)	
Benefit obligation at end of year	\$	1,254.6	\$ 1,667.1	
Change in plan assets:				
Fair value of plan assets at beginning of year	\$	1,710.9	\$ 1,632.4	
Actual gain (loss) on plan assets		(384.1)	146.3	
Employer contributions		10.8	10.7	
Plan participant contributions		0.4	0.5	
Benefits paid		(77.7)	(75.6)	
Foreign currency impact		(18.6)	(3.4)	
Fair value of plan assets at end of year	\$	1,241.7	\$ 1,710.9	
Funded (unfunded) status at end of year	\$	(12.9)	\$ 43.8	

The decrease in the defined benefit pension plans benefit obligations in 2022 was primarily due to an increase in the discount rate in 2022 as compared to 2021.

Amounts recognized in the Consolidated Balance Sheets as of 2022 and 2021 year end are as follows:

(Amounts in millions)	202	22	2021
Pension assets	\$	70.6 \$	160.7
Accrued benefits		(4.9)	(12.0)
Pension liabilities		(78.6)	(104.9)
Net asset (liability)	\$	(12.9) \$	43.8

Amounts included in Accumulated OCI on the accompanying Consolidated Balance Sheets as of 2022 and 2021 year end are as follows:

(Amounts in millions)	 2022	 2021
Net loss, net of tax of \$88.8 million and \$68.1 million, respectively	\$ (269.0)	\$ (209.4)
Prior service cost, net of tax of \$0.2 million and \$0.2 million, respectively	 (0.5)	 (0.6)
Total amount included in Accumulated OCI	\$ (269.5)	\$ (210.0)

The accumulated benefit obligation for Snap-on's pension plans as of 2022 and 2021 year end was \$1,201.8 million and \$1,580.4 million, respectively.

The projected benefit obligation, accumulated benefit obligation and fair value of plan assets for Snap-on's pension plans as of 2022 and 2021 year end are as follows:

(Amounts in millions)	 2022	2021
Pension plans with accumulated benefit obligations in excess of plan assets:		
Accumulated benefit obligation	\$ 94.9	\$ 127.8
Fair value of plan assets	15.1	25.1
Pension plans with projected benefit obligations in excess of plans assets:		
Projected benefit obligation	\$ 98.6	\$ 280.4
Fair value of plan assets	15.1	163.5

The components of net periodic benefit cost and changes recognized in "Other comprehensive income (loss)" ("OCI") are as follows:

(Amounts in millions)	2022		 2021		2020	
Net periodic benefit cost:	'				_	
Service cost	\$	26.5	\$ 28.8	\$	27.0	
Interest cost		44.4	42.3		48.7	
Expected return on plan assets		(99.2)	(94.4)		(94.7)	
Amortization of unrecognized loss		18.0	36.3		34.5	
Amortization of prior service cost		0.1	0.1			
Net periodic benefit cost (credit)	\$	(10.2)	\$ 13.1	\$	15.5	
Changes in benefit obligations recognized in OCI, net of tax:						
Net (gain) loss	\$	59.6	\$ (92.8)	\$	(31.6)	
Prior service cost (credit)		(0.1)	 (0.1)		0.1	
Total recognized in OCI	\$	59.5	\$ (92.9)	\$	(31.5)	

The components of net periodic pension cost, other than the service cost component, are included in "Other income (expense) - net" on the accompanying Consolidated Statements of Earnings. See Note 18 for additional information on Other income (expense) - net.

The worldwide weighted-average assumptions used to determine Snap-on's full-year pension costs are as follows:

	2022	2021	2020
Discount rate	2.8%	2.5%	3.2%
Expected return on plan assets	6.2%	6.5%	7.0%
Rate of compensation increase	3.4%	3.4%	3.4%
Interest crediting rate - U.S. cash balance plan	3.8%	3.8%	3.8%

The worldwide weighted-average assumptions used to determine Snap-on's projected benefit obligation as of 2022 and 2021 year end are as follows:

	2022	2021
Discount rate	5.4%	2.8%
Rate of compensation increase	3.2%	3.4%
Interest crediting rate - U.S. cash balance plan	3.8%	3.8%

The objective of Snap-on's discount rate assumption is to reflect the rate at which the pension benefits could be effectively settled. In making this determination, the company takes into account the timing and amount of benefits that would be available under the plans. The domestic discount rate as of 2022 and 2021 year end was selected based on a cash flow matching methodology developed by the company's outside actuaries that incorporates a review of current economic conditions. This methodology matches the plans' yearly projected cash flows for benefits and service costs to those of hypothetical bond portfolios using high-quality, AA rated or better, corporate bonds from either Moody's Investors Service or Standard & Poor's credit rating agencies available at the measurement date. This technique calculates bond portfolios that produce adequate cash flows to pay the plans' projected yearly benefits and then selects the portfolio with the highest yield and uses that yield as the recommended discount rate.

The weighted-average discount rate for Snap-on's domestic pension plans of 5.5% represents the single rate that produces the same present value of cash flows as the estimated benefit plan payments. Lowering Snap-on's domestic discount rate assumption by 50 basis points (100 basis points ("bps") equals 1.0 percent) would have increased Snap-on's 2022 domestic pension expense and projected benefit obligation by approximately \$4.5 million and \$48.6 million, respectively. As of 2022 year end, Snap-on's domestic projected benefit obligation comprised approximately 85% of Snap-on's worldwide projected benefit obligation. The weighted-average discount rate for Snap-on's foreign pension plans of 4.8% represents the single rate that produces the same present value of cash flows as the estimated benefit plan payments. Lowering Snap-on's foreign discount rate assumption by 50 bps would have increased Snap-on's 2022 foreign pension expense and projected benefit obligation by approximately \$1.4 million and \$12.3 million, respectively.

Actuarial gains and losses in excess of 10 percent of the greater of the projected benefit obligation or market-related value of assets are amortized on a straight-line basis over the average remaining service period of active participants or over the average remaining life expectancy for plans with primarily inactive participants. Prior service costs and credits resulting from plan amendments are amortized in equal annual amounts over the average remaining service period of active participants or over the average remaining life expectancy for plans with primarily inactive participants.

As a practical expedient, Snap-on uses the calendar year end as the measurement date for its plans. Snap-on funds its pension plans as required by governmental regulation and may consider discretionary contributions as conditions warrant. Snap-on intends to make contributions of \$6.9 million to its foreign pension plans and \$2.4 million to its domestic pension plans in 2023, as required by law. Depending on market and other conditions, Snap-on may make discretionary cash contributions to its pension plans in 2023.

The following benefit payments, which reflect expected future service, are expected to be paid as follows:

(Amounts in millions)	Amount	
Year:		
2023	\$ 86	8.
2024	90	.6
2025	94	8.
2026	94	.6
2027	97	.5
2028-2032	497	.7

Snap-on's domestic pension plans have a long-term investment horizon and a total return strategy that emphasizes a capital growth objective. The long-term investment performance objective for Snap-on's domestic plans' assets is to achieve net of expense returns that meet or exceed the 7.5% domestic long-term return on plan assets assumption used for reporting purposes. Snap-on uses a three-year, market-related value asset method of amortizing the difference between actual and expected returns on its domestic plans' assets. As of 2022 year end, Snap-on's domestic pension plans' assets comprised approximately 87% of the company's worldwide pension plan assets.

The basis for determining the overall expected long-term return on plan assets assumption is a nominal returns forecasting method. For each asset class, future returns are estimated by identifying the premium of riskier asset classes over lower risk alternatives. The methodology constructs expected returns using a "building block" approach to the individual components of total return. These forecasts are stated in both nominal and real (after inflation) terms. This process first considers the long-term historical return premium based on the longest set of data available for each asset class. These premiums, which are calculated using the geometric mean, are then adjusted based on current relative valuation levels, macro-economic conditions, and the expected alpha related to active investment management. The asset return assumption is also adjusted by an implicit expense load for estimated administrative and investment-related expenses.

For risk and correlation assumptions, the actual experience for each asset class is reviewed for the longest time period available. Expected relationships for a 10 to 20 year time horizon are determined based upon historical results, with adjustments made for material changes.

Investments are diversified to attempt to minimize the risk of large losses. Since asset allocation is a key determinant of expected investment returns, assets are periodically rebalanced to the targeted allocation to correct significant deviations from the asset allocation policy that are caused by market fluctuations and cash flow. Asset/liability studies are conducted periodically to determine if any revisions to the strategic asset allocation policy are necessary.

Snap-on's domestic pension plans' target allocation and actual weighted-average asset allocation by asset category and fair value of plan assets as of 2022 and 2021 year end are as follows:

	Target	2022	2021
Asset category:			
Equity securities	49%	45%	52%
Debt securities and cash and cash equivalents	46%	47%	42%
Hedge funds	5%	8%	6%
Total	100%	100%	100%
Fair value of plan assets (Amounts in millions)		\$1,074.9	\$1,464.7

The fair value measurement hierarchy prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority (Level 1) to unadjusted quoted prices in active markets for identical assets and liabilities and the lowest priority (Level 3) to unobservable inputs. Fair value measurements primarily based on observable market information are given a Level 2 priority.

Certain equity and debt securities are valued at quoted per share or unit market prices for which an official close or last trade pricing on an active exchange is available and are categorized as Level 1 in the fair value hierarchy. If quoted market prices are not readily available for specific securities, values are estimated using quoted prices of securities with similar characteristics and are categorized as Level 2 in the fair value hierarchy. Insurance contracts are valued at the present value of the estimated future cash flows promised under the terms of the insurance contracts and are categorized as Level 2 in the fair value hierarchy.

Commingled equity securities and commingled multi-strategy funds are valued at the Net Asset Value ("NAV") per share or unit multiplied by the number of shares or units held as of the measurement date, as reported by the fund managers. The share or unit price is quoted on a private market and is based on the value of the underlying investments, which are primarily based on observable inputs; such investments that are measured at fair value using the NAV per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy.

Private equity partnership funds, hedge funds, and real estate and other real assets are valued at the NAV as reported by the fund managers. Private equity partnership funds, certain hedge funds, and certain real estate and other real assets are valued based on the proportionate interest or share of net assets held by the pension plan, which is based on the estimated fair market value of the underlying investments. Certain other hedge funds and real estate and other real assets are valued at the NAV per share or unit multiplied by the number of shares or units held as of the measurement date, based on the estimated value of the underlying investments as reported by the fund managers. These investments are measured at fair value using the NAV per share (or its equivalent) practical expedient and have not been classified in the fair value hierarchy.

The company regularly reviews fund performance directly with its investment advisor and the fund managers, and performs qualitative analysis to corroborate the reasonableness of the reported NAVs. For funds for which the company did not receive a year-end NAV, the company recorded an estimate of the change in fair value for the latest period based on return estimates and other fund activity obtained from the fund managers.

The columns labeled "Investments Measured at NAV" in the following tables reflect certain investments that are measured at fair value using the NAV per share (or its equivalent) practical expedient and have not been categorized in the fair value hierarchy. The fair value amounts presented in these tables are intended to permit a reconciliation of the fair value hierarchy to the pension plan assets.

The following is a summary, by asset category, of the fair value and the level within the fair value hierarchy of Snap-on's domestic pension plans' assets as of 2022 year end:

(Amounts in millions)	P Id	Quoted rices for dentical Assets evel 1)	Significant Other Observable Inputs (Level 2)	Investments Measured at NAV	Total
Asset category:					
Cash and cash equivalents	\$	14.3	\$ _	\$ —	\$ 14.3
Equity securities:					
Domestic		67.1	_	_	67.1
Foreign		39.2	_	_	39.2
Commingled funds – domestic		_		189.1	189.1
Commingled funds – foreign		_		180.6	180.6
Private equity partnerships		_		11.0	11.0
Debt securities:					
Government		158.7	6.0		164.7
Corporate bonds			319.7	_	319.7
Real estate and other real assets		_	_	2.5	2.5
Hedge funds		_	<u> </u>	86.7	 86.7
Total	\$	279.3	\$ 325.7	\$ 469.9	\$ 1,074.9

The following is a summary, by asset category, of the fair value and the level within the fair value hierarchy of Snap-on's domestic pension plans' assets as of 2021 year end:

		Quoted Prices for Identical		Significant Other Observable	Investments		
(Amounts in millions)		Assets (Level 1)		Inputs (Level 2)	Measured at NAV		Total
Asset category:	_	(Level 1)	_	(Level 2)			1000
Cash and cash equivalents	\$	23.7	¢		\$ —	\$	23.7
Equity securities:	Ф	23.1	Ф	_	Φ —	Ф	23.1
Domestic		109.4		_	_		109.4
Foreign		59.1		_			59.1
Commingled funds – domestic		_		_	311.7		311.7
Commingled funds – foreign		_		_	261.4		261.4
Private equity partnerships		_		_	14.5		14.5
Debt securities:							
Government		180.0		0.7			180.7
Corporate bonds				414.3			414.3
Real estate and other real assets					2.7		2.7
Hedge funds		_		<u> </u>	87.2		87.2
Total	\$	372.2	\$	415.0	\$ 677.5	\$	1,464.7

Snap-on's primary investment objective for its foreign pension plans' assets is to meet the projected obligations to the beneficiaries over a long period of time, and to do so in a manner that is consistent with the company's risk tolerance. The foreign asset allocation policies consider the company's financial strength and long-term asset class risk/return expectations, since the obligations are long term in nature. The company believes the foreign pension plans' assets, which are managed locally by professional investment firms, are well diversified.

The expected long-term rates of return on foreign plans' assets, which range from 2.2% to 6.9% as of 2022 year end, reflect management's expectations of long-term average rates of return on funds invested to provide benefits included in the plans' projected benefit obligation. The expected returns are based on outlooks for inflation, fixed income returns and equity returns, asset allocations and investment strategies. Differences between actual and expected returns on foreign pension plans' assets are recorded as an actuarial gain or loss and amortized accordingly.

Snap-on's foreign pension plans' target allocation and actual weighted-average asset allocation by asset category and fair value of plan assets as of 2022 and 2021 year end are as follows:

_	Target	2022	2021
Asset category:			
Equity securities*	40%	40%	43%
Debt securities* and cash and cash equivalents	49%	49%	45%
Insurance contracts and hedge funds	11%	11%	12%
Total	100%	100%	100%
•			
Fair value of plan assets (Amounts in millions)		\$166.8	\$246.2

^{*} Includes commingled funds - multi-strategy

The following is a summary, by asset category, of the fair value and the level within the fair value hierarchy of Snap-on's foreign pension plans' assets as of 2022 year end:

(Amounts in millions)	Quoted Prices for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)	Investments Measured at NAV	Total
Asset category:					
Cash and cash equivalents	\$ 0.5	5	\$ —	\$ —	\$ 0.5
Commingled funds – multi-strategy		-		113.4	113.4
Debt securities:					
Government	11.6	6			11.6
Corporate bonds		_	23.1		23.1
Insurance contracts			18.2		18.2
Total	\$ 12.1		\$ 41.3	\$ 113.4	\$ 166.8

The following is a summary, by asset category, of the fair value and the level within the fair value hierarchy of Snap-on's foreign pension plans' assets as of 2021 year end:

(Amounts in millions)	Quoted Prices for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Investments Measured at NAV	Total
Asset category:				
Cash and cash equivalents	\$ 1.8	\$ _	\$ _	\$ 1.8
Commingled funds – multi-strategy	_		172.5	172.5
Debt securities:				
Government	13.9	_	_	13.9
Corporate bonds	_	28.1	_	28.1
Insurance contracts	_	29.9	_	29.9
Total	\$ 15.7	\$ 58.0	\$ 172.5	\$ 246.2

Snap-on has several 401(k) plans covering certain U.S. employees. Snap-on's employer match to the 401(k) plans is made with cash contributions. For 2022, 2021 and 2020, Snap-on recognized \$11.8 million, \$11.3 million and \$10.3 million, respectively, of expense related to its 401(k) plans.

Note 13: Postretirement Plans

Snap-on provides health care benefits for certain retired U.S. employees. For comprehensive major medical plans since 1989, benefits are paid based on deductibles and percentages of covered expenses. Plan provisions allow for benefit and coverage changes. Most retirees are required to pay the entire cost of the coverage, but Snap-on may elect to subsidize the cost of coverage under certain circumstances. Additionally, certain eligible retirees have been provided with an account for the reimbursement of qualifying medical expenses during retirement. Upon achieving specific age and service requirements, certain active associates are eligible for this account upon retirement from the company.

Employees retiring prior to 1989 were eligible for retiree medical coverage upon reaching early retirement age, with no retiree contributions required. Benefits are paid based on deductibles and percentages of covered expenses and take into consideration payments made by Medicare and other insurance coverage.

Snap-on has a Voluntary Employees Beneficiary Association ("VEBA") trust for the funding of existing postretirement health care benefits for certain union retirees in the United States; all other retiree health care plans are unfunded.

The status of Snap-on's U.S. postretirement health care plans as of 2022 and 2021 year end is as follows:

(Amounts in millions)	 2022	2021
Change in accumulated postretirement benefit obligation:		_
Benefit obligation at beginning of year	\$ 47.5	\$ 50.6
Interest cost	1.2	1.1
Plan participant contributions	0.2	0.2
Benefits paid	(3.8)	(3.6)
Actuarial gain	 (7.8)	(0.8)
Benefit obligation at end of year	\$ 37.3	\$ 47.5
Change in plan assets:		
Fair value of plan assets at beginning of year	\$ 13.7	\$ 13.3
Actual gain (loss) on plan assets	(1.7)	1.1
Employer contributions	2.8	2.7
Plan participant contributions	0.2	0.2
Benefits paid	(3.8)	(3.6)
Fair value of plan assets at end of year	\$ 11.2	\$ 13.7
Unfunded status at end of year	\$ (26.1)	\$ (33.8)

Amounts recognized in the Consolidated Balance Sheets as of 2022 and 2021 year end are as follows:

(Amounts in millions)	 2022	2021
Accrued benefits	\$ (2.7)	\$ (2.7)
Retiree health care benefits	 (23.4)	(31.1)
Net liability	\$ (26.1)	\$ (33.8)

Amounts included in Accumulated OCI on the accompanying Consolidated Balance Sheets as of 2022 and 2021 year end are as follows:

(Amounts in millions)	 2022	 2021
Net gain, net of tax of \$2.2 million and \$0.8 million, respectively	\$ 6.4	\$ 2.3

The components of net periodic benefit cost and changes recognized in OCI are as follows:

(Amounts in millions)	2	2022	2021	2020
Net periodic benefit cost:				 _
Interest cost	\$	1.2	\$ 1.1	\$ 1.5
Expected return on plan assets		(0.6)	(0.6)	(0.6)
Net periodic benefit cost	\$	0.6	\$ 0.5	\$ 0.9
Changes in benefit obligations recognized in OCI, net of tax:				
Net (gain) loss	\$	(4.1)	\$ (1.0)	\$ 1.9

The components of net periodic postretirement health care cost, other than the service cost component, are included in "Other income (expense) - net" on the accompanying Consolidated Statements of Earnings. See Note 18 for additional information on Other income (expense) - net.

The weighted-average discount rate used to determine Snap-on's postretirement health care expense is as follows:

	2022	2021	2020
Discount rate	2.7%	2.3%	3.1%

The weighted-average discount rate used to determine Snap-on's accumulated benefit obligation is as follows:

	2022	2021
Discount rate	5.3%	2.7%

The methodology for selecting the year-end 2022 and 2021 weighted-average discount rate for the company's domestic postretirement plans was to match the plans' yearly projected cash flows for benefits and service costs to those of hypothetical bond portfolios using high-quality, AA rated or better, corporate bonds from either Moody's Investors Service or Standard & Poor's credit rating agencies available at the measurement date. As a practical expedient, Snap-on uses the calendar year end as the measurement date for its plans.

For 2023, the actuarial calculations assume a pre-65 health care cost trend rate of 6.1% and a post-65 health care cost trend rate of 6.0%, both decreasing gradually to 4.0% in 2046 and thereafter.

The following benefit payments, which reflect expected future service, are expected to be paid as follows:

(Amounts in millions)	Amount	
Year:		
2023	\$ 3.4	4
2024	3.4	4
2025	3.:	5
2026	3.:	5
2027	3.:	5
2028-2032	17	3

The objective of the VEBA trust is to achieve net of expense returns that meet or exceed the 5.8% long-term return on plan assets assumption used for reporting purposes. Investments are diversified to attempt to minimize the risk of large losses. Since asset allocation is a key determinant of expected investment returns, assets are periodically rebalanced to the targeted allocation to correct significant deviations from the asset allocation policy that are caused by market fluctuations and cash flow.

The basis for determining the overall expected long-term return on plan assets assumption is a nominal returns forecasting method. For each asset class, future returns are estimated by identifying the premium of riskier asset classes over lower risk alternatives. The methodology constructs expected returns using a "building block" approach to the individual components of total return. These forecasts are stated in both nominal and real (after inflation) terms. This process first considers the long-term historical return premium based on the longest set of data available for each asset class. These premiums, which are calculated using the geometric mean, are then adjusted based on current relative valuation levels and macro-economic conditions. The asset return assumption is also adjusted by an implicit expense load for estimated administrative and investment-related expenses.

Snap-on's VEBA plan target allocation and actual weighted-average asset allocation by asset category and fair value of plan assets as of 2022 and 2021 year end are as follows:

	Target	2022	2021
Asset category:			
Debt securities and cash and cash equivalents	46%	48%	44%
Equity securities	29%	29%	34%
Hedge funds	25%	23%	22%
Total	100%	100%	100%
Fair value of plan assets (Amounts in millions)		\$11.2	\$13.7

The fair value measurement hierarchy prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority (Level 1) to unadjusted quoted prices in active markets for identical assets and liabilities and the lowest priority (Level 3) to unobservable inputs. Fair value measurements primarily based on observable market information are given a Level 2 priority.

Debt securities are valued at quoted per share or unit market prices for which an official close or last trade pricing on an active exchange is available and are categorized as Level 1 in the fair value hierarchy.

Equity securities are valued at the NAV per share or unit multiplied by the number of shares or units held as of the measurement date, as reported by the fund managers. The share or unit price is quoted on a private market and is based on the value of the underlying investments, which are primarily based on observable inputs; such investments that are measured at fair value using the NAV per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy.

Hedge funds are stated at the NAV per share or unit (based on the estimated fair market value of the underlying investments) multiplied by the number of shares or units held as of the measurement date, as reported by the fund managers. These investments are measured at fair value using the NAV per share (or its equivalent) practical expedient and have not been classified in the fair value hierarchy.

The company regularly reviews fund performance directly with its investment advisor and the fund managers, and performs qualitative analysis to corroborate the reasonableness of the reported NAVs. For funds for which the company did not receive a year-end NAV, the company recorded an estimate of the change in fair value for the latest period based on return estimates and other fund activity obtained from the fund managers.

The columns labeled "Investments Measured at NAV" in the following tables are measured at fair value using the NAV per share (or its equivalent) practical expedient and have not been categorized in the fair value hierarchy. The fair value amounts presented in these tables are intended to permit a reconciliation of the fair value hierarchy to the VEBA plan assets.

The following is a summary, by asset category, of the fair value and the level within the fair value hierarchy of the VEBA plan assets as of 2022 year end:

(Amounts in millions)	Prio Ide A	noted ses for ntical ssets vel 1)	Mea	stments sured at	Total		
Asset category:						_	
Cash and cash equivalents	\$	0.4	\$		\$	0.4	
Debt securities		4.9				4.9	
Equity securities		_		3.3		3.3	
Hedge fund		_		2.6		2.6	
Total	\$	5.3	\$	5.9	\$	11.2	

The following is a summary, by asset category, of the fair value and the level within the fair value hierarchy of the VEBA plan assets as of 2021 year end:

Prices for Identical Assets (Level 1)		Investments Measured at NAV		Total	
\$ 0.3	\$	_	\$	0.3	
5.8		_		5.8	
_		4.6		4.6	
<u> </u>		3.0		3.0	
\$ 6.1	\$	7.6	\$	13.7	
\$	Identical Assets (Level 1) \$ 0.3 5.8 — —	Prices for Identical Assets (Level 1) \$ 0.3 \$ 5.8	Identical Assets (Level 1) Investments Measured at NAV \$ 0.3 \$ — 5.8 — — 4.6 — 3.0	Identical Assets (Level 1) Investments Measured at NAV \$ 0.3 \$ - \$ 5.8 - 4.6 - 3.0	

Note 14: Stock-based Compensation and Other Stock Plans

The 2011 Incentive Stock and Awards Plan (the "2011 Plan") provides for the grant of stock options, performance share units ("PSUs"), stock appreciation rights ("SARs") and restricted stock awards (which may be designated as "restricted stock units" or "RSUs"). As of 2022 year end, the 2011 Plan had 3,122,593 shares available for future grants. The company uses treasury stock to deliver shares under the 2011 Plan.

Net stock-based compensation expense was \$34.0 million in 2022, \$41.4 million in 2021 and \$19.5 million in 2020. Cash received from stock purchase and option plan exercises was \$55.0 million in 2022, \$162.4 million in 2021 and \$55.8 million in 2020. The tax benefit realized from both the exercise and vesting of share-based payment arrangements was \$10.7 million in 2022, \$18.2 million in 2021 and \$8.2 million in 2020.

Stock options: Stock options are granted with an exercise price equal to the market value of a share of Snap-on's common stock on the date of grant and have a contractual term of 10 years. Stock option grants vest ratably on the first, second and third anniversaries of the date of grant.

The fair value of each stock option award is estimated on the date of grant using the Black-Scholes valuation model. The company uses historical data regarding stock option exercise and forfeiture behaviors for different participating groups to estimate the period of time that options granted are expected to be outstanding. Expected volatility is based on the historical volatility of the company's stock for the length of time corresponding to the expected term of the option. The expected dividend yield is based on the expected annual dividend as a percentage of the market value of our common stock as of the date of grant. The risk-free interest rate is based on the U.S. treasury yield curve on the grant date for the expected term of the option.

The following weighted-average assumptions were used in calculating the fair value of stock options granted during 2022, 2021 and 2020, using the Black-Scholes valuation model:

	2022	2021	2020
Expected term of option (in years)	5.14	5.33	5.53
Expected volatility factor	22.61%	21.80%	21.67%
Expected dividend yield	2.68%	2.59%	2.78%
Risk-free interest rate	2.00%	0.67%	1.50%

A summary of stock option activity during 2022 is presented below:

	Shares (in thousands)	Exercise Price per Share*	Contractual Term* (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at beginning of year	2,432	\$ 151.32		
Granted	289	211.41		
Exercised	(350)	119.84		
Forfeited or expired	(22)	186.16		
Outstanding at end of year	2,349	163.07	5.5	\$ 153.7
Exercisable at end of year	1,722	152.58	4.4	130.7

^{*} Weighted-average

The weighted-average grant date fair value of options granted was \$34.35 in 2022, \$26.19 in 2021 and \$22.95 in 2020. The intrinsic value of options exercised was \$37.5 million in 2022, \$76.1 million in 2021 and \$26.0 million in 2020. The fair value of stock options vested was \$10.5 million in 2022, \$12.5 million in 2021 and \$14.6 million in 2020.

As of 2022 year end, there was \$10.2 million of unrecognized compensation cost related to non-vested stock options that is expected to be recognized as a charge to earnings over a weighted-average period of 1.3 years.

Performance share units: PSUs are earned and expensed using the fair value of the award over a contractual term of three years based on the company's performance. Vesting of the PSUs is dependent upon performance relative to pre-defined goals for revenue growth and return on net assets for the applicable performance period. For performance achieved above specified levels, the recipient may earn additional shares of stock, not to exceed 100% of the number of performance awards initially granted. The PSUs have a three-year performance period based on the results of the consolidated financial metrics of the company.

The fair value of PSUs is calculated using the market value of a share of Snap-on's common stock on the date of grant and assumed forfeitures based on recent historical experience; in recent years, forfeitures have not been significant. The weighted-average grant date fair value of PSUs granted during 2022, 2021 and 2020, was \$211.67, \$183.13 and \$155.34, respectively. Earned PSUs totaled 61,839 shares as of the 2022 year end and 46,343 as of the 2021 year end. There were no earned PSUs as of the 2020 year end. Earned PSUs vest and are generally paid out following the conclusion of the applicable performance period upon approval by the Organization and Executive Compensation Committee of the company's Board of Directors (the "Board"). PSUs related to 46,217 shares and 21,183 shares were paid out in 2022 and 2020, respectively. There were no PSUs paid out in 2021.

Changes to the company's non-vested PSUs in 2022 are as follows:

	Shares (in thousands)	Price per Share*		
Non-vested PSUs at beginning of year	183	\$	178.60	
Granted	62		211.67	
Performance assumption change **	21		185.41	
Vested	(62)		155.34	
Cancellations and other	(5)		190.55	
Non-vested PSUs at end of year	199		196.51	

^{*} Weighted-average

As of 2022 year end, there was \$17.3 million of unrecognized compensation cost related to non-vested PSUs that is expected to be recognized as a charge to earnings over a weighted-average period of 1.3 years.

Restricted stock units: Time-based RSUs are earned and expensed using the fair value of the award over the contractual term of three years. Vesting of the time-based RSUs is dependent upon continued employment for the 3-year cliff vesting period. Prior to 2021, the company granted performance-based RSUs with a one-year performance period followed by a two-year cliff vesting schedule.

The fair value of RSUs is calculated using the market value of a share of Snap-on's common stock on the date of grant and assumed forfeitures based on recent historical experience; in recent years, forfeitures have not been significant. The weighted-average grant date fair value of RSUs granted during 2022, 2021 and 2020, was \$211.67, \$189.89 and \$155.34, respectively. In fiscal 2022, 28,050 time-based RSUs were granted; assuming continued employment, these RSUs will vest at the end of the 3-year cliff vesting period. In fiscal 2021, 32,265 time-based RSUs were granted; assuming continued employment, these RSUs will vest at the end of the 3-year cliff vesting period. In fiscal 2020, performance-based RSUs were granted, but based on the company's 2020 performance, none of the RSUs granted were earned.

Changes to the company's non-vested RSUs in 2022 are as follows:

	Shares (in thousands)	Price per Share*
Non-vested RSUs at beginning of year	32	\$ 189.89
Granted	28	211.67
Vested	(1)	189.89
Cancellations and other	(1)	198.29
Non-vested RSUs at end of year	58	200.16

Fair Value

As of 2022 year end, there was \$6.2 million of unrecognized compensation cost related to non-vested RSUs that is expected to be recognized as a charge to earnings over a weighted-average period of 1.5 years.

Stock appreciation rights: The company also issues stock-settled and cash-settled SARs to certain key non-U.S. employees. SARs have a contractual term of 10 years and vest ratably on the first, second and third anniversaries of the date of grant. SARs are granted with an exercise price equal to the market value of a share of Snap-on's common stock on the date of grant.

^{**} Reflects the number of PSUs above target levels based on performance metrics.

^{*} Weighted-average

Stock-settled SARs are accounted for as equity instruments and provide for the issuance of Snap-on common stock equal to the amount by which the company's stock has appreciated over the exercise price. Stock-settled SARs have an effect on dilutive shares and shares outstanding as any appreciation of Snap-on's common stock value over the exercise price will be settled in shares of common stock. Cash-settled SARs provide for the cash payment of the excess of the fair market value of Snap-on's common stock price on the date of exercise over the grant price. Cash-settled SARs have no effect on dilutive shares or shares outstanding as any appreciation of Snap-on's common stock over the grant price is paid in cash and not in common stock.

The fair value of stock-settled SARs is estimated on the date of grant using the Black-Scholes valuation model. The fair value of cash-settled SARs is revalued (mark-to-market) each reporting period using the Black-Scholes valuation model based on Snap-on's period-end stock price. The company uses historical data regarding SARs exercise and forfeiture behaviors for different participating groups to estimate the expected term of the SARs granted based on the period of time that similar instruments granted are expected to be outstanding. Expected volatility is based on the historical volatility of the company's stock for the length of time corresponding to the expected term of the SARs. The expected dividend yield is based on the expected annual dividend as a percentage of the market value of our common stock as of the date of grant (for stock-settled SARs) or reporting date (for cash-settled SARs). The risk-free interest rate is based on the U.S. treasury yield curve in effect as of the grant date (for stock-settled SARs) or reporting date (for cash-settled SARs) for the length of time corresponding to the expected term of the SARs.

The following weighted-average assumptions were used in calculating the fair value of stock-settled SARs granted during 2022, 2021 and 2020, using the Black-Scholes valuation model:

	2022	2021	2020
Expected term of stock-settled SARs (in years)	4.02	3.94	3.75
Expected volatility factor	23.09%	22.50%	22.50%
Expected dividend yield	2.68%	2.59%	2.78%
Risk-free interest rate	1.96%	0.19%	1.42%

Changes to the company's stock-settled SARs in 2022 are as follows:

	Stock-settled SARs (in thousands)	 Exercise Price per Share*	Remaining Contractual Term* (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at beginning of year	397	\$ 160.09		
Granted	75	211.67		
Exercised	(23)	149.46		
Forfeited or expired	(64)	163.93		
Outstanding at end of year	385	170.11	6.3	\$ 22.5
Exercisable at end of year	238	155.31	5.0	17.4

^{*} Weighted-average

The weighted-average grant date fair value of stock-settled SARs granted was \$32.63 in 2022, \$24.05 in 2021 and \$21.31 in 2020. The intrinsic value of stock-settled SARs exercised was \$1.7 million in 2022, \$3.1 million in 2021 and \$0.4 million in 2020. The fair value of stock-settled SARs vested was \$2.0 million in 2022, \$2.1 million in 2021 and \$2.3 million in 2020.

As of 2022 year end, there was \$2.4 million of unrecognized compensation cost related to non-vested stock-settled SARs that is expected to be recognized as a charge to earnings over a weighted-average period of 1.4 years.

The following weighted-average assumptions were used in calculating the fair value of cash-settled SARs granted during 2022, 2021 and 2020, using the Black-Scholes valuation model:

	2022	2021	2020
Expected term of cash-settled SARs (in years)	3.10	3.09	3.00
Expected volatility factor	23.67%	22.49%	34.58%
Expected dividend yield	2.84%	2.64%	2.87%
Risk-free interest rate	4.22%	0.97%	0.17%

The intrinsic value of cash-settled SARs exercised was \$0.6 million in 2022, \$0.6 million in 2021 and \$1.0 million in 2020. The fair value of cash-settled SARs vested during 2022, 2021 and 2020 was \$0.1 million, \$0.1 million and zero, respectively.

Changes to the company's non-vested cash-settled SARs in 2022 are as follows:

	Cash-settled SARs (in thousands)	Price per Share*
Non-vested cash-settled SARs at beginning of year	2	\$ 47.13
Granted	1	45.62
Vested	(1)	67.80
Non-vested cash-settled SARs at end of year	2	53.24

^{*} Weighted-average

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As of 2022 year end, there was \$0.1 million of unrecognized compensation cost related to non-vested cash-settled SARs that is expected to be recognized as a charge to earnings over a weighted-average period of 1.4 years.

Restricted stock awards – **non-employee directors:** The company awarded 6,525 shares, 6,858 shares and 7,380 shares of restricted stock to non-employee directors in 2022, 2021 and 2020, respectively. The fair value of the restricted stock awards is expensed over a one-year vesting period based on the fair value on the date of grant. All restrictions for the restricted stock generally lapse upon the earlier of the first anniversary of the grant date, the recipient's death or disability or in the event of a change in control, as defined in the 2011 Plan. If termination of the recipient's service occurs prior to the first anniversary of the grant date for any reason other than death or disability, the shares of restricted stock would be forfeited, unless otherwise determined by the Board.

Directors' fee plan: Under the Directors' 1993 Fee Plan, as amended, non-employee directors may elect to receive up to 100% of their fees and retainer in shares of Snap-on's common stock. Directors may elect to defer receipt of all or part of these shares. For 2022, 2021 and 2020, issuances under the Directors' Fee Plan totaled 621 shares, 1,235 shares and 1,836 shares, respectively, of which 309 shares, 922 shares and 1,364 shares, respectively, were deferred. As of 2022 year end, shares reserved for issuance to directors under this plan totaled 195,730 shares.

Employee stock purchase plan: Substantially all Snap-on employees in the United States and Canada are eligible to participate in an employee stock purchase plan. The purchase price of the company's common stock to participants is the lesser of the mean of the high and low price of the stock on the beginning date (May 15) or ending date (the following May 14) of each plan year. The company records compensation expense when Snap-on's period-end stock price is greater than the plan purchase price. For 2022, 2021 and 2020, issuances under this plan totaled 18,452 shares, 82,286 shares and 25,425 shares, respectively. As of 2022 year end, shares reserved for issuance under this plan totaled 578,823 shares and Snap-on held participant contributions of approximately \$2.8 million. Participants are able to withdraw from the plan at any time prior to the ending date and receive back all contributions made during the plan year. Compensation expense for plan participants was \$0.2 million in 2021, \$9.6 million in 2021 and \$1.1 million in 2020.

Franchisee stock purchase plan: All franchisees in the United States and Canada are eligible to participate in a franchisee stock purchase plan. The purchase price of the company's common stock to participants is the lesser of the mean of the high and low price of the stock on the beginning date (May 15) or ending date (the following May 14) of each plan year. The company records mark-to-market expense when Snap-on's period-end stock price is greater than the plan purchase price. For 2022, 2021 and 2020, issuances under this plan totaled 44,937 shares, 143,388 shares and 55,980 shares, respectively. As of 2022 year end, shares reserved for issuance under this plan totaled 225,225 shares and Snap-on held participant contributions of approximately \$6.3 million. Participants are able to withdraw from the plan at any time prior to the ending date and generally receive back all contributions made during the plan year. The company recognized mark-to-market expense of \$0.4 million in 2022, \$16.7 million in 2021, and \$1.9 million in 2020.

Note 15: Capital Stock

Snap-on has undertaken repurchases of Snap-on common stock from time to time to offset dilution created by shares issued for employee and franchisee stock purchase plans, stock awards and other corporate purposes, as well as when the company believes market conditions are favorable. Snap-on repurchased 899,000 shares, 1,943,900 shares and 1,109,000 shares in 2022, 2021 and 2020, respectively. As of 2022 year end, Snap-on has remaining availability to repurchase up to an additional \$362.4 million in common stock pursuant to Board authorizations. The purchase of Snap-on common stock is at the company's discretion, subject to prevailing financial and market conditions.

Cash dividends paid in 2022, 2021 and 2020 totaled \$313.1 million, \$275.8 million and \$243.3 million, respectively. Cash dividends per share in 2022, 2021 and 2020 were \$5.88, \$5.11 and \$4.47, respectively. On February 9, 2023, the company's Board declared a quarterly dividend of \$1.62 per share, payable on March 10, 2023, to shareholders of record on February 23, 2023.

Note 16: Commitments and Contingencies

Snap-on provides product warranties for specific product lines and accrues for estimated future warranty cost in the period in which the sale is recorded. Snap-on calculates its accrual requirements based on historic warranty loss experience that is periodically adjusted for recent actual experience, including the timing of claims during the warranty period and actual costs incurred. Snap-on's product warranty accrual activity for 2022, 2021 and 2020 is as follows:

(Amounts in millions)	2022		2021		 2020
Warranty accrual:					
Beginning of year	\$	17.3	\$	17.6	\$ 17.3
Additions		9.8		13.7	13.9
Usage		(12.8)		(14.0)	(13.6)
End of year	\$	14.3	\$	17.3	\$ 17.6

Approximately 2,600 employees, or 20% of Snap-on's worldwide workforce, are represented by unions and/or covered under collective bargaining agreements. The number of covered union employees whose contracts expire over the next five years approximates 1,600 employees in 2023, 825 employees in 2024, and 175 employees in 2025; there are no contracts currently scheduled to expire in 2026 or 2027. In recent years, Snap-on has not experienced any significant work slowdowns, stoppages or other labor disruptions.

In the ordinary course of our business, Snap-on is subject to legal disputes that are litigated and/or settled. Although it is not possible to predict the outcome of legal matters, management believes that the results of all legal matters will not have a material impact on Snap-on's consolidated financial position, results of operations or cash flows.

Note 17: Leases

Lessee accounting: Snap-on determines if an arrangement is a lease at inception. Snap-on has operating and finance leases for manufacturing plants, distribution centers, software development facilities, financial services offices, data centers, company store vans and certain equipment. Snap-on's leases have lease terms of one year to 20 years and some include options to extend and/or terminate the lease. The exercise of lease renewal options is at the company's sole discretion. Certain leases also include options to purchase the leased property. When deemed reasonably certain of exercise, the renewal and purchase options are included in the determination of the lease term and lease payment obligation, respectively. The depreciable life of assets and leasehold improvements are limited to the expected term, unless there is a transfer of title or purchase option reasonably certain of exercise. The company's lease agreements do not contain any material variable lease payments, material residual value guarantees or any material restrictive covenants.

Right-of-use ("ROU") assets represent Snap-on's right to use an underlying asset for the lease term and lease liabilities represent the obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date of the lease based on the present value of lease payments over the lease term. When readily determinable, Snap-on uses the implicit rate in determining the present value of lease payments. When leases do not provide an implicit rate, Snap-on uses its country specific incremental borrowing rate based on the information available at the lease commencement date, including the lease term. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Snap-on has lease agreements with lease and non-lease components, which are generally accounted for separately. For all equipment leases, including vehicles, Snap-on accounts for the lease and non-lease components as a single lease component.

Total lease costs for 2022, 2021 and 2020 consist of the following:

(Amounts in millions)	 2022		2021		2020
Finance lease costs:					_
Amortization of ROU assets	\$ 1.5	\$	1.7	\$	1.7
Interest on lease liabilities	0.2		0.3		0.4
Operating lease costs*	 24.3		25.4		24.6
Total lease costs	\$ 26.0	\$	27.4	\$	26.7

^{*} Includes short-term leases, variable lease costs and sublease income, which are immaterial.

Supplemental cash flow information related to leases in 2022, 2021 and 2020 is as follows:

(Amounts in millions)	 2022	2021	2020
Cash paid for amounts included in the measurement of lease liabilities:			
Financing cash flows from finance leases	\$ 2.4	\$ 3.1	\$ 3.4
Operating cash flows from finance leases	0.2	0.3	0.4
Operating cash flows from operating leases	22.2	23.5	23.1
ROU assets obtained in exchange for new lease obligations:			
Finance lease liabilities	\$ 0.2	\$ 0.3	\$ 0.4
Operating lease liabilities	33.5	23.4	15.2

Supplemental balance sheet information related to leases in 2022 and 2021 is as follows:

(Amounts in millions)	2022		2021	
Finance leases:	•			
Property and equipment - gross	\$	19.4	\$	22.3
Accumulated depreciation and amortization		(16.4)		(17.4)
Property and equipment - net	\$	3.0	\$	4.9
Other accrued liabilities	\$	2.0	\$	2.4
Other long-term liabilities		1.9		4.5
Total finance lease liabilities	\$	3.9	\$	6.9
Operating leases:				
Operating lease right-of-use assets	\$	61.5	\$	51.9
Other accrued liabilities	\$	19.4	\$	19.6
Operating lease liabilities		44.7		34.2
Total operating lease liabilities	\$	64.1	\$	53.8

Weighted-average lease terms and discount rates in 2022 and 2021 are as follows:

	2022	2021	2020
Weighted-average remaining lease terms:			
Finance leases	2.1 years	2.9 years	3.7 years
Operating leases	4.0 years	3.3 years	3.3 years
Weighted-average discount rates:			
Finance leases	3.1%	3.1%	3.4%
Operating leases	2.9%	1.9%	2.6%

Maturities of lease liabilities as of December 31, 2022, are as follows:

(Amounts in millions)	rating ases	Finance Leases
Year:		
2023	\$ 20.8	\$ 2.0
2024	17.1	1.6
2025	12.0	0.3
2026	8.7	0.1
2027	5.8	
2028 and thereafter	 3.6	<u> </u>
Total lease payments	68.0	4.0
Less: amount representing interest	 (3.9)	(0.1)
Total lease liabilities	\$ 64.1	\$ 3.9

In 2022, Snap-on did not have any significant additional operating or finance leases that have not yet commenced.

Lessor accounting: Snap-on's Financial Services business offers its customers lease financing for the lease of tools, diagnostics, and equipment products and to franchisees who require financing for vehicle leases. Snap-on accounts for its financial services leases as sales-type leases. In certain circumstances, the lessee has the option to terminate the lease. In the event of the lessee's deteriorated financial condition or default, Snap-on has the right to terminate the lease. The leases contain an end-of-term purchase option that is generally insignificant and is reasonably certain to be exercised by the lessee.

The company recognizes the net investment in the lease as the present value of the lease payments not yet received plus the present value of the unguaranteed residual value, using the interest rate implicit in the lease. The difference between the undiscounted lease payments received over the lease term and the related net investment in the lease is reported as unearned finance charges. Unearned finance charges are amortized to income over the life of the contract and are included as a component of "Financial services revenue" on the accompanying Consolidated Statements of Earnings.

Sales-type leases are included in both "Finance receivables - net" and "Long-term finance receivables - net" on the accompanying Consolidated Balance Sheets, with lease terms of up to five years. In 2022 and 2021, finance receivables have future minimum lease payments, including unguaranteed residual value, of \$5.6 million and \$13.1 million, respectively, and unearned finance charges of \$0.7 million and \$1.8 million, respectively.

Sales-type leases are included in both "Contract receivables - net" and "Long-term contract receivables - net" on the accompanying Consolidated Balance Sheets, with lease terms of up to seven years. In 2022 and 2021, contract receivables have future minimum lease payments, including unguaranteed residual value, of \$296.7 million and \$293.7 million, respectively, and unearned finance charges of \$49.8 million and \$49.0 million, respectively.

Future minimum lease payments as of December 31, 2022 are as follows:

(Amounts in millions)	ease eivables
Year:	
2023	\$ 83.1
2024	72.1
2025	57.5
2026	42.8
2027	27.8
2028 and thereafter	 19.0
Total lease payments	302.3
Less: unearned finance charges	 (50.5)
Net investment in leases	\$ 251.8

See Note 4 for further information on finance and contract receivables.

Note 18: Other Income (Expense) - Net

"Other income (expense) – net" on the accompanying Consolidated Statements of Earnings consists of the following:

(Amounts in millions)	 2022	2021	2020
Interest income	\$ 13.0	\$ 2.1	\$ 1.7
Net foreign exchange loss	(7.5)	(1.2)	(3.9)
Net periodic pension and postretirement benefits - non-service	36.1	15.2	10.6
Foreign currency translation loss from sale of equity interest	_	(1.0)	_
Other	0.9	1.4	0.3
Total other income (expense) – net	\$ 42.5	\$ 16.5	\$ 8.7

Note 19: Accumulated Other Comprehensive Income (Loss)

The following is a summary of net changes in Accumulated OCI by component and net of tax for 2022 and 2021:

(Amounts in millions)	C	Foreign urrency anslation	sh Flow ledges	Defined Benefit ension and stretirement Plans	Total
Balance at beginning of 2021	\$	(74.7)	\$ 10.5	\$ (301.6)	\$ (365.8)
Other comprehensive income (loss) before reclassifications		(69.4)		66.5	(2.9)
Amounts reclassified from Accumulated OCI		(1.0)	(1.6)	27.4	24.8
Net other comprehensive income (loss)		(70.4)	(1.6)	93.9	21.9
Balance as of 2021 year end	\$	(145.1)	\$ 8.9	\$ (207.7)	\$ (343.9)
Other comprehensive loss before reclassifications		(127.4)	_	(69.0)	(196.4)
Amounts reclassified from Accumulated OCI			(1.6)	13.6	12.0
Net other comprehensive loss		(127.4)	(1.6)	(55.4)	(184.4)
Balance as of 2022 year end	\$	(272.5)	\$ 7.3	\$ (263.1)	\$ (528.3)

The reclassifications out of Accumulated OCI in 2022 and 2021 are as follows:

	 Amounts Rec Accumul	 	Statement of Earnings Presentation
(Amounts in millions)	2022	2021	
Foreign currency loss from sale of equity interest:	 _	 	
Foreign currency	\$ 	\$ 1.0	Other income (expense) - net
Income tax expense	_		Income tax expense
Net of tax	_	1.0	
Gains on cash flow hedges:	 _	_	
Treasury locks	1.6	1.6	Interest expense
Income tax expense	 <u> </u>	 	Income tax expense
Net of tax	1.6	1.6	
Amortization of net unrecognized losses and prior service credits	 (18.1)	 (36.4)	See footnote below*
Income tax benefit	4.5	9.0	Income tax expense
Net of tax	 (13.6)	(27.4)	
Total reclassifications for the period, net of tax	\$ (12.0)	\$ (24.8)	

^{*} These Accumulated OCI components are included in the computation of net periodic pension and postretirement health care costs; see Note 12 and Note 13 for further information.

Note 20: Segments

Snap-on's business segments are based on the organization structure used by management for making operating and investment decisions and for assessing performance. Snap-on's reportable business segments are: (i) the Commercial & Industrial Group; (ii) the Snap-on Tools Group; (iii) the Repair Systems & Information Group; and (iv) Financial Services. The Commercial & Industrial Group consists of business operations serving a broad range of industrial and commercial customers worldwide, including customers in the aerospace, natural resources, government and military, power generation, transportation and technical education market segments (collectively, "critical industries"), primarily through direct and distributor channels. The Snap-on Tools Group consists of business operations primarily serving vehicle service and repair technicians through the company's multi-national mobile tool distribution channel. The Repair Systems & Information Group consists of business operations serving other professional vehicle repair customers worldwide, primarily owners and managers of independent repair shops and OEM dealerships, through direct and distributor channels. Financial Services consists of the business operations of Snap-on's finance subsidiaries.

Snap-on evaluates the performance of its operating segments based on segment revenues, including both external and intersegment net sales, and segment operating earnings. Snap-on accounts for intersegment sales and transfers based primarily on standard costs with reasonable mark-ups established between the segments. Identifiable assets by segment are those assets used in the respective reportable segment's operations. Corporate assets consist of cash and cash equivalents (excluding cash held at Financial Services), deferred income taxes and certain other assets. Intersegment amounts are eliminated to arrive at Snap-on's consolidated financial results.

Snap-on does not have any single customer or government that represents 10% or more of its revenues in any of the indicated periods.

Financial Data by Segment:

(Amounts in millions)	2022		2021	2020		
Net sales:						
Commercial & Industrial Group	\$	1,399.2	\$ 1,406.3	\$	1,234.6	
Snap-on Tools Group		2,072.0	1,938.6		1,643.9	
Repair Systems & Information Group		1,666.9	1,503.1		1,238.2	
Segment net sales		5,138.1	4,848.0		4,116.7	
Intersegment eliminations		(645.3)	(596.0)		(524.2)	
Total net sales		4,492.8	4,252.0		3,592.5	
Financial Services revenue		349.7	349.7		349.7	
Total revenues	\$	4,842.5	\$ 4,601.7	\$	3,942.2	
Operating earnings:						
Commercial & Industrial Group	\$	197.6	\$ 209.9	\$	153.7	
Snap-on Tools Group		458.7	411.1		267.7	
Repair Systems & Information Group		393.3	348.6		298.0	
Financial Services		266.0	272.0		248.6	
Segment operating earnings		1,315.6	1,241.6		968.0	
Corporate		(108.4)	(118.1)		(87.5)	
Operating earnings		1,207.2	1,123.5		880.5	
Interest expense		(47.1)	(53.1)		(54.0)	
Other income (expense) – net		42.5	16.5		8.7	
Earnings before income taxes and equity earnings	\$	1,202.6	\$ 1,086.9	\$	835.2	

Financial Data by Segment (continued):

Assets:			2022		2021
Commercial & Industrial Group		\$	1,245.8	\$	1,209.3
Snap-on Tools Group			912.9		791.4
Repair Systems & Information Group			1,678.1		1,624.3
Financial Services			2,242.7		2,163.6
Total assets from reportable segments			6,079.5		5,788.6
Corporate			972.9		1,039.7
Elimination of intersegment receivables		Φ.	(79.6)	Φ.	(68.6)
Total assets		\$	6,972.8	\$	6,759.7
(Amounts in millions)	 2022		2021		2020
Capital expenditures:					
Commercial & Industrial Group	\$ 26.0	\$	24.3	\$	20.3
Snap-on Tools Group	35.0		27.1		24.2
Repair Systems & Information Group	18.3		15.4		14.7
Financial Services	 1.1		0.8		0.8
Total from reportable segments	80.4		67.6		60.0
Corporate	 3.8		2.5		5.6
Total capital expenditures	\$ 84.2	\$	70.1	\$	65.6
Depreciation and amortization:					
Commercial & Industrial Group	\$ 26.1	\$	28.2	\$	25.1
Snap-on Tools Group	29.3		31.2		32.7
Repair Systems & Information Group	40.1		40.9		34.6
Financial Services	 0.9		0.9		0.7
Total from reportable segments	 96.4		101.2		93.1
Corporate	 3.8		3.6		3.6
Total depreciation and amortization	\$ 100.2	\$	104.8	\$	96.7
Revenues by geographic region:*					
United States	\$ 3,465.4	\$	3,153.0	\$	2,772.3
Europe	723.3		808.5		677.5
All other	653.8		640.2		492.4
Total revenues	\$ 4,842.5	\$	4,601.7	\$	3,942.2
(Amounts in millions)			2022		2021
Long-lived assets:**					
United States		\$	361.9	\$	342.2
Europe			161.3		171.2
All other			50.9		56.7
Total long-lived assets		\$	574.1	\$	570.1

^{*} Revenues are attributed to countries based on origin of the sale.

^{**} Long-lived assets consist of Property and equipment - net and Operating lease right-of-use assets.

Products and Services: Snap-on derives net sales from a broad line of products and complementary services that are grouped into three categories: (i) tools; (ii) diagnostics, information and management systems; and (iii) equipment. The tools product category includes hand tools, power tools, tool storage products and other similar products. The diagnostics, information and management systems product category includes handheld and computer-based diagnostic products, service and repair information products, diagnostic software solutions, electronic parts catalogs, business management systems and services, point-of-sale systems, integrated systems for vehicle service shops, OEM purchasing facilitation services, and warranty management systems and analytics to help OEM dealerships manage and track performance. The equipment product category includes solutions for the service of vehicles and industrial equipment. Snap-on supports the sale of its diagnostics and vehicle service shop equipment by offering training programs as well as after-sales support for its customers. Through its financial services businesses, Snap-on also derives revenue from various financing programs designed to facilitate the sales of its products and support its franchise business. Further product line information is not presented as it is not practicable to do so.

The following table shows the consolidated net sales and revenues of these product groups in the last three years:

(Amounts in millions)	2022		2021	2020	
Net sales:					_
Tools	\$	2,399.4	\$ 2,343.0	\$	1,984.7
Diagnostics, information and management systems		942.4	892.5		783.8
Equipment		1,151.0	1,016.5		824.0
Total net sales		4,492.8	4,252.0		3,592.5
Financial services revenue		349.7	349.7		349.7
Total revenues	\$	4,842.5	\$ 4,601.7	\$	3,942.2

SIGNATURES

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

SNAP-	ON	INCORP	ORATED

By: /s/ Nicholas T. Pinchuk
Nicholas T. Pinchuk, Chairman, President
and Chief Executive Officer

September 1, 2023

Pate: February 9, 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 Snap-on and in the capacities and on the date indicated.

/s/ Nicholas T. Pinchuk

Nicholas T. Pinchuk, Chairman, President
and Chief Executive Officer

/s/ Aldo J. Pagliari

Date: February 9, 2023

Date: February 9, 2023

Aldo J. Pagliari, Principal Financial Officer, Senior Vice President – Finance and Chief Financial Officer

/s/ Marty V. Ozolins Date: February 9, 2023

Marty V. Ozolins, Principal Accounting Officer, Vice President and Controller

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of Snap-on and in the capacities and on the date indicated.

By:	/s/ David C. Adams	Date:	February 9, 2023
_	David C. Adams, Director		
By:	/s/ Karen L. Daniel Karen L. Daniel, Director	Date:	February 9, 2023
By:	/s/ Ruth Ann M. Gillis Ruth Ann M. Gillis, Director	Date:	February 9, 2023
By:	/s/ James P. Holden James P. Holden, Director	Date:	February 9, 2023
By:	/s/ Nathan J. Jones Nathan J. Jones, Director	Date:	February 9, 2023
By:	/s/ Henry W. Knueppel Henry W. Knueppel, Director	Date:	February 9, 2023
By:	/s/ W. Dudley Lehman W. Dudley Lehman, Director	Date:	February 9, 2023
By:	/s/ Nicholas T. Pinchuk Nicholas T. Pinchuk, Director	Date:	February 9, 2023
By:	/s/ Gregg M. Sherrill Gregg M. Sherrill, Director	Date:	February 9, 2023
By:	/s/ Donald J. Stebbins Donald J. Stebbins, Director	Date:	February 9, 2023

EXHIBIT 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 33-37924, 333-21285, and 333-261567 on Form S-3 and Registration Statement Nos. 33-57898, 33-58939, 333-21277, 333-62098, 333-91712, 333-142412, 333-177794, 333-177795, 333-208479 and 333-261566 on Form S-8 of our reports dated February 9, 2023, relating to the consolidated financial statements of Snap-on Incorporated and the effectiveness of Snap-on Incorporated's internal control over financial reporting, appearing in this Annual Report on Form 10-K of Snap-on Incorporated for the year ended December 31, 2022.

/s/ DELOITTE & TOUCHE LLP Milwaukee, Wisconsin February 9, 2023

Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

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

Date: February 9, 2023

/s/ Nicholas T. Pinchuk

Nicholas T. Pinchuk Chief Executive Officer

EXHIBIT 31.2

Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

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

Date: February 9, 2023

/s/ Aldo J. Pagliari

Aldo J. Pagliari

Principal Financial Officer

Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Snap-on Incorporated (the "Company") on Form 10-K for the period ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Nicholas T. Pinchuk as Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, to the best of his knowledge, that:

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

/s/ Nicholas T. Pinchuk

Nicholas T. Pinchuk Chief Executive Officer February 9, 2023

Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Snap-on Incorporated (the "Company") on Form 10-K for the period ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Aldo J. Pagliari as Principal Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, to the best of his knowledge, that:

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

/s/ Aldo J. Pagliari

Aldo J. Pagliari Principal Financial Officer February 9, 2023

INVESTOR INFORMATION

EXCHANGE LISTING

Snap-on Incorporated's common stock is listed on the New York Stock Exchange under the ticker symbol SNA.

TRANSFER AGENT AND REGISTRAR

Computershare Trust Company, N.A. P.O. Box 43006 Providence, RI 02940-3006, U.S.A.

Shareholders with questions may call our transfer agent, Computershare Trust Company, N.A., toll-free at 800-446-2617 (in the United States) or 781-575-2723 (outside the United States). The deaf and hearing impaired may call 800-952-9245. An interactive automated system is available 24 hours a day, every day. Operators are available Monday through Friday, 8:30 a.m. to 6 p.m. U.S. Eastern Time. More information is available at www.computershare.com/investor.

CERTIFICATE TRANSFERS

First Class/Registered/Certified Mail: Computershare Investor Services P.O. Box 43006 Providence, RI 02940-3006, U.S.A.

By overnight mail or private courier: Computershare Investor Services 150 Royall St., Suite 101 Canton, MA 02021, U.S.A.

COMPUTERSHARE INVESTMENT PLAN

Investors may purchase Snap-on stock and increase their investment through a no-commission dividend reinvestment and direct stock purchase plan sponsored by Computershare Trust Company, N.A. All fees and brokerage commissions in connection with the purchase of stock, as well as most administrative costs, are paid by Snap-on. Visit www.computershare.com/investor for more information or write to:

Computershare Investor Services P.O. Box 43006 Providence, RI 02940-3006, U.S.A.

ANTICIPATED DIVIDEND RECORD AND PAYMENT DATES FOR 2023

Quarter	Record Date	Payment Date	
First	February 23	March 10	
Second	May 19	June 9	
Third	August 18	September 11	
Fourth	November 21	December 11	

FINANCIAL PUBLICATIONS

Publications are available without charge. Contact the Snap-on investor relations department at 2801 80th Street, Kenosha, WI 53143, visit our website, or send an e-mail to InvestorRelations@snapon.com.

WEBSITE

Snap-on's website contains Form 10-Qs, Form 10-Ks, news releases, annual reports, proxy statements and other information about Snap-on. Our website address is www.snapon.com.

INDEPENDENT AUDITORS

Deloitte & Touche LLP 555 East Wells Street, Suite 1400 Milwaukee, WI 53202-3824, U.S.A.

INVESTOR RELATIONS

Investors and other interested parties should direct inquiries to: Sara M. Verbsky Vice President, Investor Relations InvestorRelations@snapon.com

ANNUAL MEETING

The Annual Meeting of Shareholders will be held on Thursday, April 27, 2023. Please see the Notice of 2023 Annual Meeting of Shareholders and Proxy Statement for more details.

CORPORATE OFFICES

2801 80th Street Kenosha, WI 53143, U.S.A. 262-656-5200

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION:

Statements in this Report that are not historical facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include those that are in the future tense; include the words "expects," "plans," "targets," "estimates," "believes," "anticipates," or similar words; are specifically identified as forward-looking; or describe Snap-on's or management's outlook, plans, estimates, objectives or goals. These forward-looking statements are subject to risks, uncertainties or other factors that could cause actual results to differ materially from those described. Numerous important factors, such as those in the Annual Report on Form 10-K (forming part of this Report) in Part I under "Safe Harbor" or Item 1A: "Risk Factors," could affect Snap-on's actual results and could cause its actual results to differ materially from those expressed in any forward-looking statement.

BOARD OF DIRECTORS

NICHOLAS T. PINCHUK

Chairman of the Board and Chief Executive Officer Snap-on Incorporated <u>Director Since 2007</u>

DAVID C. ADAMS (C)*

Retired Chairman of the Board and Chief Executive Officer Curtiss-Wright Corporation Director since 2016

KAREN L. DANIEL (B)*

Retired Division President and Chief Financial Officer Black & Veatch Corporation Director since 2005

RUTH ANN M. GILLIS (A)

Retired Executive Vice President and Chief Administrative Officer Exelon Corporation Director since 2014

JAMES P. HOLDEN (C)

Lead Director Retired President and Chief Executive Officer DaimlerChrysler Corporation Director since 2007

NATHAN J. JONES (A)*

Retired President, Worldwide Commercial & Consumer Equipment Division Deere & Company Director since 2008

HENRY W. KNUEPPEL (C)

Retired Chairman of the Board and Chief Executive Officer Regal Beloit Corporation Director since 2011

W. DUDLEY LEHMAN (B)

Retired Group President Kimberly-Clark Corporation *Director since* 2003

GREGG M. SHERRILL (B)

Retired Chairman of the Board and Chief Executive Officer Tenneco Inc. Director since 2010

DONALD J. STEBBINS (A)

Retired President and Chief Executive Officer Superior Industries International, Inc. Director since 2015

Board Committees:

(A) Audit Committee

- (B) Organization and Executive Compensation Committee
- (C) Corporate Governance and Nominating Committee
- Denotes Chair

MANAGEMENT TEAM

EUGENIO AMADOR

President – Equipment

GOVIND K. ARORA

Vice President – Worldwide Strategic Sourcing

JESUS ARREGUI

Senior Vice President and President – Commercial Group

ANUP R. BANERJEE

Senior Vice President – Human Resources and Chief Development Officer

MARY E. BAUERSCHMIDT

Vice President – Human Resources

SAMUEL E. BOTTUM

Vice President and Chief Marketing Officer

IAIN BOYD

Vice President – Operations Development

BENNETT L. BRENTON

Vice President – Innovation

JOSEPH J. BURGER

President – Snap-on Credit

TIMOTHY L. CHAMBERS

Senior Vice President and President – Snap-on Tools Group

RAUL COLON

Vice President – Environmental, Social and Governance

MICHAEL G. GENTILE

President – Operations and Product Management Snap-on Tools Group

JACOB L. GUNIA

Director – Rapid Continuous Improvement

ROBERT J. HAMILTON

Vice President – Finance Snap-on Tools Group

GARY S. HENNING

Vice President – Manufacturing Development

DAVID T. HIETPAS

President – Power and Specialty Tools

JEFFREY W. HOWE

Vice President – North American Sales and Franchising Snap-on Tools Group

HOLLY J. JUDT

Vice President – Finance Repair Systems & Information Group

JEFFREY F. KOSTRZEWA

Vice President – Risk Management and Treasurer

JON M. LARUE

President – Mitchell 1

JUNE C. LEMERAND

Vice President and Chief Information Officer

BRAD R. LEWIS

Executive Vice President – Business Operations and Technology Repair Systems & Information Group

ANDREW R. LOBO

President – Industrial

RICHARD T. MILLER

Vice President, General Counsel and Secretary

IAMES NG

President – Snap-on Asia Pacific

BENNY OH

Chairman – Snap-on Asia Pacific

MARTY V. OZOLINS

Vice President and Controller

ALDO J. PAGLIARI

Senior Vice President – Finance and Chief Financial Officer

NICHOLAS T. PINCHUK

Chairman and Chief Executive Officer

SCOTT R. RUGG

Vice President – Corporate Tax

KEVIN L. THATCHER

Vice President – Business Development

SARA M. VERBSKY

Vice President – Investor Relations

MARIA J. VIEIRA

Vice President – Operations Commercial Group

THOMAS J. WARD

Senior Vice President and President – Repair Systems & Information Group

MARIAN T. WELLS

President – SNA Europe

JOHN A. WOLF

President – OEM Solutions

JEFFERY J. ZUEHLS

President – Diagnostics

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SNAP-ON INCORPORATED

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