

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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2021

or

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

For the transition period from ____ to ____

Commission File No. 001-35971

ALLEGIONTM TM

ALLEGION PUBLIC LIMITED COMPANY

(Exact name of registrant as specified in its charter)

Ireland

(State or other jurisdiction of incorporation or organization)

98-1108930

(I.R.S. Employer Identification No.)

Block D

Iveagh Court

Harcourt Road

Dublin 2, D02 VH94, Ireland

(Address of principal executive offices, including zip code)

+(353) (1) 2546200

(Registrant's telephone number, including area code)

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

<u>Title of each class</u>	<u>Trading symbols</u>	<u>Name of each exchange on which registered</u>
Ordinary shares, par value \$0.01 per share	ALLE	New York Stock Exchange
3.500% Senior Notes due 2029	ALLE 3 ½	New York Stock Exchange

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes No

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

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

The aggregate market value of ordinary shares held by non-affiliates on June 30, 2021 was approximately \$12.5 billion based on the closing price of such stock on the New York Stock Exchange.

The number of ordinary shares outstanding of Allegion plc as of February 10, 2022 was 88,230,442.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement to be filed within 120 days of the close of the registrant's fiscal year in connection with the registrant's Annual General Meeting of Shareholders to be held June 2, 2022 (the "Proxy Statement") are incorporated by reference into Part II and Part III of this Form 10-K as described herein.

ALLEGION PLC

Form 10-K For the Fiscal Year Ended December 31, 2021

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CAUTIONARY STATEMENT FOR FORWARD LOOKING STATEMENTS

Certain statements in this report, other than purely historical information, are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "forecast," "outlook," "intend," "strategy," "future", "opportunity", "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," or the negative thereof or variations thereon or similar expressions generally intended to identify forward-looking statements.

Forward-looking statements may relate to such matters as: statements regarding the continued impacts of the global COVID-19 pandemic, supply chain constraints, electronic component and labor shortages, inflation, rising freight and material costs, projections of revenue, margins, expenses, tax provisions, earnings, cash flows, benefit obligations, dividends, share purchases or other financial items; any statements of the plans, strategies and objectives of management for future operations, including those relating to any statements concerning expected development, performance or market share relating to our products and services; any statements regarding future economic conditions or our performance; any statements regarding pending investigations, claims or disputes; any statements of expectation or belief; and any statements of assumptions underlying any of the foregoing. These statements are based on currently available information and our current assumptions, expectations and projections about future events. While we believe that our assumptions, expectations and projections are reasonable in view of the currently available information, you are cautioned not to place undue reliance on our forward-looking statements. You are advised to review any further disclosures we make on related subjects in materials we file with or furnish to the United States Securities and Exchange Commission ("SEC"). Forward-looking statements speak only as of the date they are made and are not guarantees of future performance. They are subject to future events, risks and uncertainties – many of which are beyond our control – as well as potentially inaccurate assumptions, that could cause actual results to differ materially from our expectations and projections. We do not undertake to update any forward-looking statements.

Factors that might affect our forward-looking statements include, among other things:

- adverse impacts to our business operations due to the global COVID-19 pandemic and our ability to predict the full extent of such impacts;
- competitive factors in the industry in which we compete, including technological developments and increased competition from private label brands;
- the development, commercialization and acceptance of new products and services that meet the varied and evolving needs of our customers;
- the demand for our products and services, including changes in customer and consumer preferences, and our ability to maintain beneficial relationships with large customers;
- our products or solutions fail to meet certification and specification requirements, are defective or otherwise fall short of customers' needs and expectations;
- the ability to complete and integrate any acquisitions and/or losses related to our investments in external companies;
- business opportunities that diverge from our core business;
- our ability to operate efficiently and productively;
- our ability to effectively manage and implement restructuring initiatives or other organizational changes;
- the effects of global climate change or other unexpected events, including global health crises, that may disrupt our operations;
- our ability to manage risks related to our information technology and operational technology systems and cybersecurity, including implementation of new processes that may cause disruptions and be more difficult, costly or time consuming than expected;
- our reliance on third-party vendors for many of the critical elements of our global information and operational technology infrastructure and their failure to provide effective support for such infrastructure;
- disruption and breaches of our information systems;
- ability to recruit and retain a highly qualified and diverse workforce;
- disruptions in our global supply chain, including supply chain constraints, electronic component and labor shortages and product manufacturing and logistical services provided by our supplier partners;

- availability of and increased inflation impacting the prices of raw materials, parts and components, freight, packaging, labor and energy;
- economic, political and business conditions in the markets in which we operate, including changes to trade agreements, sanctions, import and export regulations and custom duties;
- conditions of the institutional, commercial and residential construction and remodeling markets, including the impact of work-from-home trends;
- fluctuations in currency exchange rates;
- potential impairment of our goodwill, indefinite-lived intangible assets and/or our long-lived assets;
- interest rate fluctuations and other changes in borrowing costs, in addition to risks associated with our outstanding and future indebtedness;
- the impact our outstanding indebtedness may have on our business and operations and other capital market conditions, including availability of funding sources and currency exchange rate fluctuations;
- risks related to corporate social responsibility and reputational matters;
- the ability to protect our brand reputation and trademarks;
- the outcome of any litigation, governmental investigations or proceedings;
- claims of infringement of intellectual property rights by third parties;
- adverse publicity or improper conduct by any of our employees, agents or business partners;
- changes to, or changes in interpretations of, current laws and regulations;
- uncertainty and inherent subjectivity related to transfer pricing regulations;
- changes in tax requirements, including tax rate changes, the adoption of new tax legislation or exposure to additional tax liabilities and revised tax law interpretations; and
- risks related to our incorporation in Ireland, including the possible effects on us of future legislation or interpretations in the U.S. that may limit or eliminate potential U.S. tax benefits resulting from our incorporation in a non-U.S. jurisdiction, such as Ireland, or deny U.S. government contracts to us based upon our incorporation in such non-U.S. jurisdiction.

Some of the significant risks and uncertainties that could cause actual results to differ materially from our expectations and projections are described more fully in Item 1A. "Risk Factors." You should read that information in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of this report and our Consolidated Financial Statements and related notes in Item 8 of this report. We note such information for investors as permitted by the Private Securities Litigation Reform Act of 1995.

PART I

Item 1. **BUSINESS**

Overview

Allegion plc ("Allegion," "we," "us" or "the Company") is a leading global provider of security products and solutions that keep people and assets safe and secure in the places they reside, work and thrive. We create peace of mind by pioneering safety and security with a vision of seamless access and a safer world. Seamless access allows authorized, automated and safe passage and movement through spaces and places in the most efficient and frictionless manner possible. Central to our vision is partnering and developing ecosystems to create a flawless experience and enable an uninterrupted and secure flow of people and assets. We offer an extensive and versatile portfolio of security and access control products and solutions across a range of market-leading brands. Our experts across the globe deliver high-quality security products, services and systems, and we use our deep expertise to serve as trusted partners to end-users who seek customized solutions to their security needs.

Allegion Principal Products

Door closers and controls	Doors and door systems
Electronic security products	Software-enabled access control systems
Exit devices	Locks, locksets, portable locks, key systems and services
Time, attendance and workforce productivity systems	Other accessories

Access control security products and solutions are critical elements in every building and home. Many door openings are configured to maximize a room's particular form and function while also meeting local and national building and safety code requirements and end-user security needs. Most buildings have multiple door openings, each serving its own purpose and requiring different specific access control solutions. Each door must fit exactly within its frame, be prepared precisely for its hinges, synchronize with its specific lockset and corresponding latch and align with a specific key to secure the door. Moreover, with the increasing adoption of the Internet of Things ("IoT"), security products – including keys – are increasingly linked electronically, integrated into software and popular consumer technology platforms and controlled with mobile applications, creating additional functionality and complexity. Seamless access capitalizes on the ability for multiple products and brands to work in tandem, allowing people and assets to move efficiently and safely by adapting access rights for various settings or use cases. These solutions can also provide insights on usage and traffic patterns to improve hygiene of high-traffic areas, boost efficiency and improve visitor, staff and tenant experiences.

We believe our ability to deliver a wide range of solutions that can be custom configured to meet end-users' security needs is a key driver of our success. We accomplish this with:

- Our extensive and versatile product portfolio, combined with our deep expertise, which enables us to deliver the right products and solutions to meet diverse security and functional specifications and to successfully and securely integrate into leading technology and systems;
- Our consultative approach and expertise, which enables us to develop the most efficient and appropriate building security and access control specifications to fulfill the unique needs of our end-users and their partners, including architects, contractors, homebuilders and engineers;
- Our access to and management of key channels in the market, which is critical to delivering our products in an efficient and consistent manner; and
- Our enterprise excellence capabilities, including our global manufacturing operations and agile supply chain, which facilitate our ability to deliver specific product and system configurations to end-users and consumers worldwide, quickly and efficiently.














We believe the security products industry will benefit from several global macroeconomic trends, including:

- Expected growth in global electronic products as end-users adopt newer technologies in their facilities and homes;
- Heightened awareness of security and privacy requirements;
- Increased focus on touchless solutions that help promote a healthy environment; and
- The shift to a digital, interconnected environment.

We operate in and report financial results for two segments: Allegion Americas and Allegion International, the latter of which provides security products, services and solutions primarily throughout Europe, Asia and Oceania. We sell our products and solutions under the following brands:















Allegion Brands

(Listed for each business segment)

Product Category	Allegion Americas	Allegion International	
Locks, Locksets, Portable Locks, Key Systems and Services	DEXTER		KRYPTONITE
	FALCON		
	KRYPTONITE	AXA	<i>Milre</i>
	LOCKNETICS		NORMBAU
		Briton	<i>PegaSys</i>
			
		FALCON	Simons  Voss technologies
			
		<i>Gainsborough</i>	
	Door Closers, Controls and Exit Devices	DEXTER	
FALCON		Briton	
LCN			CISA
VON DUPRIN		FALCON	
		LCN	
			
			VON DUPRIN

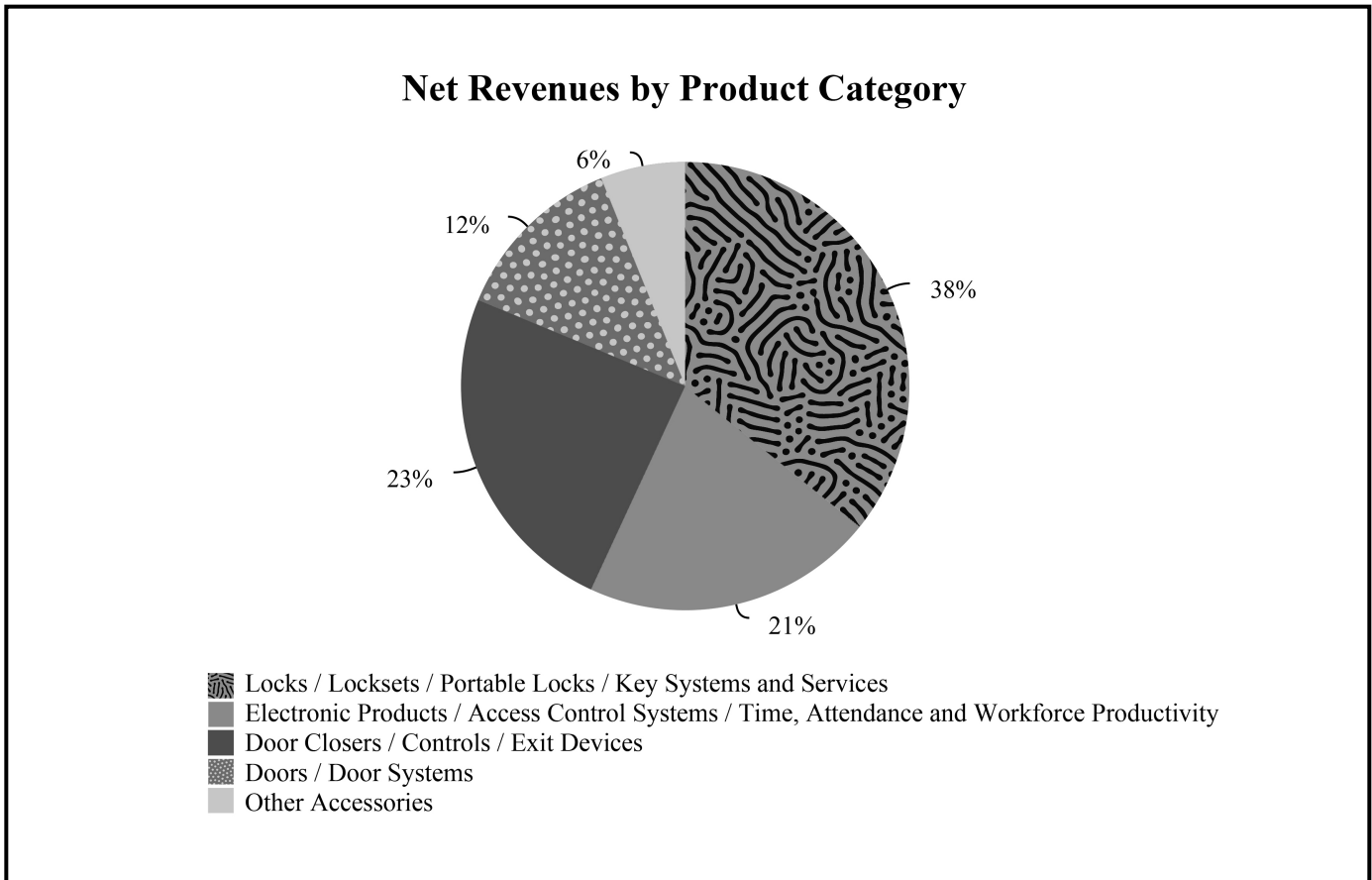
Allegion Brands

(Listed for each business segment)

Product Category	Allegion Americas	Allegion International	
Electronic Software and Products and Access Control Systems, including Time, Attendance and Workforce Productivity	ISONAS	 BRICARD	<i>Milre</i>
	LOCKNETICS	 CISA	PegaSys
	 SCHLAGE	 FSH <small>www.fshlocking.com.au</small>	 SCHLAGE
	VON DUPRIN.	<i>Gainsborough</i>	SimonsVoss technologies
	YONOMI	 interflex	VON DUPRIN.
Doors and Door Systems	ADSYSTEMS™	 BRICARD	
	FALCON.		
	Republic	STEELCRAFT.	
	STEELCRAFT.		
	TGP	TGP	
Other Accessories	Brio	 Austral Lock	GLYNN-JOHNSON.
	GLYNN-JOHNSON.	AXA	IVES.
	ISONAS	 BRICARD	KRYPTONITE™
	IVES.	Brio	 LEGGE
	KRYPTONITE™	Briton	NORMBAU
	LOCKNETICS	 CISA	 TRELOCK Deine Sicherheit.
		<i>Gainsborough</i>	

We sell a wide range of security and access control solutions for end-users in commercial, institutional and residential facilities worldwide, including the education, healthcare, government, hospitality, commercial office and single and multi-family residential markets. Our leading brands include CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. We believe LCN, Schlage and Von Duprin hold the No. 1 or No. 2 position in their primary product categories in North America while CISA, Interflex and SimonsVoss hold the No. 1 or No. 2 position in their primary product categories in certain European markets.

During the year ended December 31, 2021, we generated Net revenues of \$2,867.4 million and Operating income of \$530.2 million.



History and Developments

We were incorporated in Ireland on May 9, 2013, to hold the commercial and residential security businesses of what was then Ingersoll Rand plc ("Ingersoll Rand"). On December 1, 2013, we became a stand-alone public company after Ingersoll Rand completed the separation of these businesses from the rest of Ingersoll Rand via the transfer of these businesses from Ingersoll Rand to us and the issuance by us of ordinary shares directly to Ingersoll Rand's shareholders (the "Spin-off"). Our security businesses have long and distinguished operating histories. Several of our brands were established more than 100 years ago, and many originally created their categories:

- Von Duprin, established in 1908, was awarded the first exit device patent;
- Schlage, established in 1920, was awarded the first patents granted for the cylindrical lock and the push button lock;
- LCN, established in 1926, created the first door closer;
- CISA, established in 1926, devised the first electronically controlled lock; and
- SimonsVoss, established in 1995, created the first keyless digital transponder.

We have built upon these founding legacies since our entry into the security products market through the acquisition of Schlage, Von Duprin and LCN in 1974. Today, we continue to develop and introduce innovative and market-leading products. For example, in 2018, we announced the formation of Allegion Ventures, a corporate venture fund with an initial allocation of \$50 million to invest in and help accelerate the growth of companies that have innovative, digital-first technologies and products such as touchless access and workspace monitoring solutions that complement our core business solutions. Building on this success, in December 2021, Allegion Ventures announced a second fund with an additional allocation of \$100 million to focus on investing in technologies like artificial intelligence, machine learning and cybersecurity.

Recent examples of successful product launches by Allegion are illustrated in the table below:

Product	Brands	Year	Innovation
Residential Locks, Cylinders and Levers	Schlage, Gainsborough, CISA	2019/2020/2021	<p>Schlage Primus® RP patented, restricted key systems, allowing the widely used, historic Schlage Obverse keyway family a path to Primus levels of security with patent coverage to 2029.</p> <p>Next generation smart lock (Schlage Encode) is joined by one in Australia (Gainsborough Freestyle Trilock), which has passage, privacy or dead lock modes that can be operated using the built-in keypad, a key override or through the mobile app and offers integrations with Amazon Alexa and Google Assistant. The optional WiFi bridge can be used to program and operate the lock from anywhere in the world.</p> <p>New flat key European cylinders for multiple entrance buildings (CISA Asix P8) and high security connected solutions (CISA Domo Connexa).</p>
Commercial Locks, Cylinders, Levers and Electronic Access Platforms	Schlage, SimonsVoss, CISA	2019/2020/2021	<p>Release of mobile-enabled versions of locks, readers and controllers (Schlage NDE, LE, MTB and CTE), mobile credentials, Bluetooth Low Energy ("BLE") and RFID technology and integrations between electronic locks and exit devices (Schlage, CISA). RC reader controller combines powerful ISONAS PureIP technology together with intelligent hardware (Schlage Mobile Access Solutions). New Digital Cylinder AX (SimonsVoss) supports active transponders, Mifare badges and BLE, a further step towards digitizing the door through the keyhole.</p> <p>Mortice self-locking system with a mono-point motorized lock variant (CISA) and new platformed, modular replacement of cylindrical locks (Schlage ALX). New multipoint exit mortice self-locking system for panic exit doors with narrow profile (CISA).</p> <p>Enhanced access control solutions for low-to-medium complexity applications offers a complete portfolio of IP and mobile-enabled devices across a variety of popular applications and openings (Schlage, ISONAS, Locknetics, Von Duprin, and Falcon).</p>
Exit Devices and Closers	LCN	2020/2021	<p>New low-energy automatic operator (LCN 6400 Compact series), retrofit solution with actuators reduces the cost and complexity of touchless access and ADA accessibility, converting the popular LCN 4040XP mechanical closer and powered by a simple wall plug or an external power supply. Follows the introduction of a range of touchless solutions, including automatic operators, actuators and wireless transmitters.</p>
Doors and Door Systems	TGP	2021	<p>North America's first fire-rated Full-Lite Door System, certified to meet forced entry standards (TGP ASTM E2395).</p>
Bike Lighting and Portable Locking Solutions	AXA, Kryptonite, Trelock	2019/2020/2021	<p>Innovation in bike safety from each of our Global Portable Security brands (AXA, Kryptonite, Trelock); and new ergonomic cable and chain locks (AXA).</p>
Software, Mobile and Web Applications	Schlage, CISA, Gainsborough	2019/2020/2021	<p>Mobile apps for iOS and Android phones (Schlage, CISA, Gainsborough) lock, unlock, issue mobile keys and give status checks. Schlage Mobile Student ID allows university students, faculty and staff to add student ID cards to Apple Wallet or Google Pay for door access, payments, attendance tracking and ticketing). App and mobile solution (CISA Smart Access) allows guests to use their smartphone like a room key and also start a WhatsApp chat with the front desk with a single click, creating guest experiences beyond security and safety.</p> <p>Cloud access management software (CISA AERO) expands with a new open software interface for property management systems.</p>

Industry and Competition

The global markets we serve encompass institutional, commercial and residential construction and remodeling markets throughout North America, Europe, Asia and Oceania. We expect the security products industry will continue to benefit from favorable trends such as increased concerns about safety and security, new attention on touchless solutions that help promote a healthy environment and technology-driven innovation that enables seamless access and a better user experience as people and assets traverse multiple locations and facilities. Further, we also expect continued growth in connected security products and solutions as end-users continue to adopt newer technologies, including IoT, in their facilities and single and multi-family homes.

The security products markets are highly competitive and fragmented throughout the world, with a number of large multi-national companies and thousands of smaller regional and local companies. This high fragmentation primarily reflects local regulatory requirements and highly variable end-user needs. We believe our principal global competitors are Assa Abloy AB and dormakaba Group. We also face competition in various markets and product categories throughout the world, including from Spectrum Brands Holdings, Inc. in the North American residential market. As we move into more technologically advanced product categories, we may also compete against new, more specialized competitors.

Our success depends on a variety of factors, including brand and reputation, product breadth, innovation, integration with popular technology platforms, quality and delivery capabilities, price and service capabilities. As many of our businesses sell through wholesale distribution, our success also depends on building and partnering with a strong channel network. Although price often serves as an important customer decision point, we also compete based on the breadth, innovation and quality of our products and solutions, our ability to custom-configure solutions to meet individual end-user requirements and our global supply chain.

Products and Services

We offer an extensive and versatile portfolio of security and access control products and solutions across a range of market-leading brands:

- *Locks, locksets, portable locks and key systems and services:* A broad array of cylindrical and mortise door locksets, security levers and master key systems that are used to protect and control access and a range of portable security products, including bicycle, small vehicle and travel locks. We also offer locksmith services in select locations;
- *Door closers, controls and exit devices:* An extensive portfolio of life-safety products and solutions generally installed on fire doors and facility entrances and exits. Door controls include both mechanical door closers and automatic door operators. Exit devices, also known as panic hardware, provide rapid egress to allow building occupants to exit safely in an emergency;
- *Electronic security products and access control systems, including software solutions:* A broad range of electrified locks, access control systems, key card and reader systems and accessories, including IoT, BLE, Power over Ethernet and cloud-based solutions;
- *Time, attendance and workforce productivity systems:* Products and services designed to help business customers manage and monitor workforce access control parameters, attendance and employee scheduling. We also offer ongoing aftermarket services in addition to design and installation offerings;
- *Doors and door systems:* A portfolio of hollow metal, glass and specialty doors and door systems; and
- *Other accessories:* A variety of additional security and product components, including hinges, door pulls, door stops, bike lights, louvers, weather stripping, thresholds and other accessories, as well as certain bathroom fittings and accessibility aids.

Customers

We sell most of our products and solutions through distribution and retail channels, including specialty distribution, e-commerce and wholesalers. We have built a network of channel partners that help our customers choose the right solution to meet their security needs and help commercial and institutional end-users fulfill and install orders. We also sell through a variety of retail channels, including large do-it-yourself home improvement centers, multiple online and e-commerce platforms, as well as small, specialty showroom outlets. We work with our retail partners on developing marketing and merchandising strategies to maximize their sales per square foot of shelf space. Through a few of our businesses, such as Interflex and our Global Portable Security brands, we also provide products and services directly to end-users.

Our 10 largest customers represented approximately 25% of our total Net revenues in 2021. No single customer represented 10% or more of our total Net revenues in 2021.

Sales and Marketing

In markets where we sell through commercial and institutional distribution channels, we employ sales professionals around the world who work with a combination of end-users, security professionals, architects, contractors, engineers and distribution partners to develop specific, custom-configured solutions for our end-users' needs. Our field sales professionals are assisted by specification writers who work with architects, engineers and consultants to help design door openings and security systems to meet end-users' functional, aesthetic and regulatory requirements. Both groups are supported by dedicated customer care and technical sales-support specialists worldwide. We also support our sales efforts with a variety of marketing efforts, including trade-specific advertising, cooperative distributor merchandising, digital marketing and marketing at a variety of industry trade shows.

In markets in which we sell through retail and home-builder distribution channels, we have teams of sales, merchandising and marketing professionals who help drive brand and product awareness through our channel partners and to consumers. We utilize a variety of advertising and marketing strategies, including traditional consumer media, retail merchandising, digital marketing, retail promotions and builder and consumer trade shows, to support these teams.

We also work actively with several industry bodies around the world to help promote effective and consistent safety and security standards. For example, we are members of Builders Hardware Manufacturers Association (BHMA), Connectivity Standards Alliance, Construction Specification Institute, Door and Hardware Institute (DHI), FiRa Consortium, Partner Alliance for Safer Schools (PASS), Physical Security Interoperability Alliance (PSIA), Security Industry Association, Security Technology Alliance, Z-Wave Alliance, The European Federation of Associations of Locks and Builders Hardware Manufacturers (ARGE), ASSOFERMA (Italy), BHE (Germany) and UNIQ (France).

Production and Distribution

We manufacture our products in our geographic markets around the world. We operate 29 principal production and assembly facilities – 14 in our Allegion Americas segment and 15 in our Allegion International segment. We own 15 of these facilities and lease the others. Our strategy is to produce in the region of use, wherever appropriate, to allow us to be closer to the end-user and increase efficiency and timely product delivery. Much of our U.S. based residential portfolio is manufactured in the Baja region of Mexico under the Maquiladora, Manufacturing and Export Services Industry ("IMMEX") program. In managing our network of production and assembly facilities, we focus on continuous improvement in customer experience, employee health and safety, productivity, resource utilization and operational excellence.

We distribute our products through a broad network of channel partners. In addition, third-party manufacturing and logistics providers perform certain manufacturing, storage and distribution services for us to support certain parts of our manufacturing and distribution network.

Raw Materials

We support our region-of-use production strategy with corresponding region-of-use supplier partners, where available. Our global and regional commodity teams work with production leadership, product management and materials management teams to procure materials for production. Where appropriate, we may enter into fixed-cost contracts to lower overall costs.

We purchase a wide range of raw materials, including steel, zinc, brass and other non-ferrous metals, as well as other parts and components, such as electronic components, to support our production facilities. During 2021, especially in the second half of the year, we experienced an acceleration of several macroeconomic challenges, including supply chain disruptions and delays; shortages in materials, including reductions in allocations of electronic components and other parts from key suppliers; and increased material and other inflation. These trends had a negative impact on our results of operations in 2021, and while we currently anticipate these challenges to continue in 2022, we are rapidly adapting to navigate these challenges. See "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" for a more detailed discussion of these trends and challenges.

Intellectual Property

Intellectual property, inclusive of certain patents, trademarks, copyrights, know-how, trade secrets and other proprietary rights, is important to our business. We create, protect and enforce our intellectual property investments in a variety of ways. We work actively in the U.S. and internationally to try to ensure the protection and enforcement of our intellectual property rights. We use trademarks on nearly all of our products and believe such distinctive marks are an important factor in creating a market for our goods, in identifying us and in distinguishing our products from others. We consider our CISA, Interflex, LCN, Schlage,

SimonsVoss, Von Duprin and other associated trademarks to be among our most valuable assets, and we have registered these trademarks in a number of countries. Although certain proprietary intellectual property rights are important to our success, we do not believe we are materially dependent on any particular patent or license, or any particular group of patents or licenses.

Facilities

We operate through a broad network of sales offices, engineering centers, 29 principal production and assembly facilities and several distribution centers throughout the world. Our active properties represent approximately 6.3 million square feet, of which approximately 40% is leased. The following table shows the location of our principal worldwide production and assembly facilities:

Production and Assembly Facilities	
Allegion Americas	Allegion International
Blue Ash, Ohio	Auckland, New Zealand
Chino, California	Brooklyn, Australia
Ensenada, Mexico	Blackburn, Australia
Everett, Washington	Bucheon, South Korea
Indianapolis, Indiana	Clamecy, France
Irving, Texas	Durchhausen, Germany
McKenzie, Tennessee	Faenza, Italy
Mississauga, Ontario	Feuquieres, France
Perrysburg, Ohio	Jinshan, China
Princeton, Illinois	Monsampolo, Italy
Security, Colorado	Osterfeld, Germany
Snoqualmie, Washington	Renchen, Germany
Tecate, Mexico	Sydney, Australia
Tijuana, Mexico	Veenendaal, Netherlands
	Zawiercie, Poland

Research and Development

We are committed to investing in our research and development capabilities with a focus on innovations that will deliver growth through the introduction of new products and solutions. In addition, we invest in initiatives that continuously drive improvements in product cost, quality, safety and sustainability.

Our research and development team is managed as a global, collaborative group to identify and develop new technologies and worldwide product platforms. Our regionally located resources leverage expertise in local standards and configurations and apply those to adapt products for the benefit of our customers. Further, we operate a global technology center in Bangalore, India, which augments and supports the regional engineering teams.

Seasonality

Our business experiences seasonality that varies by product line. Because more construction and do-it-yourself projects occur during the second and third calendar quarters in the Northern Hemisphere, our security product sales related to those projects are typically higher in those quarters than in the first and fourth quarters. However, certain other businesses typically experience higher sales in the fourth quarter due to project timing. In 2020, we experienced lower sales volumes during the second quarter, principally due to the economic challenges stemming from the COVID-19 pandemic; however, this is not anticipated to be a long-term trend in the seasonality of our businesses. Net revenues by quarter for the years ended December 31, 2021, 2020 and 2019, were as follows:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2021	24%	26%	25%	25%
2020	25%	21%	27%	27%
2019	23%	26%	26%	25%

Human Capital

The Company's human capital strategy is based on our values and is foundational to achieving our business strategy. To ensure we attract and retain top talent, we strive for a diverse and inclusive culture that rewards performance, provides growth and development opportunities and supports employees and their families through competitive compensation, benefits and numerous volunteer and charitable giving opportunities.

As of December 31, 2021, we had approximately 11,000 employees around the world, the vast majority working full time. Our employee base is supplemented by contingent labor where demand fluctuates or we experience short-term needs for specialized skills.

Compensation and Benefits

Compensation and benefit programs are tailored to be competitive in the geographies where we work, including the total package (which varies by country/region) that includes hourly and salaried compensation, performance incentive and equity plans, retirement, insurance and government social welfare programs, disability and family leave, education benefits to pursue degrees and certifications and additional offerings to support financial stability and personal planning. Health and wellness programs are provided globally and contribute to a productive, sustainable workforce by empowering our employees to take personal responsibility for their health, safety and well-being. In addition, we maintain tobacco-free facilities and pursue strategies to incentivize healthy behaviors and outcome-driven rewards. Pay for performance strategies consider not only accomplishments, but how individuals achieve results. The Allegion Leadership Behaviors – be a pioneer, break boundaries, coach, champion change, be courageous and inspire – are used to identify key talent and to train and develop aspiring leaders. They also work in concert with our performance management system to reinforce our values and code of conduct in assessing how people lead and deliver top performance.

Talent Attraction

Our employer brand strength creates a differentiated employee experience that attracts and retains the right talent for Allegion, both now and in the future. Talent attraction efforts are focused on our unique employee value proposition and highlight a culture that reflects our core values and business objectives. These efforts begin well before people walk in our doors and begin to work for us. Around the world, our sites partner with schools and support teachers, providing mentoring, grants, scholarships, internships, co-op programs, classroom technology and on-site activities and full-time rotational programs after graduation. Our sites sponsor science, technology, engineering and math ("STEM") programs and robotics and engineering competitions. In the U.S., we also host an annual Manufacturing Day event at several of our production and assembly facilities. These programs expose students to careers in manufacturing and technology and provide educators with programming to encourage academic excellence and social development while building a pipeline of talent for Allegion.

Talent attraction efforts go beyond emerging talent strategies to span core capabilities that enable the business to run, grow and transform. Key capabilities have been identified for our long-term corporate business strategy: talent, customer focus, innovation, partnering, pace and agility and collaboration. We use a variety of recruitment tactics to ensure a strong base of labor for manufacturing operations and to build the base of talent with these capabilities. Throughout the process, there is a focus on driving a technology-enabled seamless experience for internal and external candidates and hiring managers throughout the recruitment cycle. These talent attraction efforts are complemented with a total reward framework, internal learning and development paths and career growth opportunities to secure Allegion as an employer of choice, where people want to come work, stay and thrive.

Talent Development and Succession Planning

Talent development and succession planning at all levels of the organization are instrumental in ensuring we have the key capabilities to deliver the value proposition expected by our customers and employees. Inclusive succession planning is supported through the Allegion Leadership Behaviors, individual career mapping, assessment of performance and talent pipeline planning up to and including the Chief Executive Officer ("CEO"). On a quarterly basis, the executive team reviews talent development, focusing on developing a diverse succession bench, as part of their quarterly business review and a key component of the Allegion Operating System, our system of annual operation to support governance, reporting processes and management of the business. These cross-functional reviews highlight individuals who are ready for new opportunities, individuals who are on a special assignment or project and individuals early in their career that demonstrate emerging leadership skills.

Learning and Development

Opportunities for on-going learning and development are delivered to employees through structured coursework, on-site and expert-led training and experiential, applied development. The Allegion Academy is offered globally, supporting multiple languages and providing more than 17,000 self-guided online courses, as well as community channels on targeted skills and inclusion and diversity. We offer programs to provide successive levels of development, including reskilling and upskilling existing employees, as well as strengths-based leadership curriculum. Enterprise excellence initiatives and sprint teams expand skills in lean manufacturing and quality principles and lead to redesigning workflow to boost productivity and reduce waste. Employee-led resource and affinity groups provide enrichment opportunities for women's leadership, early-career professionals, creativity and innovation, health and fitness, community volunteering and philanthropy.

Engagement, Inclusion and Diversity

A commitment to engagement, inclusion and diversity is core to the Allegion Operating System. Engagement surveys provide team leaders with insights on potential areas of focus and help them prioritize and take action on their teams' foundational, inclusion, growth and development needs. Strengths-based leadership is an element of our commitment to inclusion: the more employees understand their own strengths, the better equipped they are to add value and appreciate the contributions of diverse members of their teams.

Inclusion and diversity are topics for learning communities, employee roundtables and ongoing, regular analysis and dialogue among our people leaders, executive leadership and our Board of Directors. We believe in fundamental standards that support our employees, including a commitment to building and maintaining diverse and inclusive workplaces, safe and healthy practices and competitive wages and benefits. We embrace all differences and similarities among colleagues and within the relationships we foster with customers, suppliers and the communities where we live and work. Whatever background, experience, race, color, national origin, religion, age, gender, gender identity, disability status, sexual orientation, protected veteran status or any other characteristic protected by law, we make sure that potential and current employees have every opportunity for application and the opportunity to give their best at work because it's the right thing to do.

The combined efforts of Allegion's Inclusion and Diversity Steering Committee, our Executive Leadership Team ("ELT") and, as of June 2021, a new employee-led Inclusion Council, are driving expectations and accountability while creating role models and change champions. Our engagement, inclusion and diversity strategy has three core pillars:

- *Learn & listen deeply:* Learn to recognize biases and mitigate them. Seek to first understand the other person's perspective rather than respond or act;
- *Unite widely:* Create a workplace where all employees feel welcomed, respected and valued, enabling customers to more easily connect with our brands through our people; and
- *Take action:* Identify the unique things that impact our organization, our communities and our industry.

During 2021, we focused on four action priorities: establish the Inclusion Council; charter and expand employee resource groups; review business policies, processes and practices; and launch the Supplier Diversity Program. In 2021, Allegion was named the winner of the Jackson Lewis Diversity, Equity and Inclusion Champion, on the merits of our company's proactive and intentional global efforts throughout 2021.

We are dedicated to fulfilling equal opportunity commitments in all decisions regarding all employment actions and at all levels of employment. In partnership with our Human Resources organization, our Equal Employment Opportunity Officer ensures that the applicable policy and procedures are appropriately established, implemented and disseminated, including those prohibiting discrimination, harassment, bullying and/or retaliation.

Civic Involvement

Civic involvement is part of the value proposition we offer employees and supports inclusion, diversity, growth and development. The Company and its employees provide multi-faceted support for our communities, guided by three philanthropic pillars: safety and security; wellness; and addressing the unique needs of the communities where we work, live and thrive. Corporate sponsorships and voluntary employee payroll deductions support a wide range of non-profits, including those that address housing and school security and safety; children and youth programs; education and scholarships for people of color and those who are economically disadvantaged and support for Historically Black Colleges and Universities; community safety nets for basic needs (e.g., food, shelter, transportation) for underserved people and to break the cycle of poverty; wellness, mental health, health research, emergency relief and blood supply initiatives; and programs to advance

equality, justice and address systemic bias. In addition to corporate sponsorships, site leaders and employees are encouraged to organize local volunteer and fundraising activities, provide grants to local organizations and serve on boards and committees.

Respect for Human Rights

Our respect for human rights is expressed in standards for our employees, our business partners, our customers and our communities. We have adopted and continue to uphold our Global Human Rights Policy, with standards that align with basic working conditions and human rights concepts advanced by international organizations such as the International Labor Organization and the United Nations. This policy also represents our own minimum standards for working conditions and human rights in our business and supply chains. In addition, we conduct risk assessments and continue to have conversations with the suppliers and companies we work with about the importance of human rights.

Employee Health and Safety

Employee health and safety are top priorities, and we consistently rank as the safest among leading competitors on core measures such as the total recordable incident rate. ‘Be safe, be healthy’ is a core organizational value in our proactive safety culture and has guided our response to the COVID-19 pandemic throughout 2020 and 2021. We have adopted numerous health and safety measures in accordance with best-practice safe hygiene guidelines issued by recognized health experts like the U.S. Centers for Disease Control and Prevention (“CDC”), the European Centre for Disease Prevention and Control (“ECDC”) and the World Health Organization (“WHO”), as well as any applicable government mandates. We continue to adapt to changing health conditions at a local level and support a wide range of health and safety measures, including reduced density, remote and hybrid work options for appropriate roles, cleaning and hygiene protocols, visitor management and mask-wearing. We also encourage preventative measures, including COVID-19 and influenza vaccines and booster shots.

The CEO and senior executives have responsibility for risk management, employee accountability and safety hazard recognition and take a personal responsibility toward executing on safety initiatives. We monitor leading and lagging indicators related to health and safety as part of our ongoing management of the Allegion Operating System and regularly update the Corporate Governance and Nominating Committee of the Board of Directors on key accomplishments and employee health and safety topics. In recognition of our efforts over the past several years to integrate sound environmental, health and safety ("EHS") management with our business operations, in 2021, we received the renowned Robert W. Campbell Award from the National Safety Council.

Regulatory Matters

We are subject to a variety of federal, state and local laws and regulations, both within and outside the U.S., relating to environmental, health and safety concerns. We are committed to conducting our business in a safe, environmentally responsible and sustainable manner, in compliance with all applicable EHS laws and regulations, and in a manner that helps promote and protect the health and safety of our environment, associates, customers, contractors and members of our local communities worldwide. Environmental, social and governance ("ESG") matters are embedded into the Allegion Operating System and, in tandem with our values and Allegion leadership behaviors, create a workplace culture committed to doing the right thing in the right way. Our Board of Directors oversees the Company's ESG initiatives, strategies, goals and performance, and Company leaders and our employees all have a responsibility to uphold excellence, as we believe ESG helps advance engagement and business vitality. We operate with principles that support our proactive commitments, including:

- Integrating sound, EHS and sustainability strategies in all elements of our business functions, including objectives and measurements;
- Conducting periodic, formal evaluation of our compliance status and annual review of objectives and targets;
- Creating a workplace culture where all employees are responsible for safety;
- Making continuous improvements in EHS and sustainability management systems and performance, including the reduction in the usage of natural resources, waste minimization, prevention of pollution and prevention of workplace accidents, injuries and risks;
- Designing, operating and maintaining our facilities in a manner that minimizes negative EHS and sustainability impacts;
- Using materials responsibly, including, where feasible, the recycling and reuse of materials; and
- Acting in a way that shows sensitivity to community concerns about EHS and sustainability issues.

We recognize that these principles are critical to our future success. We have a dedicated environmental program designed to reduce the utilization and generation of hazardous materials during the manufacturing process and to remediate any identified environmental concerns. As to the latter, we are currently engaged in site investigations and remediation activities to address environmental cleanup from past operations at current and former production facilities. We also regularly evaluate our

remediation methods that are in addition to, or in replacement of, those we currently utilize based upon enhanced technology and regulatory changes. We are sometimes a party to environmental lawsuits and claims and have, from time to time, received notices of potential violations of environmental laws and regulations from the U.S. Environmental Protection Agency ("EPA") and similar state authorities. We have also been identified as a potentially responsible party ("PRP") for cleanup costs associated with off-site waste disposal at federal Superfund and state remediation sites. For all such sites, there are other PRPs and, in most instances, our involvement is minimal.

In estimating our liability, we have assumed that we will not bear the entire cost of remediation of any site to the exclusion of other PRPs who may be jointly and severally liable. The ability of other PRPs to participate has been taken into account, based on our understanding of the parties' financial condition and probable contributions on a per site basis. Additional lawsuits and claims involving environmental matters are likely to arise from time to time in the future. For a further discussion of our potential environmental liabilities, see Notes 2 and 21 to the Consolidated Financial Statements.

Further, during 2021, we provided additional transparency on our sustainability priorities and progress by creating a new ESG section of the corporate website (found under the ESG tab at www.allegion.com). The website highlights our ongoing progress and advancements in ESG, including the development of the cross-functional ESG Council which was formed in 2020 and establishing Allegion's materiality matrix of ESG priorities.

Throughout this Form 10-K, we may refer to additional information that is available on our websites. The information contained on, or that may be accessed through, the Company's websites is not incorporated by reference into, and is not part of, this Form 10-K.

Available Information

We are required to file annual, quarterly and current reports, proxy statements and other documents with the SEC under the Securities Exchange Act of 1934. The SEC maintains an Internet website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. The public can obtain any documents that are filed by us at www.sec.gov.

In addition, the Company's Annual Report on Form 10-K, as well as future quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to all of the foregoing reports, are made available free of charge on our Internet website (www.allegion.com) as soon as reasonably practicable after such reports are electronically filed with or furnished to the SEC. The contents of our website are not incorporated by reference in this report.

Item 1A. **RISK FACTORS**

We discuss our expectations regarding future performance, events and outcomes in this Form 10-K, quarterly and annual reports, press releases and other written and oral communications. All statements except for historical and present factual information are “forward-looking statements” and are based on financial data and business plans available only as of the time the statements are made, which may become outdated or incomplete. Forward-looking statements are inherently uncertain, and investors must recognize that events could significantly differ from our expectations. You should carefully consider the risk factors discussed below, together with all the other information included in this Form 10-K, in evaluating us, our ordinary shares and our senior notes. If any of the risks below actually occurs, our business, financial condition, results of operations and cash flows could be materially and adversely affected. Any such adverse effect may cause the trading price of our ordinary shares to decline, and as a result, you could lose all or part of your investment in us. Our business may also be adversely affected by risks and uncertainties not known to us or risks that we currently believe to be immaterial. We assume no obligation to update any forward-looking statements as a result of new information, future events or other factors.

Strategic and Operational Risks

Our business operations have been, and are expected to continue to be, adversely impacted by the global COVID-19 pandemic. We are unable to predict the full extent to which the pandemic and related impacts, including macroeconomic impacts and the pace of global economic recovery, will continue to adversely impact our business, results of operations and financial condition.

The COVID-19 pandemic and preventative measures taken to contain the spread of COVID-19 or mitigate this pandemic have caused, and are continuing to cause, business slowdowns or shutdowns in various countries around the world. This pandemic has also caused, and may continue to cause, disruption to our global supply chain and business operations, in addition to the various effects noted elsewhere within the risk factors contained in this Annual Report on Form 10-K. Numerous actions taken to help limit the spread of COVID-19, such as stay-at-home orders, quarantines, increased border controls and closures, business shutdowns, and other public health and government mandates that restrict business activities and travel have impacted, and will likely continue to impact our ability to carry out business as usual, including the temporary suspension of some of our operations, shortages in materials, parts and components, fluctuations in customer demand, costs associated with operational changes and an extended period of remote work arrangements for some of our employees which could increase cybersecurity risks and other operational risks. Conversely, as some governments ease their restrictions and social interactions increase prior to the widespread global distribution and adoption of effective vaccines or treatments for COVID-19, and as the COVID-19 virus mutates into more contagious or severe variants, preventative and precautionary measures may not be sufficient to mitigate the risk of increased infection and could result in increased illness among our employees, business partners and others, and lead to further business interruption.

In addition, our operations, as well as a significant number of our customers, suppliers, vendors and other business partners have been, and continue to be, adversely affected by the COVID-19 pandemic. In particular, shortages in commodities and materials, including shortages and reductions in allocations of electronic and other components from key suppliers, labor shortages and elevated levels of employee absenteeism, freight delays and other supply chain constraints and disruptions have significantly delayed or disrupted, and may continue to adversely impact, both our suppliers’ and our ability to manufacture and deliver products to our customers. We have also experienced a significant increase in commodity, parts and material component inflation in 2021, as well as inflation in other costs, such as packaging, freight, labor and energy prices. Continued supply chain disruptions and delays, as well as continued heightened inflation, could lead to continued periodic production interruptions and other inefficiencies that could negatively impact our productivity, margin performance and our results of operations.

Further, we have experienced increased labor shortages at some of our production and distribution facilities. While we have historically experienced some level of ordinary course turnover of employees, the COVID-19 pandemic and resulting impacts have exacerbated labor shortages and increased employee turnover. A number of factors have had and may continue to have adverse effects on the labor force available to us, including reduced employment pools, increased competition for manufacturing employees, any unemployment subsidies, including unemployment benefits offered in response to the COVID-19 pandemic, and other government regulations, which include laws and regulations related to workers’ health and safety, wage and hour practices and immigration. It is also uncertain to what extent any COVID-19 vaccine mandates, if imposed or implemented, may result in further workforce attrition. Labor shortages and increased turnover rates within our Company have led to and could in the future lead to increased costs, such as increased overtime to meet demand and increased wage rates to attract and retain employees and could negatively affect our ability to efficiently operate our production facilities or otherwise operate at full capacity. An overall or prolonged labor shortage, lack of skilled labor, increased turnover or labor cost inflation could have a material adverse impact on our operations, results of operations, liquidity or cash flows.

Despite our best efforts to manage and mitigate the negative effects of the COVID-19 pandemic to the Company, their ultimate impact also depends on factors beyond our knowledge or control, including the duration and severity of this pandemic, the

emergence and spread of more contagious or severe variants of the COVID-19 virus, the continuing prevalence of severe, unconstrained or escalating rates of infection in certain countries and regions, the availability, adoption and efficacy of treatments and vaccines, future actions taken by public health and governmental authorities, including any unintended consequences of such actions, and the pace of global economic recovery. Further, to the extent our management is focused on mitigating the impacts of the COVID-19 pandemic which has required, and will continue to require, a large investment of time and resources, our attention and resources may be diverted from other business matters.

The impact of the COVID-19 pandemic continues to evolve, and its ultimate impact on our business is highly uncertain and difficult to predict. The continued spread of COVID-19 may have further adverse impacts on our business, operations, customer demand, supply chain, cash flow generation, financial position and liquidity and may also exacerbate other risks and uncertainties described in this Annual Report on Form 10-K.

Increased competition, including from technological developments, could adversely affect our business.

The markets in which we operate include a large number of participants, including multi-national, regional and small, local companies. We primarily compete on the basis of quality, innovation, expertise, effective channels to market, breadth of product offering and price. We may be unable to effectively compete on all these bases. Further, in a number of our product offerings, we compete with our retail customers and technology partners who use their own private labels. If we are unable to anticipate evolving trends in the market or the timing and scale of our competitors' activities and initiatives, including increased competition from private label brands, the demand for our products and services could be negatively impacted.

In addition, we compete in an industry that is experiencing the convergence of mechanical, electronic and digital products. Technology and innovation play significant roles in the competitive landscape. Our success depends, in part, upon the research, development and implementation of new technologies and products including obtaining, maintaining and enforcing necessary intellectual property protections. Securing and maintaining key partnerships and alliances, recruiting and retaining highly skilled and qualified employee talent and having access to technologies, services, intellectual property and solutions developed by others will play a significant role in our ability to effectively compete. The continual development of new technologies by existing and new competitors, including non-traditional competitors with significant resources, could adversely affect our ability to sustain operating margins and desirable levels of sales volumes. To remain competitive, we must develop new products and respond to new technologies in a timely manner.

Our growth is dependent, in part, on the development, commercialization and acceptance of new products and services.

We must develop and commercialize new products and services that meet the varied and evolving needs of our customers and end-users in order to remain competitive in our current and future markets and in order to continue to grow our business. The speed of development by our competitors and new market entrants is increasing. We cannot provide any assurance that any new product or service will be successfully commercialized in a timely manner, if ever, or, if commercialized, will result in returns greater than our investment. Investment in a product or service could divert our attention and resources from other projects that become more commercially viable in the market. We also cannot provide any assurance that any new product or service will be accepted by the market.

Changes in customer and consumer preferences and the inability to maintain beneficial relationships with large customers could adversely affect our business.

We have significant customers, particularly major retailers, although no one customer represented 10% or more of our total Net revenues in any of the past three fiscal years. The loss or material reduction of business, either due to a reduction in demand from one or more of our significant customers, or our inability to timely meet the elevated level of customer demand for various reasons, the lack of success of sales initiatives or changes in customer preferences or loyalties for our products related to any such significant customer could have a material adverse impact on our business. In addition, major customers who are volume purchasers are much larger than us and have strong bargaining power with suppliers. This limits our ability to recover cost increases through higher selling prices. Furthermore, unanticipated inventory adjustments by these customers can have a negative impact on sales.

We also sell our products through various trade channels, including traditional retail and e-commerce channels. If we or our major customers are not successful in navigating the shifting consumer preferences to distribution channels such as e-commerce, our expected future revenues may be negatively impacted.

If our products or solutions fail to meet certification and specification requirements, are defective, or otherwise fall short of end-users' needs and expectations, our business may be negatively impacted.

The security and access control product markets we serve often have unique certification and specification requirements, reflecting local regulatory requirements and highly variable end-user needs. While we strive to meet all certification and specification requirements, if any of our products or solutions do not meet such requirements, or contain, or are perceived to contain, defects or otherwise fall short of end-users' needs and expectations, we may incur significant costs and our business, results of operations or financial condition may be negatively impacted.

Additionally, as end-users have continued to adopt newer technologies in their facilities and homes, accelerated by the increasing adoption of IoT technologies, our industry is seeing a shift in demand from mechanical security products to electronic security products and solutions, including connected devices. Electronic security products and solutions are increasingly more sophisticated and technologically complex than the mechanical security products we sell and have an increased risk of design, cybersecurity or manufacturing defects, which could lead to product liability claims, recalls, product replacements or modifications, write-offs of inventory or other assets and significant warranty and other expenses. Product quality issues can also adversely affect the end-user experience, resulting in reputational harm, loss of competitive advantage, poor market acceptance, reduced demand for products and solutions, delay in new product and service introductions and lost sales. Further, adverse publicity, whether or not justified, or allegations of product or service quality issues, even if false or unfounded, could damage our reputation and negatively affect our sales.

Our business and innovation strategies include making acquisitions of, and investments in, external companies. These acquisitions and investments could be unsuccessful or consume significant resources, which could adversely affect our operating and financial results.

We will continue to analyze and evaluate the acquisition of strategic businesses or product lines with the potential to strengthen our industry position or enhance our existing set of products and services offerings. We cannot provide assurance that we will identify or successfully complete acquisitions with suitable candidates in the future, nor can we provide assurance that completed acquisitions will be successful, or otherwise result in efficient integration and creation of synergies.

Some of the businesses we may seek to acquire may be marginally profitable or unprofitable. For these businesses to achieve acceptable levels of profitability, we must improve their management, operations, products and market penetration. We may not be successful in this regard, and we may encounter other difficulties in integrating acquired businesses into our existing operations. Further, there may be difficulties in evaluating potential acquisitions, including the possibility that our due diligence may not reveal or fully assess valuation issues, potential liabilities or other acquisition risks.

Acquisitions may involve significant cash expenditures, debt incurrence, operating losses and expenses. Acquisitions also involve numerous other risks, including:

- Diversion of management's time and attention from daily operations;
- Difficulties integrating acquired businesses, technologies and personnel into our business;
- Difficulties completing the transaction in a timely manner;
- Difficulties realizing synergies expected to result from acquisitions;
- Difficulties in obtaining and verifying the financial statements and other business information of acquired businesses;
- Inability to obtain regulatory approvals and/or required financing on favorable terms;
- Potential loss of key employees, key contractual relationships or key customers of acquired companies or of us;
- Difficulties competing in the new markets we enter;
- Assumption of the liabilities and exposure to unforeseen liabilities of acquired companies;
- Dilution of interests of holders of our ordinary shares through the issuance of equity securities or equity-linked securities; and
- Difficulty in integrating financial reporting systems and implementing controls, procedures and policies, including disclosure controls and procedures and internal control over financial reporting, appropriate for public companies of our size at companies that, prior to the acquisition, had lacked such controls, procedures and policies.

Further, as part of our innovation strategy, from time to time we invest in start-up companies and/or development stage technology or other companies. In evaluating these opportunities, we follow a structured evaluation process that considers factors such as potential financial returns, new expertise in emerging technology and business benefits. Despite our best efforts to calculate potential return and risk, some or all of the companies we invest in may be unprofitable at the time of, and

subsequent to, our investment. We may lose money in these investments, including the potential for future impairment charges on the investments, and the anticipated benefits of the technology and business relationships may be less than expected.

We continually look to expand our services and products into new international markets, and as we do, we will have only limited experience in marketing and operating services and products in such markets. In some instances, we may rely on the efforts and abilities of third-party and foreign business partners in such markets. Certain international markets may be slower than our established markets in adopting our services and products, and our operations in such markets may not develop at a rate that supports our level of investment. In addition to the risks outlined above, expansion into certain new markets may require us to compete with local businesses with greater knowledge of the market, including the tastes and preferences of end-users and businesses with dominant market shares. Any acquisitions or investments may ultimately not be successful, may harm our business or financial condition and/or result in impairment charges.

We may pursue business opportunities that diverge from our core business.

We may pursue business opportunities that diverge from our core business, including expanding our products or service offerings, investing in new and unproven technologies and forming new alliances with companies to distribute our products and services. We can offer no assurance that any such business opportunities will prove successful. Among other negative effects, our investment in new business opportunities may exceed the returns we realize. Additionally, any new investments could have higher cost structures than our current business, which could reduce operating margins and require more working capital. In the event that working capital requirements exceed operating cash flow, we may be required to draw on our revolving credit facility or pursue other external financing, which may not be readily available.

Our enterprise excellence efforts may not achieve the improvements we expect.

We utilize a number of tools to improve efficiency and productivity. Implementation of new processes to our operations could cause disruptions and may prove to be more difficult, costly or time consuming than expected. There is no assurance that all of our planned enterprise excellence projects will be fully implemented, or if implemented, will realize the expected improvements.

We may not be able to effectively manage and implement restructuring initiatives or other organizational changes.

We have, from time to time, restructured or made other adjustments to our workforce and manufacturing footprint in response to market or product changes, performance issues, changes in strategy, acquisitions and/or other internal and external considerations. These restructuring activities and other organizational changes often result in increased restructuring costs, diversion of management's time and attention from daily operations and temporarily reduced productivity. If we are unable to successfully manage and implement restructuring and other organizational changes, we may not achieve or sustain the expected growth or cost savings benefits of these activities or do so within the expected timeframe. These effects could recur in connection with future acquisitions and other organizational changes and our results of operations could be negatively affected.

The effects of global climate change or other unexpected events, including global health crises, may disrupt our operations and have a negative impact on our business.

The effects of global climate change, such as extreme weather conditions and natural disasters occurring more frequently or with more intense effects, or the occurrence of unexpected events including wildfires, tornadoes, hurricanes, earthquakes, floods, tsunamis and other severe hazards or global health crises, such as the outbreak of Ebola or the global COVID-19 pandemic, or other actual or threatened epidemic, pandemic, outbreak and spread of a communicable disease or virus, in the countries where we operate or sell products and provide services, could adversely affect our operations and financial performance. Extreme weather, natural disasters, power outages, global health crises or other unexpected events could disrupt our operations by impacting the availability and cost of materials needed for manufacturing, causing physical damage and partial or complete closure of our manufacturing sites or distribution centers, loss of human capital, temporary or long-term disruption in the manufacturing and supply of products and services and disruption in our ability to deliver products and services to customers. These events and disruptions could also adversely affect our customers' and suppliers' financial condition or ability to operate, resulting in reduced customer demand, delays in payments received or supply chain disruptions. Further, these events and disruptions could increase insurance and other operating costs, including impacting our decisions regarding construction of new facilities to select areas less prone to climate change risks and natural disasters, which could result in indirect financial risks passed through the supply chain or other price modifications to our products and services.

In particular, the ultimate extent of the impact of any epidemic, pandemic or other global health crisis on our business, financial condition and results of operations will depend on future developments which are highly uncertain and cannot be predicted, including new information that may emerge concerning the duration and severity of such epidemic, pandemic or other global health crisis, actions taken to contain or prevent their further spread and the pace of global economic recovery following containment of the spread.

We may be subject to risks relating to our information technology and operational technology systems.

We rely extensively on information technology and operational technology systems, networks and services including hardware, software, firmware and technological applications and platforms (collectively, "IT Systems") to manage and operate our business from end-to-end, including ordering and managing materials from suppliers, design and development, manufacturing, marketing, selling and shipping to customers, invoicing and billing, managing our banking and cash liquidity systems, managing our enterprise resource planning and other accounting and financial systems and complying with regulatory, legal and tax requirements. There can be no assurance that our current IT Systems will function properly. We have invested and will continue to invest in improving our IT Systems. Some of these investments are significant and impact many important operational processes and procedures. There is no assurance that newly implemented IT Systems will improve our current systems, improve our operations or yield the expected returns on the investments. In addition, the implementation of new IT Systems may be more difficult, costly or time consuming than expected and cause disruptions in our operations and, if not properly implemented and maintained, negatively impact our business. If our IT Systems cease to function properly or if these systems do not provide the anticipated benefits, our ability to manage our operations could be impaired.

We currently rely on third-party service providers for many of the critical elements of our global information and operational technology infrastructure and their failure to provide effective support for such infrastructure could negatively impact our business and financial results.

We have outsourced many of the critical elements of our global information and operational technology infrastructure to third-party service providers in order to achieve efficiencies. If such service providers do not perform or do not perform effectively, we may not be able to achieve the expected efficiencies and may have to incur additional costs to address failures in providing service by the service providers. Depending on the function involved, such non-performance, ineffective performance or failures of service may lead to business disruptions, processing inefficiencies or security breaches.

Disruptions or breaches of our information systems could adversely affect us.

Despite our implementation of cybersecurity measures which have focused on prevention, mitigation, resilience and recovery, our network and products, including access solutions, may be vulnerable to cybersecurity attacks, computer viruses, malicious codes, malware, ransomware, phishing, social engineering, denial of service, hacking, break-ins and similar disruptions. Cybersecurity attacks and intrusion efforts are continuous and evolving, and in certain cases they have been successful at the most robust institutions. The scope and severity of risks that cyber threats present have increased dramatically and include, but are not limited to, malicious software, attempts to gain unauthorized access to data or premises, exploiting weaknesses related to vendors or other third parties that could be exploited to attack our systems, denials of service and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information and corruption of data. Any such event could have a material adverse effect on our business, operating results and financial condition, as we face regulatory, reputational and litigation risks resulting from potential cyber incidents, as well as the potential of incurring significant remediation costs. Further, while we maintain insurance coverage that may, subject to policy terms and exclusions, cover certain aspects of our cyber risks, such insurance coverage may be insufficient to cover our losses or all types of claims that may arise in the continually evolving area of cyber risk.

Our daily business operations also require us to collect and/or retain sensitive data such as intellectual property, proprietary business information and data related to customers, employees, suppliers and business partners within our networking infrastructure including data from individuals subject to the European Union's General Data Protection Regulation, that is subject to privacy and security laws, regulations and/or customer-imposed controls. Despite our efforts to protect such data, the loss or breach of such data due to various causes including material security breaches, catastrophic events, extreme weather, natural disasters, power outages, system failures, computer viruses, improper data handling, programming errors, unauthorized access and employee error or malfeasance could result in wide reaching negative impacts to our business, and as such, the ongoing maintenance and security of this information is pertinent to the success of our business operations and our strategic goals.

In addition, we operate in an environment where there are different and potentially conflicting data privacy laws and regulations in effect or expected to go into effect in the future, including regulations related to devices connected through IoT, in the

various jurisdictions in which we operate, and we must understand and comply with such laws and regulations while ensuring our data is secure.

Our networking infrastructure and related assets may be subject to unauthorized access by hackers, employee error or malfeasance or other unforeseen activities. Such issues could result in the disruption of business processes, network degradation and system downtime, along with the potential that a third party will exploit our critical assets such as intellectual property, proprietary business information and data related to our customers, suppliers and business partners. To the extent that such disruptions occur and our business continuity plans do not effectively address these disruptions in a timely manner, they may cause delays in the manufacture or shipment of our products and the cancellation of customer orders and, as a result, our business operating results and financial condition could be materially and adversely affected, resulting in a possible loss of business or brand reputation.

Our ability to successfully grow and expand our business depends on our ability to recruit and retain a highly qualified and diverse workforce.

Our ability to successfully grow and expand our business is dependent upon our ability to recruit and retain a workforce with the skills necessary to develop, manufacture and deliver the products and services desired by our customers. We need highly skilled and qualified personnel in multiple areas, including engineering, sales, manufacturing, information technology, cybersecurity, business development, strategy and management. We must therefore continue to effectively recruit, retain and motivate highly qualified, skilled and diverse personnel to maintain our current business and support our projected growth. A shortage of these employees for various reasons, including intense competition for skilled employees, labor shortages, increased labor costs, candidates' preference to work remotely, changes in laws and policies regarding immigration and work authorizations in jurisdictions where we have operations, or any government or public health mandates, such as vaccine mandates, that may result in workforce attrition and difficulty with recruiting, may jeopardize our ability to grow and expand our business.

Disruptions in our global supply chain, including product manufacturing and logistical services provided by our supplier partners, may negatively impact our business.

We procure certain products, including raw materials and other commodities, including steel, zinc, brass and other non-ferrous metals, as well as parts, components (including electronic components) and logistical services from supplier partners located throughout the world. Our ability to meet our customers' needs and achieve cost targets depends on our ability to maintain key manufacturing and supply arrangements, including execution of supply chain optimizations and certain sole supplier or sole manufacturing arrangements. Our reliance on these third parties reduces our control over the manufacturing and delivery process, exposing us to risks including reduced control over quality assurance, product costs, product supply and delivery delays. Additionally, because not all of our supply arrangements provide for guaranteed supply and some key parts and components may be available only from a single supplier or a limited group of suppliers, we are also subject to supply and pricing risks, which could negatively impact our margin performance and results of operations.

If we are unable to effectively manage these relationships, or if these third parties experience delays, disruptions, shortages of materials, labor, electronic and other components, capacity constraints, regulatory issues or quality control problems in their operations, freight delays and other supply chain constraints and disruptions, or otherwise fail to meet our future requirements for timely delivery, our ability to ship and deliver certain of our products to our customers could be impaired and our business could be harmed.

Economic, Market and Financial Risks

Increased prices and inflation could negatively impact our margin performance and our financial results.

Increased inflation, including rising prices for raw materials, parts and components, freight, packaging, labor and energy increases the costs to manufacture and distribute our products and services, and we may be unable to pass these costs on to our customers. We do not currently use financial derivatives to hedge against volatility in commodity prices; however, we utilize firm purchase commitments, where possible, to help mitigate risk. The pricing of some materials, parts and components we use is based on market prices. To mitigate this exposure, we may use annual price contracts to minimize the impact of inflation and to benefit from deflation.

Additionally, we are exposed to fluctuations in other costs such as packaging, freight, labor and energy prices. If inflation in these costs increases beyond our ability to control for them through measures such as implementing operating efficiencies, we

may not be able to increase prices to sufficiently offset the effect of various cost increases without negatively impacting customer demand, thereby negatively impacting our margin performance and results of operations.

Our global operations subject us to economic risks.

We are incorporated in Ireland and operate in countries worldwide. Our global operations depend on products manufactured, purchased and sold in the U.S. and internationally, including in Australia, Canada, China, Europe, Korea, Mexico, New Zealand and the Middle East. The political, economic and regulatory environments in which we operate are becoming increasingly volatile and uncertain. Accordingly, we are subject to risks that are inherent in operating globally, including:

- Changes to trade agreements, sanctions, import and export regulations, including imposition of burdensome tariffs and quotas, and customs duties;
- Changes in applicable tax regulations and interpretations;
- Economic downturns;
- Social and political instability, civil strife and other geographical uncertainty;
- Changes in laws and regulations or imposition of currency restrictions and other restraints in various jurisdictions;
- Limitation of ownership rights, including expropriation of assets by a local government, and limitation on the ability to repatriate earnings;
- Sovereign debt crises and currency instability in developed and developing countries;
- Difficulty in staffing and managing global operations;
- Difficulty in enforcing agreements, collecting receivables and protecting assets through non-U.S. legal systems;
- Political unrest, national and international conflict, including war, border closures, civil disturbances and terrorist acts; and
- Difficulty in transporting materials, components and products.

These risks could increase our cost of doing business in the U.S. and internationally, increase our counterparty risk, disrupt our operations, disrupt the ability of suppliers and customers to fulfill their obligations, increase our effective tax rate, increase the cost of our products, limit our ability to sell products in certain markets, reduce our operating margin, reduce cash flows and/or negatively impact our ability to compete.

Our business relies on the institutional, commercial and residential construction and remodeling markets.

Demand for our security products and solutions relies on the institutional, commercial and residential construction and remodeling markets, which are marked by cyclicity based on overall economic conditions, including consumer confidence and disposable income, corporate and government spending, work-from-home trends, availability of credit and demand for new housing and infrastructure. Weakness or instability in one or more of these markets may cause current and potential customers to delay or cancel major capital projects, or otherwise choose not to make purchases, which could negatively impact the demand for our products and solutions and erode average selling prices.

Currency exchange rate fluctuations may adversely affect our results.

We are exposed to a variety of market risks, including the effects of changes in currency exchange rates. See "Part II, Item 7A. Management's Discussion and Analysis of Financial Condition and Results of Operations – Quantitative and Qualitative Disclosures About Market Risk."

Approximately 30% of our 2021 Net revenues were derived outside the U.S., and we expect sales to non-U.S. customers to continue to represent a significant portion of our consolidated Net revenues. Although we may enter into currency exchange contracts to reduce our risk related to currency exchange fluctuations, changes in the relative fair values of currencies occur from time to time and may, in some instances, have a material impact on our results of operations. We do not hedge against all our currency exposure and therefore, our business will continue to be susceptible to currency fluctuations.

We also translate assets, liabilities, revenues and expenses denominated in non-U.S. dollar currencies into U.S. dollars for our Consolidated Financial Statements based on applicable exchange rates. Consequently, fluctuations in the value of the U.S. dollar compared to other currencies may have a material impact on the value of these items in our Consolidated Financial Statements, even if their value has not changed in their original currency.

We may be required to recognize impairment charges for our goodwill, indefinite-lived intangible assets and other long-lived assets.

At December 31, 2021, the net carrying value of our goodwill and other indefinite-lived intangible assets totaled approximately \$803.8 million and \$113.9 million, respectively. Pursuant to U.S. generally accepted accounting principles ("GAAP"), we are required to annually assess our goodwill and indefinite-lived intangible assets for impairment. In addition, interim assessments must be performed for these and other long-lived assets whenever events or changes in circumstances indicate that an impairment may have occurred. Significant disruptions to our business or end market conditions, protracted economic weakness, unexpected significant declines in operating results of reporting units, divestitures or market capitalization declines may result in recognition of impairment charges to our goodwill, indefinite-lived intangible or other long-lived assets. Any charges relating to such impairments could have a material adverse impact on our results of operations in the periods when recognized.

The capital and credit markets are important to our business.

Instability in U.S. and global capital and credit markets, including market disruptions, limited liquidity and interest rate volatility or reductions in the credit ratings assigned to us by independent ratings agencies, could reduce our access to capital markets or increase the cost of funding our short and long-term credit requirements. In particular, if we are unable to access capital and credit markets on terms that are acceptable to us, we may not be able to make certain investments or fully execute our business plans and strategy.

Our suppliers and customers are also dependent upon the capital and credit markets. Limitations on the ability of customers, suppliers or financial counterparties to access credit could lead to insolvencies of key suppliers and customers, limit or prevent customers from obtaining credit to finance purchases of our products and services and cause delays in the delivery of key products from suppliers.

There are risks associated with our outstanding and future indebtedness.

We have approximately \$1.45 billion of outstanding indebtedness at December 31, 2021. In addition, we have a senior unsecured revolving credit facility (the "2021 Revolving Facility") that permits borrowings of up to an additional \$500 million. Volatility in the credit markets could adversely impact our ability to obtain favorable financing terms in the future. A portion of our cash flows from operations is dedicated to servicing our indebtedness and will not be available for other purposes, including our operations, capital expenditures, payment of dividends, share repurchases or future business opportunities.

Our ability to make scheduled payments or to refinance our debt obligations depends on our financial and operating performance, which is subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay capital expenditures, reduce or eliminate the payment of dividends, sell assets, seek additional capital or seek to restructure or refinance our indebtedness. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. In such event, we could face substantial liquidity problems and might be required to sell material assets or operations to attempt to meet our debt service and other obligations.

Additionally, at December 31, 2021, our borrowings included a variable rate term loan facility (the "2021 Term Facility", and together with the 2021 Revolving Facility, the "2021 Credit Facilities") with an outstanding balance of \$250 million, which exposes us to variable interest rate risk. We are also exposed to the risk of rising interest rates to the extent that we fund our operations with short-term or variable-rate borrowings under our 2021 Revolving Facility. If variable base rates under our 2021 Credit Facilities increase in the future, our Interest expense could increase.

Legal and Compliance Risks

We are subject to risks related to corporate social responsibility and reputational matters.

Our reputation and the reputation of our brands, including the perception held by our customers, end-users, business partners, investors, other key stakeholders and the communities in which we do business are influenced by various factors. There is an increased focus from our stakeholders on ESG practices and disclosure – and if we fail, or are perceived to have failed, in any number of ESG matters, such as environmental stewardship, inclusion and diversity, workplace conduct and support for local communities, or to effectively respond to changes in, or new, legal or regulatory requirements concerning climate change or other sustainability concerns, our reputation or the reputation of our brands may suffer. Such damage to our reputation and the reputation of our brands may negatively impact our business, financial condition and results of operations.

In addition, negative or inaccurate postings or comments on social media or networking websites about the Company or our brands could generate adverse publicity that could damage our reputation or the reputation of our brands. If we are unable to effectively manage real or perceived issues, including concerns about product quality, safety, corporate social responsibility or other matters, sentiments toward the Company or our products could be negatively impacted, and our financial results could suffer.

Our brands are important assets of our businesses, and violation of our trademark rights by imitators could negatively impact revenues and brand reputation.

Our brands and trademarks enjoy a reputation for quality and value and are important to our success and competitive position. Unauthorized use of our trademarks may not only erode sales of our products but may also cause significant damage to our brand name and reputation, interfere with relationships with our customers and increase litigation costs. There can be no assurance that our on-going effort to protect our brand and trademark rights will prevent all violations.

Material adverse legal judgments, fines, penalties or settlements could adversely affect our business.

We are currently and may in the future become involved in legal proceedings and disputes incidental to the operation of our business. Our business may be adversely affected by the outcome of these proceedings and other contingencies (including, without limitation, environmental, product liability, antitrust, intellectual property, data protection, privacy and labor and employment matters) that cannot be predicted with certainty. As required by GAAP, we establish reserves based on our assessment of contingencies. Subsequent developments in legal proceedings and other contingencies may affect our assessment and estimates of the loss contingency recorded as a reserve, and we may be required to make additional material payments.

Allegations that we have infringed the intellectual property rights of third parties could negatively affect us.

We may be subject to claims of infringement of intellectual property rights by third parties. In particular, we often compete in areas having extensive intellectual property rights owned by others and we have become subject to claims alleging infringement of intellectual property rights of others. In general, if it is determined that one or more of our technologies, products or services infringes the intellectual property rights owned by others, we may be required to cease marketing those products or services, to obtain licenses from the holders of the intellectual property at a material cost or to take other actions to avoid infringing such intellectual property rights. The litigation process is costly and subject to inherent uncertainties, and we may not prevail in litigation matters regardless of the merits of our position. Adverse intellectual property litigation or claims of infringement against us may become extremely disruptive if the plaintiffs succeed in blocking the trade of our products and services and may have a material adverse effect on our business.

Our reputation, ability to do business and results of operations could be impaired by adverse publicity or improper conduct by any of our employees, agents or business partners.

We are subject to regulation under a variety of U.S. federal and state and non-U.S. laws, regulations and policies including laws related to anti-corruption, export and import compliance, anti-trust and money laundering due to our global operations. We cannot provide assurance that our internal controls will always protect us from the improper conduct of our employees, agents and business partners. Any improper conduct could damage our reputation and subject us to, among other things, civil and criminal penalties, material fines, equitable remedies (including profit disgorgement and injunctions on future conduct), securities litigation and a general loss of investor confidence.

Our operations are subject to regulatory risks.

Our U.S. and non-U.S. operations are subject to a number of laws and regulations, including fire and building codes and environmental, health and safety standards. We have incurred, and will be required to continue to incur, significant expenditures to comply with these laws and regulations. Changes to, or changes in interpretations of, current laws and regulations, including climate change legislation or other environmental mandates, could require us to increase our compliance expenditures, cause us to significantly alter or discontinue offering existing products and services or cause us to develop new products and services. Altering current products and services or developing new products and services to comply with changes in the applicable laws and regulations could require significant research and development investments, increase the cost of providing the products and services and adversely affect the demand for our products and services.

In the event a regulatory authority concludes that we are not or have not at all times been in full compliance with these laws or regulations, we could be fined, criminally charged or otherwise sanctioned.

Certain environmental laws assess liability on current or previous owners of real property or operators of manufacturing facilities for the costs of investigation, removal or remediation of hazardous substances or materials at such properties or at properties at which parties have disposed of hazardous substances. Liability for investigative, removal and remedial costs under certain U.S. federal and state laws and certain non-U.S. laws are retroactive, strict and joint and several. In addition to cleanup actions brought by governmental authorities, private parties could bring personal injury or other claims due to the presence of, or exposure to, hazardous substances. We have received notification from U.S. and non-U.S. governmental agencies, including the EPA and similar state environmental agencies, that conditions at a number of current and formerly owned sites where we and others have disposed of hazardous substances require investigation, cleanup and other possible remedial action. These agencies may require that we reimburse the government for its costs incurred at these sites or otherwise pay for the costs of investigation and cleanup of these sites, including by providing compensation for natural resource damage claims from such sites. For more information, see "Item 1. Business – Regulatory Matters."

While we have planned for future capital and operating expenditures to maintain compliance with environmental laws and have accrued for costs related to current remedial efforts, our costs of compliance, or our liabilities arising from past or future releases of, or exposures to, hazardous substances, may exceed our estimates. We may also be subject to additional environmental claims for personal injury or cost recovery actions for remediation of facilities in the future based on our past, present or future business activities.

As a global business, we have a relatively complex tax structure, and there is a risk that tax authorities will disagree with our tax positions.

Since we conduct operations worldwide through our subsidiaries, we are subject to complex transfer pricing regulations in the countries in which we operate. Transfer pricing regulations generally require that, for tax purposes, transactions between us and our affiliates be priced on a basis that would be comparable to an arm's length transaction and that contemporaneous documentation be maintained to support the tax allocation. Although uniform transfer pricing standards are emerging in many of the countries in which we operate, there is still a relatively high degree of uncertainty and inherent subjectivity in complying with these rules. To the extent that any tax authority disagrees with our transfer pricing policies, we could become subject to significant tax liabilities and penalties. Our tax returns are subject to review by taxing authorities in the jurisdictions in which we operate. Although we believe that we have provided for all tax exposures, the ultimate outcome of a tax review could differ materially from our provisions.

We could be subject to changes in tax rates, the adoption of new tax legislation or exposure to additional tax liabilities.

Our future effective tax rate and cash tax obligations could be adversely affected by shifts in our mix of earnings in countries with varying statutory tax rates, changes in the valuation of our deferred tax assets or liabilities or changes in tax laws, regulations, interpretations or accounting principles, as well as certain discrete items. In addition, we are subject to regular review and audit by tax authorities. As a result, we have received, and may in the future receive, assessments in multiple jurisdictions on various tax-related assertions. Any adverse outcome of such a review or audit could have a negative effect on our operating results and financial condition. In addition, the determination of our worldwide provision for income taxes and other tax liabilities requires significant judgment, and there are many transactions and calculations where the ultimate tax determination is uncertain. Although we believe our estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded in our financial statements and may materially affect our financial results in the period or periods for which such determination is made. Furthermore, due to shifting economic and political conditions, tax policies, laws, interpretations and rates in various jurisdictions may be subject to significant change, which could materially affect our financial position and results of operations. For example, many countries in Europe, as well as a number of other countries and organizations, have recently proposed, recommended or implemented changes to existing tax laws or have enacted new laws that could significantly increase our effective tax rate or cash tax obligations in countries where we do business or require us to change the manner in which we operate our business.

Risks Related to Our Incorporation in Ireland

Irish law differs from the laws in effect in the United States and may afford less protection to holders of our securities.

The U.S. currently does not have a treaty with Ireland providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. As such, there is some uncertainty as to whether the courts of Ireland would recognize or enforce judgments of U.S. courts obtained against us or our directors or officers based on U.S. federal or state civil liability laws, including the civil liability provisions of the U.S. federal or state securities laws, or hear actions against us or those persons based on those laws.

As an Irish company, we are governed by the Companies Act 2014 of Ireland, as amended, which differs in some material respects from laws generally applicable to U.S. corporations and shareholders, including, among others, differences relating to interested director and officer transactions and shareholder lawsuits. Likewise, the duties of directors and officers of an Irish company generally are owed to the company only. Shareholders of Irish companies generally do not have a personal right of action against directors or officers of the company and may exercise such rights of action on behalf of the company only in limited circumstances. Accordingly, holders of our securities may have more difficulty protecting their interests than would holders of securities of a corporation incorporated in a jurisdiction of the U.S.

In addition, Irish law allows shareholders to authorize share capital which then can be issued by a board of directors without shareholder approval. Also, subject to specified exceptions, Irish law grants statutory preemptive rights to existing shareholders to subscribe for new issuances of shares for cash. At our annual meeting of shareholders, our shareholders authorized our Board of Directors to issue up to 33% of our issued ordinary shares and further authorized our Board of Directors to issue up to 5% of such shares for cash without first offering them to our existing shareholders. Both of these authorizations will expire after a certain period unless renewed by our shareholders, and we cannot guarantee that the renewal of these authorizations will always be approved. If the Directors' authority to issue ordinary shares is not renewed, then we may be limited in our ability to use our shares, for example, as consideration for acquisitions.

Changes in tax laws, regulations or treaties, changes in our status under the tax laws of many jurisdictions or adverse determinations by taxing authorities could increase our tax burden or otherwise affect our financial condition or operating results, as well as subject our shareholders to additional taxes.

The realization of any tax benefit related to our incorporation and tax residence in Ireland could be impacted by changes in tax laws, tax treaties or tax regulations or the interpretation or enforcement thereof by the tax authorities of many jurisdictions. From time to time, proposals have been made and/or legislation introduced to change the tax laws of various jurisdictions or limit tax treaty benefits that if enacted could materially increase our tax burden and/or our effective tax rate. Moreover, other legislative proposals could have a material adverse impact on us by overriding certain tax treaties and limiting the treaty benefits on certain payments, which could increase our tax liability. We cannot predict the outcome of any specific legislation in any jurisdiction.

While we monitor proposals that would materially impact our tax burden and/or our effective tax rate and investigate our options, we could still be subject to increased taxation on a going forward basis no matter what action we undertake if certain proposals are enacted, certain tax treaties are amended and/or our interpretation of applicable tax law is challenged and determined to be incorrect. In particular, any changes and/or differing interpretations of applicable tax law that have the effect of disregarding our incorporation in Ireland, limiting our ability to take advantage of tax treaties between jurisdictions, modifying or eliminating the deductibility of various currently deductible payments or increasing the tax burden of operating or being resident in a particular country, could subject us to increased taxation.

Dividends received by our shareholders may be subject to Irish dividend withholding tax.

In certain circumstances, we are required to deduct Irish dividend withholding tax of 25% from dividends paid to our shareholders. In the majority of cases, shareholders residing in the U.S. will not be subject to Irish withholding tax, and shareholders resident in a number of other countries will not be subject to Irish withholding tax provided that they complete certain Irish dividend withholding tax forms. However, some shareholders may be subject to withholding tax, which could discourage the investment in our stock and adversely impact the price of our shares.

Dividends received by our shareholders may be subject to Irish income tax.

Dividends paid in respect of our shares generally are not subject to Irish income tax where the beneficial owner of these dividends is exempt from Irish dividend withholding tax, unless the beneficial owner of the dividend has some connection with Ireland other than his or her shareholding in Allegion.

Our shareholders who receive their dividends subject to Irish dividend withholding tax will generally have no further liability to Irish income tax on the dividends unless the beneficial owner of the dividend has some connection with Ireland other than his or her shareholding in Allegion.

Certain provisions in our Memorandum and Articles of Association, among other things, could prevent or delay an acquisition of us, which could decrease the trading price of our ordinary shares.

Our Memorandum and Articles of Association contains provisions to deter takeover practices, inadequate takeover bids and unsolicited offers. These provisions include, amongst others:

- A provision of our Articles of Association which generally prohibits us from engaging in a business combination with an interested shareholder (being (i) the beneficial owner, directly or indirectly, of 10% or more of our voting shares or (ii) an affiliate or associate of us that has at any time within the last five years been the beneficial owner, directly or indirectly, of 10% or more of our voting shares), subject to certain exceptions;
- Rules regarding how shareholders may present proposals or nominate directors for election at shareholder meetings;
- The right of our Board of Directors to issue preferred shares without shareholder approval in certain circumstances, subject to applicable law; and
- The ability of our Board of Directors to set the number of directors and to fill vacancies on our Board of Directors.

We believe these provisions will provide some protection to our shareholders from coercive or otherwise unfair takeover tactics. These provisions are not intended to make us immune from takeovers. However, these provisions will apply even if the offer may be considered beneficial by some shareholders and could delay or prevent an acquisition that our Board of Directors determines is in our best interests and our shareholders' best interests. These provisions may also prevent or discourage attempts to remove and replace incumbent directors.

In addition, several mandatory provisions of Irish law could prevent or delay an acquisition of us. For example, Irish law does not permit shareholders of an Irish public limited company to take action by written consent with less than unanimous consent. We also will be subject to various provisions of Irish law relating to mandatory bids, voluntary bids, requirements to make a cash offer and minimum price requirements, as well as substantial acquisition rules and rules requiring the disclosure of interests in our shares in certain circumstances. Also, Irish companies, including us, may alter their Memorandum of Association and Articles of Association only with the approval of at least 75% of the votes of the company's shareholders cast in person or by proxy at a general meeting of the company.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

We operate through a broad network of sales offices, engineering centers, 29 principal production and assembly facilities and several distribution centers throughout the world. Our active properties represent about 6.3 million square feet, of which approximately 40% is leased.

We own 15 of our production and assembly facilities, with the remainder under long-term lease arrangements. We believe that our plants have been well maintained, are generally in good condition and are suitable for the conduct of our business.

Item 3. LEGAL PROCEEDINGS

In the normal course of business, we are involved in a variety of lawsuits, claims and legal proceedings, including commercial and contract disputes, employment matters, product liability claims, environmental liabilities, intellectual property disputes and tax-related matters. In our opinion, pending legal matters are not expected to have a material adverse impact on our results of operations, financial condition, liquidity or cash flows.

This item should be read in conjunction with the Company's Risk Factors in Part I, Item 1A for additional information.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The following is a list of executive officers of the Company as of February 15, 2022.

David D. Petratis, age 64, has served as our Chairman, President and Chief Executive Officer since 2013.

Patrick S. Shannon, age 59, has served as our Senior Vice President and Chief Financial Officer since 2013.

Jeffrey N. Braun, age 62, has served as our Senior Vice President and General Counsel since 2014. Mr. Braun also served as Secretary from 2018 to 2020.

Timothy P. Eckersley, age 60, has served as our Senior Vice President – Allegion International since 2021. Mr. Eckersley served as our Senior Vice President – Americas from 2013 to 2020.

Cynthia D. Farrer, age 59, has served as our Senior Vice President – Global Operations and Integrated Supply Chain since June 2021. Ms. Farrer served as our Vice President – Global Operations and Integrated Supply Chain from October 2020 to June 2021. Ms. Farrer served as our Vice President, Global Supply Management from 2017 to 2020 and as our Vice President, Operations – Americas from 2013 to 2017.

Tracy L. Kemp, age 53, has served as our Senior Vice President – Chief Information and Digital Officer since 2020. Ms. Kemp served as our Senior Vice President – Chief Customer and Digital Officer from 2019 to December 2020. Ms. Kemp also served as our Senior Vice President and Chief Information Officer from 2015 to 2019.

Robert C. Martens, age 51, has served as our Senior Vice President – Chief Innovation and Design Officer since 2019 and Futurist and President of Allegion Ventures since 2017. Mr. Martens served as Futurist of the Americas region and Director of Connectivity Platforms from 2014 to 2017.

Douglas P. Ranck, age 63, has served as our Vice President, Controller and Chief Accounting Officer since 2013.

Vincent M. Wenos, age 55, has served as our Senior Vice President – Chief Technology Officer since 2019. Mr. Wenos served as our Vice President – Global Technology and Engineering from 2018 to 2019 and served as both our Vice President – Americas Engineering and Vice President – Global Mechanical Products from 2016 to 2018.

All above-listed officers have been employed by the Company for more than the past five years. No family relationship exists between any of the above-listed executive officers of the Company. All officers are elected to hold office for one year or until their successors are elected and qualified or their earlier death, resignation or removal from office by the Board of Directors of the Company.

PART II

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

Information regarding the principal market for our ordinary shares and related shareholder matters is as follows:

Our ordinary shares are traded on the NYSE under the symbol ALLE. As of February 10, 2022, the number of record holders of ordinary shares was 2,176. Information regarding equity compensation plans required to be disclosed pursuant to this Item is incorporated by reference from our Proxy Statement.

Dividend Policy

Our Board of Directors declared dividends of \$0.36 per ordinary share on February 5, 2021, April 8, 2021, September 1, 2021 and December 10, 2021. On February 4, 2022, our Board of Directors declared a dividend of \$0.41 per ordinary share payable March 31, 2022. We paid a total of \$129.0 million in cash for dividends to ordinary shareholders during the year ended December 31, 2021. Future dividends on our ordinary shares, if any, will be at the discretion of our Board of Directors and will depend on, among other things, our results of operations, cash requirements and surplus, financial condition, contractual restrictions and other factors that the Board of Directors may deem relevant, as well as our ability to pay dividends in compliance with the Irish Companies Act. Under the Irish Companies Act, dividends and distributions may only be made from distributable reserves. Distributable reserves, broadly, means the accumulated realized profits of Allegion plc (ALLE-Ireland) and are unrelated to any GAAP reporting amount (e.g. retained earnings). As of December 31, 2021, we had distributable reserves of \$3.7 billion. In addition, no distribution or dividend may be made unless the net assets of ALLE-Ireland are equal to, or in excess of, the aggregate of ALLE-Ireland's called up share capital plus undistributable reserves and the distribution does not reduce ALLE-Ireland's net assets below such aggregate.

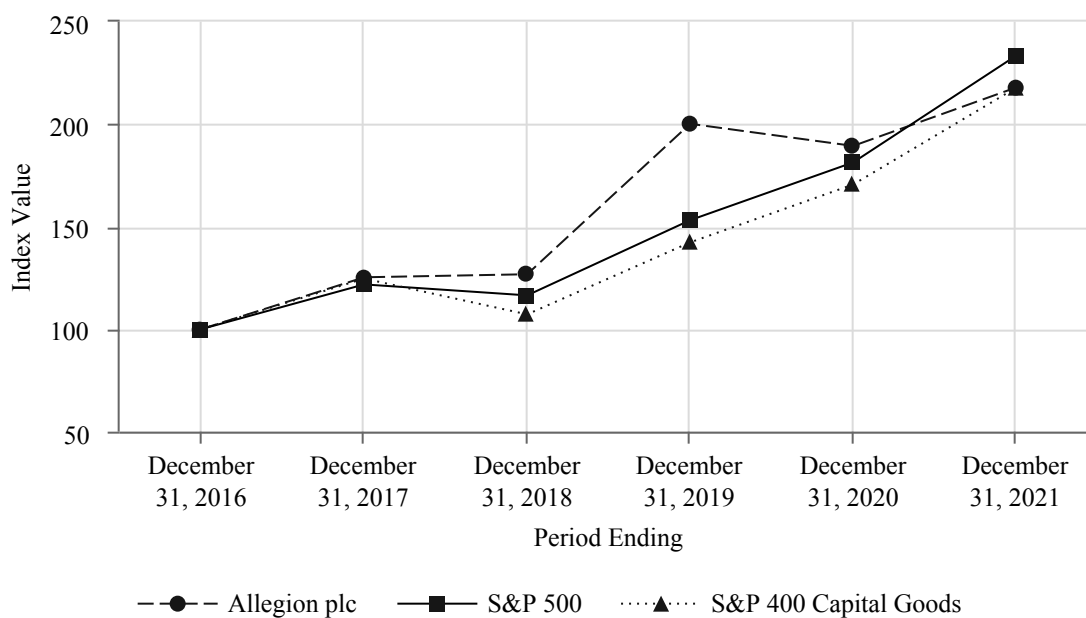
Issuer Purchases of Equity Securities

Period	Total number of shares purchased (000s)	Average price paid per share	Total number of shares purchased as part of the 2020 Share Repurchase Authorization (000s)	Approximate dollar value of shares still available to be purchased under the 2020 Share Repurchase Authorization (000s)
October 1 - October 31	152	\$ 131.43	152	\$ 381,427
November 1 - November 30	796	132.26	796	276,085
December 1 - December 31	580	128.80	580	201,435
Total	<u>1,528</u>	<u>\$ 130.85</u>	<u>1,528</u>	<u>\$ 201,435</u>

In February 2020, our Board of Directors approved a share repurchase authorization of up to, and including, \$800 million of the Company's ordinary shares (the "2020 Share Repurchase Authorization"). The 2020 Share Repurchase Authorization does not have a prescribed expiration date. Based on market conditions, share repurchases are made from time to time in the open market at the discretion of management.

Performance Graph

The annual changes for the five-year period shown below are based on the assumption that \$100 had been invested in Allegion plc ordinary shares, the Standard & Poor's 500 Stock Index ("S&P 500") and the Standard & Poor's 400 Capital Goods Index ("S&P 400 Capital Goods") on December 31, 2016, and that all quarterly dividends were reinvested. The total cumulative dollar returns shown on the graph represent the value that such investments would have had on December 31, 2021.



	December 31, 2016	December 31, 2017	December 31, 2018	December 31, 2019	December 31, 2020	December 31, 2021
Allegion plc	100.00	125.31	126.79	200.18	189.39	217.90
S&P 500	100.00	121.83	116.49	153.17	181.35	233.42
S&P 400 Capital Goods	100.00	124.69	107.22	142.34	170.58	217.78

Item 6. [RESERVED]

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from the results discussed in the forward-looking statements. Factors that might cause a difference include, but are not limited to, those discussed under Item 1A. Risk Factors in this Annual Report on Form 10-K. The following section is qualified in its entirety by the more detailed information, including our consolidated financial statements and the notes thereto, which appears elsewhere in this Annual Report.

Overview

Organization

We are a leading global provider of security products and solutions operating in two segments: Allegion Americas and Allegion International. We sell a wide range of security products and solutions for end-users in commercial, institutional and residential facilities worldwide, including the education, healthcare, government, hospitality, commercial office and single and multi-family residential markets. Our leading brands include CISA, Interflex, LCN, Schlage, SimonsVoss and Von Duprin.

Recent Developments

COVID-19 Pandemic and Industry Trends and Outlook

The COVID-19 pandemic and uneven economic recovery continue to create volatility in the global economy and on our business. Throughout 2021, we experienced strong and accelerating demand for our products and services in most of the markets we serve. However, especially in the second half of the year, we also experienced an acceleration of several macroeconomic challenges that have negatively impacted our ability to meet this robust demand, such as supply chain disruptions and delays; shortages in materials, including reductions in allocations of electronic components and other parts from key suppliers; labor shortages and elevated levels of employee absenteeism due to the on-going COVID-19 pandemic; and increased commodity, material component, packaging, freight and labor inflation. These challenges have also created both operational and logistical inefficiencies, which have led to periodic production interruptions and an increased level of inventory, which have negatively impacted our productivity, margin performance, working capital and cash flows. While these challenges are impacting all our global businesses, they had a more pronounced impact on our Allegion Americas operating segment in 2021.

We currently anticipate these challenges to continue in 2022 and are rapidly adapting to navigate them, expecting to be well-positioned to convert demand to revenue as conditions normalize. We remain focused on providing exceptional service to our customers; implementing measures to mitigate operational and distribution inefficiencies and reduce our record high level of backlogs, such as aligning resources to re-engineer product designs and configurations to accept alternate electronic components and developing alternate sources of supply; implementing pricing initiatives to address rising production, material, freight and labor costs; and investing in business initiatives to drive future growth. We will continue to explore various options to control costs and enhance financial performance, while minimizing disruption to customers and the overall business; however, the full impacts of the pandemic and the on-going macroeconomic challenges on our business, results of operations, financial condition and cash flows remain uncertain.

The pandemic and related macroeconomic challenges noted above will likely continue to impact us in numerous and evolving ways that we may not be able to accurately predict. The full impact of the pandemic will continue to depend on future developments such as the continued spread and duration of the pandemic, the emergence of future variant strains of the COVID-19 virus which may be more contagious or severe, the availability and distribution of effective medical treatments and vaccines, vaccination rates, as well as any government-imposed restrictions or mandates. Further, any new or strengthened government-imposed restrictions or mandates on the conduct of business and travel could adversely impact our ability to carry out business as usual in certain markets.

The challenges and uncertainties related to the COVID-19 pandemic and its potential impact on our business, results of operations, financial condition and cash flows, as well as other challenges and uncertainties that could affect our businesses are described further under "Part I, Item 1A. Risk Factors".

2021 and 2020 Significant Events

Financing activities

On November 18, 2021, we entered into a new \$750.0 million unsecured credit agreement, consisting of the \$250.0 million 2021 Term Facility and the \$500.0 million 2021 Revolving Facility. The initial proceeds of \$250.0 million from the 2021 Term Facility were primarily used to repay in full our previously outstanding unsecured Term Facility. All obligations under the previously outstanding Credit Agreement were satisfied, all commitments thereunder were terminated and all guarantees that had been granted in connection therewith were released.

Acquisitions

In July 2021, we acquired certain assets of Astrum Benelux B.V. ("Astrum Benelux") and 100% of the equity of WorkforceIT B.V. in the Netherlands ("WorkforceIT"), both of which were previously held under common control and offer workforce management technology products and solutions in the Benelux region of Europe. Both Workforce IT and the assets acquired from Astrum Benelux have been integrated into our Allegion International segment.

In December 2020, we acquired Yonomi, Inc. ("Yonomi"), a U.S. based smart home integration platform provider and innovation leader in IoT Cloud platforms. Yonomi has been integrated into our Allegion Americas segment.

QMI Divestiture

During the fourth quarter of 2020, the net assets of our Qatar Metal Industries ("QMI") business, met the criteria to be classified as held for sale, and accordingly, were written down to fair value, resulting in a Loss on assets held for sale of \$37.9 million.

On February 28, 2021, we completed our divestiture of QMI. The impacts of this divestiture on our results of operations for the year ended December 31, 2021, are reflected in the discussions below.

2020 Impairment of Goodwill and Intangible Assets

As a result of the global economic disruption and uncertainty due to the COVID-19 pandemic, we performed interim impairment tests on the goodwill balances of our former EMEA and Asia Pacific reporting units, as well as on certain indefinite-lived trade name assets in these two regions, during the first quarter of 2020. The results of these interim impairment tests indicated that the estimated fair value of our former Asia Pacific reporting unit and three indefinite-lived trade names were impaired. Consequently, goodwill and intangible asset impairment charges totaling \$96.3 million were recorded during the first quarter of 2020. Further intangible asset impairment charges of \$5.4 million were recorded in 2020 in our former Asia Pacific segment, relating to supply chain disruptions that reduced a brand's expected future cash flows and declines in volumes and pricing pressure for a separate subsidiary in the region.

2021 Dividends and Share Repurchases

We paid quarterly dividends of \$0.36 per ordinary share to shareholders on record as of March 17, 2021, June 16, 2021, September 16, 2021, and December 20, 2021. We paid a total of \$129.0 million in cash for dividends to ordinary shareholders and repurchased approximately 3.3 million shares for approximately \$412.8 million during the year ended December 31, 2021.

Results of Operations - For the years ended December 31

<i>Dollar amounts in millions, except per share amounts</i>	2021	% of Net revenues	2020	% of Net revenues
Net revenues	\$ 2,867.4		\$ 2,719.9	
Cost of goods sold	1,662.5	58.0 %	1,541.1	56.7 %
Selling and administrative expenses	674.7	23.5 %	635.7	23.4 %
Impairment of goodwill and intangible assets	—	— %	101.7	3.7 %
Loss on assets held for sale	—	— %	37.9	1.4 %
Operating income	530.2	18.5 %	403.5	14.8 %
Interest expense	50.2		51.1	
Other income, net	(44.0)		(13.0)	
Earnings before income taxes	524.0		365.4	
Provision for income taxes	40.7		50.9	
Net earnings	483.3		314.5	
Less: Net earnings attributable to noncontrolling interests	0.3		0.2	
Net earnings attributable to Allegion plc	<u>\$ 483.0</u>		<u>\$ 314.3</u>	
Diluted net earnings per ordinary share attributable to Allegion plc ordinary shareholders:	<u>\$ 5.34</u>		<u>\$ 3.39</u>	

The discussions that follow describe the significant factors contributing to the changes in our results of operations for the years presented and form the basis used by management to evaluate the financial performance of the business. For a discussion of our results of operations for the year ended December 31, 2020, compared to the year ended December 31, 2019, see “Part II, Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our 2020 Annual Report on Form 10-K filed with the SEC on February 16, 2021.

Net Revenues

Net revenues for the year ended December 31, 2021, increased by 5.4%, or \$147.5 million, compared to the same period in 2020, due to the following:

Pricing	1.8 %
Volume	2.7 %
Acquisitions / divestitures	(0.5)%
Currency exchange rates	1.4 %
Total	<u>5.4 %</u>

The increase in Net revenues was principally driven by higher volumes, improved pricing and the impact of foreign currency exchange rate movements. These increases were slightly offset by the divestiture of our QMI business in February 2021. The increase in sales volumes for the year was principally realized during the second quarter, given the muted demand and temporary plant shut-downs we experienced in the second quarter of 2020 due to the COVID-19 pandemic. However, in addition to the comparative impact of the rebound in demand in the third and fourth quarters of 2020, the supply chain disruptions and delays and shortages in materials, components and labor discussed above resulted in lower volumes during the second half of 2021 within the Allegion Americas segment. While these challenges are expected to continue into 2022, given the current elevated demand we are experiencing, we expect volume growth to resume as conditions improve.

Pricing includes increases or decreases of price, including discounts, surcharges and/or other sales deductions, on our existing products and services. Volume includes increases or decreases of revenue due to changes in unit volume of existing products and services, as well as new products and services.

Cost of Goods Sold

For the year ended December 31, 2021, Cost of goods sold as a percentage of Net revenues increased to 58.0% from 56.7%, due to the following:

Inflation in excess of pricing and productivity	1.2 %
Volume / product mix	0.7 %
Acquisitions / divestitures	(0.2)%
Currency exchange rates	(0.1)%
Restructuring / acquisition expenses	(0.3)%
Total	<u>1.3 %</u>

Cost of Goods sold as a percentage of Net revenues increased primarily due to inflation in excess of pricing and productivity improvements, and, to a lesser extent, unfavorable product mix, which exceeded the benefits from sales volume growth during the year. Inflation in excess of pricing and productivity reflects the impacts of increased commodity, material component, packaging, freight and labor inflation, as well as inefficiencies caused by the global supply chain challenges and shortages of materials, components and labor, as discussed above. These increases were partially offset by the year-over-year decrease in restructuring and acquisition expenses, favorable foreign currency exchange rate movements and the beneficial impact of our QMI divestiture.

Inflation in excess of pricing and productivity includes the impact to Costs of goods sold from pricing, as defined above, in addition to productivity and inflation. Productivity represents improvements in unit costs of materials and cost reductions related to improvements to our manufacturing design and processes. Inflation includes unit costs for the current period compared to the average actual cost for the prior period, multiplied by current year volumes.

Volume/product mix represents the impact due to increases or decreases of revenue due to changes in unit volume, including new products and services, including the effect of changes in the mix of products and services sold on Cost of goods sold.

Selling and Administrative Expenses

For the year ended December 31, 2021, Selling and administrative expenses as a percentage of Net revenues increased to 23.5% from 23.4%, due to the following:

Inflation in excess of productivity	0.5 %
Volume leverage	(0.5)%
Acquisitions / divestitures	(0.1)%
Investment spending	0.7 %
Restructuring / acquisition expenses	(0.5)%
Total	<u>0.1 %</u>

Selling and administrative expenses as a percentage of Net revenues increased primarily due to inflation in excess of productivity and increased investment spending. These increases were partially offset by favorable volume leverage, a year-over-year decrease in restructuring and acquisition expenses and the beneficial impact of our QMI divestiture on current year operations. Inflation in excess of productivity reflects increases to variable compensation and a return to a more normalized level of other discretionary business spending that was reduced or delayed in the prior year as a result of the COVID-19 pandemic. The increased investment spending similarly reflects a return to a full-year focus of investing in business initiatives to drive future growth and realize our vision of seamless access with a focus on software and connected products. The increase also reflects that certain of these investments were temporarily frozen or delayed in 2020 due to the economic uncertainty surrounding the COVID-19 pandemic.

Volume leverage represents the contribution margin related to changes in sales volume, excluding the impact of price, productivity, mix and inflation. Expenses related to increased head count for strategic initiatives, new facilities or significant spending for strategic initiatives or new product and channel development, are captured in Investment spending in the table above.

Operating Income/Margin

Operating income for the year ended December 31, 2021, increased \$126.7 million from the same period in 2020, and Operating margin increased to 18.5% from 14.8%, due to the following:

<i>In millions</i>	<u>Operating Income</u>	<u>Operating Margin</u>
December 31, 2020	\$ 403.5	14.8 %
Inflation in excess of pricing and productivity	(34.9)	(1.7)%
Volume / product mix	9.3	(0.2)%
Currency exchange rates	8.1	0.1 %
Investment spending	(19.4)	(0.7)%
Acquisitions/ divestitures	4.4	0.3 %
Restructuring / acquisition expenses	19.6	0.8 %
Impairment of goodwill and intangible assets	101.7	3.7 %
Loss on assets held for sale	37.9	1.4 %
December 31, 2021	<u>\$ 530.2</u>	<u>18.5 %</u>

The increase in Operating income was primarily due to the prior year goodwill and intangible asset impairment charges and the loss on assets held for sale related to our QMI business, which did not recur in the current year. Also contributing to the increase in Operating income were favorable volume/product mix, lower year-over-year restructuring and acquisition expenses, favorable foreign currency exchange rate movements and the beneficial impact of our QMI divestiture on current year operations. These increases were partially offset by inflation in excess of pricing and productivity and increased investment spending. As discussed above, inflation in excess of pricing and productivity reflects the impacts of increased commodity, material component, packaging, freight and labor inflation; inefficiencies caused by the global supply chain challenges; and shortages of materials, components and labor, as well as increases in variable compensation and other discretionary business spending to a more normalized level in the current year. Similarly, the increased investment spending reflects a return to a full-year focus of investing in business initiatives to drive future growth and realize our vision of seamless access with a focus on software and connected products. The increase also reflects that certain of these investments were temporarily frozen or delayed in 2020 due to the economic uncertainty surrounding the COVID-19 pandemic.

The increase in Operating margin was also primarily due to the prior year goodwill and intangible asset impairment charges and the loss on assets held for sale related to our QMI business, which did not recur in the current year. Also contributing to the increase in Operating margin were lower year-over-year restructuring and acquisition expenses, favorable foreign currency exchange rate movements and the beneficial impact of our QMI divestiture on current year operations. These increases were partially offset by inflation in excess of pricing and productivity and increased investment spending as discussed above, as well as unfavorable product mix, which exceeded the margin benefits from the sales volume growth during the year.

Interest Expense

Interest expense for the year ended December 31, 2021, decreased \$0.9 million compared to 2020, primarily due to a lower weighted-average interest rate on our outstanding indebtedness.

Other Income, net

The components of Other income, net, for the years ended December 31 were as follows:

<i>In millions</i>	<u>2021</u>	<u>2020</u>
Interest income	\$ (0.4)	\$ (0.9)
Foreign currency exchange loss	2.7	0.7
Earnings and gains from the sale of equity method investments, net	(6.4)	(0.3)
Net periodic pension and postretirement benefit income, less service cost	(7.1)	(2.2)
Other	(32.8)	(10.3)
Other income, net	<u>\$ (44.0)</u>	<u>\$ (13.0)</u>

For the year ended December 31, 2021, Other income, net increased \$31.0 million compared to 2020, primarily due to a \$20.7 million gain in the fourth quarter related to a fair value remeasurement of our investment in VergeSense, Inc. This gain is included within Other in the table above. Also contributing to the increase in Other income, net, are an increase in other realized and unrealized investment gains during the year, favorable net periodic pension and postretirement benefit income, less service cost, and a gain of \$6.4 million from the sale of our equity method investment in Nuki Home Solutions GmbH, which is included in Earnings and gains from the sale of equity method investments, net in the table above. These increases are partially

offset by gains of \$12.8 million in the prior year, which did not recur in 2021, related to the reclassification to earnings of accumulated foreign currency translation adjustments upon the liquidation of two legal entities in our former EMEA region, and which are included within Other in the table above.

Provision for Income Taxes

For the year ended December 31, 2021, our effective tax rate was 7.8%, compared to 13.9% for the year ended December 31, 2020. The decrease in the effective tax rate was primarily due to the unfavorable tax impact recognized in 2020 related to goodwill and intangible asset impairment charges, favorable settlements of uncertain tax positions and the unfavorable tax impact recognized in 2020 related to the recording of valuation allowances, which were partially offset by an unfavorable year-over-year change in share-based compensation deductions and an unfavorable mix of income earned in lower tax rate jurisdictions.

Review of Business Segments

We operate in and report financial results for two segments: Allegion Americas and Allegion International. These segments represent the level at which our chief operating decision maker reviews our financial performance and makes operating decisions.

Segment operating income is the measure of profit and loss that our chief operating decision maker uses to evaluate the financial performance of the business and as the basis for resource allocation, performance reviews and compensation. For these reasons, we believe that Segment operating income represents the most relevant measure of Segment profit and loss. Our chief operating decision maker may exclude certain charges or gains, such as corporate charges and other special charges, to arrive at a Segment operating income that is a more meaningful measure of profit and loss upon which to base our operating decisions. We define Segment operating margin as Segment operating income (loss) as a percentage of the segment's Net revenues.

The segment discussions that follow describe the significant factors contributing to the changes in results for each segment included in Net earnings. As previously announced, effective January 1, 2021, we combined our previous operations in EMEA and Asia Pacific into a new segment named Allegion International, in addition to renaming our Americas segment "Allegion Americas". Business segment information for EMEA and Asia Pacific for the year ended December 31, 2020, has been combined in the segment results of operations presented below to reflect this change in reportable segments.

Segment Results of Operations - For the years ended December 31

<i>In millions</i>	2021	2020	% Change
Net revenues			
Allegion Americas	\$ 2,072.2	\$ 2,016.7	2.8 %
Allegion International	795.2	703.2	13.1 %
Total	\$ 2,867.4	\$ 2,719.9	
Segment operating income (loss)			
Allegion Americas	\$ 525.0	\$ 580.2	(9.5)%
Allegion International	82.4	(102.1)	180.7 %
Total	\$ 607.4	\$ 478.1	
Segment operating margin			
Allegion Americas	25.3 %	28.8 %	
Allegion International	10.4 %	(14.5)%	

Allegion Americas

Our Allegion Americas segment is a leading provider of security products and solutions throughout North America, Central America, the Caribbean and South America. The segment sells a broad range of products and solutions including, locks, locksets, portable locks, key systems, door closers, exit devices, doors and door systems, electronic products and access control systems to end-users in commercial, institutional and residential facilities, including the education, healthcare, government, hospitality, commercial office and single and multi-family residential markets. This segment's primary brands are LCN, Schlage, Steelcraft, Technical Glass Products ("TGP") and Von Duprin.

Net revenues

Net revenues for the year ended December 31, 2021, increased by 2.8%, or \$55.5 million, compared to the same period in 2020, due to the following:

Pricing	1.9 %
Volume	0.5 %
Currency exchange rates	0.4 %
Total	2.8 %

The increase in Net revenues was principally driven by higher volumes, improved pricing and the impact of foreign currency exchange rate movements. The increase in sales volumes for the year was principally realized during the second quarter, given the muted demand and temporary plant shut-downs we experienced in the second quarter of 2020 due to the COVID-19 pandemic. However, the supply chain disruptions and delays and shortages in materials, components and labor discussed above have resulted in lower volumes during the second half of 2021. While these challenges are expected to continue into 2022, given the current elevated demand we are experiencing, we expect volume growth to resume as conditions improve.

Net revenues from non-residential products were flat compared to the same period in the prior year. While we continue to see strong demand for our non-residential products, the persistent and widespread supply chain challenges and shortages in materials, components (including electronic components) and labor discussed above have led to challenges in converting this elevated demand into Net revenues. Further, the combination of these factors has also culminated in our highest non-residential product backlog to date as a company as of December 31, 2021.

Net revenues from residential products increased by a low double digits percent compared to the prior year, driven significantly by the muted demand and temporary plant shut-downs we experienced in the second quarter of 2020 due to the COVID-19 pandemic. While we continue to see strong demand for our residential products due to a sustained level of DIY home projects and a robust residential housing construction market, we also experienced supply chain challenges and electronic component shortages in the second half of 2021, which we expect to continue through 2022.

Additionally, growth in electronic security products and solutions has become an increased metric monitored by management and a focus of our investors. Electronic products encompass both residential and non-residential products, and include all electrified product categories including, but not limited to, electronic and electrified locks, access controls and electrified exit devices. Net revenues from the sale of electronic products decreased by a low single digits percent compared to 2020. As previously disclosed, a surge in global demand for electronic components has led to supply chain challenges and component shortages. This has led to a reduction in the allocations of electronic components we receive from key suppliers, periodic production interruptions and delays in our ability to meet the elevated level of demand for our electronic products in the second half of 2021. While considered temporary, we expect these challenges around the availability of electronic components to continue through 2022. As a result, we are actively implementing measures to mitigate the operational and distribution inefficiencies these component shortages and other challenges are creating, such as re-engineering product designs and configurations and developing alternate sources of component supply.

Operating income/margin

Segment operating income for the year ended December 31, 2021, decreased \$55.2 million, and Segment operating margin decreased to 25.3% from 28.8% compared to the same period in 2020, due to the following:

<i>In millions</i>	Operating Income	Operating Margin
December 31, 2020	\$ 580.2	28.8 %
Inflation in excess of pricing and productivity	(31.5)	(2.2)%
Volume / product mix	(17.3)	(1.0)%
Currency exchange rates	2.3	0.1 %
Investment spending	(14.1)	(0.7)%
Restructuring / acquisition expenses	5.4	0.3 %
December 31, 2021	\$ 525.0	25.3 %

The decreases in Segment operating income and Segment operating margin were primarily due to inflation in excess of pricing and productivity, unfavorable product mix, which exceeded the benefits from sales volume growth during the year, and increased investment spending. These decreases were partially offset by a year-over-year decrease in restructuring and acquisition expenses and the impact of foreign currency exchange rate movements. Inflation in excess of pricing and productivity reflects the impacts of the increased commodity, material component, packaging, freight and labor inflation; inefficiencies caused by the global supply chain challenges; and shortages of materials, components and labor discussed above, as well as increases in variable compensation and other discretionary business spending to a more normalized level in the current year. Similarly, the increased investment spending reflects a return to a full-year focus of investing in business initiatives to drive future growth and realize our vision of seamless access with a focus on software and connected products. The increase also reflects that certain of these investments were temporarily frozen or delayed in 2020 due to the economic uncertainty surrounding the COVID-19 pandemic.

Allegion International

Our Allegion International segment provides security products, services and solutions primarily throughout Europe, Asia and Oceania. The segment offers end-users a broad range of products, services and solutions including locks, locksets, portable locks, key systems, door closers, exit devices, doors and door systems, electronic products and access control systems, as well as time and attendance and workforce productivity solutions. This segment's primary brands are AXA, Bricard, Briton, CISA, Gainsborough, Interflex and SimonsVoss.

Net revenues

Net revenues for the year ended December 31, 2021, increased by 13.1%, or \$92.0 million, compared to the same period in 2020, due to the following:

Pricing	1.5 %
Volume	8.9 %
Acquisitions / divestitures	(2.0)%
Currency exchange rates	4.7 %
Total	<u>13.1 %</u>

The increase in Net revenues was principally driven by higher volumes and foreign currency exchange rate movements, in addition to improved pricing, and were partially offset by the divestiture of our QMI business in February 2021. The higher volumes, led by our Global Portable Security businesses, were achieved across nearly all of the countries within our Allegion International segment, reflecting in part the global economic rebound in 2021, contrasted with the depressed demand and temporary plant shut-downs we experienced in 2020 due to the COVID-19 pandemic.

Operating income (loss)/margin

Segment operating income (loss) for the year ended December 31, 2021, was favorable \$184.5 million, and Segment operating margin improved to 10.4% from (14.5)% compared to the same period in 2020, due to the following:

<i>In millions</i>	<u>Operating Income (Loss)</u>	<u>Operating Margin</u>
December 31, 2020	\$ (102.1)	(14.5)%
Inflation in excess of pricing and productivity	(2.7)	(0.5)%
Volume / product mix	26.5	2.8 %
Currency exchange rates	5.9	0.4 %
Investment spending	(2.3)	(0.4)%
Acquisitions / divestitures	4.4	0.8 %
Restructuring / acquisition expenses	13.1	1.9 %
Impairment of goodwill and intangible assets	101.7	14.5 %
Loss on assets held for sale	37.9	5.4 %
December 31, 2021	<u>\$ 82.4</u>	<u>10.4 %</u>

The improvements in Segment operating income (loss) and Segment operating margin were primarily due to the prior year goodwill and intangible asset impairment charges and the loss on assets held for sale related to our QMI business, which did not recur in the current year. Additional improvements were due to favorable volume/product mix, a year-over-year decrease in

restructuring and acquisition expenses, favorable foreign currency exchange rate movements and the beneficial impacts of our current year acquisition and divestiture in the Allegion International segment. These increases were partially offset by inflation in excess of pricing and productivity and increased investment spending.

Additionally, while our Allegion International segment did not experience the supply chain disruptions and delays and other operational and logistical challenges to the same extent as our Allegion Americas segment in 2021, these challenges have increased during the fourth quarter of 2021, and we currently expect them to continue into 2022.

Liquidity and Capital Resources

Sources and uses of liquidity

The following table reflects the major categories of cash flows for the years ended December 31. For additional details, see the Consolidated Statements of Cash Flows in the Consolidated Financial Statements.

<i>In millions</i>	2021	2020
Net cash provided by operating activities	\$ 488.6	\$ 490.3
Net cash used in investing activities	(31.6)	(56.7)
Net cash used in financing activities	\$ (529.3)	\$ (321.9)

Operating activities: Net cash provided by operating activities for the year ended December 31, 2021, was nearly flat compared to 2020, decreasing by \$1.7 million, as increased Net earnings were offset by working capital challenges, principally stemming from the supply chain disruptions and delays and related operational and logistical interruptions discussed above.

Investing activities: Net cash used in investing activities for the year ended December 31, 2021, decreased \$25.1 million compared to 2020, primarily due to cash proceeds from the sales of our equity method investment in Nuki Home Solutions GmbH and other investments, as well as a decrease in cash paid for acquisitions.

Financing activities: Net cash used in financing activities for the year ended December 31, 2021, increased \$207.4 million compared to 2020, primarily due to an increase of \$204.0 million in cash used to repurchase shares.

Capitalization

At December 31, long-term debt and other borrowings consisted of the following:

<i>In millions</i>	2021	2020
2021 Term Facility	\$ 250.0	\$ —
Term Facility	—	238.8
2021 Revolving Facility	—	—
Revolving Facility	—	—
3.200% Senior Notes due 2024	400.0	400.0
3.550% Senior Notes due 2027	400.0	400.0
3.500% Senior Notes due 2029	400.0	400.0
Other debt	0.3	0.6
Total borrowings outstanding	1,450.3	1,439.4
Less discounts and debt issuance costs, net	(8.2)	(9.8)
Total debt	1,442.1	1,429.6
Less current portion of long-term debt	12.6	0.2
Total long-term debt	\$ 1,429.5	\$ 1,429.4

In November 2021, we entered into a new unsecured credit agreement (the “2021 Credit Agreement”), which refinanced in full our previously outstanding unsecured Credit Facilities. The 2021 Credit Agreement consists of a \$250.0 million term loan facility (the “2021 Term Facility”) and a \$500.0 million revolving credit facility (the “2021 Revolving Facility”) and, together with the 2021 Term Facility, the “2021 Credit Facilities”). The 2021 Credit Facilities mature on November 18, 2026. The initial proceeds from the 2021 Term Facility of \$250.0 million were used primarily to repay in full the outstanding borrowings under our previously outstanding unsecured Term Facility. All obligations under the previously outstanding Credit Agreement were

satisfied, all commitments thereunder were terminated, and all guarantees that had been granted in connection therewith were released.

The 2021 Term Facility will amortize in quarterly installments at the following rates: 1.25% per quarter starting March 31, 2022 through March 31, 2025, 2.5% per quarter starting June 30, 2025 through September 30, 2026, with the balance due on November 18, 2026. Any amounts outstanding under the 2021 Term Facility may be voluntarily prepaid at any time without premium or penalty, subject to customary breakage costs. Amounts borrowed under the 2021 Term Facility that are repaid may not be reborrowed.

The 2021 Revolving Facility provides aggregate commitments of up to \$500.0 million, which includes up to \$100.0 million for the issuance of letters of credit. At December 31, 2021, there were no borrowings outstanding on the 2021 Revolving Facility and we had \$8.7 million of letters of credit outstanding. Commitments under the 2021 Revolving Facility may be reduced at any time without premium or penalty, and amounts repaid may be reborrowed. Certain fees are owed with respect to the 2021 Revolving Facility, including an unused commitment fee on the undrawn portion of the 2021 Revolving Facility of between 0.090% and 0.200% per year, depending on our credit rating, as well as certain other fees.

Outstanding borrowings under the 2021 Credit Facilities accrue interest at our option of (i) a Bloomberg Short-Term Bank Yield Index ("BSBY") rate plus the applicable margin or (ii) a base rate plus the applicable margin. The applicable margin ranges from 0.875% to 1.375% depending on our credit ratings. At December 31, 2021, the outstanding borrowings under the 2021 Term Facility accrue interest at BSBY plus a margin of 1.125%, resulting in an interest rate of 1.271%. The 2021 Credit Facilities also contain negative and affirmative covenants and events of default that, among other things, limit or restrict our ability to enter into certain transactions. In addition, the 2021 Credit Facilities require us to comply with a maximum leverage ratio as defined within the agreement. As of December 31, 2021, our leverage ratio of approximately 1.8 was significantly below the covenant requirement and we do not anticipate any potential covenant concerns for at least the next 12 months.

As of December 31, 2021, we also have \$400.0 million outstanding of 3.200% Senior Notes due 2024 (the "3.200% Senior Notes"), \$400.0 million outstanding of 3.550% Senior Notes due 2027 (the "3.550% Senior Notes") and \$400.0 million outstanding of 3.500% Senior Notes due 2029 (the "3.500% Senior Notes", and all three senior notes collectively, the "Senior Notes"). The Senior Notes require semi-annual interest payments on April 1 and October 1 of each year, and will mature on October 1, 2024, October 1, 2027, and October 1, 2029, respectively.

Historically, the majority of our earnings were considered to be permanently reinvested in jurisdictions where we have made, and intend to continue to make, substantial investments to support the ongoing development and growth of our global operations. At December 31, 2021, we analyzed our working capital requirements and the potential tax liabilities that would be incurred if certain subsidiaries made distributions and concluded that no material changes to our historic permanent reinvestment assertions are required.

Scheduled principal repayments on indebtedness as of December 31, 2021 can be found in Note 9 to the Consolidated Financial Statements. Expected principal and interest payments related to our long-term indebtedness in 2022 amount to \$12.6 million and \$45.0 million, respectively, given our current level of indebtedness and effective interest rates as of December 31, 2021.

Liquidity Outlook

Our primary source of liquidity is cash provided by operating activities. Cash provided by operating activities is used to invest in new product development and fund capital expenditures and working capital requirements. Our ability to generate cash from our operating activities, our unused availability under our 2021 Revolving Facility and our access to the capital and credit markets enable us to fund these capital needs, as well as execute our long-term growth strategies and return value to our shareholders. As of December 31, 2021, we maintain cash and cash equivalents of \$397.9 million and have unused availability of \$491.3 million under our 2021 Revolving Facility. Further, our business operates with strong operating cash flows, low leverage and low capital intensity, providing financial flexibility, including sufficient access to credit markets.

Short-term financing needs primarily consist of working capital requirements, restructuring initiatives, capital spending, dividend payments and principal and interest payments on our long-term debt. Long-term financing needs depend largely on potential growth opportunities, including potential acquisitions, repayment or refinancing of our long-term obligations and repurchases of our ordinary shares. Based upon our operations, existing cash balances and availability under our 2021 Credit Facilities, we expect cash flows from operations to be sufficient to maintain a sound financial position and liquidity and to meet our financing needs for at least the next 12 months. Further, we do not anticipate any covenant compliance challenges with any of our outstanding indebtedness for at least the next 12 months. We also believe the availability under our 2021 Credit Facilities and access to credit and capital markets are sufficient to achieve our longer-term strategic plans.

Contractual Obligations and Other Commitments

In addition to the scheduled principal and interest payments discussed above, our material cash requirements include the following contractual and other obligations:

Purchase Commitments – We occasionally enter into short-term, firm purchase commitments to mitigate pricing risk related to certain of our commodity, parts and component purchases, which represent commitments under enforceable and legally binding agreements. Such purchase commitments are made in the normal course of business and are not anticipated to materially impact our liquidity or financial position over the next 12 months.

Leases – We have numerous real estate and equipment leasing arrangements for which we are a lessee. See Note 11 to the Consolidated Financial Statements for further information as to the short and long-term lease liabilities included within the Consolidated Balance Sheets, as well as future minimum lease payments for 2022 and future years.

Defined Benefit Plans – Our investment objective in managing defined benefit plan assets is to ensure that all present and future benefit obligations are met as they come due. We seek to achieve this goal while trying to mitigate volatility in plan funded status, contributions and expense by better matching the characteristics of the plan assets to that of the plan liabilities. Global asset allocation decisions are based on a dynamic approach whereby a plan's allocation to fixed income assets increases as the funded status increases. We monitor plan funded status, asset allocation and the impact of market conditions on our defined benefit plans regularly in addition to investment manager performance. None of our defined benefit pension plans have experienced a significant impact on their liquidity due to volatility in the markets.

At December 31, 2021, we had net pension assets of \$22.9 million, which consist of plan assets of \$775.9 million and benefit obligations of \$753.0 million. It is our objective to contribute to our pension plans in order to ensure adequate funds are available in the plans to make benefit payments to plan participants and beneficiaries when required. At December 31, 2021, the funded status of our U.S. pension plans increased to 97.2% from 92.1% at December 31, 2020. The funded status for our non-U.S. pension plans increased to 107.7% at December 31, 2021 from 101.8% at December 31, 2020. The funded status for all of our pension plans at December 31, 2021 increased to 103.0% from 97.5% at December 31, 2020. While there are no required pension contributions for 2022, we currently expect to contribute approximately \$5 million to our plans worldwide in 2022. For further details on pension plan activity, see Note 12 to the Consolidated Financial Statements.

Income Taxes – At December 31, 2021, we have total unrecognized tax benefits for uncertain tax positions of \$41.5 million and \$7.5 million of related accrued interest and penalties, net of tax, although we are unable to reasonably estimate the timing over which these liabilities might be paid. See Note 18 to the Consolidated Financial Statements for additional information regarding matters relating to income taxes, including unrecognized tax benefits and tax authority disputes.

Contingent Liabilities – We are involved in various litigation, claims and administrative proceedings, including those related to environmental, asbestos-related and product liability matters. We believe that these liabilities are subject to the uncertainties inherent in estimating future costs for contingent liabilities and will likely be resolved over an extended period of time. See Note 21 to the Consolidated Financial Statements for additional information.

Guarantor Financial Information

Allegion US Holding Company Inc. ("Allegion US Hold Co") is the issuer of the 3.200% Senior Notes and 3.550% Senior Notes and is the guarantor of the 3.500% Senior Notes. Allegion plc (the "Parent") is the issuer of the 3.500% Senior Notes and is the guarantor of the 3.200% Senior Notes and 3.550% Senior Notes. Allegion US Hold Co is directly or indirectly 100% owned by the Parent and each of the guarantees of Allegion US Hold Co and the Parent is full and unconditional and joint and several.

The 3.200% Senior Notes and the 3.550% Senior Notes are senior unsecured obligations of Allegion US Hold Co and rank equally with all of Allegion US Hold Co's existing and future senior unsecured and unsubordinated indebtedness. The guarantee of the 3.200% Senior Notes and the 3.550% Senior Notes is the senior unsecured obligation of the Parent and ranks equally with all of Allegion plc's existing and future senior unsecured and unsubordinated indebtedness. The 3.500% Senior Notes are senior unsecured obligations of the Parent, are guaranteed by Allegion US Hold Co and rank equally with all of Allegion plc's existing and future senior unsecured indebtedness.

Each guarantee is effectively subordinated to any secured indebtedness of the Guarantor to the extent of the value of the assets securing such indebtedness. The Senior Notes are structurally subordinated to indebtedness and other liabilities of the subsidiaries of the Guarantor, none of which guarantee the notes. The obligations of the Guarantor under its Guarantee are limited as necessary to prevent such Guarantee from constituting a fraudulent conveyance under applicable law and, therefore,

are limited to the amount that the Guarantor could guarantee without such Guarantee constituting a fraudulent conveyance; this limitation, however, may not be effective to prevent such Guarantee from constituting a fraudulent conveyance. If the Guarantee was rendered voidable, it could be subordinated by a court to all other indebtedness (including guarantees and other contingent liabilities) of the Guarantor, and, depending on the amount of such indebtedness, the Guarantor's liability on its Guarantee could be reduced to zero. In such an event, the notes would be structurally subordinated to the indebtedness and other liabilities of the Guarantor.

For further details, terms and conditions of the Senior Notes refer to the Company's Form 8-K filed October 2, 2017 and Form 8-K filed September 27, 2019.

The following tables present the summarized financial information specified in Rule 1-02(bb)(1) of Regulation S-X for each issuer and guarantor. The summarized financial information has been prepared in accordance with Rule 13-01 of Regulation S-X.

Selected Condensed Statement of Comprehensive Income Information

<i>In millions</i>	Year ended December 31, 2021	
	Allegion plc	Allegion US Hold Co
Net revenues	\$ —	\$ —
Gross profit	—	—
Operating loss	(6.6)	(0.5)
Equity earnings in affiliates, net of tax	521.6	173.6
Transactions with related parties and subsidiaries ^(a)	(12.5)	(85.0)
Net earnings	483.0	87.1
Net earnings attributable to the entity	483.0	87.1

(a) Transactions with related parties and subsidiaries include intercompany interest and fees.

Selected Condensed Balance Sheet Information

<i>In millions</i>	December 31, 2021	
	Allegion plc	Allegion US Hold Co
Current assets:		
Amounts due from related parties and subsidiaries	\$ 0.6	\$ 753.7
Total current assets	60.8	785.5
Noncurrent assets:		
Amounts due from related parties and subsidiaries	—	1,240.9
Total noncurrent assets	1,793.1	1,292.7
Current liabilities:		
Amounts due to related parties and subsidiaries	\$ 62.8	\$ 233.9
Total current liabilities	82.6	241.3
Noncurrent liabilities:		
Amounts due to related parties and subsidiaries	761.8	2,660.5
Total noncurrent liabilities	1,396.5	3,466.9

Critical Accounting Policies and Estimates

Management's Discussion and Analysis of Financial Condition and Results of Operations are based upon our Consolidated Financial Statements, which have been prepared in accordance with GAAP. The preparation of financial statements in conformity with those accounting principles requires management to use judgment in making estimates and assumptions based on the relevant information available at the end of each period. These estimates and assumptions have a significant effect on reported amounts of assets and liabilities, revenues and expenses as well as the disclosure of contingent assets and liabilities because they result primarily from the need to make estimates and assumptions on matters that are inherently uncertain. Actual results may differ from estimates. If updated information or actual amounts are different from previous estimates, the revisions are included in our results for the period in which they become known.

The following is a summary of certain accounting estimates and assumptions made by management that we consider critical:

- *Goodwill* – Goodwill is tested annually during the fourth quarter for impairment or when there is a significant change in events or circumstances that indicate the fair value of a reporting unit is more likely than not less than its carrying amount. Recoverability of goodwill is measured at the reporting unit level and starts with a comparison of the carrying amount of a reporting unit to its estimated fair value. If the estimated fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired. To the extent that the carrying value of a reporting unit exceeds its estimated fair value, a goodwill impairment charge will be recognized for the amount by which the carrying value of the reporting unit exceeds its fair value, not to exceed the carrying amount of the reporting unit's goodwill.

As quoted market prices are not available for our reporting units, the calculation of their estimated fair values is based on two valuation techniques, a discounted cash flow model (income approach) and a market multiple of earnings (market approach), with each method being weighted in the calculation. The income approach relies on our estimates of revenue growth rates, margin assumptions and discount rates to estimate future cash flows and explicitly addresses factors such as timing, with due consideration given to forecasting risk. These assumptions are subject to varying degrees of judgment and complexity. Estimates of future revenue growth rates and margin assumptions represent our best estimates of future cash flows given our expectations of market growth for the security products industry in the specific markets in which we operate, as well as factors such as our market positioning, brand strength, pricing and marketing efforts and other growth and productivity opportunities and initiatives. Discount rate assumptions represent our best estimates of market participant adjusted weighted-average costs of capital. Although these assumptions represent our best estimates as of the assessment date, certain factors could potentially create variances in these estimates, including but not limited to:

- Decreases in estimated market sizes or market growth rates due to greater than expected declines in volumes, pricing pressures or disruptive technology;
- Declines in our market share and penetration assumptions due to increased competition or an inability to develop or launch new products;
- The impacts of market volatility, including but not limited to, impacts of global pandemics, greater than expected inflation, supply chain disruption and delays, declines in pricing, reductions in volumes or fluctuations in foreign exchange rates;
- The level of success of on-going and future research and development efforts, including those related to acquisitions, and increases in the research and development costs necessary to obtain regulatory approvals and launch new products; and
- Volatility in market interest rates that could impact the selection of an appropriate discount rate.

The market approach requires determining an appropriate peer group, which is utilized to derive estimated fair values of our reporting units based on selected market multiples. The market approach reflects the market's expectations for future growth and risk, with adjustments to account for differences between the selected peer group companies and the subject reporting units. While market multiples are based on observable, arm's-length evidence of value, these assumptions are still subject to inherent uncertainty, as the peer-group companies may differ in significant ways from one or more of our reporting units in terms of size, growth or business description characteristics.

All critical accounting estimates and assumptions utilized in determining the fair values of our reporting units are subject to a high degree of judgment and complexity. While we make every effort to estimate fair value as accurately as possible with the information available at the assessment date, changes in assumptions and estimates may affect the estimated fair value of the reporting unit and could result in impairment charges in future periods.

- *Indefinite-lived intangible assets* – Similar to goodwill, indefinite-lived intangible assets are tested annually during the fourth quarter for impairment or when there is a significant change in events or circumstances that indicate the fair value of the asset is more likely than not less than its carrying amount. Recoverability of indefinite-lived intangible assets is determined on a relief from royalty methodology, which is based on the implied royalty paid, at an appropriate discount rate, to license the use of an asset rather than owning the asset. The present value of the after-tax cost savings (i.e. royalty relief) indicates the estimated fair value of the asset. Any excess of the carrying value over the estimated fair value is recognized as an impairment loss equal to that excess. A significant change in any or a combination of the assumptions used to estimate fair value of our indefinite-lived intangible assets could have a negative impact on the estimated fair values.
- *Income taxes* – We account for income taxes in accordance with ASC Topic 740. Deferred tax assets and liabilities are determined based on temporary differences between financial reporting and tax bases of assets and liabilities, applying enacted tax rates expected to be in effect for the year in which the differences are expected to reverse. We recognize future tax benefits, such as net operating losses and non-U.S. tax credits, to the extent that realizing these benefits is

considered in our judgment to be more likely than not. We regularly review the recoverability of our deferred tax assets considering our historic profitability, projected future taxable income, timing of the reversals of existing temporary differences and the feasibility of our tax planning strategies. Where appropriate, we record a valuation allowance with respect to future tax benefits. We establish valuation allowances against the realizability of any deferred tax assets, based on our consideration of all available evidence, both positive and negative, using a “more likely than not” standard. This assessment considers the nature, frequency and amount of recent losses, the duration of statutory carryforward periods and tax planning strategies. In making such judgments, significant weight is given to evidence that can be objectively verified.

The provision for income taxes involves a significant amount of management judgment regarding interpretation of relevant facts and laws in the jurisdictions in which we operate. Future changes in applicable laws, projected levels of taxable income and tax planning could change the effective tax rate and tax balances recorded by us. In addition, tax authorities periodically review income tax returns filed by us and can raise issues regarding our filing positions, timing and amount of income or deductions and the allocation of income among the jurisdictions in which we operate. A significant period of time may elapse between the filing of an income tax return and the ultimate resolution of an issue raised by a tax authority with respect to that return. We believe we have adequately provided for any reasonably foreseeable resolution of these matters and will adjust our estimates if significant events so dictate. To the extent that the ultimate results differ from our original or adjusted estimates, the effect will be recorded in the provision for income taxes in the period the matter is finally resolved.

- *Defined benefit plans* – We provide several U.S. and non-U.S. defined benefit pension plan benefits to eligible employees and retirees. Our noncontributory defined benefit pension plans covering non-collectively bargained U.S. employees provide benefits on an average pay formula while most plans for collectively bargained U.S. employees provide benefits on a flat dollar benefit formula. The non-U.S. pension plans generally provide benefits based on earnings and years of service. Determining the costs associated with such plans is dependent on various actuarial assumptions including discount rates, expected returns on plan assets, employee mortality and turnover rates. Actuarial valuations are performed to determine expense in accordance with GAAP. Actual results may differ from actuarial assumptions and when they do, are generally recorded to Accumulated other comprehensive loss and amortized into earnings over future periods.

We review our actuarial assumptions at each measurement date and make modifications to the assumptions as appropriate. The discount rate and expected return on plan assets are determined as of each measurement date. Discount rates for all plans are established using hypothetical yield curves based on the yields of corporate bonds rated AA quality. Spot rates are developed from the yield curve and used to discount future benefit payments. The expected return on plan assets reflects the average rate of returns expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation. The expected return on plan assets is based on what is achievable given the plan’s investment policy, the types of assets held and the target asset allocation. We believe the assumptions utilized in recording our defined benefit obligations are reasonable based on input from our actuaries, outside investment advisors and information as to assumptions used by plan sponsors.

Changes in any of the assumptions can have an impact on the net periodic pension benefit cost. An estimated 0.25% rate decline in the discount rate would have increased net periodic pension benefit cost by approximately \$1.2 million in 2021, while a 0.25% rate decline in the estimated return on assets would have increased net periodic pension benefit cost by approximately \$1.9 million.

- *Business combinations* – The fair value of consideration paid in a business combination is allocated to the tangible and identifiable intangible assets acquired, liabilities assumed and goodwill. Acquired intangible assets primarily include indefinite-lived trade names, customer relationships and completed technologies. The accounting for business combinations involves a considerable amount of judgment and estimation, including the fair value of acquired intangible assets involving projections of future revenues and cash flows that are either discounted at an estimated discount rate or measured at an estimated royalty rate; fair value of other acquired assets and assumed liabilities, including potential contingencies; and the useful lives of the acquired assets. As a result, in the case of significant acquisitions, we normally obtain the assistance of a third-party valuation specialist in estimating fair values of acquired tangible and intangible assets and assumed liabilities. An income approach or market approach (or both) is utilized in accordance with accepted valuation models to determine fair value. The assumptions used to determine the fair value of acquired assets include projections developed using historical information and internal forecasts, available industry and market data, estimates of long-term growth rates, profitability, customer attrition and royalty rates, which are estimated at the time of acquisition, considering the perspective of marketplace participants. While we believe expectations and assumptions utilized for historical business combinations have been reasonable, they are inherently uncertain, and unanticipated market or macroeconomic events and circumstances occasionally do occur, and may occur in the future, which could affect the

accuracy and validity of such assumptions. The impact of future business combinations on our financial condition or results of operations may also be materially impacted by the change in or initial selection of assumptions and estimates, in addition to events and circumstances subsequent to the acquisition that are not reasonably anticipated when finalizing our purchase accounting estimates and assumptions.

Recent Accounting Pronouncements

See Note 2 to our Consolidated Financial Statements included in Item 8 herein for a discussion of recently issued and adopted accounting pronouncements.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to fluctuations in currency exchange rates, interest rates and commodity prices which could impact our results of operations and financial condition.

Foreign Currency Exposures

We have operations throughout the world that manufacture and sell products in various international markets. As a result, we are exposed to movements in exchange rates of various currencies against the U.S. dollar as well as against other currencies throughout the world. We actively manage material currency exposures that are associated with purchases and sales and other assets and liabilities at the legal entity level; however, we do not hedge currency translation risk. We attempt to hedge exposures that cannot be naturally offset to an insignificant amount with foreign currency derivatives. Derivative instruments utilized in our hedging activities are viewed as risk management tools, involve little complexity and are not used for trading or speculative purposes. To minimize the risk of counter party non-performance, derivative instrument agreements are made only through major financial institutions with significant experience in such derivative instruments.

We evaluate our exposure to changes in currency exchange rates on our foreign currency derivatives using a sensitivity analysis. The sensitivity analysis is a measurement of the potential loss in fair value based on a percentage change in exchange rates. Based on the firmly committed currency derivative instruments in place at December 31, 2021, a hypothetical change in fair value of those derivative instruments assuming a 10% adverse change in exchange rates would result in an additional unrealized loss of approximately \$9.4 million. This amount, when realized, would be partially offset by changes in the fair value of the underlying transactions.

Commodity Price Exposures

We are exposed to volatility in the prices of commodities used in some of our products and we use fixed price contracts to manage this exposure. We do not have committed commodity derivative instruments in place at December 31, 2021.

Interest Rate Exposure

Outstanding borrowings under our 2021 Credit Facilities accrue interest at our option of (i) a BSBY rate plus the applicable margin or (ii) a base rate plus the applicable margin. The applicable margin ranges from 0.875% to 1.375% depending on our credit ratings. At December 31, 2021, the outstanding borrowings of \$250.0 million under the 2021 Term Facility accrue interest at BSBY plus a margin of 1.125%. We are also exposed to the risk of rising interest rates to the extent that we fund our operations with short-term or variable-rate borrowings, as we currently have unused availability of \$491.3 million under our 2021 Revolving Facility as of December 31, 2021. If our BSBY or other applicable base rates of our 2021 Credit Facilities increase in the future, our Interest expense could increase.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

- (a) The following Consolidated Financial Statements and Financial Statement Schedule and the report thereon of PricewaterhouseCoopers LLP dated February 15, 2022, are presented following Item 16 of this Annual Report on Form 10-K.

Consolidated Financial Statements:

Report of independent registered public accounting firm (PCAOB ID 238)
Consolidated Statements of Comprehensive Income for the years ended December 31, 2021, 2020 and 2019
Consolidated Balance Sheets at December 31, 2021 and 2020
For the years ended December 31, 2021, 2020 and 2019:

Consolidated Statements of Equity
Consolidated Statements of Cash Flows

Notes to Consolidated Financial Statements

Financial Statement Schedule:

Schedule II – Valuation and Qualifying Accounts for the years ended December 31, 2021, 2020 and 2019

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

None.

Item 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

The Company's management, including its Chief Executive Officer and Chief Financial Officer, have conducted an evaluation of the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act)), as of the end of the period covered by this Annual Report on Form 10-K. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded as of December 31, 2021, that the Company's disclosure controls and procedures were effective in ensuring that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act has been recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms, and that such information has been accumulated and communicated to the Company's management including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

(b) 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 under Exchange Act Rules 13a-15(f) and 15d-15(f). Our 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. Internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company's assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that the Company's receipts and expenditures are being made only in accordance with authorizations of the Company's management and directors; and
- 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.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2021. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway

Commission (COSO) in *Internal Control-Integrated Framework (2013)*. We concluded that our internal control over financial reporting was effective as of December 31, 2021.

The effectiveness of our internal control over financial reporting has been audited by PricewaterhouseCoopers LLP, the independent registered public accounting firm, as stated in their report herein.

(c) Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal control over financial reporting that occurred during the quarter ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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

The information regarding our executive officers is included in Part I under the caption "Executive Officers of the Registrant."

The other information required by this item is incorporated herein by reference to the information contained under the headings "Item 1. Election of Directors", "Delinquent Section 16(a) Reports" and "Corporate Governance" in our Proxy Statement.

Item 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference to the information contained under the headings "Compensation Discussion and Analysis", "Executive Compensation" and "Compensation Committee Report" in our Proxy Statement.

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

The information required by this item is incorporated herein by reference to the information contained under the headings "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" of our Proxy Statement.

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

The information required by this item is incorporated herein by reference to the information contained under the headings "Corporate Governance" and "Certain Relationships and Related Person Transactions" of our Proxy Statement.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated herein by reference to the information contained under the caption "Fees of the Independent Auditors" in our Proxy Statement.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) 1. and 2. Financial statements and financial statement schedule
 See Item 8.
3. Exhibits
 The exhibits listed on the accompanying index to exhibits are filed as part of this Annual Report on Form 10-K.

ALLEGION PLC
INDEX TO EXHIBITS
(Item 15(a))

Description

Pursuant to the rules and regulations of the SEC, we have filed certain agreements as exhibits to this Annual Report on Form 10-K. These agreements may contain representations and warranties by the parties. These representations and warranties have been made solely for the benefit of the other party or parties to such agreements and (i) may have been qualified by disclosures made to such other party or parties, (ii) were made only as of the date of such agreements or such other date(s) as may be specified in such agreements and are subject to more recent developments, which may not be fully reflected in our public disclosure, (iii) may reflect the allocation of risk among the parties to such agreements and (iv) may apply materiality standards different from what may be viewed as material to investors. Accordingly, these representations and warranties may not describe our actual state of affairs at the date hereof and should not be relied upon.

(a) Exhibits

Exhibit Number	Exhibit Description	Method of Filing
2.1	Separation and Distribution Agreement between Ingersoll-Rand plc and Allegion plc, dated November 29, 2013.	Incorporated by reference to Exhibit 2.1 of the Company's Form 8-K filed with the SEC on December 2, 2013 (File No. 001-35971).
3.1	Amended and Restated Memorandum and Articles of Association of Allegion plc.	Incorporated by reference to Exhibit 3.1 of the Company's Form 8-K filed with the SEC on June 13, 2016 (File No. 001-35971).
4.1	Indenture, dated as of October 2, 2017, among Allegion US Holding Company Inc., Allegion plc and Wells Fargo Bank, National Association.	Incorporated by reference to Exhibit 4.1 of the Company's Form 8-K filed October 2, 2017 (File No. 001-35971).
4.2	First Supplemental Indenture, dated as of October 2, 2017, among Allegion US Holding Company Inc., Allegion plc and Wells Fargo Bank, National Association.	Incorporated by reference to Exhibit 4.2 of the Company's Form 8-K filed October 2, 2017 (File No. 001-35971).
4.3	Form of Global Note representing the 3.200% Senior Notes due 2024.	Incorporated by reference to Exhibit 4.3 of the Company's Form 8-K filed October 2, 2017 (included in Exhibit 4.2) (File No. 001-35971).
4.4	Second Supplemental Indenture, dated as of October 2, 2017, among Allegion US Holding Company Inc., Allegion plc and Wells Fargo Bank, National Association.	Incorporated by reference to Exhibit 4.4 of the Company's Form 8-K filed October 2, 2017 (File No. 001-35971).
4.5	Form of Global Note representing the 3.550% Senior Notes due 2027.	Incorporated by reference to Exhibit 4.5 of the Company's Form 8-K filed October 2, 2017 (included in Exhibit 4.4) (File No. 001-35971).
4.6	Third Supplemental Indenture, dated as of September 27, 2019, among Allegion plc, Allegion US Holding Company Inc. and Wells Fargo Bank, National Association.	Incorporated by reference to Exhibit 4.2 of the Company's Form 8-K filed September 27, 2019 (File No. 001-35971).
4.7	Form of Global Note representing the 3.500% Senior Notes due 2029.	Incorporated by reference to Exhibit 4.3 of the Company's Form 8-K filed September 27, 2019 (included in Exhibit 4.2) (File No. 001-35971).
4.8	Description of the Registrant's Securities registered pursuant to Section 12 of the Securities Exchange Act of 1934.	Incorporated by reference to Exhibit 4.8 of the Company's Form 10-K filed with the SEC on February 18, 2020 (File No. 001-35971).
10.1	Form of Separation Agreement and Release. *	Incorporated by reference to Exhibit 10.1 of the Company's Form 10-K filed with the SEC on February 19, 2019 (File No. 001-35971).
10.2	Tax Matters Agreement between Ingersoll-Rand plc and Allegion plc.	Incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed with the SEC on December 2, 2013 (File No. 001-35971).

10.3	Credit Agreement, dated as of November 18, 2021.	Incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed November 18, 2021 (File No. 001-35971).
10.4	Employee Matters Agreement between Ingersoll-Rand plc and Allegion plc.	Incorporated by reference to Exhibit 10.2 of the Company's Form 8-K filed with the SEC on December 2, 2013 (File No. 001-35971).
10.5	2013 Incentive Stock Plan. *	Incorporated by reference to Exhibit 10.5 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.6	Executive Deferred Compensation Plan. *	Incorporated by reference to Exhibit 10.6 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.7	Supplemental Employee Savings Plan. *	Incorporated by reference to Exhibit 10.7 of the Company's Form 10-K filed with the SEC on February 18, 2020 (File No. 001-35971).
10.8	Elected Officer Supplemental Program. *	Incorporated by reference to Exhibit 10.8 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.9	Key Management Supplemental Program. *	Incorporated by reference to Exhibit 10.9 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.10	Supplemental Pension Plan. *	Incorporated by reference to Exhibit 10.10 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.11	Senior Executive Performance Plan. *	Incorporated by reference to Exhibit 10.11 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.12	David D. Petratis Offer Letter, dated June 19, 2013. *	Incorporated by reference to Exhibit 10.14 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.13	Patrick S. Shannon Offer Letter, dated April 9, 2013. *	Incorporated by reference to Exhibit 10.15 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.14	Timothy P. Eckersley Offer Letter, dated October 3, 2013. *	Incorporated by reference to Exhibit 10.16 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.15	Jeffrey N. Braun Offer Letter, dated June 13, 2014. *	Incorporated by reference to Exhibit 10.15 of the Company's Form 10-K filed with the SEC on February 17, 2017 (File No. 001-35971).
10.16	Form of Allegion plc Deed Poll Indemnity.	Incorporated by reference to Exhibit 10.21 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.17	Form of Allegion US Holding Company, Inc. Deed Poll Indemnity.	Incorporated by reference to Exhibit 10.22 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).

10.18	Form of Allegion Irish Holding Company Limited Deed Poll Indemnity.	Incorporated by reference to Exhibit 10.23 of the Company's Registration Statement on Form 10 filed with the SEC on June 17, 2013, as amended (File No. 001-35971).
10.19	Annual Incentive Plan. *	Incorporated by reference to Exhibit 10.1 of the Company's Form 10-K filed with the SEC on March 10, 2014 (File No. 001-35971).
10.20	Change in Control Severance Plan. *	Incorporated by reference to Exhibit 10.2 of the Company's Form 10-K filed with the SEC on March 10, 2014 (File No. 001-35971).
10.21	Form of Special Global Restricted Stock Unit Award Agreement. *	Filed herewith.
10.22	Form of 2019 Global Restricted Stock Unit Award Agreement. *	Incorporated by reference to Exhibit 10.22 of the Company's Form 10-K filed with the SEC on February 19, 2019 (File No. 001-35971).
10.23	Form of 2019 Global Stock Option Award Agreement. *	Incorporated by reference to Exhibit 10.23 of the Company's Form 10-K filed with the SEC on February 19, 2019 (File No. 001-35971).
10.24	Form of 2019 Global Performance Stock Unit Award Agreement. *	Incorporated by reference to Exhibit 10.24 of the Company's Form 10-K filed with the SEC on February 19, 2019 (File No. 001-35971).
10.25	Form of 2020 Global Restricted Stock Unit Award Agreement. *	Incorporated by reference to Exhibit 10.22 of the Company's Form 10-K filed with the SEC on February 18, 2020 (File No. 001-35971).
10.26	Form of 2020 Global Stock Option Award Agreement. *	Incorporated by reference to Exhibit 10.23 of the Company's Form 10-K filed with the SEC on February 18, 2020 (File No. 001-35971).
10.27	Form of 2020 Global Performance Stock Unit Award Agreement. *	Incorporated by reference to Exhibit 10.24 of the Company's Form 10-K filed with the SEC on February 18, 2020 (File No. 001-35971).
10.28	Form of 2021 Global Restricted Stock Unit Award Agreement. *	Incorporated by reference to Exhibit 10.22 of the Company's Form 10-K filed with the SEC on February 16, 2021 (File No. 001-35971).
10.29	Form of 2021 Global Stock Option Award Agreement. *	Incorporated by reference to Exhibit 10.23 of the Company's Form 10-K filed with the SEC on February 16, 2021 (File No. 001-35971).
10.30	Form of 2021 Global Performance Stock Unit Award Agreement. *	Incorporated by reference to Exhibit 10.24 of the Company's Form 10-K filed with the SEC on February 16, 2021 (File No. 001-35971).
10.31	Form of 2022 Global Restricted Stock Unit Award Agreement. *	Filed herewith.
10.32	Form of 2022 Global Stock Option Award Agreement. *	Filed herewith.
10.33	Form of 2022 Global Performance Stock Unit Award Agreement. *	Filed herewith.
10.34	Form of Non-Employee Director Restricted Stock Unit Award Agreement. *	Incorporated by reference to Exhibit 10.1 of the Company's Form 10-Q filed with the SEC on April 30, 2015 (File No. 001-35971).
10.35	Share Purchase Agreement dated June 26, 2015 between SimonsVoss Luxco S.à r.l., SimonsVoss Co-Invest GmbH & Co. KG, Mr Frank Rövekamp and Allegion Luxembourg Holding & Financing S.à r.l.	Incorporated by reference to Exhibit 10.1 of the Company's Form 10-Q filed with the SEC on July 30, 2015 (File No. 001-35971).
10.36	Timothy P. Eckersley Offer Letter, dated March 3, 2021. *	Incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed with the SEC on March 10, 2021 (File No. 001-35971).

10.37	Timothy P. Eckersley Retention Agreement, dated March 3, 2021. *	Incorporated by reference to Exhibit 10.2 of the Company's Form 8-K filed with the SEC on March 10, 2021 (File No. 001-35971).
10.38	Timothy P. Eckersley Restricted Stock Unit Award Agreement, dated March 10, 2021. *	Incorporated by reference to Exhibit 10.6 of the Company's Form 10-Q filed with the SEC on April 22, 2021 (File No. 001-35971).
10.39	Timothy P. Eckersley Performance Stock Unit Award Agreement, dated March 10, 2021. *	Incorporated by reference to Exhibit 10.7 of the Company's Form 10-Q filed with the SEC on April 22, 2021 (File No. 001-35971).
10.40	Luis Orbegoso Offer Letter, dated January 29, 2021. *	Filed herewith.
10.41	Luis Orbegoso Restricted Stock Unit Award Agreement, dated February 18, 2021. *	Filed herewith.
10.42	Luis Orbegoso Separation Agreement, dated December 31, 2021. *	Filed herewith.
21.1	List of subsidiaries of Allegion plc.	Filed herewith.
23.1	Consent of Independent Registered Public Accounting Firm.	Filed herewith.
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith.
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith.
32.1	Certifications of Chief Executive Officer and Chief Financial Officer Pursuant to Rule 13a-14(b) or Rule 15d-14(b) and 18U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Furnished herewith.
101.INS	XBRL Instance Document.	The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	XBRL Taxonomy Extension Schema Document.	Filed herewith.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.	Filed herewith.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.	Filed herewith.
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document.	Filed herewith.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.	Filed herewith.
104	Cover Page Interactive Data File.	Formatted as Inline XBRL and contained in Exhibit 101.

* Compensatory plan or arrangement.

Item 16. **FORM 10-K SUMMARY**

Not applicable.

Pursuant to the requirement of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ David D. Petratis</u> (David D. Petratis)	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)	February 15, 2022
<u>/s/ Patrick S. Shannon</u> (Patrick S. Shannon)	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 15, 2022
<u>/s/ Douglas P. Ranck</u> (Douglas P. Ranck)	Vice President, Controller and Chief Accounting Officer (Principal Accounting Officer)	February 15, 2022
<u>/s/ Kirk S. Hachigian</u> (Kirk S. Hachigian)	Director	February 15, 2022
<u>/s/ Steven C. Mizell</u> (Steven C. Mizell)	Director	February 15, 2022
<u>/s/ Nicole Parent Haughey</u> (Nicole Parent Haughey)	Director	February 15, 2022
<u>/s/ Lauren B. Peters</u> (Lauren B. Peters)	Director	February 15, 2022
<u>/s/ Dean I. Schaffer</u> (Dean I. Schaffer)	Director	February 15, 2022
<u>/s/ Charles L. Szews</u> (Charles L. Szews)	Director	February 15, 2022
<u>/s/ Dev Vardhan</u> (Dev Vardhan)	Director	February 15, 2022
<u>/s/ Martin E. Welch III</u> (Martin E. Welch III)	Director	February 15, 2022

ALLEGION PLC
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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Allegion Public Limited Company

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Allegion plc and its subsidiaries (the “Company”) as of December 31, 2021 and 2020, and the related consolidated statements of comprehensive income, of equity and of cash flows for each of the three years in the period ended December 31, 2021, including the related notes and financial statement schedule listed in the accompanying index (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2021, 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

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

Goodwill Impairment Assessment - Allegion International Reporting Unit

As described in Notes 2 and 5 to the consolidated financial statements, the Company's consolidated goodwill balance was \$803.8 million as of December 31, 2021, and the goodwill associated with the Allegion International reporting unit was \$302.6 million. As disclosed by management, goodwill is tested annually for impairment during the fourth quarter or whenever there is a significant change in events or circumstances that indicate that the fair value of the reporting unit is more likely than not less than the carrying amount of the reporting unit. If the estimated fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired. To the extent that the carrying value of the reporting unit exceeds its estimated fair value, a goodwill impairment charge will be recognized for the amount by which the carrying value of the reporting unit exceeds its fair value, not to exceed the carrying amount of goodwill. For the annual impairment analysis, the estimated fair value of the Allegion International reporting unit was based on two valuation techniques, a discounted cash flow model (income approach) and a market multiple of earnings (market approach), with each method being weighted in the calculation. The income approach relies on management's estimates of revenue growth rates, margin assumptions, and discount rates. The market approach requires the determination of an appropriate peer group, which is utilized to derive estimated fair values based on selected market multiples.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment of the Allegion International reporting unit is a critical audit matter are (i) the significant judgment by management when developing the fair value of the reporting unit; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to revenue growth rates, discount rates, peer group determination, and selected market multiples; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the valuation of the Allegion International reporting unit. These procedures also included, among others (i) testing management's process for developing the fair value estimate of the Allegion International reporting unit; (ii) evaluating the appropriateness of the income and market approaches; (iii) testing the completeness and accuracy of underlying data used in the approaches; and (iv) evaluating the reasonableness of the significant assumptions used by management related to revenue growth rates and discount rates in the income approach, and the peer group determination and selected market multiples in the market approach. Evaluating management's assumptions related to revenue growth rates involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting unit, (ii) the consistency with external market and industry data, and (iii) whether the assumption was consistent with evidence obtained in other areas of the audit. Evaluating the Company's peer group determination included assessing the appropriateness of the identified peer companies. Professionals with specialized skill and knowledge were used to assist in the evaluation of management's income and market approaches, and the discount rates, peer group determination, and selected market multiples assumptions.

/s/ PricewaterhouseCoopers LLP
Indianapolis, Indiana
February 15, 2022

We have served as the Company's auditor since 2013.

Allegion plc

Consolidated Statements of Comprehensive Income

In millions, except per share amounts

For the years ended December 31,	2021	2020	2019
Net revenues	\$ 2,867.4	\$ 2,719.9	\$ 2,854.0
Cost of goods sold	1,662.5	1,541.1	1,601.7
Selling and administrative expenses	674.7	635.7	681.3
Impairment of goodwill and intangible assets	—	101.7	5.9
Loss on assets held for sale	—	37.9	—
Operating income	530.2	403.5	565.1
Interest expense	50.2	51.1	56.0
Loss on divestitures	—	—	30.1
Other (income) expense, net	(44.0)	(13.0)	3.8
Earnings before income taxes	524.0	365.4	475.2
Provision for income taxes	40.7	50.9	73.1
Net earnings	483.3	314.5	402.1
Less: Net earnings attributable to noncontrolling interests	0.3	0.2	0.3
Net earnings attributable to Allegion plc	\$ 483.0	\$ 314.3	\$ 401.8
Amounts attributable to Allegion plc ordinary shareholders:			
Earnings per share attributable to Allegion plc ordinary shareholders:			
Basic net earnings:	\$ 5.37	\$ 3.41	\$ 4.29
Diluted net earnings:	\$ 5.34	\$ 3.39	\$ 4.26
Net earnings	\$ 483.3	\$ 314.5	\$ 402.1
Other comprehensive income (loss), net of tax:			
Currency translation	(63.3)	57.3	13.4
Cash flow hedges:			
Unrealized net gains arising during period	2.6	3.9	—
Net gains reclassified into earnings	(0.2)	(5.8)	(7.5)
Tax (expense) benefit	(0.6)	0.5	1.9
Total cash flow hedges, net of tax	1.8	(1.4)	(5.6)
Pension and OPEB adjustments:			
Prior service gains (costs) and net actuarial gains (losses), net	25.7	4.9	(8.3)
Amortization reclassified into earnings	4.8	5.0	6.1
Settlements/curtailments reclassified into earnings	0.5	0.1	2.3
Currency translation and other	1.0	(2.1)	(2.7)
Tax expense	(7.7)	(2.0)	(0.4)
Total pension and OPEB adjustments, net of tax	24.3	5.9	(3.0)
Other comprehensive (loss) income, net of tax	(37.2)	61.8	4.8
Total comprehensive income, net of tax	446.1	376.3	406.9
Less: Total comprehensive income attributable to noncontrolling interests	0.4	0.5	0.2
Total comprehensive income attributable to Allegion plc	\$ 445.7	\$ 375.8	\$ 406.7

See accompanying notes to consolidated financial statements.

Allegion plc

Consolidated Balance Sheets

In millions, except share amounts

As of December 31,	2021	2020
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 397.9	\$ 480.4
Accounts and notes receivable, net	283.3	321.8
Inventories	380.4	283.1
Current tax receivable	29.1	25.8
Other current assets	26.9	28.1
Assets held for sale	—	5.8
Total current assets	1,117.6	1,145.0
Property, plant and equipment, net	283.7	294.9
Goodwill	803.8	819.0
Intangible assets, net	447.5	487.1
Deferred and noncurrent income taxes	154.5	126.7
Other noncurrent assets	243.9	196.7
Total assets	<u>\$ 3,051.0</u>	<u>\$ 3,069.4</u>
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	\$ 259.1	\$ 220.4
Accrued compensation and benefits	117.7	86.1
Accrued expenses and other current liabilities	199.9	189.4
Current tax payable	11.9	18.2
Short-term borrowings and current maturities of long-term debt	12.6	0.2
Liabilities held for sale	—	7.2
Total current liabilities	601.2	521.5
Long-term debt	1,429.5	1,429.4
Postemployment and other benefit liabilities	69.2	79.4
Deferred and noncurrent income taxes	100.8	105.7
Other noncurrent liabilities	87.9	100.8
Total liabilities	<u>2,288.6</u>	<u>2,236.8</u>
Equity:		
Allegion plc shareholders' equity		
Ordinary shares, \$0.01 par value (88,215,625 and 91,212,741 shares issued and outstanding at December 31, 2021 and 2020, respectively)	0.9	0.9
Capital in excess of par value	—	—
Retained earnings	952.6	985.6
Accumulated other comprehensive loss	(194.4)	(157.1)
Total Allegion plc shareholders' equity	759.1	829.4
Noncontrolling interests	3.3	3.2
Total equity	762.4	832.6
Total liabilities and equity	<u>\$ 3,051.0</u>	<u>\$ 3,069.4</u>

See accompanying notes to consolidated financial statements.

Allegion plc

Consolidated Statements of Equity

In millions, except per share amounts

	Allegion plc shareholders' equity						
	Total equity	Ordinary Shares		Capital in excess of par value	Retained earnings	Accumulated other comprehensive loss	Noncontrolling interests
		Amount	Shares				
Balance at December 31, 2018	\$ 654.0	\$ 0.9	94.6	\$ —	\$ 873.6	\$ (223.5)	\$ 3.0
Net earnings	402.1	—	—	—	401.8	—	0.3
Other comprehensive income (loss), net	4.8	—	—	—	—	4.9	(0.1)
Repurchase of ordinary shares	(226.0)	—	(2.3)	(26.5)	(199.5)	—	—
Share-based compensation activity	26.5	—	0.4	26.5	—	—	—
Dividends declared to noncontrolling interests	(0.2)	—	—	—	—	—	(0.2)
Cash dividends declared (\$1.08 per share)	(100.9)	—	—	—	(100.9)	—	—
Other	0.1	—	—	—	0.1	—	—
Balance at December 31, 2019	760.4	0.9	92.7	—	975.1	(218.6)	3.0
Cumulative effect of adoption of ASC 326, Financial Instruments – Credit Losses	(2.2)	—	—	—	(2.2)	—	—
Net earnings	314.5	—	—	—	314.3	—	0.2
Other comprehensive income, net	61.8	—	—	—	—	61.5	0.3
Repurchase of ordinary shares	(208.8)	—	(1.9)	(24.8)	(184.0)	—	—
Share-based compensation activity	24.8	—	0.4	24.8	—	—	—
Dividends declared to noncontrolling interests	(0.3)	—	—	—	—	—	(0.3)
Cash dividends declared (\$1.28 per share)	(117.9)	—	—	—	(117.9)	—	—
Other	0.3	—	—	—	0.3	—	—
Balance at December 31, 2020	832.6	0.9	91.2	—	985.6	(157.1)	3.2
Net earnings	483.3	—	—	—	483.0	—	0.3
Other comprehensive (loss) income, net	(37.2)	—	—	—	—	(37.3)	0.1
Repurchase of ordinary shares	(412.8)	—	(3.3)	(25.8)	(387.0)	—	—
Share-based compensation activity	25.8	—	0.3	25.8	—	—	—
Dividends declared to noncontrolling interests	(0.3)	—	—	—	—	—	(0.3)
Cash dividends declared (\$1.44 per share)	(129.0)	—	—	—	(129.0)	—	—
Balance at December 31, 2021	\$ 762.4	\$ 0.9	88.2	\$ —	\$ 952.6	\$ (194.4)	\$ 3.3

See accompanying notes to consolidated financial statements.

Allegion plc

Consolidated Statements of Cash Flows

In millions

For the years ended December 31,	2021	2020	2019
Cash flows from operating activities:			
Net earnings	\$ 483.3	\$ 314.5	\$ 402.1
Adjustments to arrive at net cash provided by operating activities:			
Debt extinguishment costs	0.5	—	2.7
Depreciation and amortization	83.1	81.0	83.0
Impairment of goodwill and intangible assets	—	101.7	5.9
Loss on assets held for sale	—	37.3	—
Loss on divestitures	—	—	30.1
Share-based compensation	23.4	20.8	20.4
Unrealized (gains) losses on investments, net	(25.6)	2.0	(3.1)
Deferred income taxes	(43.8)	(24.4)	(30.2)
Other items	7.9	(6.4)	(0.5)
Changes in other assets and liabilities:			
Accounts and notes receivable	31.7	(1.9)	(6.0)
Inventories	(105.6)	(7.8)	5.4
Other current and noncurrent assets	(38.0)	(46.0)	(15.0)
Accounts payable	40.0	(1.6)	(11.0)
Other current and noncurrent liabilities	31.7	21.1	4.4
Net cash provided by operating activities	<u>488.6</u>	<u>490.3</u>	<u>488.2</u>
Cash flows from investing activities:			
Capital expenditures	(45.4)	(47.1)	(65.6)
Acquisition of and equity investments in businesses, net of cash acquired	(6.5)	(12.5)	(7.6)
Proceeds from sale of equity method investment	7.6	—	—
Proceeds related to business dispositions, net	—	—	3.3
Other investing activities, net	12.7	2.9	(7.7)
Net cash used in investing activities	<u>(31.6)</u>	<u>(56.7)</u>	<u>(77.6)</u>
Cash flows from financing activities:			
Proceeds from issuance of 2021 Term Facility	250.0	—	—
Proceeds from issuance of senior notes	—	—	400.0
Payments of short-term borrowings and long-term debt, net	(238.9)	(0.2)	(417.9)
Proceeds from (repayments of) debt, net	11.1	(0.2)	(17.9)
Debt issuance costs	(1.9)	—	(4.2)
Dividends paid to ordinary shareholders	(129.0)	(117.3)	(100.6)
Repurchase of ordinary shares	(412.8)	(208.8)	(226.0)
Proceeds from shares issued under incentive plans	—	4.5	6.5
Other financing activities, net	3.3	(0.1)	—
Net cash used in financing activities	<u>(529.3)</u>	<u>(321.9)</u>	<u>(342.2)</u>
Effect of exchange rate changes on cash, cash equivalents and restricted cash	<u>(10.2)</u>	<u>10.0</u>	<u>(0.3)</u>
Net (decrease) increase in cash, cash equivalents and restricted cash	(82.5)	121.7	68.1
Cash, cash equivalents and restricted cash – beginning of period	480.4	358.7	290.6
Cash, cash equivalents and restricted cash – end of period	<u>\$ 397.9</u>	<u>\$ 480.4</u>	<u>\$ 358.7</u>

See accompanying notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 – DESCRIPTION OF COMPANY AND BASIS OF PRESENTATION

Allegion plc, an Irish public limited company, and its consolidated subsidiaries ("Allegion" or "the Company") are a leading global company that provides security products and solutions that keep people and assets safe and secure in the places they reside, work and thrive. Allegion creates peace of mind by pioneering safety and security with a vision of seamless access and a safer world. The Company offers an extensive and versatile portfolio of security and access control products and solutions across a range of market-leading brands including CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®.

Basis of presentation: The Consolidated Financial Statements were prepared in accordance with generally accepted accounting principles in the United States of America ("GAAP") as defined by the Financial Accounting Standards Board ("FASB") within the FASB Accounting Standards Codification ("ASC").

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following is a summary of significant accounting policies used in the preparation of the accompanying Consolidated Financial Statements:

Principles of Consolidation: The Consolidated Financial Statements include all controlled subsidiaries of the Company. A noncontrolling interest in a subsidiary is considered an ownership interest in a controlled subsidiary that is not attributable to the Company. The Company includes noncontrolling interests as a component of Total equity in the Consolidated Balance Sheets and the Net earnings attributable to noncontrolling interests are presented as an adjustment from Net earnings used to arrive at Net earnings attributable to Allegion plc in the Consolidated Statements of Comprehensive Income.

Equity method affiliates represent unconsolidated entities over which the Company demonstrates significant influence but does not have a controlling financial interest. The Company is also required to consolidate variable interest entities in which it bears a majority of the risk to the entity's potential losses or stands to gain from a majority of the entity's expected returns.

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 and the disclosures of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenues and expenses during the reporting period. Estimates are based on several factors including the facts and circumstances available at the time the estimates are made, historical experience, risk of loss, general economic conditions and trends and the assessment of the probable future outcome. Some of the more significant estimates include useful lives of property, plant and equipment and intangible assets, purchase price allocations of acquired businesses, valuation of assets and liabilities including goodwill and other intangible assets, product warranties, sales allowances, assets and liabilities related to defined benefit plans, taxes, lease related assets and liabilities, share-based compensation, environmental costs, product liability and other contingencies. Actual results could differ from those estimates. Estimates and assumptions are reviewed periodically, and the effects of changes, if any, are reflected in the Consolidated Statements of Comprehensive Income in the period they are determined.

Currency Translation: Assets and liabilities where the functional currency is not the U.S. dollar have been translated at year-end exchange rates, and income and expense accounts have been translated using average exchange rates throughout the year. Adjustments resulting from the process of translating a subsidiary's financial statements into the U.S. dollar are recorded to Accumulated other comprehensive loss.

Foreign currency transaction gains and losses are a result of the effect of exchange rate changes on transactions denominated in currencies other than the functional currency. Transaction gains and losses are recognized in Other income (expense), net, in the Consolidated Statements of Comprehensive Income in the period they are incurred.

Cash and Cash Equivalents: Cash and cash equivalents include cash on hand, demand deposits and all highly liquid investments with original maturities at the time of purchase of three months or less.

Allowance for Doubtful Accounts: The Company provides for an allowance for doubtful accounts and notes receivable, which represents the best estimate of expected lifetime credit losses inherent in the Company's accounts and notes receivable portfolios. The Company's estimates are influenced by a continuing credit evaluation of customers' financial condition, trade accounts and notes receivable aging and historical loss experience, as well as reasonable and supportable forecasts of future economic conditions. The Company has reserved \$5.4 million and \$6.2 million for doubtful accounts and notes receivable as of December 31, 2021 and 2020, respectively.

Inventories: Inventories are stated at the lower of cost and net realizable value using the first-in, first-out (FIFO) method.

Property, Plant and Equipment: Property, plant and equipment are stated at cost, less accumulated depreciation. Assets placed in service are recorded at cost and depreciated using the straight-line method over the estimated useful life of the asset except for leasehold improvements, which are depreciated over the shorter of their economic useful life or their lease term. Repair and maintenance costs that do not extend the useful life of the asset are expensed as incurred. Major replacements and significant improvements that increase asset values and extend useful lives are capitalized. The range of useful lives used to depreciate property, plant and equipment is as follows:

Buildings	10	to	50	years
Machinery and equipment	2	to	12	years
Software	2	to	7	years

The Company assesses the recoverability of the carrying value of its property, plant and equipment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be fully recoverable. Recoverability is measured by a comparison of the carrying amount of an asset to the future net undiscounted cash flows expected to be generated by the asset. If the undiscounted cash flows are less than the carrying amount of the asset, an impairment loss is recognized for the amount by which the carrying value of the asset exceeds its fair value.

Investments: The Company periodically invests in debt or equity securities of start-up companies and/or development stage technology or other companies without acquiring a controlling interest. The Company applies the equity method of accounting when the Company has the ability to exercise significant influence over the operating and financial decision making of the investee. Investments in equity method affiliates totaled \$11.0 million and \$17.4 million as of December 31, 2021 and 2020, respectively. Equity investments that have readily determinable fair values in which the Company does not have significant influence are measured at fair value, with any unrealized holding gains and losses being recorded to earnings. Investments without readily determinable fair values are measured at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar investment of the same issuer and are qualitatively assessed for impairment indicators each reporting period. Investments in debt and equity securities not accounted for under the equity method of accounting totaled \$35.8 million and \$13.7 million as of December 31, 2021 and 2020, respectively. The Company's investments are recorded within Other noncurrent assets within the Consolidated Balance Sheets.

Leases: The Company records a right-of-use ("ROU") asset and lease liability for substantially all leases for which it is a lessee. At inception of a contract, the Company considers all relevant facts and circumstances to assess whether or not the contract represents a lease by determining whether or not the contract conveys the right to control the use of an identified asset, either explicit or implicit, for a period of time in exchange for consideration. Judgment and estimation is also required in determining the lease classification and the amount of the ROU asset and corresponding lease liability for each lease, which includes determining the appropriate lease term and an applicable discount rate. The Company assesses the specific terms and conditions of each lease to determine the appropriate classification as either an operating or finance lease. Substantially all of the Company's leases for which the Company is a lessee are classified as operating leases. In determining the appropriate length of the lease term, both the minimum period over which lease payments are required plus any renewal options that are both within the Company's control to exercise and reasonably certain of being exercised as of lease commencement are considered. If at lease commencement date, a lease has a term of less than 12 months and does not include a purchase option that is reasonably certain to be exercised, the Company does not include the lease as part of its ROU asset or lease liability. If the Company enters into a large number of leases in the same month with the same terms and conditions, these are considered a group (portfolio). There are no material residual value guarantees provided by the Company nor any restrictions or covenants imposed by any leases to which the Company is a party.

As a lessee, the Company categorizes its leases into two general categories: real estate leases and equipment leases. The Company's real estate leases include leased production and assembly facilities, warehouses and distribution centers and office space. The Company's equipment leases include vehicles, material handling equipment, other machinery and equipment utilized in the Company's production and assembly facilities, warehouses and distribution centers, laptops and other IT equipment and other miscellaneous leased equipment.

The terms and conditions of real estate leases can vary significantly from lease to lease. The Company assesses the specific terms and conditions of each real estate lease to determine the amount of the lease payments and the length of the lease term, which includes the minimum period over which lease payments are required plus any renewal options that are both within the Company's control to exercise and reasonably certain of being exercised upon lease commencement. The Company assesses all relevant factors to determine if sufficient incentives exist as of lease commencement to conclude whether or not renewal is

reasonably certain. When available, the Company will utilize the rate implicit in the lease as the discount rate to determine the lease liability. However, as this rate is not available for most leases, the Company will use its incremental borrowing rate for debt instruments with terms approximating the weighted-average term of its real estate or equipment leases to discount the future lease payments over the lease term to present value. The Company does incur variable lease payments for certain of its real estate leases, such as reimbursements of property taxes, maintenance and other operational costs to the lessor. In general, these variable lease payments are not captured as part of the lease liability or ROU asset, but rather are expensed as incurred. Most of the Company's equipment leases are for terms ranging from two to five years, although terms and conditions can vary from lease to lease. The Company applies similar estimates and judgments to its equipment lease portfolio in determining the lease payments, lease term and incremental borrowing rate as it does to its real estate lease portfolio. The Company does not typically incur variable lease payments related to its equipment leases.

Goodwill: The Company records as goodwill the excess of the purchase price of an acquired business over the fair value of the net assets acquired. Once the final valuation has been performed for each acquisition, adjustments may be recorded. Goodwill is tested and reviewed annually for impairment during the fourth quarter or whenever there is a significant change in events or circumstances that indicate the fair value of a reporting unit is more likely than not less than its carrying amount.

Recoverability of goodwill is measured at the reporting unit level. The carrying amount of a reporting unit is compared to its estimated fair value. If the estimated fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired. To the extent that the carrying value of the reporting unit exceeds its estimated fair value, a goodwill impairment charge will be recognized for the amount by which the carrying value of the reporting unit exceeds its fair value, not to exceed the carrying amount of the reporting unit's goodwill. Estimated fair value of the Company's reporting units is based on two valuation techniques, a discounted cash flow model (income approach) and a market multiple of earnings (market approach), with each method being weighted in the calculation.

Intangible Assets: Indefinite-lived intangible assets other than Goodwill are not amortized, but similar to Goodwill, are also tested and reviewed annually for impairment during the fourth quarter or whenever there is a significant change in events or circumstances that indicate the asset is more likely than not less than its carrying amount. Recoverability of other intangible assets with indefinite useful lives (i.e. Trade names) is determined on a relief from royalty methodology, which is based on the implied royalty paid, at an appropriate discount rate, to license the use of an asset rather than owning the asset. The present value of the after-tax cost savings (i.e. royalty relief) indicates the estimated fair value of the asset. Any excess of the carrying value over the estimated fair value is recognized as an impairment loss equal to that excess.

Intangible assets such as completed technologies, patents, customer-related intangible assets and other intangible assets with finite useful lives are amortized on a straight-line basis over their estimated economic lives. The weighted-average useful lives approximate the following:

Customer relationships	20 years
Trade names (finite-lived)	25 years
Completed technologies/patents	10 years
Other	7 years

Recoverability of intangible assets with finite useful lives is assessed in the same manner as property, plant and equipment, as described above.

Business Combinations: The fair value of consideration paid in a business combination is allocated to the tangible and identifiable intangible assets acquired, liabilities assumed and goodwill. Acquired intangible assets primarily include indefinite-lived trade names, customer relationships and completed technologies. The accounting for business combinations involves a considerable amount of judgment and estimation, including the fair value of acquired intangible assets involving projections of future revenues and cash flows that are either discounted at an estimated discount rate or measured at an estimated royalty rate; fair value of other acquired assets and assumed liabilities, including potential contingencies; and the useful lives of the acquired assets. As a result, in the case of significant acquisitions, the Company normally obtains the assistance of a third-party valuation specialist in estimating fair values of acquired tangible and intangible assets and assumed liabilities. An income approach or market approach (or both) is utilized in accordance with accepted valuation models for significant acquired assets to determine fair value.

Income Taxes: The calculation of the Company's income taxes involves considerable judgment and the use of both estimates and allocations. Deferred tax assets and liabilities are determined based on temporary differences between financial reporting and tax bases of assets and liabilities, applying enacted tax rates expected to be in effect for the year in which the differences are expected to reverse. The Company recognizes future tax benefits, such as net operating losses and tax credits, to the extent

that realizing these benefits is considered in its judgment to be more likely than not. The Company regularly reviews the recoverability of its deferred tax assets considering its historic profitability, projected future taxable income, timing of the reversals of existing temporary differences and the feasibility of its tax planning strategies. Where appropriate, the Company records a valuation allowance with respect to future tax benefits.

Cash paid for income taxes, net of refunds, for the twelve months ended December 31, 2021, 2020 and 2019 was \$89.1 million, \$82.6 million and \$103.0 million, respectively.

Product Warranties: The Company offers a standard warranty with most product sales, and the value of such warranty is included in the contractual sales price. Standard product warranty accruals are recorded at the time of sale and are estimated based upon product warranty terms and historical experience. The Company regularly assesses the adequacy of its liabilities and makes adjustments as necessary based on known or anticipated warranty claims, or as new information becomes available.

Revenue Recognition: Net revenues are recognized based on the satisfaction of performance obligations under the terms of a contract. A performance obligation is a promise in a contract to transfer control of a distinct product or to provide a service, or a bundle of products or services, to a customer. The Company has two principal revenue streams, tangible product sales and services. Approximately 99% of consolidated Net revenues involve contracts with a single performance obligation, the transfer of control of a product or bundle of products to a customer. Transfer of control typically occurs when goods are shipped from the Company's facilities or at other predetermined control transfer points (for instance, destination terms). The Company's remaining Net revenues involve services, including installation and consulting. Unlike the single performance obligation to ship a product or bundle of products, revenue recognition related to services is delayed until the service based performance obligations are satisfied. In some instances, customer acceptance provisions are included in sales arrangements to give the buyer the ability to ensure the service meets any established criteria. In these instances, revenue recognition is deferred until the performance obligations are satisfied, which could include acceptance terms specified in the arrangement being fulfilled through customer acceptance or a demonstration that established criteria have been satisfied.

Net revenues are measured as the amount of consideration expected to be received in exchange for transferring control of the products or providing the services and takes into account variable consideration, such as sales incentive programs including discounts and volume rebates. The existence of these programs does not preclude revenue recognition but does require the Company's best estimate of the variable consideration to be made based on expected activity, as these items are reserved for as a deduction to Net revenues based on the Company's historical rates of providing these incentives and annual forecasted sales volumes. Sales returns and customer disputes involving a question of quantity or price are accounted for as variable consideration, and therefore, as a reduction to Net revenues and as a contra receivable. At December 31, 2021 and 2020, the Company had a customer claim accrual (contra receivable) of \$47.7 million and \$48.6 million, respectively. All other incentives or incentive programs where the customer is required to reach a certain level of purchases, remain a customer for a certain period, provide a rebate form or is subject to additional requirements are also considered variable consideration and are accounted for as a reduction of revenue and a liability. At December 31, 2021 and 2020, the Company had a sales incentive accrual of \$38.0 million and \$35.0 million, respectively. Each of these accruals represents the Company's best estimate of the most likely amount expected to be received from customers based on historical experience. These estimates are reviewed regularly for accuracy, and if updated information or actual amounts are different from previous estimates, the revisions are included in the Company's results for the period in which they become known.

As a practical expedient, the Company recognizes incremental costs of obtaining a contract, if any, as an expense when incurred if the amortization period of the asset would have been one year or less. The Company also applies the practical expedients allowed under ASC 606, "Revenue from Contracts with Customers", to omit the disclosure of remaining performance obligations for contracts with an original expected duration of one year or less and for contracts where the Company has the right to invoice for performance completed to date. The transaction price is not adjusted for the effects of a significant financing component, as the time period between control transfer of goods and services is less than one year. Sales, value-added and other similar taxes collected by the Company are excluded from Net revenues. The Company has also elected to account for shipping and handling activities that occur after control of the related goods transfers as fulfillment activities instead of performance obligations. These activities are included in Cost of goods sold in the Consolidated Statements of Comprehensive Income. The Company's payment terms are generally consistent with the industries in which its businesses operate.

Environmental Costs: The Company is subject to laws and regulations relating to protecting the environment and is dedicated to an environmental program to reduce the utilization and generation of hazardous materials during the manufacturing process and to remediate identified environmental concerns. The Company is currently engaged in site investigations and remediation activities to address environmental cleanup from past operations at current and former production facilities. The Company regularly evaluates its remediation programs and considers alternative remediation methods that are in addition to, or in

replacement of, those currently utilized by the Company based upon enhanced technology and regulatory changes. Changes to the Company's remediation programs may result in increased expenses and increased environmental reserves.

The Company is sometimes a party to environmental lawsuits and claims and has, from time to time, received notices of potential violations of environmental laws and regulations from the U.S. Environmental Protection Agency and similar state authorities. It has also been identified as a potentially responsible party ("PRP") for cleanup costs associated with off-site waste disposal at federal Superfund and state remediation sites for past operations. For all such sites, there are other PRPs and, in most instances, the Company's involvement is minimal. In estimating its liability, the Company has assumed it will not bear the entire cost of remediation of any site to the exclusion of other PRPs who may be jointly and severally liable. The ability of other PRPs to participate has been taken into account, based on the Company's understanding of the parties' financial condition and probable contributions on a per site basis. Additional lawsuits and claims involving environmental matters are likely to arise from time to time in the future.

Environmental expenditures relating to current operations are expensed or capitalized as appropriate. Expenditures relating to existing conditions caused by past operations, which do not contribute to current or future revenues, are expensed. Liabilities for remediation costs are recorded when they are probable and can be reasonably estimated, generally no later than the completion of feasibility studies or the Company's commitment to a plan of action. The assessment of this liability, which is calculated based on existing technology, does not reflect any offset for possible recoveries from insurance companies and is not discounted.

Research and Development Costs: The Company conducts research and development activities for the purpose of developing and improving new products and services. These costs are expensed when incurred. For the years ended December 31, 2021, 2020 and 2019, expenses related to research and development activities amounted to approximately \$73.3 million, \$54.4 million and \$54.7 million, respectively, and primarily consisted of salaries, wages, benefits, facility costs and other overhead expenses.

Defined Benefit Plans: The Company provides a range of defined benefits, including pension, postretirement and postemployment benefits to eligible current and former employees. Determining the costs associated with such benefits is dependent on various actuarial assumptions, including discount rates, expected returns on plan assets, compensation increases, employee mortality and turnover rates. Actuaries perform the required calculations to determine expense in accordance with GAAP. Actual results may differ from the actuarial estimates and are generally recorded to Accumulated other comprehensive loss and amortized into Net earnings over future periods. The Company reviews its actuarial assumptions at each measurement date and makes modifications to the assumptions as appropriate. Refer to Note 12 for further details on defined benefit plans.

Share-Based Compensation: The Company records share-based compensation awards using a fair value method and recognizes compensation expense for an amount equal to the fair value of the share-based payment issued in its financial statements. The Company's share-based compensation plans include programs for stock options, restricted stock units ("RSUs"), performance stock units ("PSUs") and deferred compensation. The fair value of each of the Company's stock option and RSU awards is expensed on a straight-line basis over the required service period, which is generally the 3-year vesting period. However, for stock options and RSUs granted to retirement eligible employees, the Company recognizes expense for the fair value at the grant date. The Company's Performance Stock Program ("PSP") provides awards for key employees in the form of PSUs based on performance against pre-established objectives. The annual target award level is expressed as a number of the Company's ordinary shares. All PSUs are settled in the form of ordinary shares unless deferred.

Loss Contingencies: Liabilities are recorded for various contingencies arising in the normal course of business, including litigation and administrative proceedings, environmental matters, product liabilities, product warranties, worker's compensation and other claims. The Company has recorded reserves in the financial statements related to these matters, which are developed using inputs derived from actuarial estimates and historical and anticipated experience data depending on the nature of the reserve and, in certain instances, with consultation of legal counsel, internal and external consultants and engineers. Amounts recorded for identified contingent liabilities are estimates, which are reviewed periodically and adjusted to reflect additional information when it becomes available. Subject to the uncertainties inherent in estimating future costs for these types of liabilities, the Company believes its estimated reserves are reasonable and does not believe the final determination of the liabilities with respect to these matters would have a material effect on the financial condition, results of operations, liquidity or cash flows of the Company for any year.

Financial Instruments: In the normal course of business, the Company uses various financial instruments, including derivative instruments, to manage the risks associated with interest and currency rate exposures. These financial instruments are not used for trading or speculative purposes. When a derivative contract is entered into, the Company designates the derivative instrument as a cash flow hedge of a forecasted transaction, a cash flow hedge of a recognized asset or liability or as an

undesigned derivative. The Company formally documents its hedge relationships, including identification of the derivative instruments and the hedged items, as well as its risk management objectives and strategies for undertaking the hedge transaction. This process includes linking derivative instruments that are designated as hedges to specific assets, liabilities or forecasted transactions.

The Company assesses at inception and at least quarterly thereafter, whether the derivatives used in cash flow hedging transactions are effective in offsetting the changes in the cash flows of the hedged item. To the extent the derivative is deemed to be an effective hedge, the fair market value changes of the instrument are recorded to Accumulated other comprehensive loss and subsequently reclassified to Net earnings when the hedged transaction affects earnings, while changes in the fair market value of derivatives not deemed to be an effective hedge are recorded in Net earnings in the period of change. The Company recognizes all derivative instruments on the Consolidated Balance Sheets at their fair value as either assets or liabilities. The fair value of derivative instruments is determined through market-based valuations and may not be representative of the actual gains or losses that will be recorded when these instruments mature due to future fluctuations in the markets in which they are traded. If the hedging relationship ceases to be effective subsequent to inception, or it becomes probable that a forecasted transaction will no longer occur, the hedging relationship will be undesignated and any future gains or losses on the derivative instrument will be recorded in Net earnings.

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements:

In December 2019, the FASB issued ASU 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes." The new guidance was intended to simplify the accounting for income taxes by removing certain exceptions and by updating accounting requirements around franchise taxes, goodwill recognized for tax purposes, the allocation of current and deferred tax expense among legal entities, among other minor changes. This ASU became effective for fiscal years beginning after December 15, 2020, and interim periods within those annual periods. Accordingly, the Company adopted ASU 2019-12 on January 1, 2021, and the adoption did not have a material impact to the Consolidated Financial Statements.

In January 2020, the FASB issued ASU 2020-01, "Investments—Equity Securities (Topic 321), Investments—Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815): Clarifying the Interactions between Topic 321, Topic 323, and Topic 815." The amendments in ASU 2020-01 clarify the interaction of the accounting for equity securities under Topic 321 and investments accounted for under the equity method of accounting. This ASU became effective for fiscal years beginning after December 15, 2020, and interim periods within those annual periods. Accordingly, the Company adopted ASU 2020-01 on January 1, 2021, and the adoption did not have a material impact to the Consolidated Financial Statements.

Recently Issued Accounting Pronouncements:

In October 2021, the FASB issued ASU No. 2021-08, "Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers." This ASU requires contract assets and contract liabilities (e.g. deferred revenue) acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, "Revenue from Contracts with Customers". Generally, this new guidance will result in the acquirer recognizing contract assets and contract liabilities at the same amounts recorded by the acquiree. Historically, such amounts were recognized by the acquirer at fair value in purchase accounting. The guidance is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption is permitted, including in interim periods, for any financial statements that have not yet been issued. The Company elected to early adopt ASU 2021-08 on January 1, 2022, and will apply to all business combinations consummated subsequent to this date.

NOTE 3 – INVENTORIES

Inventories are stated at the lower of cost and net realizable value using the first-in, first-out (FIFO) method.

At December 31, the major classes of Inventories were as follows:

<i>In millions</i>	2021	2020
Raw materials	\$ 144.4	\$ 114.0
Work-in-process	42.2	42.3
Finished goods	193.8	126.8
Total	<u>\$ 380.4</u>	<u>\$ 283.1</u>

NOTE 4 – PROPERTY, PLANT AND EQUIPMENT

At December 31, the major classes of property, plant and equipment were as follows:

<i>In millions</i>	2021	2020
Land	\$ 16.5	\$ 17.2
Buildings	177.0	179.8
Machinery and equipment	451.1	455.2
Software	152.6	157.7
Construction in progress	30.5	20.2
Total property, plant and equipment	827.7	830.1
Accumulated depreciation	(544.0)	(535.2)
Property, plant and equipment, net	<u>\$ 283.7</u>	<u>\$ 294.9</u>

Depreciation expense for the years ended December 31, 2021, 2020 and 2019, was \$45.2 million, \$46.5 million and \$47.1 million, which includes amounts for software amortization of \$11.5 million, \$13.5 million and \$14.5 million, respectively.

NOTE 5 – GOODWILL

The changes in the carrying amount of Goodwill were as follows:

<i>In millions</i>	Allegion Americas	Allegion International	Total
December 31, 2019 (gross)	\$ 485.0	\$ 873.8	\$ 1,358.8
Accumulated impairment	—	(485.5)	(485.5)
December 31, 2019 (net)	485.0	388.3	873.3
Acquisitions	16.1	—	16.1
Impairment charge	—	(88.1)	(88.1)
Currency translation	—	17.7	17.7
December 31, 2020 (net)	501.1	317.9	819.0
Acquisitions and adjustments	0.1	4.6	4.7
Currency translation	—	(19.9)	(19.9)
December 31, 2021 (net)	<u>\$ 501.2</u>	<u>\$ 302.6</u>	<u>\$ 803.8</u>

As a result of the global economic disruption and uncertainty due to the COVID-19 pandemic arising during the first quarter of 2020, the Company concluded a triggering event had occurred as of March 31, 2020, and performed interim impairment tests on the goodwill balances, at that time, of its previous EMEA and Asia Pacific reporting units (which were combined to form the new Allegion International segment effective January 1, 2021). The results of the interim impairment testing indicated that the estimated fair value of the former Asia Pacific reporting unit was less than its carrying value. Consequently, a goodwill impairment charge of \$88.1 million was recorded, which is included in Impairment of goodwill and intangible assets in the Consolidated Statement of Comprehensive Income for the year ended December 31, 2020.

NOTE 6 – INTANGIBLE ASSETS

The following table sets forth the gross amount and related accumulated amortization of the Company's intangible assets at December 31:

<i>In millions</i>	2021			2020		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Completed technologies/patents	\$ 57.9	\$ (28.8)	\$ 29.1	\$ 59.9	\$ (25.1)	\$ 34.8
Customer relationships	395.9	(141.6)	254.3	415.5	(130.2)	285.3
Trade names (finite-lived)	84.0	(56.9)	27.1	90.2	(57.4)	32.8
Other	45.8	(22.7)	23.1	27.0	(11.1)	15.9
Total finite-lived intangible assets	583.6	\$ (250.0)	333.6	592.6	\$ (223.8)	368.8
Trade names (indefinite-lived)	113.9		113.9	118.3		118.3
Total	<u>\$ 697.5</u>		<u>\$ 447.5</u>	<u>\$ 710.9</u>		<u>\$ 487.1</u>

Intangible asset amortization expense for the years ended December 31, 2021, 2020 and 2019, was \$34.0 million, \$31.5 million and \$31.2 million, respectively. Future estimated amortization expense on existing intangible assets in each of the next five years amounts to approximately \$29.0 million for 2022, \$28.8 million for 2023, \$28.8 million for 2024, \$27.9 million for 2025 and \$25.7 million for 2026.

No intangible asset impairment charges were recorded for the year ended December 31, 2021. However, as a result of the global economic disruption and uncertainty due to the COVID-19 pandemic arising during the first quarter of 2020, the Company concluded a triggering event had occurred as of March 31, 2020, and performed interim impairment testing on certain indefinite-lived trade names. Based on these tests, it was determined that three of the Company's indefinite-lived trade names were impaired, and impairment charges of \$8.2 million were recorded. Additional intangible asset impairment charges of \$5.4 million were recorded in 2020, relating to supply chain disruptions, which reduced a brand's expected future cash flows, and declines in volumes and pricing pressure for a separate subsidiary. During the 2019 annual impairment testing, it was determined that two of the Company's indefinite-lived trade names were impaired, resulting in impairment charges totaling \$5.9 million. Intangible asset impairment charges are included in Impairment of goodwill and intangible assets in the Consolidated Statements of Comprehensive Income.

NOTE 7 - ACQUISITIONS

In July 2021, the Company acquired, through its subsidiaries, certain assets of Astrum Benelux B.V. ("Astrum Benelux") and 100% of the equity of WorkforceIT B.V. in the Netherlands ("WorkforceIT"), both of which were previously held under common control and offer workforce management technology products and solutions in the Benelux region of Europe. Neither the assets from Astrum Benelux nor the acquisition of WorkforceIT had a material impact on the Consolidated Financial Statements. Both Workforce IT and the assets acquired from Astrum Benelux were accounted for as a business combination and have been integrated into the Allegion International segment.

In December 2020, the Company acquired the remaining interest of Yonomi, Inc. ("Yonomi"), a U.S. based smart home integration platform provider and innovation leader in IoT Cloud platforms, through one of its subsidiaries. Prior to acquisition, the Company held a noncontrolling interest in Yonomi that was considered an equity method investment. This acquisition was accounted for as a business combination and did not have a material impact on the Consolidated Financial Statements. Yonomi has been integrated into the Allegion Americas segment.

During the years ended December 31, 2021, 2020 and 2019, the Company incurred \$4.4 million, \$2.3 million and \$2.0 million, respectively, of acquisition and integration related expenses, which are included in Selling and administrative expenses in the Consolidated Statement of Comprehensive Income.

NOTE 8 - DIVESTITURES

As previously disclosed, during the fourth quarter of 2020, the net assets of the Company's Qatar Metal Industries ("QMI") business, met the criteria to be classified as held for sale, and accordingly, were written down to fair value, resulting in a Loss on assets held for sale in 2020 of \$37.9 million. On February 28, 2021, the Company completed its divestiture of QMI. The completion of the divestiture did not have a material impact to the Consolidated Financial Statements for the year ended December 31, 2021.

In 2019, the Company closed its production facility in Turkey and sold certain of the production assets thereof. Total proceeds from the sale were approximately \$4.1 million, and the Company recorded a loss on divestiture of \$24.2 million (\$25.5 million, net of tax), primarily driven by the reclassification of \$25.0 million of accumulated foreign currency translation adjustments to earnings upon sale. The Company also sold its interests in its Colombia operations in 2019 for a nominal amount, recording a net loss on divestiture of \$5.9 million, of which \$1.2 million relates to the reclassification of accumulated foreign currency translation adjustments to earnings upon sale. These losses are included within Loss on divestitures in the Consolidated Statements of Comprehensive Income for the year ended December 31, 2019.

NOTE 9 – DEBT AND CREDIT FACILITIES

At December 31, long-term debt and other borrowings consisted of the following:

<i>In millions</i>	2021	2020
2021 Term Facility	\$ 250.0	\$ —
Term Facility	—	238.8
2021 Revolving Facility	—	—
Revolving Facility	—	—
3.200% Senior Notes due 2024	400.0	400.0
3.550% Senior Notes due 2027	400.0	400.0
3.500% Senior Notes due 2029	400.0	400.0
Other debt	0.3	0.6
Total borrowings outstanding	1,450.3	1,439.4
Less discounts and debt issuance costs, net	(8.2)	(9.8)
Total debt	1,442.1	1,429.6
Less current portion of long-term debt	12.6	0.2
Total long-term debt	\$ 1,429.5	\$ 1,429.4

Unsecured Credit Facilities

On November 18, 2021, the Company entered into a new unsecured credit agreement (the “2021 Credit Agreement”), which refinanced in full the Company's previously outstanding unsecured Credit Facilities. The 2021 Credit Agreement consists of a \$250.0 million term loan facility (the “2021 Term Facility”) and a \$500.0 million revolving credit facility (the “2021 Revolving Facility”) and, together with the 2021 Term Facility, the “2021 Credit Facilities”). The 2021 Credit Facilities mature on November 18, 2026, and are unconditionally guaranteed jointly and severally on an unsecured basis by the Company and Allegion US Holding Company Inc. (“Allegion US Hold Co”), the Company's wholly-owned subsidiary. All obligations under the previously outstanding Credit Agreement were satisfied, all commitments thereunder were terminated, and all guarantees that had been granted in connection therewith were released.

The full amount of the 2021 Term Facility was drawn at closing, with the initial proceeds of \$250.0 million primarily used to repay in full the outstanding borrowings under the previously outstanding Term Facility. The 2021 Term Facility will amortize in quarterly installments at the following rates: 1.25% per quarter starting March 31, 2022 through March 31, 2025, 2.5% per quarter starting June 30, 2025 through September 30, 2026, with the balance due on November 18, 2026. The Company may voluntarily prepay outstanding amounts under the 2021 Term Facility at any time without premium or penalty, subject to customary breakage costs. Amounts borrowed under the 2021 Term Facility that are repaid may not be reborrowed.

The 2021 Revolving Facility provides aggregate commitments of up to \$500.0 million, which includes up to \$100.0 million for the issuance of letters of credit. At December 31, 2021, there were no borrowings outstanding on the 2021 Revolving Facility and the Company had \$8.7 million of letters of credit outstanding. Commitments under the 2021 Revolving Facility may be reduced at any time without premium or penalty, and amounts repaid may be reborrowed. The Company pays certain fees with respect to the 2021 Revolving Facility, including an unused commitment fee on the undrawn portion of the 2021 Revolving Facility of between 0.090% and 0.200% per year, depending on the Company's credit rating, as well as certain other fees.

Outstanding borrowings under the 2021 Credit Facilities accrue interest at the option of the Company of (i) a Bloomberg Short-Term Bank Yield Index (“BSBY”) rate plus the applicable margin or (ii) a base rate plus the applicable margin. The applicable margin ranges from 0.875% to 1.375% depending on the Company's credit ratings. At December 31, 2021, the outstanding borrowings under the 2021 Term Facility accrue interest at BSBY plus a margin of 1.125%, resulting in an interest rate of

1.271%. The 2021 Credit Facilities also contain negative and affirmative covenants and events of default that, among other things, limit or restrict the Company's ability to enter into certain transactions. In addition, the 2021 Credit Facilities require the Company to comply with a maximum leverage ratio as defined within the agreement. As of December 31, 2021, the Company was in compliance with all covenants.

Senior Notes

As of December 31, 2021, Allegion US Hold Co has \$400.0 million outstanding of its 3.200% Senior Notes due 2024 (the "3.200% Senior Notes") and \$400.0 million outstanding of its 3.550% Senior Notes due 2027 (the "3.550% Senior Notes"), while Allegion plc has \$400.0 million outstanding of its 3.500% Senior Notes due 2029 (the "3.500% Senior Notes"). The 3.200% Senior Notes, 3.550% Senior Notes and 3.500% Senior Notes (collectively, the "Senior Notes") all require semi-annual interest payments on April 1 and October 1 of each year, and will mature on October 1, 2024, October 1, 2027, and October 1, 2029, respectively. The 3.200% Senior Notes and the 3.550% Senior Notes are senior unsecured obligations of Allegion US Hold Co and rank equally with all of Allegion US Hold Co's existing and future senior unsecured and unsubordinated indebtedness. The guarantee of the 3.200% Senior Notes and the 3.550% Senior Notes is the senior unsecured obligation of the Company and ranks equally with all of the Company's existing and future senior unsecured and unsubordinated indebtedness. The 3.500% Senior Notes are senior unsecured obligations of Allegion plc, are guaranteed by Allegion US Hold Co and rank equally with all of the Company's existing and future senior unsecured indebtedness.

Future Repayments

Scheduled principal repayments on indebtedness as of December 31, 2021 were as follows:

<i>In millions</i>	
2022	\$ 12.6
2023	12.6
2024	412.6
2025	21.9
2026	190.6
Thereafter	800.0
Total	\$ 1,450.3

Cash paid for interest for the years ended December 31, 2021, 2020 and 2019 was \$45.1 million, \$47.3 million and \$48.8 million, respectively.

NOTE 10 – FINANCIAL INSTRUMENTS

Currency Derivatives

The gross notional amount of the Company's currency derivatives was \$164.9 million and \$218.9 million at December 31, 2021 and 2020, respectively. The fair values of currency derivatives included within the Consolidated Balance Sheets as of December 31, 2021 and 2020 were not material, nor were either the balances included in Accumulated other comprehensive loss or the amount expected to be reclassified into Net earnings over the next twelve months related to currency derivatives designated as cash flow hedges, although the actual amounts that will be reclassified to Net earnings may vary as a result of future changes in market conditions.

The amounts associated with currency derivatives designated as hedges affecting Net earnings and Accumulated other comprehensive loss for the years ended December 31 were as follows:

<i>In millions</i>	Amount of gain recognized in Accumulated other comprehensive loss			Location of gain recognized in Net earnings	Amount of gain reclassified from Accumulated other comprehensive loss and recognized into Net earnings		
	2021	2020	2019		2021	2020	2019
Currency derivatives	\$ 2.6	\$ 4.1	\$ 1.9	Cost of goods sold	\$ 0.2	\$ 5.3	\$ 4.4

Gains and losses associated with the Company's non-designated currency derivatives, which are offset by changes in the fair value of the underlying transactions, are included within Other (income) expense, net in the Consolidated Statements of

Comprehensive Income. At December 31, 2021, the maximum term of the Company's currency derivatives, both those that are designated as cash flow hedges and those that are not, was less than one year.

Concentration of Credit Risk

The counterparties to the Company's forward contracts consist of a number of investment grade major international financial institutions. The Company could be exposed to losses in the event of nonperformance by the counterparties. However, the credit ratings and the concentration of risk in these financial institutions are monitored on a continuous basis and present no significant credit risk to the Company.

NOTE 11 - LEASES

Total rental expense for the years ended December 31, 2021, 2020 and 2019, was \$45.4 million, \$44.2 million and \$43.2 million, respectively, and is classified within Cost of goods sold and Selling and administrative expenses within the Consolidated Statements of Comprehensive Income. Rental expense related to short-term leases, variable lease payments or other leases or lease components not included within the ROU asset or lease liability totaled \$8.2 million, \$9.1 million and \$8.1 million, respectively, for the years ended December 31, 2021, 2020 and 2019. No material lease costs have been capitalized on the Consolidated Balance Sheets as of December 31, 2021 or 2020.

Amounts included within the Consolidated Balance Sheets related to the Company's ROU asset and lease liability were as follows:

<i>In millions</i>	Balance Sheet classification	December 31, 2021			December 31, 2020		
		Real estate	Equipment	Total	Real estate	Equipment	Total
ROU asset	Other noncurrent assets	\$ 58.2	\$ 31.7	\$ 89.9	\$ 59.5	\$ 32.5	\$ 92.0
Lease liability - current	Accrued expenses and other current liabilities	15.5	13.6	29.1	14.7	12.9	27.6
Lease liability - noncurrent	Other noncurrent liabilities	45.1	18.2	63.3	46.5	19.8	66.3

Other information:

Weighted-average remaining term (years)	6.5	2.8	7.0	3.2
Weighted-average discount rate	3.4 %	2.1 %	3.9 %	2.7 %

The following table summarizes additional information related to the Company's leases for the years ended December 31:

<i>In millions</i>	2021			2020		
	Real estate	Equipment	Total	Real estate	Equipment	Total
Cash paid for amounts included in the measurement of lease liabilities	\$ 19.1	\$ 17.4	\$ 36.5	\$ 19.0	\$ 15.0	\$ 34.0
ROU assets obtained in exchange for new lease liabilities	16.7	12.8	29.5	19.2	22.0	41.2

The Company frequently enters into both real estate and equipment leases in the normal course of business. While there have been lease agreements entered into that have not yet commenced as of December 31, 2021, none of these leases provide new rights or obligations to the Company that are material individually or in the aggregate.

Future Repayments

Scheduled minimum lease payments required under non-cancellable operating leases for both the real estate and equipment lease portfolios for the next five years and thereafter as of December 31, 2021, were as follows:

<i>In millions</i>	2022	2023	2024	2025	2026	Thereafter	Total
Real estate leases	\$ 17.3	\$ 12.9	\$ 9.5	\$ 8.0	\$ 4.8	\$ 16.2	\$ 68.7
Equipment leases	14.1	9.9	5.7	2.6	0.3	—	32.6
Total	\$ 31.4	\$ 22.8	\$ 15.2	\$ 10.6	\$ 5.1	\$ 16.2	\$ 101.3

The difference between the total undiscounted minimum lease payments and the combined current and noncurrent lease liabilities as of December 31, 2021, is due to imputed interest of \$8.9 million.

NOTE 12 – PENSIONS AND POSTRETIREMENT BENEFITS OTHER THAN PENSIONS

The Company sponsors several U.S. defined benefit and defined contribution plans covering substantially all U.S. employees. Additionally, the Company has non-U.S. defined benefit and defined contribution plans covering eligible non-U.S. employees. Postretirement benefits, other than pensions, provide healthcare benefits, and in some instances, life insurance benefits for certain eligible employees.

Pension Plans

The noncontributory defined benefit pension plans covering non-collectively bargained U.S. employees provide benefits on an average pay formula, while most plans for collectively bargained U.S. employees provide benefits on a flat dollar benefit formula. The non-U.S. pension plans generally provide benefits based on earnings and years of service. The Company also maintains additional other supplemental plans for officers and other key employees.

The following table details information regarding the Company's pension plans at December 31:

<i>In millions</i>	U.S.		NON-U.S.	
	2021	2020	2021	2020
Change in benefit obligations:				
Benefit obligation at beginning of year	\$ 361.4	\$ 341.0	\$ 455.7	\$ 404.5
Service cost	6.7	6.7	2.0	1.7
Interest cost	6.8	9.6	5.1	6.6
Employee contributions	—	—	0.3	0.3
Amendments	—	—	(0.1)	0.2
Actuarial (gains) losses	(18.7)	22.5	(21.9)	43.4
Benefits paid	(20.0)	(19.0)	(14.8)	(16.3)
Foreign exchange rate changes	—	—	(5.4)	15.9
Curtailments and settlements	—	—	(3.0)	(0.6)
Divestitures	—	—	(0.8)	—
Other, including expenses paid	(0.3)	0.6	—	—
Benefit obligation at end of year	\$ 335.9	\$ 361.4	\$ 417.1	\$ 455.7
Change in plan assets:				
Fair value at beginning of year	\$ 333.0	\$ 301.5	\$ 463.9	\$ 409.0
Actual return on plan assets	8.9	45.2	3.7	52.1
Company contributions	6.2	6.3	6.0	5.1
Employee contributions	—	—	0.3	0.3
Benefits paid	(20.0)	(19.0)	(14.8)	(16.3)
Foreign exchange rate changes	—	—	(4.8)	15.9
Curtailement and settlements	—	—	(3.0)	(0.6)
Other, including expenses paid	(1.6)	(1.0)	(1.9)	(1.6)
Fair value of assets at end of year	\$ 326.5	\$ 333.0	\$ 449.4	\$ 463.9
Funded status:				
Plan assets (less than) exceeding benefit obligations	\$ (9.4)	\$ (28.4)	\$ 32.3	\$ 8.2
Amounts included in the balance sheet:				
Other noncurrent assets	\$ 13.9	\$ —	\$ 55.9	\$ 37.4
Accrued compensation and benefits	(0.5)	(0.2)	(0.7)	(0.8)
Postemployment and other benefit liabilities	(22.8)	(28.2)	(22.9)	(27.6)
Liabilities held for sale	—	—	—	(0.8)
Net amount recognized	\$ (9.4)	\$ (28.4)	\$ 32.3	\$ 8.2

It is the Company's objective to contribute to the pension plans to ensure adequate funds are available in the plans to make benefit payments to plan participants and beneficiaries when required. However, certain plans are not funded due to either legal,

accounting or tax requirements in certain jurisdictions. As of December 31, 2021, approximately 6% of the Company's projected benefit obligation relates to plans that are not funded, of which the majority are non-U.S. plans.

The pretax amounts recognized in Accumulated other comprehensive loss were as follows:

<i>In millions</i>	U.S.		
	Prior service cost	Net actuarial losses	Total
December 31, 2019	\$ (1.2)	\$ (69.1)	\$ (70.3)
Current year changes recorded to Accumulated other comprehensive loss	—	8.1	8.1
Amortization reclassified to earnings	0.2	3.6	3.8
December 31, 2020	\$ (1.0)	\$ (57.4)	\$ (58.4)
Current year changes recorded to Accumulated other comprehensive loss	—	13.5	13.5
Amortization reclassified to earnings	0.3	3.4	3.7
December 31, 2021	\$ (0.7)	\$ (40.5)	\$ (41.2)

<i>In millions</i>	NON-U.S.		
	Prior service cost	Net actuarial losses	Total
December 31, 2019	\$ (3.8)	\$ (69.8)	\$ (73.6)
Current year changes recorded to Accumulated other comprehensive loss	(0.3)	(4.0)	(4.3)
Amortization reclassified to earnings	0.1	1.3	1.4
Settlements/curtailments reclassified to earnings	—	0.1	0.1
Currency translation and other	(0.1)	(2.6)	(2.7)
December 31, 2020	\$ (4.1)	\$ (75.0)	\$ (79.1)
Current year changes recorded to Accumulated other comprehensive loss	0.1	11.8	11.9
Amortization reclassified to earnings	0.1	1.4	1.5
Settlements/curtailments reclassified to earnings	—	0.5	0.5
Currency translation and other	0.1	2.0	2.1
December 31, 2021	\$ (3.8)	\$ (59.3)	\$ (63.1)

Weighted-average assumptions used:

Benefit obligations at December 31,	2021	2020
Discount rate:		
U.S. plans	2.8 %	2.5 %
Non-U.S. plans	1.9 %	1.3 %
Rate of compensation increase:		
U.S. plans	3.0 %	3.0 %
Non-U.S. plans	3.4 %	3.0 %

The accumulated benefit obligation for all U.S. defined benefit pension plans was \$333.4 million and \$354.9 million at December 31, 2021 and 2020, respectively. The accumulated benefit obligation for all non-U.S. defined benefit pension plans was \$410.2 million and \$446.0 million at December 31, 2021 and 2020, respectively.

Information regarding pension plans with accumulated benefit obligations more than plan assets were:

<i>In millions</i>	U.S.		NON-U.S.	
	2021	2020	2021	2020
Projected benefit obligation	\$ 23.3	\$ 24.0	\$ 33.7	\$ 40.3
Accumulated benefit obligation	23.0	23.3	28.2	34.0
Fair value of plan assets	\$ —	\$ —	\$ 10.1	\$ 11.1

Future pension benefit payments are expected to be paid as follows:

<i>In millions</i>	U.S.	NON-U.S.
2022	\$ 19.5	\$ 15.6
2023	30.0	16.1
2024	28.2	17.0
2025	19.8	17.8
2026	21.2	18.6
2027 - 2031	93.4	104.8

The components of the Company's net periodic pension benefit cost (income) for the years ended December 31 were as follows:

<i>In millions</i>	U.S.		
	2021	2020	2019
Service cost	\$ 6.7	\$ 6.7	\$ 6.5
Interest cost	6.8	9.6	11.7
Expected return on plan assets	(14.0)	(14.5)	(12.5)
Administrative costs and other	1.2	1.6	1.7
Net amortization of:			
Prior service costs	0.3	0.2	0.3
Plan net actuarial losses	3.4	3.6	4.7
Net periodic pension benefit cost	<u>\$ 4.4</u>	<u>\$ 7.2</u>	<u>\$ 12.4</u>

<i>In millions</i>	NON-U.S.		
	2021	2020	2019
Service cost	\$ 2.0	\$ 1.7	\$ 1.7
Interest cost	5.1	6.6	8.8
Expected return on plan assets	(13.8)	(12.7)	(13.0)
Administrative costs and other	1.9	1.6	1.3
Net amortization of:			
Prior service costs	0.1	0.1	0.2
Plan net actuarial losses	1.4	1.3	1.4
Net curtailment and settlement losses	0.5	0.1	2.3
Net periodic pension benefit (income) cost	<u>\$ (2.8)</u>	<u>\$ (1.3)</u>	<u>\$ 2.7</u>

The Service cost component of Net periodic pension benefit cost (income) is recorded in Cost of goods sold and Selling and administrative expenses, while the remaining components are recorded within Other (income) expense, net within the Consolidated Statements of Comprehensive Income.

Net periodic pension benefit income for 2022 is projected to be approximately \$1.7 million, utilizing the assumptions for calculating the pension benefit obligations at the end of 2021.

Weighted-average assumptions used:

Net periodic pension benefit cost (income) for the year ended December 31,	2021	2020	2019
Discount rate:			
U.S. plans	2.5 %	3.3 %	4.3 %
Non-U.S. plans	1.3 %	1.9 %	2.8 %
Rate of compensation increase:			
U.S. plans	3.0 %	3.0 %	3.0 %
Non-U.S. plans	3.0 %	3.0 %	3.3 %
Expected return on plan assets:			
U.S. plans	4.3 %	5.0 %	5.0 %
Non-U.S. plans	3.0 %	3.3 %	3.8 %

The Company estimates the service and interest cost components of net periodic benefit cost utilizing a full yield-curve approach. Under this approach, the Company applies discounting using the applicable spot rates derived from the yield curve to discount the cash flows used to measure the benefit obligation. These spot rates align to each of the projected benefit obligations and service cost cash flows. The expected return on plan assets reflects the average rate of returns expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation and is based on what is achievable given the plan's investment policy, the types of assets held and target asset allocations. The expected long-term rate of return is determined as of the measurement date. Each plan is reviewed, along with its historical returns and target asset allocations, to determine the appropriate expected return on plan assets to be used.

The Company's overall objective in managing defined benefit plan assets is to ensure that all present and future benefit obligations are met as they come due. The goal is to achieve this while trying to mitigate volatility in plan funded status, contributions and expense by better matching the characteristics of the plan assets to that of the plan liabilities. Each plan's funded status and asset allocation is monitored regularly in addition to investment manager performance.

The fair values of the Company's U.S. pension plan assets at December 31, 2021, by asset category were as follows:

<i>In millions</i>	Fair value measurements				Total
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Assets measured at NAV	
Cash, cash equivalents and short-term investments	\$ —	\$ —	\$ —	\$ 4.5	\$ 4.5
Common collective trusts	—	—	—	252.3	252.3
Other ^(a)	—	—	—	69.7	69.7
Total U.S. pension plan assets	\$ —	\$ —	\$ —	\$ 326.5	\$ 326.5

(a) Includes group trust diversified credit and real asset funds.

The fair values of the Company's U.S. pension plan assets at December 31, 2020, by asset category were as follows:

<i>In millions</i>	Fair value measurements				Total
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Assets measured at NAV	
Cash, cash equivalents and short-term investments	\$ —	\$ —	\$ —	\$ 2.1	\$ 2.1
Common collective trusts	—	—	—	288.4	288.4
Other ^(a)	—	—	—	42.5	42.5
Total U.S. pension plan assets	\$ —	\$ —	\$ —	\$ 333.0	\$ 333.0

(a) Includes a group trust diversified credit fund and real estate investment trust.

No material transfers in or out of Level 3 occurred during the years ended December 31, 2021 or 2020.

The Company's U.S. pension plan assets are valued using the following methodologies:

- *Cash, cash equivalents and short-term investments* – Short-term investments are valued at their daily net asset value (NAV) per share or the equivalent based upon the fair value of the underlying investments. NAV per share or the equivalent is used for fair value purposes as a practical expedient and is calculated by the investment manager or sponsor of the fund. These investments primarily consist of short-term investment funds.
- *Common collective trusts* - Common collective trust ("CCT") funds are not publicly traded and are valued at NAV per share or the equivalent based upon the fair value of the underlying investments. NAV per share or the equivalent is used for fair value purposes as a practical expedient and is calculated by the investment manager or sponsor of the applicable fund. CCT funds consist of a variety of publicly traded securities, including equity mutual funds, U.S. government and agency obligations, corporate and non-U.S. bonds, securitized credit and emerging market debt. There are no unfunded commitments, redemption frequency restrictions or other redemption restrictions related to such investments.

The fair values of the Company's non-U.S. pension plan assets at December 31, 2021, by asset category were as follows:

<i>In millions</i>	Fair value measurements			Assets measured at NAV	Total
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)		
Cash, cash equivalents and short-term investments	\$ 0.3	\$ —	\$ —	\$ 103.9	\$ 104.2
Equity mutual funds	—	3.1	—	112.5	115.6
Corporate and non-U.S. bonds	—	3.0	—	166.4	169.4
Other ^(a)	—	0.5	3.8	55.9	60.2
Total non-U.S. pension plan assets	\$ 0.3	\$ 6.6	\$ 3.8	\$ 438.7	\$ 449.4

(a) Primarily includes a core diversified credit fund, a credit opportunity fund and derivative contracts.

The fair values of the Company's non-U.S. pension plan assets at December 31, 2020, by asset category were as follows:

<i>In millions</i>	Fair value measurements			Assets measured at NAV	Total
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)		
Cash, cash equivalents and short-term investments	\$ 1.6	\$ —	\$ —	\$ 92.5	\$ 94.1
Equity mutual funds	—	3.3	—	110.0	113.3
Corporate and non-U.S. bonds	—	3.5	—	203.8	207.3
Other ^(a)	—	0.5	4.2	44.5	49.2
Total non-U.S. pension plan assets	\$ 1.6	\$ 7.3	\$ 4.2	\$ 450.8	\$ 463.9

(a) Primarily includes a core diversified credit fund and derivative contracts.

No material transfers in or out of Level 3 occurred during the years ended December 31, 2021 or 2020.

The Company's non-U.S. pension plan assets are valued using the following methodologies:

- *Cash, cash equivalents and short-term investments* – Cash equivalents are valued using a market approach with inputs including quoted market prices for either identical or similar instruments. Short-term investments are valued at the closing price or amount held on deposit by the custodian bank, at fair value by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the credit-worthiness of the issuer, or at their NAV per share or the equivalent based upon the fair value of the underlying investments. NAV per share or the equivalent is used for fair value purposes as a practical expedient and is calculated by the investment manager or sponsor of the fund. These investments primarily consist of short-term investment funds.
- *Equity mutual funds* – Equity mutual funds are primarily valued at their NAV per share or the equivalent. NAV per share or the equivalent is used for fair value purposes as a practical expedient. NAV is calculated by the investment manager or sponsor of the fund.

- *Corporate and non-U.S. bonds* – Quoted market prices are not available for these securities. Fair values are either estimated using pricing models and/or quoted prices of securities with similar characteristics or discounted cash flows, in which instances such securities are classified as Level 2 or valued at their NAV per share or the equivalent. NAV per share or the equivalent is used for fair value purposes as a practical expedient and are calculated by the investment manager or sponsor of the fund.

The Company made employer contributions of \$6.2 million, \$6.3 million and \$6.0 million to the U.S. pension plans in 2021, 2020 and 2019, respectively. The Company made required and discretionary contributions to its non-U.S. pension plans of \$6.0 million, \$5.1 million and \$10.6 million in 2021, 2020 and 2019, respectively.

The Company currently projects that approximately \$5 million will be contributed to its plans worldwide in 2022. The Company's policy allows it to fund an amount, which could be in excess of or less than the pension cost expensed, subject to the limitations imposed by current tax regulations. The Company anticipates funding the plans in 2022 in accordance with contributions required by funding regulations or the laws of each jurisdiction.

Most of the Company's U.S. employees are covered by defined contribution plans. Employer contributions are determined based on criteria specific to the individual plans and amounted to approximately \$18.3 million, \$17.9 million and \$15.6 million in 2021, 2020 and 2019, respectively. The Company's contributions relating to non-U.S. defined contribution plans and other non-U.S. benefit plans were \$8.6 million, \$7.0 million and \$6.0 million in 2021, 2020 and 2019, respectively.

Deferred Compensation Plan

The Company maintains an Executive Deferred Compensation Plan ("EDCP"), which is an unfunded, nonqualified plan that, prior to 2019, permitted certain employees to defer up to 50% of their annual salary and up to 100% of their annual bonus awards, performance stock plan awards and restricted stock units earned until conclusion of their employment with the Company. As of December 31, 2021 and 2020, the deferred compensation liability balance was \$18.2 million and \$18.1 million, respectively, which was recorded within Postemployment and other benefit liabilities in the Consolidated Balance Sheets.

Postretirement Benefits Other Than Pensions

The Company sponsors a postretirement ("OPEB") plan that provides for healthcare benefits, and in some instances, life insurance benefits, that cover certain eligible retired employees. The Company funds postretirement benefit obligations principally on a pay-as-you-go basis. Generally, postretirement health benefits are contributory with contributions adjusted annually. Life insurance plans for retirees are primarily noncontributory. Net periodic postretirement benefit income is included within Other (income) expense, net within the Consolidated Statements of Comprehensive Income.

The benefit obligation related to the Company's postretirement plans as of December 31, 2021 and 2020 was \$4.4 million and \$5.2 million, respectively, and is classified as Accrued compensation and benefits and Postemployment and other benefit liabilities within the Consolidated Balance Sheets. Net periodic postretirement benefit income was not material for any of the years ended December 31, 2021, 2020 or 2019, nor is it projected to be material for 2022. Benefit payments for postretirement benefits, which are net of expected plan participant contributions and Medicare Part D subsidies, are expected to be less than \$1 million per year for the foreseeable future.

NOTE 13 – FAIR VALUE MEASUREMENTS

Fair value is defined as the exchange price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Fair value measurements are based on a framework that utilizes the inputs market participants use to determine the fair value of an asset or liability and establishes a fair value hierarchy to prioritize those inputs. The fair value hierarchy is comprised of the three levels described below:

- Level 1 – Inputs based on quoted prices in active markets for identical assets or liabilities.
- Level 2 – Inputs other than Level 1 quoted prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability.
- Level 3 – Unobservable inputs based on little or no market activity and that are significant to the fair value of the assets and liabilities.

The fair value hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Observable inputs are obtained from independent sources and can be validated by a third party, whereas unobservable inputs reflect assumptions regarding what a third party would use in pricing an asset or liability based on the best information available under the circumstances. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Assets and liabilities measured at fair value at December 31, 2021, were as follows:

<i>In millions</i>	Fair value measurements				Total fair value
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)		
Recurring fair value measurements					
<i>Assets:</i>					
Investments	\$ —	\$ 24.5	\$ —	\$ 24.5	\$ 24.5
Derivative instruments	—	0.5	—	0.5	0.5
Total asset recurring fair value measurements	\$ —	\$ 25.0	\$ —	\$ 25.0	\$ 25.0
<i>Liabilities:</i>					
Derivative instruments	\$ —	\$ 0.4	\$ —	\$ 0.4	\$ 0.4
Deferred compensation and other retirement plans	—	25.9	—	25.9	25.9
Total liability recurring fair value measurements	\$ —	\$ 26.3	\$ —	\$ 26.3	\$ 26.3
Financial instruments not carried at fair value					
Total debt	\$ —	\$ 1,510.4	\$ —	\$ 1,510.4	\$ 1,510.4
Total financial instruments not carried at fair value	\$ —	\$ 1,510.4	\$ —	\$ 1,510.4	\$ 1,510.4

Assets and liabilities measured at fair value at December 31, 2020, were as follows:

<i>In millions</i>	Fair value measurements				Total fair value
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)		
Recurring fair value measurements					
<i>Assets:</i>					
Investments	\$ —	\$ 23.5	\$ —	\$ 23.5	\$ 23.5
Derivative instruments	—	1.6	—	1.6	1.6
Total asset recurring fair value measurements	\$ —	\$ 25.1	\$ —	\$ 25.1	\$ 25.1
<i>Liabilities:</i>					
Derivative instruments	\$ —	\$ 3.4	\$ —	\$ 3.4	\$ 3.4
Deferred compensation and other retirement plans	—	25.1	—	25.1	25.1
Total liability recurring fair value measurements	\$ —	\$ 28.5	\$ —	\$ 28.5	\$ 28.5
Financial instruments not carried at fair value					
Total debt	\$ —	\$ 1,541.4	\$ —	\$ 1,541.4	\$ 1,541.4
Total financial instruments not carried at fair value	\$ —	\$ 1,541.4	\$ —	\$ 1,541.4	\$ 1,541.4

The Company determines the fair value of its financial assets and liabilities using the following methodologies:

- *Investments* – These instruments include equity mutual funds and corporate bond funds. The fair value is obtained based on observable market prices quoted on public exchanges for similar instruments.
- *Derivative instruments* – These instruments include foreign currency contracts for non-functional currency balance sheet exposures, including both those that are and are not designated as cash flow hedges. The fair value of the foreign currency contracts is determined based on a pricing model that uses spot rates and forward prices from actively quoted currency markets that are readily accessible and observable.

- *Deferred compensation and other retirement plans* - These include obligations related to deferred compensation and other retirement plans adjusted for market performance. The fair value is obtained based on observable market prices quoted on public exchanges for similar instruments.
- *Debt* – These instruments are recorded at cost and include senior notes maturing through 2029. The fair value of the long-term debt instruments is obtained based on observable market prices quoted on public exchanges for similar instruments.

The carrying values of Cash and cash equivalents, Accounts and notes receivable, net, Accounts payable, Accrued compensation and benefits and Accrued expenses and other current liabilities are a reasonable estimate of their fair value due to the short-term nature of these instruments. As discussed in Note 2, the Company also has investments in debt and equity securities without readily determinable fair values, which are measured at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer and are qualitatively assessed for impairment indicators at each reporting period. As these investments are considered to be nonrecurring fair value measurements, they are not included in the fair value tables above.

The methodologies used by the Company to determine the fair value of its financial assets and liabilities at December 31, 2021, are the same as those used at December 31, 2020.

NOTE 14 – EQUITY

Ordinary Shares

The changes in Ordinary shares for the year ended December 31, 2021 were as follows:

<i>In millions</i>	Total
December 31, 2020	91.2
Shares issued under incentive plans	0.3
Repurchase of ordinary shares	(3.3)
December 31, 2021	<u>88.2</u>

Alliegon had 400.0 million ordinary shares authorized and 10.0 million \$0.001 par value preferred shares authorized (with none outstanding) at December 31, 2021.

In February 2020, the Company's Board of Directors approved a share repurchase authorization of up to, and including, \$800 million of the Company's ordinary shares (the "2020 Share Repurchase Authorization"). The 2020 Share Repurchase Authorization does not have a prescribed expiration date. During the year ended December 31, 2021, the Company paid \$412.8 million to repurchase 3.3 million ordinary shares on the open market under the 2020 Share Repurchase Authorization. As of December 31, 2021, the Company has approximately \$201.4 million still available to be repurchased under the 2020 Share Repurchase Authorization.

Accumulated Other Comprehensive Loss

The changes in Accumulated other comprehensive loss were as follows:

<i>In millions</i>	Cash flow hedges	Pension and OPEB items	Foreign currency items	Total
December 31, 2018	\$ 6.1	\$ (123.2)	\$ (106.4)	\$ (223.5)
Other comprehensive (loss) income, net of tax ^(a)	(5.6)	(3.0)	13.5	4.9
December 31, 2019	0.5	(126.2)	(92.9)	(218.6)
Other comprehensive (loss) income, net of tax ^(b)	(1.4)	5.9	57.0	61.5
December 31, 2020	(0.9)	(120.3)	(35.9)	(157.1)
Other comprehensive income (loss), net of tax	1.8	24.3	(63.4)	(37.3)
December 31, 2021	<u>\$ 0.9</u>	<u>\$ (96.0)</u>	<u>\$ (99.3)</u>	<u>\$ (194.4)</u>

- (a) During 2019, the Company reclassified \$26.2 million of accumulated foreign currency translation adjustments to earnings upon the sale of the Company's business operations in Colombia and Turkey, which is included in Foreign currency items in the table above. See Note 8 for further information on these divestitures.

- (b) During 2020, the Company reclassified \$12.8 million of accumulated foreign currency translation adjustments to earnings upon the liquidation of two legal entities in the Company's former EMEA segment, which is included in Foreign currency items in the table above.

All amounts of Other comprehensive income (loss), net attributable to noncontrolling interests on the Consolidated Statements of Equity relate to foreign currency items.

NOTE 15 – SHARE-BASED COMPENSATION

Under the Company's incentive stock plan, the total number of ordinary shares authorized by the shareholders is 8.0 million, of which 2.6 million remain available as of December 31, 2021 for future incentive awards.

Compensation Expense

Share-based compensation expense is included in Cost of goods sold and Selling and administrative expenses within the Consolidated Statements of Comprehensive Income. The following table summarizes the expenses recognized for the years ended December 31:

<i>In millions</i>	2021	2020	2019
Stock options	\$ 3.9	\$ 3.8	\$ 3.5
RSUs	13.6	11.4	10.0
PSUs	5.9	5.6	6.9
Deferred compensation	2.1	2.4	3.2
Pre-tax expense	25.5	23.2	23.6
Tax benefit ^(a)	(3.0)	(2.9)	(3.0)
After-tax expense	<u>\$ 22.5</u>	<u>\$ 20.3</u>	<u>\$ 20.6</u>

- (a) Tax benefit reflected in the table above does not include the excess benefit from exercises and vesting of share-based compensation of \$2.1 million, \$4.5 million and \$2.8 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Stock Options / RSUs

The average fair value of the stock options granted for the years ended December 31, 2021, 2020 and 2019, was estimated to be \$24.99, \$25.62 and \$19.58 per share, respectively, using the Black-Scholes option-pricing model. The weighted-average assumptions used were as follows:

	2021	2020	2019
Dividend yield	1.32 %	0.99 %	1.23 %
Volatility	27.14 %	20.70 %	21.44 %
Risk-free rate of return	0.75 %	1.41 %	2.53 %
Expected life	6.0 years	6.0 years	6.0 years

Volatility is based on the Company's historic volatility. The risk-free rate of return is based on the yield curve of a zero-coupon U.S. Treasury bond on the date the award is granted with a maturity equal to the expected term of the award. The expected life of the Company's stock option awards is derived from the simplified approach based on the weighted-average time to vest and the remaining contractual term and represents the period of time that awards are expected to be outstanding.

Changes in options outstanding under the plans for the years ended December 31, 2021, 2020 and 2019, were as follows:

	Shares subject to option	Weighted- average exercise price ^(a)	Aggregate intrinsic value (millions)	Weighted-average remaining life (years)
December 31, 2018	957,198	\$ 56.71		
Granted	195,675	88.07		
Exercised	(272,003)	42.97		
Canceled	(17,248)	85.22		
December 31, 2019	863,622	67.57		
Granted	161,600	129.26		
Exercised	(256,704)	52.89		
Canceled	(8,376)	107.23		
December 31, 2020	760,142	85.18		
Granted	179,743	109.14		
Exercised	(156,063)	66.98		
Canceled	(26,042)	109.36		
Outstanding December 31, 2021	757,780	\$ 93.76	\$ 29.3	6.6
Exercisable December 31, 2021	439,997	\$ 80.83	\$ 22.7	5.4

(a) The weighted-average exercise price of awards represents the exercise price of the awards on the grant date converted to ordinary shares of the Company.

The following table summarizes information concerning currently outstanding and exercisable options:

Range of exercise price	Options outstanding			Options exercisable		
	Number outstanding at December 31, 2021	Weighted- average remaining life (years)	Weighted- average exercise price	Number exercisable at December 31, 2021	Weighted- average remaining life (years)	Weighted- average exercise price
\$ 0.01 — \$ 25.00	1,275	0.2	\$ 24.95	1,275	0.2	\$ 24.95
25.01 — 50.00	14,242	1.1	33.77	14,242	1.1	33.77
50.01 — 75.00	179,313	4.2	64.62	179,313	4.2	64.62
75.01 — 100.00	253,153	6.4	87.61	196,802	6.3	87.47
100.01 — 125.00	162,848	9.1	109.12	130	8.4	100.68
125.01 — 150.00	146,949	7.8	129.33	48,235	7.7	129.33
	757,780	6.6	\$ 93.76	439,997	5.4	\$ 80.83

At December 31, 2021, there was \$1.5 million of total unrecognized compensation cost from stock option arrangements granted under the plan, which is primarily related to unvested shares of non-retirement eligible employees. The aggregate intrinsic value of the Company's options exercised during the years ended December 31, 2021 and 2020, was \$10.5 million and \$18.8 million, respectively. Generally, stock options expire ten years from their date of grant.

The following table summarizes RSU activity for the years ended December 31, 2021, 2020 and 2019:

	RSUs	Weighted- average grant date fair value ^(a)
Outstanding and unvested at December 31, 2018	244,347	\$ 76.51
Granted	134,518	91.75
Vested	(118,060)	73.52
Canceled	(24,286)	79.53
Outstanding and unvested at December 31, 2019	236,519	86.37
Granted	81,796	124.91
Vested	(113,776)	85.40
Canceled	(9,249)	91.73
Outstanding and unvested at December 31, 2020	195,290	102.52
Granted	134,543	112.75
Vested	(124,347)	100.52
Canceled	(10,083)	109.31
Outstanding and unvested at December 31, 2021	195,403	\$ 112.35

(a) The weighted-average grant date fair value represents the fair value of the awards on the grant date converted to ordinary shares of the Company.

At December 31, 2021, there was \$6.5 million of total unrecognized compensation cost from RSU arrangements granted under the plan, which is primarily related to unvested shares of non-retirement eligible employees.

Performance Stock

In February 2019, 2020 and 2021, the Company's Compensation Committee granted PSUs that were earned based 50% upon a performance condition, measured at each reporting period by earnings per share ("EPS") performance in relation to pre-established targets set by the Compensation Committee, and 50% upon a market condition, measured by the Company's relative total shareholder return ("TSR") against the S&P 400 Capital Goods Index over a three-year performance period. The fair values of the market conditions are estimated using a Monte Carlo simulation approach in a risk-neutral framework to model future stock price movements based upon historical volatility, risk-free rates of return and correlation matrix.

The following table summarizes PSU activity for the maximum number of shares that may be issued for the years ended December 31, 2021, 2020 and 2019:

	PSUs	Weighted- average grant date fair value ^(a)
Outstanding and unvested at December 31, 2018	156,041	\$ 65.07
Granted	68,125	87.02
Vested	(56,773)	61.00
Forfeited	(10,045)	68.63
Outstanding and unvested at December 31, 2019	157,348	75.82
Granted	92,913	113.54
Vested	(101,638)	83.16
Forfeited	(2,647)	121.43
Outstanding and unvested at December 31, 2020	145,976	93.89
Granted	92,717	109.53
Vested	(80,194)	100.26
Forfeited	(13,332)	115.92
Outstanding and unvested at December 31, 2021	145,167	\$ 98.34

(a) The weighted-average grant date fair value represents the fair value of the awards on the grant date converted to ordinary shares of the Company.

At December 31, 2021, there was \$6.3 million of total unrecognized compensation cost from the PSP based on current performance, which is related to unvested shares. This compensation will be recognized over the required service period, which is generally the three-year vesting period.

Deferred Compensation

Prior to 2019, the Company allowed key employees to defer a portion of their eligible granted PSUs and/or compensation into a number of investment choices including its ordinary share equivalents. Any amounts invested in ordinary share equivalents will be settled in ordinary shares of the Company at the time of distribution.

NOTE 16 – RESTRUCTURING ACTIVITIES

During the years ended December 31, 2021, 2020 and 2019, the Company recorded \$4.3 million, \$25.6 million and \$16.5 million, respectively, of expenses associated with restructuring activities. Restructuring activities in each period were primarily associated with the Allegion International segment and related to workforce reductions intended to optimize and simplify operations and cost structure, although approximately \$9 million of the restructuring charges incurred during the year ended December 31, 2020, related to the Allegion Americas segment and Corporate. Restructuring expenses for each of the three years ended December 31, 2021, 2020 and 2019, are primarily included within Cost of goods sold and Selling and administrative expenses, although \$1.9 million of the 2019 restructuring charges related to pension curtailment costs and are included within Other (income) expense, net within the Consolidated Statements of Comprehensive Income.

The changes in the restructuring reserve during the years ended December 31, 2021 and 2020, were as follows:

<i>In millions</i>	Total
December 31, 2019	\$ 1.2
Additions, net of reversals	25.0
Cash payments	(21.3)
Currency translation	0.4
December 31, 2020	5.3
Additions, net of reversals	3.8
Cash payments	(8.6)
Currency translation	(0.1)
December 31, 2021	\$ 0.4

The majority of the costs accrued as of December 31, 2021, will be paid within one year.

The Company also incurred other non-qualified restructuring charges of \$0.8 million, \$1.2 million and \$5.7 million during the years ended December 31, 2021, 2020 and 2019, respectively, which represent costs directly attributable to restructuring activities, but that do not fall into the severance, exit or disposal category. Non-qualified restructuring charges are included within Cost of goods sold and Selling and administrative expenses within the Consolidated Statements of Comprehensive Income.

NOTE 17 – OTHER (INCOME) EXPENSE, NET

At December 31, the components of Other (income) expense, net were as follows:

<i>In millions</i>	2021	2020	2019
Interest income	\$ (0.4)	\$ (0.9)	\$ (1.8)
Foreign currency exchange loss	2.7	0.7	1.8
(Earnings and gains from the sale of) losses from equity method investments, net	(6.4)	(0.3)	0.1
Net periodic pension and postretirement benefit (income) cost, less service cost	(7.1)	(2.2)	6.8
Other	(32.8)	(10.3)	(3.1)
Other (income) expense, net	\$ (44.0)	\$ (13.0)	\$ 3.8

Other (income) expense, net for the year ended December 31, 2021, included unrealized gains related to the Company's investments in debt and equity securities of \$25.6 million, the largest of which was a gain of \$20.7 million related to the fair value remeasurement of the Company's investment in VergeSense, Inc. upon an observable price change in an orderly external

funding round. These gains are included within Other in the table above. Other (income) expense, net for the year ended December 31, 2021, also included a gain of \$6.4 million from the sale of the Company's equity method investment in Nuki Home Solutions GmbH.

Other (income) expense, net for the year ended December 31, 2020, included gains of \$12.8 million related to the reclassification to earnings of accumulated foreign currency translation adjustments upon the liquidation of two legal entities in the Company's former EMEA segment. These gains are included within Other in the table above.

NOTE 18 – INCOME TAXES

Earnings before income taxes for the years ended December 31 were taxed within the following jurisdictions:

<i>In millions</i>	2021	2020	2019
U.S.	\$ 74.5	\$ 151.4	\$ 211.1
Non-U.S.	449.5	214.0	264.1
Total	<u>\$ 524.0</u>	<u>\$ 365.4</u>	<u>\$ 475.2</u>

The jurisdictional mix of earnings, which includes the impact of the location of earnings as well as the tax cost on the Company's international operations, can vary as a result of operating fluctuations in the normal course of business, the impact of internal restructurings and as a result of the extent and location of other income and expense items, such as restructuring charges, asset impairments and gains or losses on strategic business decisions.

The components of the Provision for income taxes for the years ended December 31 were as follows:

<i>In millions</i>	2021	2020	2019
Current tax expense:			
U.S.	\$ 57.4	\$ 55.0	\$ 87.1
Non-U.S.	27.1	20.3	16.2
Total:	84.5	75.3	103.3
Deferred tax benefit:			
U.S.	(38.3)	(13.4)	(25.2)
Non-U.S.	(5.5)	(11.0)	(5.0)
Total:	(43.8)	(24.4)	(30.2)
Total tax expense:			
U.S.	19.1	41.6	61.9
Non-U.S.	21.6	9.3	11.2
Total	<u>\$ 40.7</u>	<u>\$ 50.9</u>	<u>\$ 73.1</u>

The Provision for income taxes differs from the amount of income taxes determined by applying the applicable U.S. statutory income tax rate to pretax income, as a result of the following differences:

	Percent of pretax income		
	2021	2020	2019
Statutory U.S. rate	21.0 %	21.0 %	21.0 %
Increase (decrease) in rates resulting from:			
Non-U.S. tax rate differential ⁽¹⁾	(14.1)	(17.5)	(10.6)
State and local income taxes ⁽¹⁾	1.1	2.4	3.0
Reserves for uncertain tax positions	0.3	1.1	0.5
Tax on unremitted earnings	(0.1)	(0.1)	0.1
Trade incentives	—	—	0.2
Impairment of goodwill and intangible assets	—	7.3	—
Impact of divestitures	—	—	1.6
Other adjustments	(0.4)	(0.3)	(0.4)
Effective tax rate	<u>7.8 %</u>	<u>13.9 %</u>	<u>15.4 %</u>

(1) Net of changes in valuation allowances

The majority of the Company's earnings are considered permanently reinvested, and therefore, the Company has not recorded any incremental withholding or income tax liabilities on earnings of its non-U.S. subsidiaries.

At December 31, a summary of the deferred tax accounts was as follows:

<i>In millions</i>	<u>2021</u>	<u>2020</u>
Deferred tax assets:		
Inventory and accounts receivable	\$ 6.5	\$ 6.5
Fixed assets and intangibles	3.2	2.6
Lease liabilities	21.6	22.0
Postemployment and other benefit liabilities	24.9	29.9
Other reserves and accruals	12.9	16.4
Net operating losses, tax credits and other carryforwards	446.0	386.1
Other	0.6	1.8
Gross deferred tax assets	<u>515.7</u>	<u>465.3</u>
Less: deferred tax valuation allowances	(265.5)	(259.7)
Deferred tax assets net of valuation allowances	<u>\$ 250.2</u>	<u>\$ 205.6</u>
Deferred tax liabilities:		
Fixed assets and intangibles	\$ (110.6)	\$ (112.0)
Right of use assets	(21.0)	(21.7)
Postemployment and other benefit liabilities	(13.9)	(6.8)
Unremitted earnings of foreign subsidiaries	(1.9)	(1.4)
Other	(10.3)	(5.6)
Gross deferred tax liabilities	<u>(157.7)</u>	<u>(147.5)</u>
Net deferred tax assets	<u>\$ 92.5</u>	<u>\$ 58.1</u>

At December 31, 2021, \$1.9 million of deferred taxes were recorded for certain undistributed earnings of non-U.S. subsidiaries. Historically, no deferred taxes have been provided for any portion of the remaining undistributed earnings of the Company's subsidiaries since these earnings have been, and will continue to be, permanently reinvested in these subsidiaries. For many reasons, including the number of legal entities and jurisdictions involved, the complexity of the Company's legal entity structure, the complexity of tax laws in the relevant jurisdictions and the impact of projections of income for future years to any calculations, the Company believes it is not practicable to estimate, within any reasonable range, the amount of additional taxes which may be payable upon the distribution of earnings.

At December 31, 2021, the Company had the following tax losses and tax credit carryforwards available to offset taxable income in prior and future years:

<i>In millions</i>	<u>Amount</u>	<u>Expiration Period</u>
U.S. Federal tax loss carryforwards	\$ 17.7	2027-Unlimited
U.S. Federal and State credit carryforwards	23.4	2025-2037
U.S. State tax loss carryforwards	52.1	2022-Unlimited
Non-U.S. tax loss carryforwards	\$ 1,013.7	2025-Unlimited

The U.S. state loss carryforwards were incurred in various jurisdictions. The non-U.S. loss carryforwards were incurred in various jurisdictions, predominantly in China, Ireland, Italy, Luxembourg and the United Kingdom.

The Company evaluates its deferred income tax assets to determine if valuation allowances are required or should be adjusted. GAAP requires that companies assess whether valuation allowances should be established against their deferred tax assets based on consideration of all available evidence, both positive and negative, using a "more likely than not" standard. This assessment considers the nature, frequency and amount of recent losses, the duration of statutory carryforward periods and tax planning strategies. In making such judgments, significant weight is given to evidence that can be objectively verified.

Activity associated with the Company's valuation allowance is as follows:

<i>In millions</i>	2021	2020	2019
Beginning balance	\$ 259.7	\$ 241.0	\$ 357.1
Increase to valuation allowance	8.4	21.1	2.8
Decrease to valuation allowance	(2.0)	(2.8)	(118.6)
Foreign exchange translation	(0.6)	0.4	(0.3)
Ending balance	<u>\$ 265.5</u>	<u>\$ 259.7</u>	<u>\$ 241.0</u>

During the year ended December 31, 2021, the valuation allowance increased by \$5.8 million, while during the year ended December 31, 2020, the valuation allowance increased by \$18.7 million. The increases for the years ended December 31, 2021 and 2020, are the result of changes in country specific tax laws, internal restructurings, jurisdictional profitability and changes in judgments and facts regarding the realizability of deferred tax assets.

The Company has total unrecognized tax benefits of \$41.5 million and \$41.2 million as of December 31, 2021 and 2020, respectively. The amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate is \$40.4 million as of December 31, 2021. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

<i>In millions</i>	2021	2020	2019
Beginning balance	\$ 41.2	\$ 37.3	\$ 42.0
Additions based on tax positions related to the current year	8.8	6.0	5.7
Additions based on tax positions related to prior years	3.6	4.1	1.7
Reductions based on tax positions related to prior years	(2.2)	(1.5)	(7.0)
Reductions related to settlements with tax authorities	(3.6)	(0.3)	(4.0)
Reductions related to lapses of statute of limitations	(5.6)	(5.2)	(0.8)
Translation (gain)/loss	(0.7)	0.8	(0.3)
Ending balance	<u>\$ 41.5</u>	<u>\$ 41.2</u>	<u>\$ 37.3</u>

The Company records interest and penalties associated with the uncertain tax positions within its provision for income taxes. The Company had reserves associated with interest and penalties, net of tax, of \$7.5 million and \$7.6 million at December 31, 2021 and 2020, respectively. For the years ended December 31, 2021 and 2020, the Company recognized \$0.5 million and \$1.9 million in interest and penalties, net of tax, related to these uncertain tax positions.

The total amount of unrecognized tax benefits relating to the Company's tax positions is subject to change based on future events including, but not limited to, the settlements of ongoing audits and/or the expiration of applicable statutes of limitations. Although the outcomes and timing of such events are highly uncertain, it is reasonably possible that the balance of gross unrecognized tax benefits, excluding interest and penalties, could potentially be reduced by up to approximately \$8.7 million during the next 12 months.

The provision for income taxes involves a significant amount of management judgment regarding interpretation of relevant facts and laws in the jurisdictions in which the Company operates. Future changes in applicable laws, projected levels of taxable income and tax planning could change the effective tax rate and tax balances recorded by the Company. In addition, tax authorities periodically review income tax returns filed by the Company and can raise issues regarding its filing positions, timing and amount of income or deductions and the allocation of income among the jurisdictions in which the Company operates. A significant period of time may elapse between the filing of an income tax return and the ultimate resolution of an issue raised by a tax authority with respect to that return. In the normal course of business, the Company is subject to examination by taxing authorities throughout the world, including such major jurisdictions as Australia, Canada, France, Germany, Italy, Mexico, the Netherlands, Poland and the U.S. In general, the examination of the material tax returns of subsidiaries of the Company is complete for the years prior to 2009, with certain matters being resolved through appeals and litigation.

NOTE 19 – EARNINGS PER SHARE (EPS)

Basic EPS is calculated by dividing Net earnings attributable to Allegion plc by the weighted-average number of ordinary shares outstanding for the applicable period. Diluted EPS is calculated after adjusting the denominator of the basic EPS calculation for the effect of all potentially dilutive ordinary shares, which in the Company's case, includes shares issuable under share-based compensation plans.

The following table summarizes the weighted-average number of ordinary shares outstanding for basic and diluted earnings per share calculations:

<i>In millions</i>	2021	2020	2019
Weighted-average number of basic shares	89.9	92.3	93.6
Shares issuable under share-based compensation plans	0.6	0.5	0.7
Weighted-average number of diluted shares	90.5	92.8	94.3

At December 31, 2021, 0.1 million stock options were excluded from the computation of weighted-average diluted shares outstanding because the effect of including these shares would have been anti-dilutive.

NOTE 20 – NET REVENUES

The following table shows the Company's Net revenues related to both tangible product sales and services for the years ended December 31, 2021, 2020 and 2019, respectively, disaggregated by business segment. Net revenues are shown by tangible product sales and services, as contract terms, conditions and economic factors affecting the nature, amount, timing and uncertainty around revenue recognition and cash flows are substantially similar within each of the two principal revenue streams:

<i>In millions</i>	2021		
	Allegion Americas	Allegion International	Consolidated
Net revenues			
Products	\$ 2,070.4	\$ 763.1	\$ 2,833.5
Services	1.8	32.1	33.9
Total Net revenues	<u>\$ 2,072.2</u>	<u>\$ 795.2</u>	<u>\$ 2,867.4</u>
<i>In millions</i>	2020		
	Allegion Americas	Allegion International	Consolidated
Net revenues			
Products	\$ 2,016.7	\$ 672.2	\$ 2,688.9
Services	—	31.0	31.0
Total Net revenues	<u>\$ 2,016.7</u>	<u>\$ 703.2</u>	<u>\$ 2,719.9</u>
<i>In millions</i>	2019		
	Allegion Americas	Allegion International	Consolidated
Net revenues			
Products	\$ 2,114.5	\$ 704.9	\$ 2,819.4
Services	—	34.6	34.6
Total Net revenues	<u>\$ 2,114.5</u>	<u>\$ 739.5</u>	<u>\$ 2,854.0</u>

As of December 31, 2021 and 2020, neither the contract assets related to the Company's right to consideration for work completed but not billed nor the contract liabilities associated with contract revenue were material. The Company does not have any costs to obtain or fulfill a contract that are capitalized on its Consolidated Balance Sheets. During the years ended December 31, 2021 and 2020, no adjustments related to performance obligations satisfied in previous periods were recorded.

NOTE 21 – COMMITMENTS AND CONTINGENCIES

The Company is involved in various litigation, claims and administrative proceedings, including those related to environmental and product warranty matters. Amounts recorded for identified contingent liabilities are estimates, which are reviewed periodically and adjusted to reflect additional information when it becomes available. Subject to the uncertainties inherent in estimating future costs for contingent liabilities, except as expressly set forth in this note, management believes that any liability which may result from these legal matters would not have a material adverse effect on the financial condition, results of operations, liquidity or cash flows of the Company.

Environmental Matters

The Company incurred \$0.9 million, \$7.1 million and \$1.7 million of expenses during the years ended December 31, 2021, 2020 and 2019, respectively, for environmental remediation at sites presently or formerly owned or leased by the Company.

Environmental remediation costs are recorded in Costs of goods sold within the Consolidated Statements of Comprehensive Income.

As of December 31, 2021 and 2020, the Company has recorded reserves for environmental matters of \$16.4 million and \$21.1 million, respectively. The total reserve at December 31, 2021 and 2020, included \$4.3 million and \$4.4 million, respectively, related to remediation of sites previously disposed by the Company. Environmental reserves are classified as Accrued expenses and other current liabilities or Other noncurrent liabilities within the Consolidated Balance Sheets based on the timing of their expected future payment. The Company's total current environmental reserve at December 31, 2021 and 2020, was \$3.7 million and \$6.1 million, respectively, and the remainder is classified as noncurrent. Given the evolving nature of environmental laws, regulations and technology, the ultimate cost of future compliance is uncertain.

Warranty Liability

The changes in the standard product warranty liability for the years ended December 31, were as follows:

<i>In millions</i>	2021	2020	2019
Balance at beginning of period	\$ 16.5	\$ 15.9	\$ 14.5
Reductions for payments	(10.6)	(7.3)	(8.4)
Accruals for warranties issued during the current period	11.9	8.2	10.3
Changes to accruals related to preexisting warranties	—	(0.6)	(0.4)
Translation	(0.1)	0.3	(0.1)
Balance at end of period	<u>\$ 17.7</u>	<u>\$ 16.5</u>	<u>\$ 15.9</u>

Standard product warranty liabilities are classified as Accrued expenses and other current liabilities or Other noncurrent liabilities within the Consolidated Balance Sheets based on the timing of the expected future payments.

NOTE 22 – BUSINESS SEGMENT INFORMATION

The Company classifies its business into the following two reportable segments based on industry and market focus: Allegion Americas and Allegion International. The Company largely evaluates performance based on Segment operating income and Segment operating margins. Segment operating income is the measure of profit and loss that the Company's chief operating decision maker uses to evaluate the financial performance of the business and as the basis for resource allocation, performance reviews and compensation. For these reasons, the Company believes that Segment operating income represents the most relevant measure of segment profit and loss. The Company's chief operating decision maker may exclude certain charges or gains, such as corporate charges and other special charges, from Operating income to arrive at a Segment operating income that is a more meaningful measure of profit and loss upon which to base operating decisions. The Company defines Segment operating margin as Segment operating income (loss) as a percentage of the segment's Net revenues.

As previously announced, effective January 1, 2021, the Company combined its previous operations in Europe, the Middle East and Africa ("EMEA") and Asia Pacific into a new segment named Allegion International, in addition to renaming its Americas segment "Allegion Americas". Business segment information for EMEA and Asia Pacific for the years ended December 31, 2020 and 2019, has been combined in the table below to reflect this change in reportable segments.

A summary of operations and balance sheet information by reportable segments as of and for the years ended December 31 were as follows:

<i>Dollar amounts in millions</i>	<u>2021</u>	<u>2020</u>	<u>2019</u>
Allegion Americas			
Net revenues	\$ 2,072.2	\$ 2,016.7	\$ 2,114.5
Segment operating income	525.0	580.2	611.6
Segment operating margin	25.3 %	28.8 %	28.9 %
Depreciation and amortization	34.8	34.5	35.7
Capital expenditures	30.7	26.9	32.1
Total segment assets	1,309.6	1,249.0	1,239.0
Allegion International			
Net revenues	795.2	703.2	739.5
Segment operating income (loss)	82.4	(102.1)	34.8
Segment operating margin	10.4 %	(14.5)%	4.7 %
Depreciation and amortization	40.4	39.0	38.0
Capital expenditures	11.4	15.6	28.3
Total segment assets	1,276.9	1,343.5	1,338.7
Total Net revenues	<u>\$ 2,867.4</u>	<u>\$ 2,719.9</u>	<u>\$ 2,854.0</u>
Reconciliation to earnings before income taxes			
Segment operating income from reportable segments	\$ 607.4	\$ 478.1	\$ 646.4
Unallocated corporate expense	77.2	74.6	81.3
Interest expense	50.2	51.1	56.0
Loss on divestitures	—	—	30.1
Other (income) expense, net	(44.0)	(13.0)	3.8
Total earnings before income taxes	<u>\$ 524.0</u>	<u>\$ 365.4</u>	<u>\$ 475.2</u>
Depreciation and amortization from reportable segments	\$ 75.2	\$ 73.5	\$ 73.7
Unallocated depreciation and amortization	4.0	4.5	4.4
Total depreciation and amortization	<u>\$ 79.2</u>	<u>\$ 78.0</u>	<u>\$ 78.1</u>
Capital expenditures from reportable segments	\$ 42.1	\$ 42.5	\$ 60.4
Corporate capital expenditures	3.3	4.6	5.2
Total capital expenditures	<u>\$ 45.4</u>	<u>\$ 47.1</u>	<u>\$ 65.6</u>
Assets from reportable segments	\$ 2,586.5	\$ 2,592.5	\$ 2,577.7
Unallocated assets ^(a)	464.5	476.9	389.5
Total assets	<u>\$ 3,051.0</u>	<u>\$ 3,069.4</u>	<u>\$ 2,967.2</u>

(a) Unallocated assets consist primarily of investments in unconsolidated affiliates, property, plant and equipment, net, ROU assets, deferred income taxes and cash.

Net revenues by destination and product type for the years ended December 31, were as follows:

<i>In millions</i>	<u>2021</u>	<u>2020</u>	<u>2019</u>
Net revenues			
U.S.	\$ 1,948.9	\$ 1,905.5	\$ 1,988.9
Non-U.S.	918.5	814.4	865.1
Total	<u>\$ 2,867.4</u>	<u>\$ 2,719.9</u>	<u>\$ 2,854.0</u>

<i>In millions</i>	<u>2021</u>	<u>2020</u>	<u>2019</u>
Net revenues			
Mechanical products	\$ 2,249.2	\$ 2,146.1	\$ 2,247.0
All other	618.2	573.8	607.0
Total	<u>\$ 2,867.4</u>	<u>\$ 2,719.9</u>	<u>\$ 2,854.0</u>

In fiscal year 2021, 2020 and 2019, no customer exceeded 10% of consolidated Net revenues.

At December 31, long-lived assets by geographic area were as follows:

<i>In millions</i>	<u>2021</u>	<u>2020</u>
Long-lived assets		
U.S.	\$ 231.7	\$ 236.8
Non-U.S.	385.6	426.9
Total	<u>\$ 617.3</u>	<u>\$ 663.7</u>

NOTE 23 – SUBSEQUENT EVENTS

On February 4, 2022, the Company's Board of Directors declared a quarterly dividend of \$0.41 cents per ordinary share. The dividend is payable March 31, 2022 to shareholders of record on March 16, 2022.

ALLEGION PLC
VALUATION AND QUALIFYING ACCOUNTS
FOR THE YEARS ENDED DECEMBER 31, 2021, 2020 AND 2019
(Amounts in millions)

Allowances for Doubtful Accounts:

Balance December 31, 2018	\$ 3.3
Additions charged to costs and expenses	2.4
Currency translation	(0.1)
Balance December 31, 2019	5.6
Adoption of ASC 326, <i>Financial Instruments – Credit Losses</i>	1.9
Additions charged to costs and expenses	2.4
Deductions*	(3.9)
Currency translation	0.2
Balance December 31, 2020	6.2
Additions charged to costs and expenses	0.1
Deductions*	(0.7)
Currency translation	(0.2)
Balance December 31, 2021	<u>\$ 5.4</u>

* "Deductions" include accounts and advances written off, less recoveries.