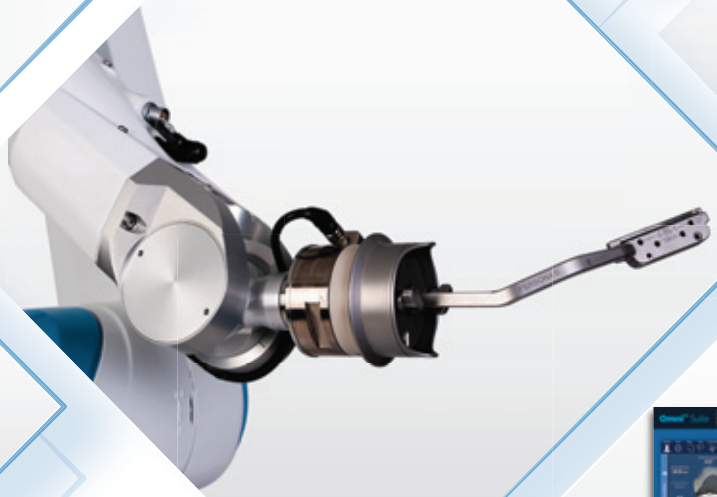
ZIMMER BIOMET

Moving You Forward.™



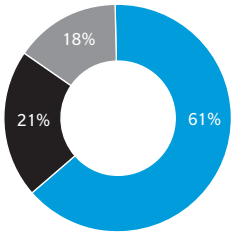
ANNUAL REPORT 2021

ZIMMER BIOMET HOLDINGS, INC.

Financial Highlights*

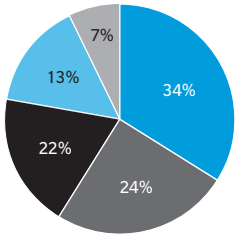
(Dollars in millions except per share amounts)

Sales by Geography



	2017	2018	2019	2020	2021	% Change 2020-2021 Reported	% Change 2020-2021 Constant Currency[1]
Americas	$4,845	$4,837	$4,876	$4,336	$4,800	11%	11%
EMEA	1,745	1,802	1,747	1,391	1,671	20%	16%
Asia Pacific	1,213	1,294	1,359	1,298	1,365	5%	3%
Consolidated	$7,803	$7,933	$7,982	$7,025	$7,836	12%	10%

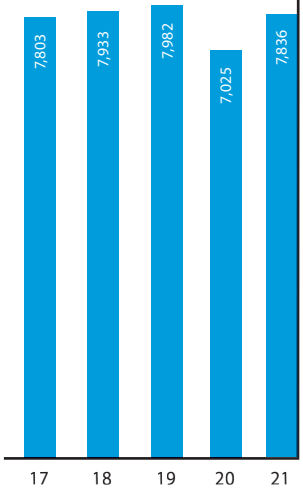
Sales by Product Category



	2017	2018	2019	2020	2021	% Change 2020-2021 Reported	% Change 2020-2021 Constant Currency[1]
Knees	$2,747	$2,789	$2,780	$2,378	$2,648	11%	10%
Hips	1,872	1,919	1,932	1,751	1,856	6%	5%
S.E.T.	1,538	1,596	1,653	1,526	1,728	13%	12%
Spine & Dental	1,069	1,045	1,022	897	1,009	13%	12%
Other	577	584	595	473	595	26%	25%
Consolidated	$7,803	$7,933	$7,982	$7,025	$7,836	12%	10%

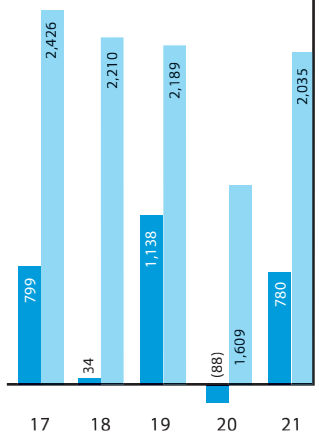
Net Sales

Zimmer Biomet recorded net sales of $7.836 billion in 2021, our net sales increased by 11.6% compared to 2020 primarily due to the significant deferral of elective surgical procedures at the onset of the COVID-19 pandemic in 2020.



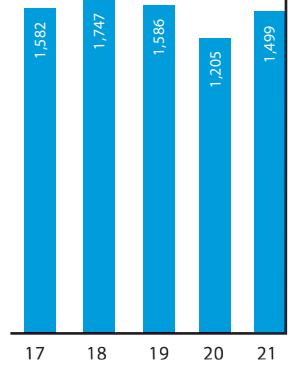
Operating Profit (Loss)

Our 2021 operating profit improved from 2020 due to the recovery of elective surgical procedures when compared to the deferrals that occurred during the onset of the COVID-19 pandemic in 2020. In addition, there were significant goodwill impairment charges in 2020 resulting from decreased expected future cash flows due to the pandemic.



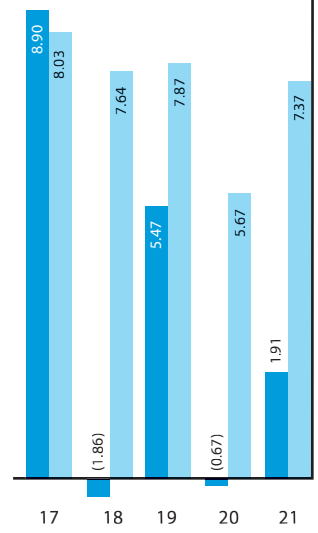
Operating Cash Flow

The increase in cash flow from operating activities in 2021 from 2020 was primarily the result of higher net earnings in the 2021 period.



Diluted Earnings (Loss) per Share

Diluted earnings (loss) per share improved in 2021 due to the recovery of elective surgical procedures compared to the significant deferrals at the onset of the COVID-19 pandemic in 2020. In addition, reported diluted earnings (loss) per share in 2020 included a significant goodwill impairment charge resulting from decreased expected future cash flows due to the pandemic.



GRAPH KEY Reported Adjusted[2]

(1) "Constant Currency" refers to changes in sales resulting from translating current and prior-period sales at the same predetermined foreign currency exchange rate. The translated results are then used to determine year-over-year percentage increases or decreases that exclude the effect of changes in foreign currency exchange rates. See the reconciliation of this non-GAAP financial measure to the most directly comparable GAAP measure on page 92.

(2) "Adjusted" refers to performance measures that exclude the effects of inventory step-up; certain inventory and manufacturing-related charges, including charges to discontinue certain product lines; intangible asset amortization; goodwill and intangible asset impairment, as applicable; quality remediation expenses; restructuring and other cost reduction initiatives; acquisition, integration, divestiture and related expenses; certain litigation gains and charges; expenses to establish initial compliance with the European Union Medical Device Regulation; expenses related to certain R&D agreements; other charges; loss on early extinguishment of debt; any related effects on our income tax provision associated with these items; the effect of Swiss tax reform; the effect of U.S. tax reform; other certain tax adjustments; and, with respect to earnings per share information, provide for the effect of dilutive shares assuming net earnings in periods of a reported net loss. See the reconciliations of these non-GAAP financial measures to the most directly comparable GAAP measures on pages 89-91.

*All historical financial information is for WholeCo Zimmer Biomet; amounts do not reflect spinoff of ZimVie, Inc.

To Our Shareholders,

In 2021, the Zimmer Biomet team remained intensely focused on creating value — despite another challenging year impacted by the COVID-19 pandemic. I am proud to report that we made great progress in the continued transformation of our business and further strengthened our position as a leading medtech innovator.

While 2021 brought market pressure, particularly given the proportion of Zimmer Biomet revenues driven by elective procedures, it also presented our company with the opportunity to deliver against our corporate strategy. Zimmer Biomet continued to execute for our team members, for our shareholders and, most importantly, for the customers and patients that we serve.

I want to take a moment to thank all of our Zimmer Biomet team members for their unwavering vigilance and dedication to our safety protocols over the past year, and their unmatched focus on our mission to "alleviate pain and improve the quality of life for people around the world."

Key Achievements in 2021

Zimmer Biomet continued to drive innovation across the patient journey with our integrated digital and robotics products — all of which help us use data to unlock insights, add value, enhance the user experience and improve patient outcomes. Focused work in active portfolio management, crisis response and planning throughout COVID-19, a commitment to Diversity, Equity and Inclusion within the workplace, along with a defined engagement strategy for our team members, were also notable achievements for the company over the course of the year.

Highlights of Zimmer Biomet 2021 accomplishments include:

- **Innovative, Enabling Technologies and Solutions:** In 2021, Zimmer Biomet focused on innovation to drive long-term growth. The company delivered multiple robotics launches, debuted the world's first-and-only "smart" knee implant, offered new functionality with mymobility® and unveiled our ZBEdge™ ecosystem of connected technologies.

- **Active Portfolio Management:** We announced and made significant progress toward the spinoff of our Dental and Spine businesses, which was completed ahead of schedule on March 1, 2022. We also accelerated restructuring programs to streamline our operational footprint, offset inflationary pressures in our business, address stranded cost from the spin transaction and create capacity to reinvest in our business.
- **COVID-19:** Prior to COVID-19, Zimmer Biomet developed comprehensive crisis response plans and initiated contingency drills — including for pandemic events — across our operations, which helped prepare our business and create enhanced disaster recovery plans that have been a significant benefit throughout our response to COVID-19. Throughout 2021, we continued to aggressively secure our global supply chain and manage the unique challenges presented by each new COVID-19 wave. Due to these efforts, we continued to keep our team members safe and serve our customers without compromising product quality and safety.
- **Commitment to Diversity, Equity and Inclusion:** Zimmer Biomet further advanced our commitment to creating, supporting and celebrating diverse and equal workplaces and communities. We established year 2026 representation goals for women and people of color (POC) in the organization, guided by internal and external benchmarks.
- **Team Member Engagement:** Through the implementation of a comprehensive engagement strategy, we engaged team members frequently for a more holistic view of their experience as we strive to be a Best and Preferred Place to Work. In 2021, we implemented quarterly performance check-ins, as well as a global, social recognition platform and new, expanded resources to nurture well-being and deliver even greater transparency in our communication for our team members.

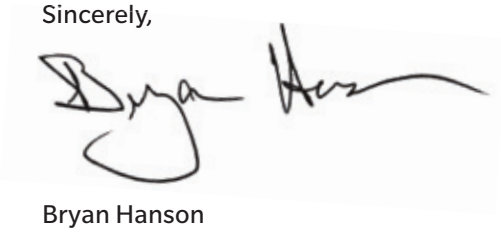
Our progress during the year was recognized with Zimmer Biomet being named one of America's Most Responsible Companies 2021 by *Newsweek*, along with several other awards that highlight our company as a leader in the industry, including PM360's Trailblazer Award for Best Medical Device Company and inclusion on *Forbes*' list of Best Employers for Diversity.

The Year Ahead: Moving Our Mission Forward in 2022

I continue to remain highly confident in the Zimmer Biomet team and our business momentum. While some uncertainty due to the global pandemic remains, I truly believe that we are ready and well-positioned for success and that our strategy is absolutely working. The transformation of our business is well underway and I'm excited about the value we can create for our shareholders moving forward.

On behalf of all of us at Zimmer Biomet, I thank you for your support. I look forward to continuing to share our progress with you as we move forward.

Sincerely,



Bryan Hanson
Chairman, President and CEO, Zimmer Biomet

Leadership (As of March 3, 2022)

Board of Directors

Christopher B. Begley
Lead Independent Director of Zimmer Biomet Holdings, Inc. and Retired Executive Chairman and Chief Executive Officer, Hospira, Inc.

Betsy J. Bernard
Retired President, AT&T Corp.

Michael J. Farrell
Chief Executive Officer, ResMed Inc.

Robert A. Hagemann
Retired Senior Vice President and Chief Financial Officer, Quest Diagnostics Incorporated

Bryan Hanson
Chairman of the Board, President and Chief Executive Officer, Zimmer Biomet Holdings, Inc.

Arthur J. Higgins
Operating Advisor to Abu Dhabi Investment Authority

Maria Teresa Hilado
Retired Executive Vice President and Chief Financial Officer, Allergan plc

Syed Jafry
Senior Vice President and President, Regions, Thermo Fisher Scientific, Inc.

Sreelakshmi Kolli
Executive Vice President and Chief Digital Officer, Align Technology, Inc.

Michael W. Michelson
Retired Senior Advisory Partner, KKR Management LLC, the general partner of KKR & Co. L.P.

Management Team

Bryan Hanson
Chairman of the Board, President and Chief Executive Officer, Zimmer Biomet Holdings, Inc.

Derek Davis
Vice President, Interim Controller and Chief Accounting Officer

Rachel Ellingson
Senior Vice President, Chief Strategy Officer

Ellie Humphrey
Senior Vice President, Chief Transformation Officer

David Kunz
Senior Vice President, Global Quality and Regulatory Affairs

Angela Main
Senior Vice President, Global Chief Compliance Officer and Associate General Counsel, Asia Pacific

Keri Mattox
Senior Vice President, Investor Relations and Chief Communications Officer

Chad Phipps
Senior Vice President, General Counsel and Secretary

Zeeshan Tariq
Senior Vice President, Chief Information Officer

Ivan Tornos
Chief Operating Officer

Kenneth Tripp
Senior Vice President, Global Operations and Logistics

Suketu Upadhyay
Executive Vice President, Chief Financial Officer

Lori Winkler
Senior Vice President, Chief Human Resources Officer

Sang Yi
President, Asia Pacific

Wilfred van Zuilen
President, Europe, Middle East and Africa

Forward-Looking Statements

This 2021 Annual Report includes forward-looking statements that are subject to significant risks, uncertainties and changes in circumstances that could cause actual results to differ materially from the forward-looking statements. See "Cautionary Note Regarding Forward-Looking Statements" immediately following the cover page of our Annual Report on Form 10-K included herein.

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

FORM 10-K

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

For year ended December 31, 2021

Commission file number 001-16407

ZIMMER BIOMET HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**13-4151777**
(State of Incorporation)	*(IRS Employer Identification No.)*
345 East Main Street Warsaw, Indiana	**46580**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(574) 267-6131**

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value	ZBH	New York Stock Exchange
1.414% Notes due 2022	ZBH 22A	New York Stock Exchange
2.425% Notes due 2026	ZBH 26	New York Stock Exchange
1.164% Notes due 2027	ZBH 27	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 checkmark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

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

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

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. ☒

The aggregate market value of shares held by non-affiliates was $33,533,707,317 (based on the closing price of these shares on the New York Stock Exchange on June 30, 2021 and assuming solely for the purpose of this calculation that all directors and executive officers of the registrant are "affiliates"). As of February 7, 2022, 209,177,445 shares of the registrant's $.01 par value common stock were outstanding.

Documents Incorporated by Reference

Document	**Form 10-K**
Portions of the Proxy Statement with respect to the 2022 Annual Meeting of Stockholders	Part III

Cautionary Note Regarding Forward-Looking Statements

This Annual Report contains forward-looking statements within the meaning of federal securities laws, including, among others, statements regarding sales and earnings guidance and any statements about our expectations, plans, intentions, strategies or prospects. We generally use the words "may," "will," "expects," "believes," "anticipates," "plans," "estimates," "projects," "assumes," "guides," "targets," "forecasts," "sees," "seeks," "should," "could," "would," "predicts," "potential," "strategy," "future," "opportunity," "work toward," "intends," "guidance," "confidence," "positioned," "design," "strive," "continue," "look forward to" and similar expressions to identify forward-looking statements. All statements other than statements of historical or current fact are, or may be deemed to be, forward-looking statements. Such statements are based upon the current beliefs, expectations and assumptions of management and are subject to significant risks, uncertainties and changes in circumstances that could cause actual outcomes and results to differ materially from the forward-looking statements. These risks, uncertainties and changes in circumstances include, but are not limited to: the effects of the COVID-19 global pandemic and other adverse public health developments on the global economy, our business and operations and the business and operations of our suppliers and customers, including the deferral of elective surgical procedures and our ability to collect accounts receivable; the failure of vaccine rollouts and other strategies to mitigate or reverse the impacts of the COVID-19 pandemic; the failure of elective surgical procedures to recover at the levels or on the timeline anticipated; the risks and uncertainties related to our ability to successfully execute our restructuring plans; our ability to attract, retain and develop the highly skilled employees we need to support our business; the risks and uncertainties associated with the planned spinoff of ZimVie Inc., including, without limitation, the significant expenses, time and efforts related to implementing such transaction, the ability to complete the transaction on our expected timeline or at all, the tax-free nature of the transaction, the tax-efficient nature of any subsequent distribution of any ZimVie Inc. common stock we retain, possible disruptions in our relationships with customers, suppliers and other business partners, and the possibility that the anticipated benefits and synergies of the transaction, strategic and competitive advantages of each company, and future growth and other opportunities will not be realized within the expected time periods or at all; the success of our quality and operational excellence initiatives, including ongoing quality remediation efforts at our Warsaw North Campus facility; the ability to remediate matters identified in inspectional observations or warning letters issued by the U.S. Food and Drug Administration (FDA), while continuing to satisfy the demand for our products; the impact of substantial indebtedness on our ability to service our debt obligations and/or refinance amounts outstanding under our debt obligations at maturity on terms favorable to us, or at all; the ability to retain the employees, independent agents and distributors who market our products; dependence on a limited number of suppliers for key raw materials and outsourced activities; the possibility that the anticipated synergies and other benefits from mergers and acquisitions will not be realized, or will not be realized within the expected time periods; the risks and uncertainties related to our ability to successfully integrate the operations, products, employees and distributors of acquired companies; the effect of the potential disruption of management's attention from ongoing business operations due to integration matters related to mergers and acquisitions; the effect of mergers and acquisitions on our relationships with customers, suppliers and lenders and on our operating results and businesses generally; challenges relating to changes in and compliance with governmental laws and regulations affecting our U.S. and international businesses, including regulations of the FDA and foreign government regulators, such as more stringent requirements for regulatory clearance of products; the outcome of government investigations; competition; pricing pressures; changes in customer demand for our products and services caused by demographic changes or other factors; the impact of healthcare reform measures; reductions in reimbursement levels by third-party payors and cost containment efforts sponsored by government agencies, legislative bodies, the private sector and healthcare purchasing organizations, including the volume-based procurement process in China; dependence on new product development, technological advances and innovation; shifts in the product category or regional sales mix of our products and services; supply and prices of raw materials and products; control of costs and expenses; the ability to obtain and maintain adequate intellectual property protection; breaches or failures of our information technology systems or products, including by cyberattack, unauthorized access or theft; the ability to form and implement alliances; changes in tax obligations arising from tax reform measures, including European Union rules on state aid, or examinations by tax authorities; product liability, intellectual property and commercial litigation losses; changes in general industry and market conditions, including domestic and international growth rates; changes in general domestic and international economic conditions, including interest rate and currency exchange rate fluctuations; the domestic and international business impact of political, social and economic instability, tariffs, trade embargoes, sanctions, wars, disputes and other conflicts; and the impact of the ongoing financial and political uncertainty on countries in EMEA on the ability to collect accounts receivable in affected countries.

See also the section titled "Risk Factors" (refer to Part I, Item 1A of this report) for further discussion of certain risks and uncertainties that could cause actual results and events to differ materially from the forward-looking statements. Readers of this report are cautioned not to rely on these forward-looking statements, since there can be no assurance that these forward-looking statements will prove to be accurate. Forward-looking statements speak only as of the date they are made, and we expressly disclaim any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You are advised, however, to consult any further disclosures we make on related subjects in our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. This cautionary note is applicable to all forward-looking statements contained in this report.

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Item 1. **Business**

Overview

Zimmer Biomet is a global leader in musculoskeletal healthcare. We design, manufacture and market orthopedic reconstructive products; sports medicine, biologics, extremities and trauma products; spine, craniomaxillofacial and thoracic ("CMFT") products; dental implants; and related surgical products. We collaborate with healthcare professionals around the globe to advance the pace of innovation. Our products and solutions help treat patients suffering from disorders of, or injuries to, bones, joints or supporting soft tissues. Together with healthcare professionals, we help millions of people live better lives. In this report, "Zimmer Biomet," "we," "us," "our," "the Company" and similar words refer collectively to Zimmer Biomet Holdings, Inc. and its subsidiaries. "Zimmer Biomet Holdings" refers to the parent company only.

Zimmer Biomet Holdings was incorporated in Delaware in 2001. Our history dates to 1927, when Zimmer Manufacturing Company, a predecessor, was founded in Warsaw, Indiana. On August 6, 2001, we were spun off from our former parent and became an independent public company. In 2015, we acquired LVB Acquisition, Inc. ("LVB"), the parent company of Biomet, Inc. ("Biomet"), and LVB and Biomet became our wholly-owned subsidiaries. In connection with the merger, we changed our name from Zimmer Holdings, Inc. to Zimmer Biomet Holdings, Inc.

On February 5, 2021, we announced our intention to pursue a plan to spin off our Spine and Dental businesses into a new public company named ZimVie Inc. ("ZimVie"). The planned transaction is intended to benefit our stockholders by enhancing the focus of both Zimmer Biomet and ZimVie to meet the needs of patients and customers and, therefore, achieve faster growth and deliver greater value for all stakeholders. The transaction is intended to qualify as a tax-free distribution, for U.S. federal income tax purposes, to U.S. stockholders of new publicly traded stock in ZimVie. The expected completion date of the spinoff is March 1, 2022.

Customers, Sales and Marketing

Our primary customers include orthopedic surgeons, neurosurgeons, oral surgeons, and other specialists, dentists, hospitals, stocking distributors, healthcare dealers and, in their capacity as agents, healthcare purchasing organizations or buying groups. These customers range from large multinational enterprises to independent clinicians and dentists.

We market and sell products through three principal channels: 1) direct to healthcare institutions, such as hospitals, referred to as direct channel accounts; 2) through stocking distributors and healthcare dealers; and 3) directly to dental practices and dental laboratories. With direct channel accounts and some healthcare dealers, inventory is generally consigned to sales agents or customers. With sales to stocking distributors, some healthcare dealers and hospitals, dental practices and dental laboratories, title to product passes upon shipment. Consignment sales represented approximately 80 percent of our net sales in 2021. No individual customer accounted for more than 1 percent of our net sales for 2021.

We stock inventory in our warehouse facilities and retain title to consigned inventory in an effort to have sufficient quantities available when products are needed for surgical procedures. Safety stock levels are determined based on a number of factors, including demand, manufacturing lead times and quantities required to maintain service levels.

We also carry trade accounts receivable balances based on credit terms that are generally consistent with local market practices.

We utilize a network of sales associates, sales managers and support personnel, some of whom are employed or contracted by independent distributors and sales agencies. We invest a significant amount of time and expense in training sales associates in how to use specific products and how to best inform surgeons of product features and uses. Sales force representatives must have strong technical selling skills and medical education to provide technical support for surgeons.

In response to the different healthcare systems throughout the world, our sales and marketing strategies and organizational structures differ by region. We utilize a global approach to sales force training, marketing and medical education to provide consistent, high quality service. Additionally, we keep current with key surgical developments and other issues related to orthopedic surgeons, neurosurgeons, other specialists, dentists and oral surgeons and the medical and dental procedures they perform.

We allocate resources to achieve our operating profit goals through four operating segments. Our operating segments are comprised of Americas Orthopedics; Europe, Middle East and Africa ("EMEA"); Asia Pacific; and Americas Spine and Global Dental. The following is a summary of our operating segments. See Note 19 to our consolidated financial statements for more information regarding our segments.

Americas Orthopedics. The Americas Orthopedics operating segment is our largest operating segment. This segment is comprised principally of the U.S. and includes other North, Central and South American markets for our orthopedic product categories. This segment also includes research, development engineering, medical education, and brand management for our orthopedic product category headquarter locations. The U.S. accounts for approximately 95 percent of net sales in this region. The U.S. sales force consists of a combination of employees and independent sales agents, most of whom sell products exclusively for Zimmer Biomet. The sales force in the U.S. receives a commission on product sales and is responsible for many operating decisions and costs.

In this region, we contract with group purchasing organizations and managed care accounts and have promoted unit growth by offering volume discounts to customer healthcare institutions within a specified group. Generally, we are designated as one of several preferred purchasing sources for specified products, although members are not obligated to

purchase our products. Contracts with group purchasing organizations generally have a term of three years, with extensions as warranted.

EMEA. The EMEA operating segment is our second largest operating segment. France, Germany, Italy, Spain and the United Kingdom collectively account for approximately 55 percent of net sales in the region. This segment also includes other key markets, including Switzerland, Benelux, Nordic, Central and Eastern Europe, the Middle East and Africa. This operating segment includes all product categories in these markets, except for Dental. Our sales force in this segment is comprised of direct sales associates, commissioned agents, independent distributors and sales support personnel. We emphasize the advantages of our clinically proven, established designs and innovative solutions and new and enhanced materials and surfaces. In most European countries, healthcare is sponsored by the government and therefore government budgets impact healthcare spending, which can affect our sales in this segment.

Asia Pacific. The Asia Pacific operating segment includes key markets such as Japan, China, Australia, New Zealand, Korea, Taiwan, India, Thailand, Singapore, Hong Kong and Malaysia. Japan is the largest market within this segment, accounting for approximately 50 percent of the region's sales. This operating segment includes all product categories in these markets, except for Dental. In Japan and most countries in the Asia Pacific region, we maintain a network of dealers, who act as order agents on behalf of hospitals in the region, and sales associates, who build and maintain relationships with orthopedic surgeons and neurosurgeons in their markets. The knowledge and skills of these sales associates play a critical role in providing service, product information and support to surgeons. In certain countries of this region, healthcare is sponsored by governments. Most notably, in 2021 the Chinese government began to implement a nationwide volume-based procurement ("VBP") process across certain of our product categories that negatively affected our net sales due to distributor inventory reductions, ongoing pricing negotiations with distributor partners, revaluation of channel inventory and volume reductions as patients deferred procedures until after VBP pricing has become effective.

Americas Spine and Global Dental. The Americas Spine and Global Dental operating segment constitutes a majority of the operations that will be spun off to ZimVie. The U.S. accounts for approximately 75 percent of sales in this operating segment. The Americas Spine market dynamics are similar to Americas Orthopedics. However, the Spine business maintains a separate sales force of independent sales agents. In our Dental products division, our sales force is primarily composed of employees who market our products to customers. We sell directly to dental practices or dental laboratories, or to independent stocking distributors depending on the market.

Seasonality

Our business is seasonal in nature to some extent, as many of our products are used in elective procedures, which typically decline during the summer months and can increase at the end of the year once annual deductibles have been met on health insurance plans. Additionally, with sales to customers where title to product passes upon shipment, these customers may purchase items in large quantities if incentives are offered or if there are new product offerings in a market, which could cause period-to-period differences in sales. Due to the COVID-19 global pandemic, the typical seasonal patterns did not occur in 2020 or 2021.

Distribution

We distribute our products both through large, centralized warehouses and through smaller, market specific facilities, depending on the needs of the market. We maintain large, centralized warehouses in the U.S. and Europe to be able to efficiently distribute our products to customers in those regions. In addition to these centralized warehouses, we maintain smaller distribution facilities in the U.S. and in each of the countries where we have a direct sales presence. In many locations, our inventory is consigned to the healthcare institution.

We generally ship our orders via expedited courier. Since most of our sales occur at the time of an elective procedure, we generally do not have firm orders.

Products

Our products include orthopedic reconstructive products; sports medicine, biologics, extremities and trauma products; spine and CMFT products; dental implants; and related surgical products.

KNEES

Total knee replacement surgeries typically include a femoral component, a patella (knee cap), a tibial tray and an articular surface (placed on the tibial tray). Knee replacement surgeries include first-time, or primary, joint replacement procedures and revision procedures for the replacement, repair or enhancement of an implant or component from a previous procedure. There are also procedures for partial reconstruction of the knee, which treat limited knee degeneration and involve the replacement of only one side, or compartment, of the knee with a unicompartmental knee prosthesis. A developing trend in knee replacement surgeries is the use of robotic technologies to assist a surgeon with implant positioning. In 2019, we entered the robotic assistance market with our ROSA® Robot. The ROSA® Robot can be used for total knee arthroplasty or partial knee arthroplasty.

Our significant knee brands include the following:

- Persona® Knee
- NexGen® Knee Implants
- Vanguard® Knee
- Oxford® Partial Knee

HIPS

Total hip replacement surgeries replace both the head of the femur and the socket portion of the pelvis (acetabulum) of the natural hip. Hip procedures include first-time, or primary, joint replacement as well as revision procedures. Hip implant procedures involve the use of bone cement to attach or affix the prosthetic components to the surrounding bone, or are

press-fit into bone, which means that they have a surface that bone affixes to through either ongrowth or ingrowth technologies. In 2021, we entered the robotic assistance market for hips with our ROSA® Robot.

Our significant hip brands include the following:

- Taperloc® Hip System
- Avenir Complete® Hip System
- Arcos® Modular Hip System
- G7® Acetabular System

S.E.T.

Our S.E.T. product category includes sports medicine, biologics, foot and ankle, extremities, trauma and CMFT products. Our sports medicine products are primarily for the repair of soft tissue injuries, most commonly used in the knee and shoulder. Our biologics products are used as early intervention for joint preservation or to support surgical procedures. Our foot and ankle and extremities products are designed to treat arthritic conditions and fractures in the foot, ankle, shoulder, elbow and wrist. Our trauma products are used to stabilize damaged or broken bones and their surrounding tissues to support the body's natural healing process. Our CMFT product division includes face and skull reconstruction products as well as products that fixate and stabilize the bones of the chest in order to facilitate healing or reconstruction after open heart surgery, trauma or for deformities of the chest.

Our significant S.E.T. brands include the following:

- JuggerKnot® Soft Anchor System
- Gel-One®[1] Cross-linked Hyaluronate
- Trabecular Metal® Reverse Plus® Shoulder System
- Comprehensive® Shoulder
- Natural Nail® System
- A.L.P.S.® Plating System
- SternaLock® System

SPINE and DENTAL

Our Spine products division designs, manufactures and distributes medical devices and surgical instruments to deliver comprehensive solutions for individuals with back or neck pain caused by degenerative conditions, deformities or traumatic injury of the spine. Our Dental products division manufactures and/or distributes: 1) dental reconstructive implants – for individuals who are totally without teeth or are missing one or more teeth; 2) dental prosthetic products – aimed at providing a more natural restoration to resemble the original teeth; and 3) dental regenerative products – for soft tissue and bone rehabilitation.

Our significant spine and dental brands include the following:

- Mobi-C® Cervical Disc
- The Tether™ Vertebral Body Tethering System
- Tapered Screw-Vent® Implant System
- 3i T3® Implant

OTHER

Our other product category primarily includes our robotic, surgical and bone cement products.

[1] Registered trademark of Seikagaku Corporation

Research and Development

We have extensive research and development activities to develop new surgical techniques, including robotic techniques, materials, biologics and product designs. The research and development teams work closely with our strategic brand marketing function. The rapid commercialization of innovative new materials, biologics products, implant and instrument designs and surgical techniques remains one of our core strategies and continues to be an important driver of sales growth.

We are broadening our offerings in certain of our product categories and exploring new technologies, including artificial intelligence and machine learning, with possible applications in multiple areas. Our primary research and development facility is located in Warsaw, Indiana. We have other research and development personnel based in, among other places, Canada, China, France, Switzerland and other U.S. locations. As of December 31, 2021, we employed approximately 2,000 research and development employees worldwide.

We expect to continue to identify innovative technologies, which may include acquiring complementary products or businesses, establishing technology licensing arrangements or strategic alliances.

Government Regulation and Compliance

Our operations, products and customers are subject to extensive government regulation by numerous government agencies, both within and outside the U.S. Our global regulatory environment is increasingly stringent, unpredictable and complex. There is a global trend toward increased regulatory activity related to medical products.

In the U.S., numerous laws and regulations govern all the processes by which our products are brought to market. These include, among others, the Federal Food, Drug and Cosmetic Act ("FDCA") and regulations issued or promulgated thereunder. The U.S. Food and Drug Administration ("FDA") has enacted regulations that control all aspects of the development, manufacture, advertising, promotion and postmarket surveillance of medical products, including medical devices. In addition, the FDA controls the access of products to market through processes designed to ensure that only products that are safe and effective are made available to the public.

Most of our new products fall into an FDA medical device classification that requires the submission of a Premarket Notification (510(k)) to the FDA. This process requires us to demonstrate that the device to be marketed is at least as safe and effective as, that is, substantially equivalent to, a legally marketed device. We must submit information that supports our substantial equivalency claims. Before we can market the new device, we must receive an order from the FDA finding substantial equivalence and clearing the new device for commercial distribution in the U.S.

Other devices we develop and market are in a category (class) for which the FDA has implemented stringent clinical investigation and Premarket Approval ("PMA") requirements. The PMA process requires us to provide clinical and laboratory data that establishes that the new medical device is safe and

effective. The FDA will approve the new device for commercial distribution if it determines that the data and information in the PMA application constitute valid scientific evidence and that there is reasonable assurance that the device is safe and effective for its intended use(s).

All of our devices marketed in the U.S. have been cleared or approved by the FDA, with the exception of some devices which are classified by FDA regulation as exempt from premarket clearance and approval or were in commercial distribution prior to May 28, 1976.

In January 2021, the FDA announced a new "Action Plan" to address software as a medical device ("SaMD") and artificial intelligence and machine learning ("AI/ML"). Certain of our new products will likely incorporate innovations related to AI/ML, and therefore we will monitor developments in this area closely to determine our compliance obligations and risks.

Both before and after a product is commercially released, we have ongoing responsibilities under FDA regulations. The FDA reviews design and manufacturing practices, labeling and record keeping, and manufacturers' required reports of adverse experiences and other information to identify potential problems with marketed medical devices. We are also subject to periodic inspection by the FDA for compliance with its Quality System Regulation (21 CFR Part 820) ("QSR"), among other FDA requirements, such as requirements for advertising and promotion of our devices. Our manufacturing operations, and those of our third-party manufacturers, are required to comply with the QSR, which addresses a company's responsibility for product design, testing and manufacturing quality assurance and the maintenance of records and documentation. The QSR requires that each manufacturer establish a quality system by which the manufacturer monitors the manufacturing process and maintains records that show compliance with FDA regulations and the manufacturer's written specifications and procedures relating to the devices. QSR compliance is necessary to receive and maintain FDA clearance or approval to market new and existing products and is also necessary for distributing in the U.S. certain devices exempt from FDA clearance and approval requirements. The FDA conducts announced and unannounced periodic and on-going inspections of medical device manufacturers to determine compliance with the QSR. If in connection with these inspections the FDA believes the manufacturer has failed to comply with applicable regulations and/or procedures, it may issue inspectional observations on Form FDA-483 ("Form 483") that would necessitate prompt corrective action. If FDA inspectional observations are not addressed and/or corrective action is not taken in a timely manner and to the FDA's satisfaction, the FDA may issue a warning letter (which would similarly necessitate prompt corrective action) and/or proceed directly to other forms of enforcement action, including the imposition of operating restrictions, including a ceasing of operations, on one or more facilities, enjoining and restraining certain violations of applicable law pertaining to products, seizure of products, and assessing civil or criminal penalties against our officers, employees or us. The FDA could also issue a corporate warning letter or a recidivist warning letter or negotiate the entry of a consent decree of permanent injunction with us. The FDA may also recommend prosecution to the U.S. Department of Justice ("DOJ"). Any adverse regulatory action, depending on its magnitude, may restrict us from effectively manufacturing, marketing and selling our products and could have a material adverse effect on our business, financial condition and results of operations. For information regarding certain warning letters and Form 483 inspectional observations that we are addressing, see Note 21 to our consolidated financial statements.

The FDA, in cooperation with U.S. Customs and Border Protection ("CBP"), administers controls over the import of medical devices into the U.S. and can prevent the importation of products the FDA deems to violate the FDCA or its implementing regulations. The CBP imposes its own regulatory requirements on the import of our products, including inspection and possible sanctions for noncompliance. We are also subject to foreign trade controls administered by certain U.S. government agencies, including the Bureau of Industry and Security within the Commerce Department and the Office of Foreign Assets Control within the Treasury Department ("OFAC"). In addition, exported medical products are subject to the regulatory requirements of each country to which the medical product is exported.

There are also requirements of state and local governments that we must comply with in the manufacture and marketing of our products.

In many of the countries in which our products are sold, we are subject to supranational, national, regional and local regulations affecting, among other things, the development, design, manufacturing, product standards, packaging, advertising, promotion, labeling, marketing and postmarket surveillance of medical products, including medical devices. The member countries of the European Union (the "EU") have adopted the European Medical Device Directive (the "MDD"), which creates a single set of medical device regulations for products marketed in all member countries. Compliance with the MDD and certification to a quality system (e.g., ISO 13485 certification) enable the manufacturer to place a CE mark on its products. To obtain authorization to affix the CE mark to a product, a recognized European Notified Body must assess a manufacturer's quality system and the product's conformity to the requirements of the MDD. We are subject to inspection by the Notified Bodies for compliance with these requirements. In May 2017, a new EU Medical Device Regulation ("MDR") was published that will replace the MDD and will impose significant additional premarket and postmarket requirements. The effective date for the MDR was extended to May 2021 due to the COVID-19 pandemic. Under a corrigendum to the MDR finalized in December 2019, some low-risk medical devices being up-classified as a result of the MDR, including low-risk instruments, may now receive a transitional period to comply by May 2024.

Our quality management system is based upon the requirements of ISO 13485, the QSR, the MDD and other applicable regulations for the markets in which we sell. Our principal manufacturing sites are certified to ISO 13485 and audited at regular intervals. Additionally, our principal sites are certified under the Medical Device Single Audit Program ("MDSAP"), which is a voluntary audit program developed by regulatory authorities in five countries (i.e., Australia, Brazil,

Canada, Japan, and the United States) to assess compliance with the quality management system regulatory requirements of those countries. MDSAP audits are conducted by an MDSAP-recognized auditing organization and can fulfill the needs of the participating regulatory jurisdictions, replacing standard surveillance audits by the regulatory authorities in those countries.

Further, we are subject to other supranational, national, regional, federal, state and local laws concerning healthcare fraud and abuse, including false claims and anti-kickback laws, as well as the U.S. Physician Payments Sunshine Act and similar state and foreign healthcare professional payment transparency laws. These laws are administered by, among others, the DOJ, the Office of Inspector General of the Department of Health and Human Services ("OIG-HHS"), state attorneys general and various foreign government agencies. Many of these agencies have increased their enforcement activities with respect to medical products manufacturers in recent years. Violations of these laws are punishable by criminal and/or civil sanctions, including, in some instances, fines, imprisonment and, within the U.S., exclusion from participation in government healthcare programs, including Medicare, Medicaid and Veterans Administration health programs.

Our operations in foreign countries are subject to the extraterritorial application of the U.S. Foreign Corrupt Practices Act ("FCPA"). Our global operations are also subject to foreign anti-corruption laws, such as the United Kingdom ("UK") Bribery Act, among others. As part of our global compliance program, we seek to address anti-corruption risks proactively. On January 12, 2017, we resolved previously-disclosed FCPA matters involving Biomet and certain of its subsidiaries. As part of that settlement, we entered into a Deferred Prosecution Agreement ("DPA") with the DOJ, which concluded on February 9, 2021, six months following certification to the DOJ and the U.S. Securities and Exchange Commission ("SEC") by an independent compliance monitor that our compliance program, including its policies and procedures, is reasonably designed and implemented to prevent and detect violations of the FCPA and is functioning effectively.

Our facilities and operations are also subject to complex federal, state, local and foreign environmental and occupational safety laws and regulations, including those relating to discharges of substances in the air, water and land, the handling, storage and disposal of wastes and the clean-up of properties contaminated by pollutants. We do not expect that the ongoing costs of compliance with these environmental requirements will have a material impact on our consolidated earnings, capital expenditures or competitive position.

In addition, we are subject to federal, state and international data privacy and security laws and regulations that govern the collection, use, disclosure, transfer, storage, disposal and protection of health-related and other personal information. The FDA has issued guidance to which we may be subject concerning data security for medical devices. The FDA and the Department of Homeland Security ("DHS") have issued urgent safety communications regarding cybersecurity vulnerabilities of certain medical devices.

In addition, certain of our affiliates are subject to privacy, security and breach notification regulations promulgated under the Health Insurance Portability and Accountability Act of 1996 and the Health Information Technology for Economic and Clinical Health Act (collectively, "HIPAA"). HIPAA governs the use, disclosure, and security of protected health information by HIPAA "covered entities" and their "business associates." Covered entities are health plans, health care clearinghouses and health care providers that engage in specific types of electronic transactions. A business associate is any person or entity (other than members of a covered entity's workforce) that performs a service on behalf of a covered entity involving the use or disclosure of protected health information. The U.S. Department of Health and Human Services ("HHS") (through the Office for Civil Rights) has direct enforcement authority against covered entities and business associates with regard to compliance with HIPAA regulations. On December 10, 2020, HHS issued a notice of proposed rulemaking ("NPR") to modify the HIPAA privacy rule. The proposed modifications would remove communication barriers between providers and health plans, allow individuals more access to their health information and impose new requirements on entities that receive patient data requests. Separately, HHS (through the National Coordinator for Health Information Technology) issued a new rule, to be effective April 5, 2021, that seeks to limit "blocking" of electronic health information by imposing data access, software licensing and inter-operability requirements on healthcare providers and information technology vendors. We intend to monitor both the NPR and the "information blocking" rule and assess their impact on the use of data in our business.

In addition to the FDA guidance and HIPAA regulations described above, a number of U.S. states have also enacted data privacy and security laws and regulations that govern the collection, use, disclosure, transfer, storage, disposal and protection of personal information, such as social security numbers, medical and financial information and other information. These laws and regulations may be more restrictive and not preempted by U.S. federal laws. For example, several U.S. territories and all 50 states now have data breach laws that require timely notification to individuals, and at times regulators, the media or credit reporting agencies, if a company has experienced the unauthorized access or acquisition of personal information. Other state laws include the California Consumer Privacy Act ("CCPA"), which took effect on January 1, 2020. The CCPA, among other things, contains new disclosure obligations for businesses that collect personal information about California residents and affords those individuals numerous rights relating to their personal information that may affect our ability to use personal information or share it with our business partners. A second law called the California Privacy Rights Act ("CPRA") passed via a ballot referendum in November 2020. The CPRA expands the scope of the CCPA, imposes new restrictions on behavioral advertising and establishes a new California Privacy Protection Agency which will enforce the law and issue regulations. The CPRA is scheduled to take effect on January 1, 2023, with a lookback to January 1, 2022. Other states have considered and/or enacted similar privacy laws. We will continue to monitor

and assess the impact of these state laws, which may impose substantial penalties for violations, impose significant costs for investigation and compliance, allow private class-action litigation and carry significant potential liability for our business.

Outside of the U.S., data protection laws, including the EU General Data Protection Regulation (the "GDPR") and member state implementing legislation, and the Brazil Lei Geral de Proteção de Dados (the "LGPD"), also apply to some of our operations in the countries in which we provide services to our customers. Legal requirements in these countries relating to the collection, storage, processing and transfer of personal data continue to evolve. The GDPR, which became effective on May 25, 2018, imposes data protection requirements that include strict obligations and restrictions on the ability to collect, analyze and transfer EU personal data, a requirement for prompt notice of data breaches to data subjects and supervisory authorities in certain circumstances, and possible substantial fines for any violations (including possible fines for certain violations of up to the greater of 20 million Euros or 4% of total worldwide annual turnover of the preceding financial year).

Failure to comply with U.S. and international data protection laws and regulations could result in government enforcement actions (which could include civil and/or criminal penalties), private litigation and/or adverse publicity and could negatively affect our operating results and business.

Competition

The orthopedics and broader musculoskeletal care industry is highly competitive. In the global markets for our knees, hips, and S.E.T. products, our major competitors include the DePuy Synthes Companies of Johnson & Johnson, Stryker Corporation and Smith & Nephew plc. There are smaller competitors in these product categories as well who have success by focusing on smaller subsegments of the industry.

In the spine product category, we compete globally primarily with the spinal and biologic business of Medtronic plc, the DePuy Synthes Companies, Stryker Corporation, NuVasive, Inc. and Globus Medical Inc.

In the dental implant category, we compete primarily with The Straumann Group, Dentsply Sirona Inc. and Nobel Biocare Services AG (part of Envista Holdings Corporation).

Competition within the industry is primarily based on technology, innovation, quality, reputation, customer service and pricing. A key factor in our continuing success in the future will be our ability to develop new products and technologies and improve existing products and technologies.

Manufacturing and Raw Materials

We manufacture our products at various sites. We also strategically outsource some manufacturing to qualified suppliers who are highly capable of producing components.

The manufacturing operations at our facilities are designed to incorporate the cellular concept for production and to implement tenets of a manufacturing philosophy focused on continuous improvement efforts in product quality, lead time reduction and capacity optimization. Our continuous improvement efforts are driven by Lean and Six Sigma methodologies. In addition, at certain of our manufacturing facilities, many of the employees are cross-trained to perform a broad array of operations.

We generally target operating our manufacturing facilities at optimal levels of total capacity. We continually evaluate the potential to in-source and outsource production as part of our manufacturing strategy to provide value to our stakeholders.

In most of our manufacturing network, we have improved our manufacturing processes to harmonize and optimize our quality systems and to protect our profitability and offset the impact of inflationary costs. We have, for example, employed computer-assisted robots and multi-axis grinders to precision polish medical devices; automated certain manufacturing and inspection processes, including on-machine inspection and process controls; purchased state-of-the-art equipment; in-sourced core products and processes; and negotiated cost reductions from third-party suppliers.

We use a diverse and broad range of raw materials in the manufacturing of our products. We purchase all of our raw materials and select components used in manufacturing our products from external suppliers. In addition, we purchase some supplies from single sources for reasons of quality assurance, sole source availability, cost effectiveness or constraints resulting from regulatory requirements. We work closely with our suppliers to assure continuity of supply while maintaining high quality and reliability. To date, we have not experienced any significant difficulty in locating and obtaining the materials necessary to fulfill our production schedules.

Intellectual Property

Patents and other proprietary rights are important to the continued success of our business. We also rely upon trade secrets, know-how, continuing technological innovation and licensing opportunities to develop and maintain our competitive position. We protect our proprietary rights through a variety of methods, including confidentiality agreements and proprietary information agreements with suppliers, employees, consultants and others who may have access to proprietary information. We own or control through licensing arrangements over 9,000 issued patents and patent applications throughout the world that relate to aspects of the technology incorporated in many of our products.

Human Capital

As of December 31, 2021, we employed approximately 19,500 employees worldwide, including approximately 2,000 employees dedicated to research and development. Approximately 9,000 employees are located within the U.S. and approximately 10,500 employees are located outside of the U.S., primarily throughout Europe and in Japan and China. We have approximately 8,000 employees dedicated to manufacturing our products worldwide.

Our mission is to alleviate pain and improve the quality of life for people around the world. Our commitment to patients shapes all day-to-day decisions at Zimmer Biomet. To be able to accomplish our mission we have established guiding

principles. These guiding principles are central to our human capital management policies and practices. The guiding principles are:

- Respect the contributions and perspectives of all employees
- Commit to the highest standards of patient safety, quality and integrity
- Focus our resources in areas where we will make a difference
- Ensure the company's return is equivalent to the value we provide our customers and patients
- Give back to our communities and people in need.

Diversity, Equity and Inclusion

We believe that each of us as individuals can drive change every day. We remain wholly committed to creating, supporting and celebrating diverse and equal workplaces and communities. Together, we will continue to foster and embrace diversity and inclusion within our team and our communities, and commit our voices and our resources to community groups, business platforms and other organizations united to driving meaningful change and sustained improvement.

We believe that representation matters. As of December 31, 2021, women made up approximately 35 percent of our total employee population, and approximately 25 percent of positions at Director level and above. People of Color ("POC") made up approximately 22 percent of our total employee population in the U.S., and comprised approximately 15 percent of positions at Director level and above. We have established 2026 representation goals for women and POC at all levels of the organization, guided by internal data and external benchmarking.

Core to our values is our commitment to stand together against hatred, discrimination and injustice, and we advance these values through our actions and investments. With this in mind, we have committed to the following initiatives to drive and accelerate change both within our own organization and around the globe. We have shared these commitments publicly and are tracking our progress against them:

- Engage our 19,500 global employees in cultural awareness and inclusion programming;
- Invest $1 million and provide executive sponsorship to support ongoing programs and elevate the impact of our employee resource groups;
- Commit at least $5 million over five years through the Zimmer Biomet Foundation to non-profit organizations dedicated to combating racism and supporting diversity, equality and justice. The Zimmer Biomet Foundation is an independent, non-profit organization established in 2018 to address the needs of our global community;
- Match, through the Zimmer Biomet Foundation, employee financial contributions to non-profit organizations, including those dedicated to combating racism and supporting diversity, equality and justice;
- Expand our student and early career internship programs to attract and develop more Black leaders; and
- Continue our financial support of Movement is Life, a multidisciplinary coalition seeking to eliminate racial, ethnic and gender disparities in muscle and joint health.

Employee Engagement

We value our employees' input and to that end, from time-to-time, we conduct comprehensive employee engagement surveys that ultimately inform our actions towards improving employee engagement. Surveys attempt to assess five drivers of engagement including purpose, culture, leadership, personal growth and belonging. The key results of surveys, and commensurate action plans, are shared with our Board of Directors and with our employee base. Employee engagement is the degree to which employees invest their cognitive, emotional, and behavioral energies toward positive organizational outcomes. While we strive for engagement scores to sequentially improve, the outcomes of the surveys can be influenced by many factors that are internal and external to the company.

We believe it is critical to keep our employees engaged through frequent and transparent communication. This is accomplished through town halls, video and written messages, news and recognition on our intranet site, and various other methods. To stay connected through the COVID-19 pandemic, our Chief Executive Officer has kept employees informed of our priorities, financial results, management response and employee health and safety through frequent video messages and written communications.

Health, Safety and Wellness

The physical and mental health, financial wellbeing, and work/life balance of our employees is vital to accomplishing our mission. We sponsor wellness programs designed to enhance physical, financial and mental wellbeing for our employees. We encourage participation in these programs through regular communications, educational sessions and other incentives.

We are also intensely focused on the health and safety of our team members in the workplace. Our environmental, health and safety team constantly monitor various metrics to ensure we are providing the safest environment in which to work. In 2021, our Total Recordable Incident Rate was 0.29 and our Lost Time Incident Rate was 0.14. These results are shared with relevant regulatory agencies as required and presented to our Board of Directors.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The following table sets forth certain information with respect to our executive officers as of February 15, 2022.

Name	Age	Position
Bryan Hanson	55	Chairman, President and Chief Executive Officer
Derek Davis	52	Vice President, Interim Controller and Chief Accounting Officer
Rachel Ellingson	52	Senior Vice President and Chief Strategy Officer
Chad Phipps	50	Senior Vice President, General Counsel and Secretary
Ivan Tornos	46	Chief Operating Officer
Suketu Upadhyay	52	Executive Vice President and Chief Financial Officer
Wilfred van Zuilen	52	President, Europe, Middle East and Africa
Lori Winkler	60	Senior Vice President, Chief Human Resources Officer
Sang Yi	59	President, Asia Pacific

Mr. Hanson was appointed President and Chief Executive Officer and a member of the Board of Directors in December 2017. He was subsequently named Chairman of the Board of Directors in May 2021. Previously, Mr. Hanson served as Executive Vice President and President, Minimally Invasive Therapies Group of Medtronic plc from January 2015 until joining Zimmer Biomet. Prior to that, he was Senior Vice President and Group President, Covidien of Covidien plc from October 2014 to January 2015; Senior Vice President and Group President, Medical Devices and United States of Covidien from October 2013 to September 2014; Senior Vice President and Group President of Covidien for the Surgical Solutions business from July 2011 to October 2013; and President of Covidien's Energy-based Devices business from July 2006 to June 2011. Mr. Hanson held several other positions of increasing responsibility in sales, marketing and general management with Covidien from October 1992 to July 2006.

Mr. Davis was appointed Vice President, Interim Controller and Chief Accounting Officer in November 2021. Previously, he served as the Company's Vice President, Finance Integration since August 2020, and the Vice President, Global Integration of the Company since June 2015. Mr. Davis served as the Vice President, Finance and Corporate Controller and Chief Accounting Officer, the principal accounting officer, of the Company from May 2007 until June 2015.

Ms. Ellingson was appointed Senior Vice President and Chief Strategy Officer in April 2018 and was designated as an executive officer in January 2021. Prior to joining Zimmer Biomet, Ms. Ellingson served as a member of the executive leadership team of St. Jude Medical in positions of increasing responsibility from 2012 until 2017, most recently as Vice President, Corporate Strategy from 2015 until 2017. Before joining St. Jude Medical, Ms. Ellingson served as Vice President, Business Development and Investor Relations at AGA Medical Corporation. Prior to joining AGA Medical, Ms. Ellingson had more than 15 years of experience in investment banking, most recently with Bank of America as a Managing Director, Medical Technology Investment Banking.

Mr. Phipps was appointed Senior Vice President, General Counsel and Secretary in May 2007. He has global responsibility for the Company's Legal Affairs and he serves as Secretary to the Board of Directors. Mr. Phipps also oversees the Company's Government Affairs activities. Previously, Mr. Phipps served as Associate General Counsel and Corporate Secretary from December 2005 to May 2007. He joined the Company in September 2003 as Associate Counsel and Assistant Secretary. Prior to joining the Company, he served as Vice President and General Counsel of L&N Sales and Marketing, Inc. in Pennsylvania and he practiced law with the firm of Morgan, Lewis & Bockius in Philadelphia, focusing on corporate and securities law, mergers and acquisitions and financial transactions.

Mr. Tornos was appointed Chief Operating Officer in March 2021. Previously, he served as the Company's Group President, Global Businesses and the Americas since December 2019 and prior to that as Group President, Orthopedics since joining the Company in November 2018. Prior to joining Zimmer Biomet, Mr. Tornos served as Worldwide President of the Global Urology, Medical and Critical Care Divisions of Becton, Dickinson and Company ("BD") (and previously, C. R. Bard, Inc. ("Bard")) from June 2017 until October 2018. From June 2017 until BD's acquisition of Bard in December 2017, Mr. Tornos also continued to serve as President, EMEA of Bard, a position to which he was appointed in September 2013. Mr. Tornos joined Bard in August 2011 and, prior to his appointment as President, EMEA, served as Vice President and General Manager with leadership responsibility for Bard's business in Southern Europe, Central Europe and the Emerging Markets Region of the Middle East and Africa. Before joining Bard, Mr. Tornos served as Vice President and General Manager of the Americas Pharmaceutical and Medical/Imaging Segments of Covidien International from April 2009 to August 2011. Before that, he served as International Vice President, Business Development and Strategy with Baxter International Inc. from July 2008 to April 2009 and, prior to that, Mr. Tornos spent 11 years with Johnson & Johnson in positions of increasing responsibility. He has also served as a member of the board of directors at PHC Holdings Corporation since September 2021.

Mr. Upadhyay was appointed Executive Vice President and Chief Financial Officer in July 2019. Prior to joining Zimmer

Biomet, Mr. Upadhyay served as Senior Vice President, Global Financial Operations at Bristol-Myers Squibb from November 2016 until June 2019. Before joining Bristol-Myers Squibb, he served as Executive Vice President and Chief Financial Officer of Endo International from September 2013 to November 2016. Prior to his tenure at Endo International, Mr. Upadhyay served as Interim Chief Financial Officer as well as Senior Vice President of Finance, Corporate Controller and Principal Accounting Officer of BD. Prior to his role as BD's Interim Chief Financial Officer and Corporate Controller, Mr. Upadhyay was the Senior Vice President of Global Financial Planning and Analysis and also held the role of Vice President and Chief Financial Officer of BD's international business. Before joining BD in 2010, Mr. Upadhyay held a number of leadership roles across AstraZeneca and Johnson & Johnson. Mr. Upadhyay spent the early part of his career in public accounting with KPMG.

Mr. van Zuilen was appointed President, Europe, Middle East and Africa in June 2021. Prior to joining Zimmer Biomet, Mr. van Zuilen served in various roles for Medtronic plc, including as Vice President, North Western Europe from October 2020 to May 2021, as Vice President, Restorative Therapies Group EMEA from February 2017 through September 2020, and as Vice President, Advanced Surgical Technologies Europe, Surgical Solution Group, from October 2011 through January 2017. He served in other roles of increasing responsibility with Medtronic plc through January 1998. Before joining Medtronic, he spent more than five years in medical sales, most recently with Baxter BV (Edwards Life Sciences).

Ms. Winkler joined Zimmer Biomet as Group Vice President of Human Resources in March 2020 and was appointed Senior Vice President, Chief Human Resources Officer in February 2021. Prior to joining Zimmer Biomet, she served Cardinal Health as a Worldwide Vice President of Human Resources in the Medical Segment from November 2016 through January 2020. Before joining Cardinal Health, Ms. Winkler served more than 20 years with Johnson and Johnson, including its subsidiary companies DePuy and Cordis, most recently as Global Head, Human Resources Global Finance from April 2011 through November 2016.

Mr. Yi was appointed President, Asia Pacific in June 2015. He is responsible for the sales, marketing and distribution of products, services and solutions in the Asia Pacific region. Mr. Yi joined the Company in March 2013 as Senior Vice President, Asia Pacific. Previously, he served as Vice President and General Manager of St. Jude Medical for Asia Pacific and Australia from 2005 to 2013. Prior to that, Mr. Yi held several leadership positions over a ten-year period with Boston Scientific Corporation, ultimately serving as Vice President for North Asia.

AVAILABLE INFORMATION

Our Internet address is www.zimmerbiomet.com. We routinely post important information for investors on our website in the "Investor Relations" section, which may be accessed from our homepage at www.zimmerbiomet.com or directly at https://investor.zimmerbiomet.com. We use this website as a means of disclosing material, non-public information and for complying with our disclosure obligations under Regulation FD. Accordingly, investors should monitor the Investor Relations section of our website, in addition to following our press releases, SEC filings, public conference calls, presentations and webcasts. Our goal is to maintain the Investor Relations website as a portal through which investors can easily find or navigate to pertinent information about us, free of charge, including:

- our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended ("Exchange Act"), as soon as reasonably practicable after we electronically file that material with or furnish it to the SEC;
- announcements of investor conferences and events at which our executives talk about our products and competitive strategies, as well as archives of these events;
- press releases on quarterly earnings, product announcements, legal developments and other material news that we may post from time to time;
- corporate governance information including our Corporate Governance Guidelines, Code of Business Conduct and Ethics, Code of Ethics for Chief Executive Officer and Senior Financial Officers, information concerning our Board of Directors and its committees, including the charters of the Audit Committee, Compensation and Management Development Committee, Corporate Governance Committee and Quality, Regulatory and Technology Committee, and other governance-related policies;
- stockholder services information, including ways to contact our transfer agent and information on how to sign up for direct deposit of dividends or enroll in our dividend reinvestment plan; and
- opportunities to sign up for email alerts and RSS feeds to have information provided in real time.

The information available on our website is not incorporated by reference in, or a part of, this or any other report we file with or furnish to the SEC.

Item 1A. Risk Factors

We operate in a rapidly changing economic and technological environment that presents numerous risks, many of which are driven by factors that we cannot control or predict. Our business, financial condition and results of operations may be impacted by a number of factors. In addition to the factors discussed elsewhere in this report, the following risks and uncertainties could materially harm our business, financial condition or results of operations, including causing our actual results to differ materially from those projected in any forward-looking statements. The following list of significant risk factors is not all-inclusive or necessarily in order of importance. Additional risks and uncertainties not presently known to

us, or that we currently deem immaterial, also may materially adversely affect us in future periods. You should carefully consider these risks and uncertainties before investing in our securities.

Risks Related to our Business, Operations and Strategy

The COVID-19 pandemic has adversely impacted, and continues to pose risks to, our business, results of operations and financial condition, the nature and extent of which are highly uncertain and remain unpredictable.

Our global operations expose us to risks associated with public health crises and outbreaks of epidemic, pandemic, or contagious diseases, such as COVID-19. We continue to experience a decline in elective surgical procedures globally due to the COVID-19 pandemic. In the third and fourth quarters of 2021, the highly transmissible Delta and Omicron variants resulted in further deferrals of elective surgical procedures, and we believe that staffing shortages at hospitals also contributed to the deferral of such procedures. We expect these declines to continue for the duration of the pandemic, and they may be further impacted by COVID-19 variants and resurgences.

The COVID-19 global pandemic has had, and we expect it to continue to have, an adverse impact on our financial condition, results of operations and cash flows. Our net sales have not returned to pre-pandemic levels. It is not certain when our financial condition, results of operations, or cash flows will return to pre-pandemic levels. Deferral of elective surgical procedures has caused us to experience certain of the following, and we may experience other of the following, among other potential negative outcomes:

- lower revenues, profits and cash flows compared to historic trends;
- additional charges from operating our manufacturing facilities at less than normal capacity;
- goodwill impairment charges;
- delays in certain strategic projects and investments, including our restructuring plans, which will delay or may eliminate the effectiveness of these strategic initiatives;
- excess inventory we cannot sell;
- failure to satisfy the covenants in our credit facilities, which may cause any outstanding amounts to be payable immediately and could affect our access to capital to fund our business; and
- downgrades to our credit ratings, which could result in increased interest expense.

COVID-19 and the current financial, economic and capital markets environment, and future developments in these and other areas, present material uncertainty and risk with respect to our performance, financial condition, volume of business, results of operations and cash flows.

Our restructuring program may not be successful or we may not fully realize the expected cost savings and/or operating efficiencies from our restructuring initiatives.

In December 2019, our Board of Directors approved, and we initiated, a global restructuring program (the "2019 Restructuring Plan") with an objective of reducing costs to allow us to further invest in higher priority growth opportunities, which program is ongoing. In December 2021, our management also initiated a global restructuring program (the "2021 Restructuring Plan") to reorganize our operations in preparation for the planned spinoff of ZimVie with an objective of reducing costs. Restructuring initiatives involve complex plans and actions that may include, or result in, workforce reductions, global plant closures and/or consolidations, product portfolio rationalizations and asset impairments. Additionally, as a result of restructuring initiatives, we may experience a loss of continuity, loss of accumulated knowledge and/or inefficiencies during transitional periods. Restructuring initiatives present significant risks that may impair our ability to achieve anticipated operating enhancements and/or cost reductions, or otherwise harm our business, including higher than anticipated costs in implementing our restructuring program, as well as management distraction. For more information on our restructuring program, see Note 4 to our consolidated financial statements. If we fail to achieve some or all of the expected benefits of restructuring, it could have a material adverse effect on our competitive position, business, financial condition, results of operations and cash flows.

Our success largely depends on the strength of our talent, including our senior management, and ensuring we have meaningful succession plans in place. We may not be able to attract, retain and develop the highly skilled employees we need to support our business, which could harm our business.

Our future performance depends, in large part, on the continued skills, experiences, competencies and services of our senior management and other key talent, including our ability to attract, retain, develop and motivate key talent. Competition for talent in the various geographies and business segments in which we operate is significant. Our ability to attract and retain key talent, in particular senior management, will be dependent on a number of factors, including prevailing market conditions and our ability to offer competitive compensation packages. There is no guarantee that we will have the continued service of key employees who we rely upon to execute our business strategy and identify and pursue strategic opportunities and initiatives. The loss of the services of any of our senior management or other key talent, or our inability to attract highly qualified senior management and other key talent, could harm our business. In particular, we may have to incur costs to replace senior officers or other key employees who leave, and our ability to execute our business strategy could be impaired if we are unable to replace such persons in a timely manner.

Effective succession planning is also important to our long-term success. Failure to ensure effective transfer of knowledge and orderly transitions involving key employees could hinder our strategic planning and execution. Further, changes in our management team may be disruptive to our business, and any failure to successfully integrate key new hires or promoted employees could adversely affect our business and results of operations.

We may not be able to effectively integrate acquired businesses into our operations or achieve expected cost savings or profitability from our acquisitions.

Our acquisitions involve numerous risks, including:

- unforeseen difficulties in integrating personnel and sales forces, operations, manufacturing, logistics, research and development, information technology, compliance, vendor management, communications, purchasing, accounting, marketing, administration and other systems and processes;
- difficulties harmonizing and optimizing quality systems and operations;
- diversion of financial and management resources from existing operations;
- unforeseen difficulties related to entering geographic regions where we do not have prior experience;
- potential loss of key employees;
- unforeseen risks and liabilities associated with businesses acquired, including any unknown vulnerabilities in acquired technology or compromises of acquired data; and
- inability to generate sufficient revenue or realize sufficient cost savings to offset acquisition or investment costs.

As a result, if we fail to evaluate and execute acquisitions properly, we might not achieve the anticipated benefits of such acquisitions, and we may incur costs in excess of what we anticipate. These risks would likely be greater in the case of larger acquisitions.

The planned spinoff of our Spine and Dental businesses may not be completed on the terms or timeline currently contemplated, if at all, and may not achieve the intended results.

As previously announced, we plan to spin off our Spine and Dental businesses to form ZimVie Inc., a new and independent, publicly traded company ("ZimVie") through a tax-free distribution to our stockholders of publicly traded stock in ZimVie. Unanticipated developments could delay, prevent or otherwise adversely affect the planned spinoff. Therefore, we cannot provide assurance that we will be able to complete the spinoff on the terms or on the timeline that we announced, or at all.

We expect the completion of the spinoff to continue to require significant expenses and management time and effort. We will have continuing obligations to ZimVie after the completion of the spinoff, which may cause us to incur additional costs. The spinoff will also require modifications to our systems and processes used to operate our business. We may experience delays, increased costs and other difficulties related to these modifications during or following the spinoff, which could adversely affect our business, financial condition and results of operations. Following the spinoff, we will be a smaller, less diversified company with a narrower business focus and may be more vulnerable to changing market conditions, which could adversely affect our operating results. We may also experience increased difficulties in attracting, retaining and motivating employees during the pendency of the spinoff and following its completion, which could harm our business.

Further, if the spinoff is completed, the anticipated benefits and synergies of the transaction, strategic and competitive advantages of each company, and future growth and other opportunities for each company may not be realized within the expected time periods or at all. Failure to implement the spinoff effectively could also result in a lower value to our company and our stockholders.

The planned spinoff, and any subsequent divestiture of our retained interest in ZimVie, could result in substantial tax liability.

We obtained an Internal Revenue Service ("IRS") ruling, and we intend to obtain an opinion as to the tax-free nature of the spinoff under the U.S. Internal Revenue Code of 1986, as amended. The IRS ruling is, and the opinion will be, based, among other things, on various factual assumptions and representations we will make. If any of these assumptions or representations are, or become, inaccurate or incomplete, reliance on the opinion and ruling may be jeopardized. If the spinoff does not qualify for tax-free treatment for U.S. federal income tax purposes, the resulting tax liability to us, to our stockholders and to ZimVie stockholders could be substantial.

We have announced we intend to retain 19.7% of the outstanding shares of ZimVie common stock upon the spinoff and to divest these shares after the spinoff in a tax-efficient manner. There can be no assurance that any such divestiture will occur, will occur at a time or times favorable to us, or will occur at prices or on terms favorable to us. Additionally, there can be no assurance that any such divestiture achieves a desired or any favorable tax treatment. If the divesture does not achieve a favorable tax treatment, the resulting tax liability to us, to our stockholders, and to ZimVie stockholders could be substantial.

Interruption of manufacturing operations could adversely affect our business, financial condition and results of operations.

We and our third-party manufacturers have manufacturing sites all over the world. In some instances, however, the manufacturing of certain of our product lines is concentrated in one or more plants. Damage to one or more facilities from weather or natural disaster-related events, vulnerabilities in technology, cyber-attacks against our information systems or the information systems of our business partners (such as ransomware attacks), or issues in manufacturing arising from failure to follow specific internal protocols and procedures, compliance concerns relating to the QSR and Good Manufacturing Practice requirements, equipment breakdown or malfunction, reductions in operations and/or worker absences due to the COVID-19 pandemic or other health epidemics (or local, state, or national reactions to such epidemics), or other factors could adversely affect the ability to manufacture our products. In the event of an interruption in manufacturing, we may be unable to move quickly to alternate means of producing affected products or to meet customer demand. We have experienced such interruptions due to the COVID-19 pandemic, and we may experience such interruptions in the future. In the event of a significant interruption, for example, as a result of a failure to follow regulatory protocols and procedures, we may experience lengthy delays in resuming production of affected products due primarily to the need for regulatory approvals. As a result, we may experience loss of market share, which we

may be unable to recapture, and harm to our reputation, which could adversely affect our business, financial condition and results of operations.

Disruptions in the supply of the materials and components used in manufacturing our products or the sterilization of our products by third-party suppliers could adversely affect our business, financial condition and results of operations.

We purchase many of the materials and components used in manufacturing our products from third-party suppliers and we outsource some key manufacturing activities. Certain of these materials and components and outsourced activities can only be obtained from a single source or a limited number of sources due to quality considerations, expertise, costs or constraints resulting from regulatory requirements. In certain cases, we may not be able to establish additional or replacement suppliers for such materials or components or outsourced activities in a timely or cost effective manner, largely as a result of FDA and other worldwide regulations that require validation of materials and components prior to their use in our products and the complex nature of our and many of our suppliers' manufacturing processes and the need for clearance or approval of significant changes by worldwide regulatory bodies prior to implementation. A reduction or interruption in the supply of materials or components used in manufacturing our products, such as due to one or more suppliers experiencing reductions in operations and/or worker absences due to the COVID-19 pandemic or other health epidemics; an inability to timely develop and validate alternative sources if required; or a significant increase in the price of such materials or components could adversely affect our business, financial condition and results of operations.

In addition, many of our products require sterilization prior to sale and we utilize a mix of internal resources and contract sterilizers to perform this service. To the extent we or our contract sterilizers are unable to sterilize our products, whether due to capacity, availability of materials for sterilization, regulatory or other constraints, including federal and state regulations on the use of ethylene oxide, or reductions in operations and/or worker absences due to the COVID-19 pandemic or other health epidemics, we may be unable to transition to other contract sterilizers, sterilizer locations or sterilization methods in a timely or cost effective manner or at all, which could have a material impact on our results of operations and financial condition.

Moreover, we are subject to the SEC's rule regarding disclosure of the use of certain minerals, known as "conflict minerals" (tantalum, tin and tungsten (or their ores) and gold), which are mined from the Democratic Republic of the Congo and adjoining countries. This rule could adversely affect the sourcing, availability and pricing of materials used in the manufacture of our products, which could adversely affect our manufacturing operations and our profitability. In addition, we are incurring additional costs to comply with this rule, including costs related to determining the source of any relevant minerals and metals used in our products. We have a complex supply chain and we may not be able to sufficiently verify the origins of the minerals and metals used in our products through our due diligence procedures. As a result, we may face reputational challenges with our customers and other stakeholders.

We are increasingly dependent on sophisticated information technology and if we fail to effectively maintain or protect our information systems or data, including from data breaches, our business could be adversely affected.

We are increasingly dependent on sophisticated information technology for our products and infrastructure. As a result of technology initiatives, expanding privacy and cybersecurity laws, changes in our system platforms and integration of new business acquisitions, we have been consolidating and integrating the number of systems we operate and have upgraded and expanded our information systems capabilities. In addition, some of our products and services incorporate software or information technology that collects data regarding patients and patient therapy, and some products or software we provide to customers connect to our systems for maintenance and other purposes. We also have outsourced elements of our operations to third parties, and, as a result, we manage a number of third-party suppliers who may or could have access to our confidential information, including, but not limited to, intellectual property, proprietary business information and personal information of patients, employees and customers (collectively "Confidential Information").

Our information systems, and those of third-party suppliers with whom we contract, require an ongoing commitment of significant resources to maintain, protect and enhance existing systems and develop new systems to keep pace with continuing changes in information technology, evolving systems and regulatory standards, changing threats and vulnerabilities, and the increasing need to protect patient and customer information. In addition, given their size and complexity, these systems could be vulnerable to service interruptions or to security breaches from inadvertent or intentional actions by our employees, third-party vendors and/or business partners, or from cyber-attacks by malicious third parties attempting to gain unauthorized access to our products, systems or Confidential Information.

Like other large multi-national corporations, we have experienced instances of successful phishing attacks on our email systems and expect to be subject to similar attacks in the future. We also are subject to other cyber-attacks, including state-sponsored cyber-attacks, industrial espionage, insider threats, computer denial-of-service attacks, computer viruses, ransomware and other malware, payment fraud or other cyber incidents. In addition, as a result of the COVID-19 pandemic, a significant number of our employees who are able to work remotely are doing so, and malicious cyber actors may increase malware campaigns and phishing emails targeting teleworkers, preying on the uncertainties surrounding COVID-19, which exposes us to additional cybersecurity risks. Our incident response efforts, business continuity procedures and disaster recovery planning may not be sufficient for all eventualities. If we fail to maintain or protect our information systems and data integrity effectively, we could:

- lose existing customers, vendors and business partners;

- have difficulty attracting new customers;
- have problems in determining product cost estimates and establishing appropriate pricing;
- suffer outages or disruptions in our operations or supply chain;
- have difficulty preventing, detecting, and controlling fraud;
- have disputes with customers, physicians, and other healthcare professionals;
- have regulatory sanctions or penalties imposed;
- incur increased operating expenses;
- be subject to issues with product functionality that may result in a loss of data, risk to patient safety, field actions and/or product recalls;
- incur expenses or lose revenues as a result of a data privacy breach; or
- suffer other adverse consequences.

While we have invested heavily in the protection of our data and information technology, there can be no assurance that our activities related to consolidating the number of systems we operate, upgrading and expanding our information systems capabilities, protecting and enhancing our systems and implementing new systems will be successful. We will continue to dedicate significant resources to protect against unauthorized access to our systems and work with government authorities to detect and reduce the risk of future cyber incidents; however, cyber-attacks are becoming more sophisticated, frequent and adaptive. Therefore, despite our efforts, we cannot assure that cyber-attacks or data breaches will not occur or that systems issues will not arise in the future. Any significant breakdown, intrusion, breach, interruption, corruption or destruction of these systems could have a material adverse effect on our business and reputation and could materially adversely affect our results of operations and financial condition.

Our success depends on our ability to effectively develop and market our products against those of our competitors.

We operate in a highly competitive environment. Our present or future products could be rendered obsolete or uneconomical by technological advances by one or more of our present or future competitors or by other therapies, including biological therapies. To remain competitive, we must continue to develop and acquire new products and technologies and improve existing products and technologies. Competition is primarily on the basis of:

- technology;
- innovation;
- quality;
- reputation;
- customer service; and
- pricing.

In markets outside of the U.S., other factors influence competition as well, including:

- local distribution systems;
- complex regulatory environments; and
- differing medical philosophies and product preferences.

Our competitors may:

- have greater financial, marketing and other resources than us;
- respond more quickly to new or emerging technologies;
- undertake more extensive marketing campaigns;
- adopt more aggressive pricing policies; or
- be more successful in attracting potential customers, employees and strategic partners.

Any of these factors, alone or in combination, could cause us to have difficulty maintaining or increasing sales of our products.

If we fail to retain the employees and independent agents and distributors upon whom we rely heavily to market our products, customers may not buy our products and our revenue and profitability may decline.

Our marketing success in the U.S. and abroad depends significantly upon our employees', agents' and distributors' sales and service expertise in the marketplace. Many of these agents have developed professional relationships with existing and potential customers because of the agents' detailed knowledge of products and instruments. A loss of a significant number of our agents could have a material adverse effect on our business and results of operations.

If we do not introduce new products in a timely manner, our products may become obsolete over time, customers may not buy our products and our revenue and profitability may decline.

Demand for our products may change, in certain cases, in ways we may not anticipate because of:

- evolving customer needs;
- changing demographics;
- slowing industry growth rates;
- declines in the musculoskeletal implant market;
- the introduction of new products and technologies;
- evolving surgical philosophies; and
- evolving industry standards.

Without the timely introduction of new products and enhancements, our products may become obsolete over time. If that happens, our revenue and operating results would suffer. The success of our new product offerings will depend on several factors, including our ability to:

- properly identify and anticipate customer needs;
- commercialize new products in a timely manner;
- manufacture and deliver instruments and products in sufficient volumes on time;
- differentiate our offerings from competitors' offerings;
- achieve positive clinical outcomes for new products;
- satisfy the increased demands by healthcare payors, providers and patients for shorter hospital stays, faster post-operative recovery and lower-cost procedures;
- innovate and develop new materials, product designs and surgical techniques; and
- provide adequate medical education relating to new products.

In addition, new materials, product designs and surgical techniques that we develop may not be accepted quickly, in some or all markets, because of, among other factors:

- entrenched patterns of clinical practice;
- the need for regulatory clearance; and
- uncertainty with respect to third-party reimbursement.

Moreover, innovations generally require a substantial investment in research and development before we can determine their commercial viability and we may not have the financial resources necessary to fund the production. In addition, even if we are able to successfully develop enhancements or new generations of our products, these enhancements or new generations of products may not produce revenue in excess of the costs of development and they may be quickly rendered obsolete by changing customer preferences or the introduction by our competitors of products embodying new technologies or features.

If third-party payors decline to reimburse our customers for our products or reduce reimbursement levels, the demand for our products may decline and our ability to sell our products profitably may be harmed.

We sell our products and services to hospitals, doctors, dentists and other healthcare providers, which receive reimbursement for the healthcare services provided to their patients from third-party payors, such as domestic and international government programs, private insurance plans and managed care programs. These third-party payors may deny reimbursement if they determine that a product or service used in a procedure was not in accordance with cost-effective treatment methods, as determined by the third-party payor, or was used for an unapproved indication. Third-party payors may also decline to reimburse for experimental procedures and products.

In addition, third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement for medical products and services. If third-party payors reduce reimbursement levels or change reimbursement models for hospitals and other healthcare providers for our products, demand for our products may decline, or we may experience increased pressure to reduce the prices of our products, which could have a material adverse effect on our sales and results of operations.

We have also experienced downward pressure on product pricing and other effects of healthcare reform in our international markets. For example, China has implemented a volume-based procurement process designed to decrease prices for medical devices and other products. If key participants in government healthcare systems reduce the reimbursement levels for our products, including through political changes or transitions, our business, financial condition, results of operations and cash flows may be adversely affected.

We are subject to cost containment measures in the United States and other countries, resulting in pricing pressures, which could have a material adverse effect on our business, results of operations, and cash flows.

Initiatives to limit the growth of general healthcare expenses and hospital costs are ongoing in the markets in which we do business. These initiatives are sponsored by government agencies, legislative bodies and the private sector and include price regulation and competitive pricing. For example, China has implemented a volume-based procurement process designed to decrease prices for certain medical devices and other products, which has in the past resulted in, and could in the future result in, reduced margins on covered devices and products, required renegotiation of distributor arrangements, and incurrence of inventory-related charges. Pricing pressure has also increased due to continued consolidation among healthcare providers, trends toward managed care, the shift toward governments becoming the primary payors of healthcare expenses, reductions in reimbursement levels and government laws and regulations relating to reimbursement and pricing generally.

In addition, many customers for our products have formed group purchasing organizations in an effort to contain costs. Group purchasing organizations negotiate pricing arrangements with medical supply manufacturers and distributors, and these negotiated prices are made available to a group purchasing organization's affiliated hospitals and other members. If we are not one of the providers selected by a group purchasing organization, affiliated hospitals and other members may be less likely to purchase our products, and, if the group purchasing organization has negotiated a strict compliance contract for another manufacturer's products, we may be precluded from making sales to members of the group purchasing organization for the duration of the contractual arrangement. Our failure to respond to the cost-containment efforts of group purchasing organizations may cause us to lose market share to our competitors and could have a material adverse effect on our sales and results of operations.

Financial, Credit and Liquidity Risks

We incurred substantial additional indebtedness in connection with previous mergers and acquisitions and may not be able to meet all of our debt obligations, and the phase-out, replacement or unavailability of LIBOR and/or other interest rate benchmarks could adversely affect our indebtedness.

We incurred substantial additional indebtedness in connection with previous mergers and acquisitions. At December 31, 2021, our total indebtedness was $7.1 billion, as compared to $1.4 billion at December 31, 2014. As of December 31, 2021, our debt service principal obligations (excluding interest, leases and equipment notes), during the next 12 months are expected to be $1.6 billion. As a result of the increase in our debt, demands on our cash resources have increased. The increased level of debt could, among other things:

- require us to dedicate a large portion of our cash flow from operations to the servicing and repayment of our debt, thereby reducing funds available for working capital, capital expenditures, research and development expenditures and other general corporate requirements;
- limit our ability to obtain additional financing to fund future working capital, capital expenditures, research and development expenditures and other general corporate requirements;
- limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;
- restrict our ability to make strategic acquisitions or dispositions or to exploit business opportunities;
- place us at a competitive disadvantage compared to our competitors that have less debt;

- adversely affect our credit rating, with the result that the cost of servicing our indebtedness might increase and our ability to obtain surety bonds could be impaired;
- adversely affect the market price of our common stock; and
- limit our ability to apply proceeds from a future offering or asset sale to purposes other than the servicing and repayment of debt.

In addition, the interest rates applicable to certain of our debt obligations are based on a fluctuating rate of interest determined by reference to the London Interbank Offered Rate ("LIBOR" or "LIBO rate"). Any increase in interest rates applicable to our debt obligations would increase our cost of borrowing and could adversely affect our financial position, results of operations or cash flows. Further, in July 2017, the U.K.'s Financial Conduct Authority (the "FCA"), which regulates LIBOR, announced that it intends to stop persuading or compelling banks to submit rates to the ICE Benchmark Administration Limited. On March 5, 2021, the FCA publicly announced publication of all non-U.S. dollar denominated LIBO rate settings, as well as the 1-week and 2-month U.S. dollar denominated LIBO rate, will permanently cease as of December 31, 2021, and that publication of the overnight and 12-month U.S. dollar denominated LIBO rate settings will permanently cease after June 30, 2023. In addition, the FCA announced that immediately after June 30, 2023, the 1-month, 3-month and 6-month U.S. dollar LIBO rates will cease to be provided or, subject to the FCA's consideration of the case, may be provided on a synthetic basis and no longer be representative of the underlying market and economic reality that they are intended to measure and that representativeness will not be restored. The dates announced by the FCA may change or other administrators of LIBO rates and/or regulators may take further action that could change or otherwise impact the availability and characteristics of LIBO rates, currencies and tenors. The credit agreements governing our debt provide a mechanism for determining alternative rates of interest using customary hardwired rate replacement provisions which establish a waterfall approach for establishment of a replacement benchmark interest rate in the event that LIBO rates are unavailable, subject to spread adjustments to be determined with reference to the recommendations of relevant governmental bodies or, in certain circumstances, evolving or then-prevailing market conventions for determining or calculating such spread adjustment for U.S. dollar denominated syndicated credit facilities. Any alternative, successor, or replacement rate may not be similar to, or produce the same value or economic equivalence of, the LIBO rate or have the same volume or liquidity as did the LIBO rate prior to its discontinuance or unavailability, which may increase our overall interest expense on unhedged variable rate indebtedness which is currently based on the LIBO rate.

We will continue to monitor the situation and address the potential reference rate changes in future debt obligations that we may incur. Accordingly, the potential effect of the phase-out, replacement or unavailability of LIBOR, or the unavailability of any other interest rate benchmark such as EURIBOR or TIBOR, on our cost of capital cannot yet be determined. Further, the use of an alternative base rate or a benchmark replacement rate as a basis for calculating interest with respect to any outstanding variable rate indebtedness could lead to an increase in the interest we pay and a corresponding increase in our costs of capital or otherwise have a material adverse impact on our business, financial condition or results of operations.

We may have additional tax liabilities.

We are subject to income taxes in the U.S. and many foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. We are regularly under audit by tax authorities. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation could be materially different from our historical income tax provisions and accruals. The results of an audit or litigation could have a material effect on our financial statements in the period or periods for which that determination is made.

Changes in the tax laws of the jurisdictions where we do business, including an increase in tax rates or an adverse change in the treatment of an item of income or expense, could result in a material increase in our tax expense. For example, changes in the tax laws of foreign jurisdictions could arise as a result of the "base erosion and profit shifting" project undertaken by the Organisation for Economic Co-operation and Development ("OECD"). The OECD, which represents a coalition of member countries, has recommended changes to numerous long-standing tax principles. These changes, as adopted by countries, could increase tax uncertainty and may have a material adverse impact on our business, financial condition or results of operations.

The proposed Build Back Better Act or similar legislation, if enacted, could lead to changes in tax laws that could negatively impact our effective tax rate.

The Build Back Better Act proposed an increase in the U.S. Global Intangible Low-Taxed Income ("GILTI") foreign minimum tax rate from 10.5% to 15%, assessing the GILTI tax on a per country basis, reduction of the Foreign-Derived Intangible Income tax benefit, and disallowance of certain corporate interest expense. If any or all of these (or similar) proposals are ultimately enacted into law, in whole or in part, they could have a material adverse impact on our business, financial condition or results of operations.

If our independent agents and distributors are characterized as employees, we would be subject to additional tax and other liabilities.

We structure our relationships with independent agents and distributors in a manner that we believe results in an independent contractor relationship, not an employee relationship. Although we believe that our independent agents and distributors are properly characterized as independent contractors, tax or other regulatory authorities may in the future challenge our characterization of these relationships. Further, we have been subject to lawsuits challenging the characterization of these relationships in recent years. Changes in classification from independent contractor to employee can result in a change to various requirements associated with the payment of wages, tax withholding, and

the provision of unemployment, health, and other traditional employer-employee related benefits. If regulatory authorities or state, federal or foreign courts were to determine that our independent agents or distributors are employees, and not independent contractors, we would be required to withhold income taxes, to withhold and pay social security, Medicare and similar taxes and to pay unemployment and other related payroll taxes. We would also be liable for unpaid past taxes and subject to penalties. As a result, any determination that our independent agents and distributors are our employees could have a material adverse effect on our business, financial condition or results of operations.

Future material impairments in the carrying value of our intangible assets, including goodwill, would negatively affect our operating results.

Goodwill and intangible assets represent a significant portion of our assets. At December 31, 2021, we had $9.2 billion in goodwill and $6.3 billion of intangible assets. The goodwill results from our acquisition activity and represents the excess of the consideration transferred over the fair value of the net assets acquired. We assess at least annually whether events or changes in circumstances indicate that the carrying value of our intangible assets may not be recoverable. As discussed further in Note 11 to our consolidated financial statements, in the first quarter of 2020, we recorded goodwill impairment charges of $612.0 million as a result of the adverse impacts from the COVID-19 pandemic and a change in our reportable segments, and in the second quarter of 2021 and 2020, we recorded $16.3 million and $33.0 million, respectively, of in-process research and development ("IPR&D") intangible asset impairments on certain IPR&D projects. If the operating performance at one or more of our reporting units falls significantly below current levels, including if elective surgical procedures are deferred longer than our current expectations due to the COVID-19 pandemic, if competing or alternative technologies emerge, if market conditions or future cash flow estimates for one or more of our businesses decline, or as a result of restructuring initiatives pursuant to which we reorganize our reporting units, we could be required to record additional impairment charges. Any write-off of a material portion of our goodwill or unamortized intangible assets would negatively affect our results of operations.

Global Operational Risks

We conduct a significant amount of our sales activity outside of the U.S., which subjects us to additional business risks and may cause our profitability to decline due to increased costs.

We sell our products in more than 100 countries and derived approximately 40 percent of our net sales in 2021 from outside the U.S. We intend to continue to pursue growth opportunities in sales internationally, including in emerging markets, which could expose us to additional risks associated with international sales and operations. Our international operations are, and will continue to be, subject to a number of risks and potential costs, including:

- changes in foreign medical reimbursement policies and programs;
- changes in foreign regulatory requirements, such as more stringent requirements for regulatory clearance of products;
- differing local product preferences and product requirements;
- fluctuations in foreign currency exchange rates;
- diminished protection of intellectual property in some countries outside of the U.S.;
- trade protection measures, import or export requirements, new or increased tariffs, trade embargoes and sanctions and other trade barriers, which may prevent us from shipping products to a particular market and may increase our operating costs;
- foreign exchange controls that might prevent us from repatriating cash earned in countries outside the U.S.;
- complex data privacy and cybersecurity requirements and labor relations laws;
- extraterritorial effects of U.S. laws such as the FCPA;
- effects of foreign anti-corruption laws, such as the UK Bribery Act;
- difficulty in staffing and managing foreign operations;
- labor force instability;
- potentially negative consequences from changes in tax laws; and
- political, social and economic instability and uncertainty, including sovereign debt issues.

Violations of foreign laws or regulations could result in fines, criminal sanctions against us, our officers or our employees, prohibitions on the conduct of our business and damage to our reputation.

We are subject to risks arising from currency exchange rate fluctuations, which can increase our costs, cause our profitability to decline and expose us to counterparty risks.

A substantial portion of our foreign revenues is generated in Europe and Japan. The U.S. Dollar value of our foreign-generated revenues varies with currency exchange rate fluctuations. Significant increases in the value of the U.S. Dollar relative to the Euro, the Japanese Yen, the Swiss Franc or other currencies could have a material adverse effect on our results of operations. Although we address currency risk management through regular operating and financing activities, and, on a limited basis, through the use of derivative financial instruments, those actions may not prove to be fully effective or may create additional financial obligations for us. Further, if the counterparties to the derivative financial instrument transactions fail to honor their obligations due to financial distress or otherwise, we would be exposed to potential losses or the inability to recover anticipated gains from those transactions.

We are subject to costly and complex laws and governmental regulations relating to the development, design, product standards, packaging, advertising, promotion, postmarket surveillance, manufacturing, labeling and marketing of our products, non-compliance with which could adversely affect our business, financial condition and results of operations.

Our global regulatory environment is increasingly stringent, unpredictable and complex. The products we design, develop, manufacture and market are subject to rigorous regulation by the FDA and numerous other supranational, national, federal, regional, state and local governmental authorities. The process of obtaining regulatory approvals and clearances to market these products can be costly and time consuming and approvals might not be granted for future products on a timely basis, if at all. Delays in receipt of, or failure to obtain, approvals for future products could result in delayed realization of product revenues or in substantial additional costs.

Both before and after a product is commercially released, we have ongoing responsibilities under FDA regulations and other supranational, national, federal, regional, state and local requirements globally. Compliance with these requirements, including the QSR, recordkeeping regulations, labeling and promotional requirements and adverse event reporting regulations, is subject to continual review and is monitored rigorously through periodic inspections by the FDA and other regulators, which may result in observations (such as on Form 483), and in some cases warning letters, that require corrective action, or other forms of enforcement. If the FDA or another regulator were to conclude that we are not in compliance with applicable laws or regulations, or that any of our products are ineffective or pose an unreasonable health risk, they could ban such products, detain or seize adulterated or misbranded products, order a recall, repair, replacement, or refund of payment of such products, refuse to grant pending premarket approval applications, refuse to provide certificates for exports, and/or require us to notify healthcare professionals and others that the products present unreasonable risks of substantial harm to the public health. Furthermore, the FDA strictly regulates the promotional claims that we may make about approved or cleared products. If the FDA determines that we have marketed or promoted a product for off-label use—uses other than those indicated on the labeling cleared by the FDA—we could be subject to fines, injunctions or other penalties. The FDA or other regulators may also impose operating restrictions, including a ceasing of operations at one or more facilities, enjoin and restrain certain violations of applicable law pertaining to our products, seizure of products and assess civil or criminal penalties against our officers, employees or us. The FDA or other regulators could also issue a corporate warning letter or a recidivist warning letter or negotiate the entry of a consent decree of permanent injunction with us, and/or recommend prosecution. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively manufacturing, marketing and selling our products and could have a material adverse effect on our business, financial condition and results of operations.

In August 2018, we received a warning letter from the FDA related to observed non-conformities with current good manufacturing practice requirements of the QSR at our Warsaw North Campus manufacturing facility. As of February 25, 2022, this warning letter remained pending. Until the violations are corrected, we may become subject to additional regulatory action by the FDA as described above, the FDA may refuse to grant premarket approval applications and/or the FDA may refuse to grant export certificates, any of which could have a material adverse effect on our business, financial condition and results of operations. Additional information regarding these and other FDA regulatory matters can be found in Note 21 to our consolidated financial statements.

Governmental regulations outside the U.S. continue to become increasingly stringent and complex. In the EU, for example, the MDR became effective in May 2021 and includes significant additional premarket and post-market requirements. Complying with the requirements of this regulation requires us to incur significant expense. Additionally, the availability of EU notified body services certified to the new requirements is limited, which may delay the marketing approval for some of our products under the MDR. Any such delays, or any failure to meet the requirements of the new regulation, could adversely impact our business in the EU and other regions that tie their product registrations to the EU requirements. Similarly, the separation of states from participation in the EU, such as through the cessation of the UK's membership in the EU (commonly known as "Brexit") and the separation of the Swiss and EU medical product markets with the adoption of MDR (commonly referred to as "Swexit"), may result in further regulatory risk and complexity as the former EU member or participant state establishes separate laws and regulations governing medical products.

Our products and operations are also often subject to the rules of industrial standards bodies, such as the International Standards Organization. If we fail to adequately address any of these regulations, our business could be harmed.

If we fail to comply with healthcare fraud and abuse or data privacy and security laws and regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.

The sales, marketing and pricing of products and relationships that medical products companies have with healthcare providers are under increased scrutiny around the world. Our industry is subject to various laws and regulations pertaining to healthcare fraud and abuse, including the False Claims Act, the Anti-Kickback Statute, the Stark law, the Physician Payments Sunshine Act, the Food, Drug, and Cosmetic Act and similar laws and regulations in the U.S. and around the world. In addition, we are subject to various laws concerning anti-corruption and anti-bribery matters (including the FCPA), sales to countries or persons subject to economic sanctions and other matters affecting our international operations. Violations of these laws are punishable by criminal and/or civil sanctions, including, in some instances, fines,

imprisonment and, within the U.S., exclusion from participation in government healthcare programs, including Medicare, Medicaid and Veterans Administration health programs. These laws are administered by, among others, the DOJ, the OIG-HHS, the SEC, the OFAC, the Bureau of Industry and Security of the U.S. Department of Commerce and state attorneys general.

We are also subject to federal, state and international data privacy and security laws and regulations that govern the collection, use, disclosure, transfer, storage, disposal and protection of health-related and other personal information. The FDA has issued guidance to which we may be subject concerning data security for medical devices. The FDA and the DHS have also issued urgent safety communications regarding cybersecurity vulnerabilities of certain medical devices, which vulnerabilities may apply to some of our current or future devices.

In addition, certain of our affiliates are subject to privacy, security and breach notification regulations promulgated under HIPAA. HIPAA governs the use, disclosure, and security of protected health information by HIPAA "covered entities" and their "business associates." Covered entities are health plans, health care clearinghouses and health care providers that engage in specific types of electronic transactions. A business associate is any person or entity (other than members of a covered entity's workforce) that performs a service on behalf of a covered entity involving the use or disclosure of protected health information. HHS (through the Office for Civil Rights) has direct enforcement authority against covered entities and business associates with regard to compliance with HIPAA regulations. On December 10, 2020, HHS issued an NPR to modify the HIPAA privacy rule. Separately, HHS (through the National Coordinator for Health Information Technology) issued a new rule, which took effect on April 5, 2021, that limits "blocking" of electronic health information. We intend to monitor both the NPR and the "information blocking" rule and assess their impact on the use of data in our business.

In addition to the FDA guidance and HIPAA regulations described above, a number of U.S. states have also enacted data privacy and security laws and regulations that govern the collection, use, disclosure, transfer, storage, disposal, and protection of personal information, such as social security numbers, medical and financial information and other personal information. These laws and regulations may be more restrictive and not preempted by U.S. federal laws. For example, several U.S. territories and all 50 states now have data breach laws that require timely notification to individuals, and at times regulators, the media or credit reporting agencies, if a company has experienced the unauthorized access or acquisition of personal information. Other state laws include the CCPA, which took effect on January 1, 2020. The CCPA, among other things, contains new disclosure obligations for businesses that collect personal information about California residents and affords those individuals numerous rights relating to their personal information that may affect our ability to use personal information or share it with our business partners. A second law in California, the CPRA, passed via a ballot referendum in November 2020. The CPRA expands the scope of the CCPA and establishes a new California Privacy Protection Agency that will enforce the law and issue regulations. The CPRA is scheduled to take effect on January 1, 2023, with a lookback to January 1, 2022. Other states have considered and/or enacted similar privacy laws. We will continue to monitor and assess the impact of these state laws, which may impose substantial penalties for violations, impose significant costs for investigations and compliance, allow private class-action litigation and carry significant potential liability for our business.

The legislative and regulatory framework for privacy and data protection issues worldwide is rapidly evolving as countries continue to adopt privacy and data security laws. Outside of the U.S., data protection laws, including the GDPR in the EU ("EU GDPR") and the UK ("UK GDPR"), the LGPD in Brazil, and the Personal Information Protection Law ("PIPL") in China, also apply to our operations in those countries in which we provide services to our customers. The UK GDPR and EU GDPR impose, among other things, data protection requirements that include strict obligations and restrictions on the ability to collect, analyze and transfer UK and EU personal data, a requirement for prompt notice of data breaches to data subjects and supervisory authorities in certain circumstances, and possible substantial fines for any violations (including possible fines for certain violations of up to the greater of 20 million Euros or 4% of total worldwide annual turnover of the preceding financial year under the EU GDPR, and up to the greater of 17.5 million Pounds or 4% of total worldwide annual turnover of the preceding financial year under the UK GDPR). The issue of new standard contractual clauses ("SCCs") governing cross-border data transfers between controllers and processors by the EU Commission, in conjunction with related requirements on conducting data transfer impact assessments in respect of cross-border data transfers from the EU and the UK, may involve an increase in our costs of compliance as we transition to those SCCs and subject us to increased scrutiny by EU and UK regulators. The PIPL, which took effect on November 1, 2021, shares many similarities with the EU GDPR. This includes extraterritorial reach, strict restrictions on transfer of personal information (including in certain situations data localization or prior certification/authorization requirements), compliance obligations and sanctions for non-compliance (of up to 5% of annual turnover or 50 million Yuan). It also seeks to impose additional requirements not currently contemplated under the EU GDPR. The PIPL may increase our costs of compliance, subject us to enhanced scrutiny from Chinese regulators and affect our cross-border data transfers.

The interpretation and enforcement of the laws and regulations described above are uncertain and subject to change, and may require substantial costs to monitor and implement compliance with any additional requirements. Failure to comply with U.S. and international data protection laws and regulations could result in government enforcement actions (which could include substantial civil and/or criminal penalties), private litigation and/or adverse publicity and could have a material adverse impact on our business, financial condition or results of operations.

Pending and future product liability claims and litigation could adversely impact our financial condition and results of operations and impair our reputation.

Our business exposes us to potential product liability risks that are inherent in the design, manufacture and marketing of medical devices. In the ordinary course of business, we are the subject of product liability lawsuits alleging that component failures, manufacturing flaws, design defects or inadequate disclosure of product-related risks or product-related information resulted in an unsafe condition or injury to patients. As discussed further in Note 21 to our consolidated financial statements, we are defending product liability lawsuits relating to the Durom® Acetabular Component ("Durom Cup"), certain products within the M/L Taper and M/L Taper with Kinectiv® Technology hip stems and Versys® Femoral Head implants, and the M2a-Magnum™ hip system. We are also currently defending a number of other product liability lawsuits and claims related to various other products. Any product liability claim brought against us, with or without merit, can be costly to defend. Product liability lawsuits and claims, safety alerts or product recalls, regardless of their ultimate outcome, could have a material adverse effect on our business and reputation and on our ability to attract and retain customers.

We are substantially dependent on patent and other proprietary rights, and failing to protect such rights or to be successful in litigation related to our rights or the rights of others may result in our payment of significant monetary damages and/or royalty payments, negatively impact our ability to sell current or future products, or prohibit us from enforcing our patent and other proprietary rights against others.

Claims of intellectual property infringement and litigation regarding patent and other intellectual property rights are commonplace in our industry and are frequently time consuming and costly. At any given time, we may be involved as either plaintiff or defendant in a number of patent infringement actions, the outcomes of which may not be known for prolonged periods of time. While it is not possible to predict the outcome of patent and other intellectual property litigation, such litigation has in the past resulted in, and could in the future result in, our payment of significant monetary damages and/or royalty payments, negatively impact our ability to sell current or future products, or prohibit us from enforcing our patent and proprietary rights against others, which could have a material adverse effect on our business and results of operations.

Our success depends in part on our proprietary technology, processes, methodologies and information. We rely on a combination of patent, copyright, trademark, trade secret and other intellectual property laws and nondisclosure, license, assignment and confidentiality arrangements to establish, maintain and protect our proprietary rights, as well as the intellectual property rights of third parties whose assets we license. However, the steps we have taken to protect our intellectual property rights, and the rights of those from whom we license intellectual property, may not be adequate to prevent unauthorized use, misappropriation or theft of our intellectual property. Further, our currently pending or future patent applications may not result in patents being issued to us, patents issued to or licensed by us in the past or in the future may be challenged or circumvented by competitors, and such patents may be found invalid, unenforceable or insufficiently broad to protect our technology or to provide us with any competitive advantage. Third parties could obtain patents that may require us to negotiate licenses to conduct our business, and the required licenses may not be available on reasonable terms or at all. We also cannot be certain that others will not independently develop substantially equivalent proprietary information.

In addition, intellectual property laws differ in various jurisdictions in which we operate and are subject to change at any time, which could further restrict our ability to protect our intellectual property and proprietary rights. In particular, a portion of our revenues is derived from jurisdictions where adequately protecting intellectual property rights may prove more challenging or impossible. We may also not be able to detect unauthorized uses or take timely and effective steps to remedy unauthorized conduct. To prevent or respond to unauthorized uses of our intellectual property, we might be required to engage in costly and time-consuming litigation or other proceedings and we may not ultimately prevail. Any failure to establish, maintain or protect our intellectual property or proprietary rights could have a material adverse effect on our business, financial condition, or results of operations.

We are involved in legal proceedings that may result in adverse outcomes.

In addition to intellectual property and product liability claims and lawsuits, we are involved in various commercial and securities litigation and claims and other legal proceedings that arise from time to time in the ordinary course of our business. For example, as discussed further in Note 21 to our consolidated financial statements, there have been four shareholder derivative actions filed purportedly on our behalf against certain of our current and former directors and officers and certain former stockholders of ours who sold shares of our common stock in secondary public offerings in 2016, alleging breaches of fiduciary duties and insider trading, based on allegations that we made materially false and/or misleading statements and/or omissions about our compliance with FDA regulations and our ability to continue to accelerate our organic revenue growth rate in the second half of 2016. Although we believe there are substantial defenses in these matters, litigation and other claims are subject to inherent uncertainties and management's view of these matters may change in the future. Given the uncertain nature of legal proceedings generally, we are not able in all cases to estimate the amount or range of loss that could result from an unfavorable outcome. We could in the future incur judgments or enter into settlements of claims that could have a material adverse effect on our results of operations in any particular period.

Risks Related to Our Organizational Documents and Jurisdiction of Incorporation

Anti-takeover provisions in our organizational documents could delay or prevent a change of control.

Certain provisions of our Restated Certificate of Incorporation, our Restated By-Laws and the Delaware General Corporation Law may have an anti-takeover effect and may delay, defer or prevent a merger, acquisition, tender offer, takeover attempt or other change of control transaction that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for the shares held by our stockholders.

These provisions provide for, among other things:

- the ability of our board of directors to issue one or more series of preferred stock without further stockholder action;
- advance notice for nominations of directors by stockholders and for stockholders to include matters to be considered at our annual meetings;
- certain limitations on convening special stockholder meetings; and
- the prohibition on engaging in a "business combination" with an "interested stockholder" for three years after the time at which a person became an interested stockholder unless certain conditions are met, as set forth in Section 203 of the Delaware General Corporation Law.

These anti-takeover provisions could make it more difficult for a third party to acquire us, even if the third party's offer may be considered beneficial by many of our stockholders. As a result, our stockholders may be limited in their ability to obtain a premium for their shares.

Our Restated By-Laws designate certain Delaware courts as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our Restated By-Laws provide that, unless we consent in writing to the selection of an alternative forum, a state court located within the State of Delaware (or, if no state court located in the State of Delaware has jurisdiction, the federal district court for the District of Delaware) will be the sole and exclusive forum for any stockholder (including any beneficial owner) to bring (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim against us or any of our directors, officers or other employees arising pursuant to any provision of the Delaware General Corporation Law or our Restated Certificate of Incorporation or our Restated By-Laws, as either may be amended from time to time, or (iv) any action asserting a claim against us or any of our directors, officers or other employees governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have received notice of and consented to the foregoing provisions. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find this choice of forum provision inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

Item 1B. Unresolved Staff Comments

Not Applicable.

Item 2. Properties

We own or lease approximately 340 different facilities around the world, of which approximately half are in the U.S. Our corporate headquarters is in Warsaw, Indiana. Warsaw, Indiana is also home to our most significant manufacturing, research and development ("R&D"), and other business activities for our Knees, Hips and S.E.T. product divisions. Our Spine, CMFT and Dental products divisions also have business unit headquarters located in the U.S. that are the primary facilities for these product divisions' manufacturing, R&D and other business activities. Internationally, our EMEA regional headquarters is in Switzerland and our Asia Pacific regional headquarters is in Singapore.

We have approximately 35 manufacturing locations in the U.S. and internationally. Our most significant locations outside of the U.S. are in Switzerland, Ireland, the U.K., China, and Puerto Rico. We primarily own our manufacturing facilities in the U.S.; internationally, we occupy both owned and leased manufacturing facilities.

We maintain sales and administrative offices and warehouse and distribution facilities in more than 45 countries around the world. These local market facilities are primarily leased due to common businesses practices and to allow us to be more adaptable to changing needs in the market.

We distribute our products both through large, centralized warehouses and through smaller, market specific facilities, depending on the needs of the market. We maintain large, centralized warehouses in the U.S. and the Netherlands to be able to efficiently distribute our products to customers in the U.S. and EMEA.

We believe that all of the facilities and equipment are in good condition, well maintained and able to operate at present levels. We believe the current facilities, including manufacturing, warehousing, R&D and office space, provide sufficient capacity to meet ongoing demands.

Item 3. Legal Proceedings

Information pertaining to certain legal proceedings in which we are involved can be found in Note 21 to our consolidated financial statements included in Part II, Item 8 of this report and is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not Applicable.

PART II

Item 5. Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock is traded on the New York Stock Exchange and the SIX Swiss Exchange under the symbol "ZBH." As of February 8, 2022, there were approximately 15,400 holders of record of our common stock. A substantially greater number of holders of our common stock are "street name" or beneficial holders, whose shares of record are held by banks, brokers and other financial institutions.

We expect to continue paying cash dividends on a quarterly basis; however, future dividends are subject to approval of the Board of Directors and may be adjusted as business needs or market conditions change.

The information required by this Item concerning equity compensation plans is incorporated herein by reference to Item 12 of this report.

Item 6. [Reserved]

The following discussion and analysis should be read in conjunction with the consolidated financial statements and the corresponding notes included elsewhere in this Annual Report on Form 10-K. Certain percentages presented in this discussion and analysis are calculated from the underlying whole-dollar amounts and therefore may not recalculate from the rounded numbers used for disclosure purposes. The following discussion, analysis and comparisons generally focus on the operating results for the years ended December 31, 2021 and 2020. Discussion, analysis and comparisons of the years ended December 31, 2020 and 2019 that are not included in this Form 10-K can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020.

On February 5, 2021, we announced our intention to pursue a plan to spin off our Spine and Dental businesses into a new public company. The expected completion date of the spinoff of ZimVie is March 1, 2022. The following discussion and analysis includes these businesses in our discussion of financial condition and results of operations.

EXECUTIVE LEVEL OVERVIEW

Impact of the COVID-19 Global Pandemic

Our results continue to be impacted by the COVID-19 global pandemic. The vast majority of our net sales are derived from products used in elective surgical procedures. As COVID-19 rapidly started to spread throughout the world in early 2020, our net sales decreased dramatically as countries took precautions to prevent the spread of the virus with lockdowns and stay-at-home measures and as hospitals deferred elective surgical procedures. The timing, level and sustainability of the recovery of elective surgical procedures has been difficult to predict, as a number of factors are involved, including which geographies are affected and the different measures governments and healthcare systems take in response to the virus in those areas. In the second half of 2021, the highly transmissible Delta and Omicron variants resulted in further deferrals of elective surgical procedures. Additionally, we believe that staffing shortages at hospitals are also contributing to the deferral of elective surgical procedures.

2021 Financial Highlights

In 2021, our net sales increased by 11.6 percent compared to 2020 primarily due to the significant deferral of elective surgical procedures at the onset of the COVID-19 pandemic in 2020. Our net earnings were $401.6 million in 2021 compared to a net loss of $138.9 million in 2020. In 2021, we returned to profitability compared to a net loss in 2020, primarily due to higher net sales combined with fixed operating costs that did not increase proportionally to the increase in net sales, and a reduction in operating expenses including goodwill and intangible asset impairment charges and certain fixed overhead and hourly production worker labor expenses. In 2020, we recognized $645.0 million of goodwill and intangible asset impairment charges primarily due to the forecasted impact of COVID-19 on our operating results. In the second quarter of 2020, we also temporarily suspended or limited production at certain manufacturing facilities, resulting in additional expense recognized in cost of products sold that related to certain fixed overhead costs and hourly production worker labor expenses that are included in the cost of inventory when these facilities are operating at normal capacity. The additional expense for suspended and limited production continued throughout 2020 and while we did recognize similar charges in 2021, they were lower than the 2020 charges. These reduced expenses in 2021 were partially offset by a charge for the early extinguishment of debt, higher research and development expenses, including certain agreements we entered into to gain access to or acquire third-party in-process R&D projects, higher consulting and professional service expenses related to the planned spinoff of our Spine and Dental businesses, and higher litigation-related charges.

2022 Outlook

We believe the COVID-19 variant surges and continuing staffing shortages that occurred late in 2021 will continue to negatively impact our net sales in 2022. As previously mentioned, we expect to spin off our Spine and Dental businesses on March 1, 2022. We expect to apply discontinued operations accounting after the separation, which will require us to recast our prior period results to reflect both continuing and discontinued operations. Accordingly, it is difficult to provide forward-looking information that is comparable to our historical results until the recasting of prior periods is complete.

RESULTS OF OPERATIONS

We analyze sales by three geographies, the Americas, EMEA and Asia Pacific, and by the following product categories: Knees; Hips; S.E.T.; Spine & Dental; and Other. This sales analysis differs from our reportable operating segments, which are based upon our senior management organizational structure and how we allocate resources towards achieving operating profit goals. We analyze sales by geography because the underlying market trends in any particular geography tend to be similar across product categories and because we primarily sell the same products in all geographies.

Net Sales by Geography

The following tables present net sales by geography and the components of the percentage changes (dollars in millions):

	Year Ended December 31,					
	2021	2020	% Inc	Volume/ Mix	Price	Foreign Exchange
Americas	$4,800.2	$4,335.4	10.7%	11.7%	(1.2)%	0.2%
EMEA	1,671.1	1,391.3	20.1	16.7	(0.3)	3.7
Asia Pacific	1,364.9	1,297.8	5.2	8.9	(5.5)	1.8
Total	$7,836.2	$7,024.5	11.6	12.1	(1.8)	1.3

	Year Ended December 31,					
	2020	2019	% (Dec)	Volume/ Mix	Price	Foreign Exchange
Americas	$4,335.4	$4,875.8	(11.1)%	(7.9)%	(3.1)%	(0.1)%
EMEA	1,391.3	1,746.9	(20.4)	(20.5)	(0.8)	0.9
Asia Pacific	1,297.8	1,359.5	(4.5)	(4.5)	(1.5)	1.5
Total	$7,024.5	$7,982.2	(12.0)	(10.0)	(2.4)	0.4

"Foreign Exchange" used in the tables in this report represents the effect of changes in foreign currency exchange rates on sales.

Net Sales by Product Category

The following tables present net sales by product category and the components of the percentage changes (dollars in millions):

	Year Ended December 31,					
	2021	2020	% Inc	Volume/ Mix	Price	Foreign Exchange
Knees	$2,647.9	$2,378.3	11.3%	12.4%	(2.4)%	1.3%
Hips	1,856.1	1,750.5	6.0	8.2	(3.3)	1.1
S.E.T.	1,727.8	1,525.6	13.3	12.2	(0.3)	1.4
Spine & Dental	1,008.8	897.0	12.5	11.8	(0.3)	1.0
Other	595.6	473.1	25.9	26.7	(1.7)	0.9
Total	$7,836.2	$7,024.5	11.6	12.1	(1.8)	1.3

	Year Ended December 31,					
	2020	2019	% (Dec)	Volume/ Mix	Price	Foreign Exchange
Knees	$2,378.3	$2,780.6	(14.5)%	(12.1)%	(2.7)%	0.3%
Hips	1,750.5	1,931.5	(9.4)	(7.1)	(2.8)	0.5
S.E.T.	1,525.6	1,652.5	(7.7)	(5.9)	(2.1)	0.3
Spine & Dental	897.0	1,021.8	(12.2)	(11.4)	(1.3)	0.5
Other	473.1	595.8	(20.6)	(19.1)	(1.9)	0.4
Total	$7,024.5	$7,982.2	(12.0)	(10.0)	(2.4)	0.4

The following table presents net sales by product category by geography for our Knees and Hips product categories, which represent our most significant product categories (dollars in millions):

	Year Ended December 31,				
	2021	2020	2019	2021 vs. 2020 % Inc/(Dec)	2020 vs. 2019 % Inc/(Dec)
Knees					
Americas	$1,574.2	$1,444.7	$1,645.4	9.0%	(12.2)%
EMEA	588.9	485.6	650.6	21.3	(25.4)
Asia Pacific	484.8	448.0	484.6	8.2	(7.6)
Total	$2,647.9	$2,378.3	$2,780.6	11.3	(14.5)
Hips					
Americas	$ 997.8	$ 941.5	$1,016.3	6.0%	(7.4)%
EMEA	474.0	407.8	499.8	16.2	(18.4)
Asia Pacific	384.3	401.2	415.4	(4.2)	(3.4)
Total	$1,856.1	$1,750.5	$1,931.5	6.0	(9.4)

Demand (Volume/Mix) Trends

Changes in volume and mix of product sales had a positive effect of 12.1 percent on year-over-year sales during the year ended December 31, 2021. Volume trends were positive in 2021 as elective surgical procedures were not as significantly impacted by the COVID-19 pandemic as compared to 2020 when there were significant deferrals at the beginning of the pandemic. However, 2021 did experience periods with higher deferrals of elective surgical procedures, most notably at the beginning of 2021 before vaccines were widely available and during surges of the Delta and Omicron virus variants. Accordingly, net sales in 2021 did not return to the pre-pandemic levels of 2019.

Based upon country dynamics, volume changes varied by region in 2021. The volume increases in 2021 were largely a product of how much the COVID-19 pandemic negatively affected the various regions in 2020. In EMEA, stay-at-home measures were far more prevalent than other geographies in 2020 and therefore volume increases were greater in this region in 2021 as elective surgical procedures resumed. In the Americas, elective surgical procedures in the U.S. varied from state-to-state depending on local infection rates and preventative measures in 2020. In Asia Pacific, containment of the COVID-19 virus varied from country-to-country in 2020, but overall some of our larger markets in this region were not as affected in 2020 as other locations. Additionally, in Asia Pacific in 2021, China sales were negatively impacted from a combination of variables related to the implementation of a nationwide volume-based procurement ("VBP") process. The China VBP had a negative effect on volume due to inventory reductions by distributors and short-term deferral of procedures as patients waited to have a surgical procedure performed until after VBP pricing is effective.

Pricing Trends

Global selling prices had a negative effect of 1.8 percent on year-over-year sales during 2021. In the majority of countries in which we operate, we continue to experience pricing pressure from governmental healthcare cost containment efforts and from local hospitals and health systems. Pricing in 2021 was also negatively affected by the anticipated China VBP implementation due to ongoing pricing negotiations with distributor partners.

Foreign Currency Exchange Rates

In 2021, changes in foreign currency exchange rates had a positive effect of 1.3 percent on year-over-year sales. If foreign currency exchange rates remain at levels consistent with recent rates, we estimate they will have a negative impact of approximately 2.0 percent on sales in 2022 for the full year.

Estimated Market Trends

The following table presents estimated* 2021 global market information (dollars in billions):

	Global Market Size**	Global Historic Market % Growth***	Zimmer Biomet Market Position**
Knees	$10	Low-Single Digit	1
Hips	8	Low-Single Digit	1
S.E.T.	25	Mid-Single Digit	N/A
Spine	12	Low-Single Digit	6
Dental	8	Mid-Single Digit	5

* Estimates are not precise and are based on competitor annual filings, Wall Street equity research and Company estimates
** Only includes the subsegments in these markets in which we compete
*** Represents historic growth in recent years, absent the effects of the COVID-19 pandemic, and excludes the effect of changes in foreign currency exchange rates on sales growth
N/A In these product categories, due to the breadth of subcategories and since some major competitors are privately owned, it is difficult to determine our exact position.

Expenses as a Percent of Net Sales

	Year Ended December 31,				
	2021	2020	2019	2021 vs. 2020 Inc/(Dec)	2020 vs. 2019 Inc/(Dec)
Cost of products sold, excluding intangible asset amortization	29.9%	30.3%	28.2%	(0.4)%	2.1%
Intangible asset amortization	7.9	8.5	7.3	(0.6)	1.2
Research and development	6.3	5.3	5.6	1.0	(0.3)
Selling, general and administrative	42.4	45.2	41.9	(2.8)	3.3
Goodwill and intangible asset impairment	0.2	9.2	0.9	(9.0)	8.3
Restructuring and other cost reduction initiatives	1.6	1.7	0.6	(0.1)	1.1
Quality remediation	0.7	0.7	1.0	–	(0.3)
Acquisition, integration, divestiture and related	1.0	0.3	0.2	0.7	0.1
Operating Profit (Loss)	10.0	(1.2)	14.2	11.2	(15.4)

Cost of Products Sold and Intangible Asset Amortization

We calculate gross profit as net sales minus cost of products sold and intangible asset amortization. Our gross margin percentage is gross profit divided by net sales. The following table sets forth the factors that contributed to the gross margin changes in each of 2021 and 2020 compared to the prior year:

	Year Ended December 31,	
	2021	2020
Prior year gross margin	61.2%	64.5%
Lower average selling prices	(0.5)	(0.7)
Average cost per unit	(0.4)	0.4
Excess and obsolete inventory charges	1.0	(0.5)
Discontinued products inventory charges	0.3	(0.4)
Royalties	0.1	0.1
Impact of foreign currency hedges	(0.7)	0.2
Temporarily suspended or limited production	0.8	(1.2)
Intangible asset amortization	0.6	(1.2)
Other	(0.1)	–
Current year gross margin	62.3%	61.2%

The increase in gross margin percentage in 2021 compared to 2020 was primarily due to lower excess and obsolete inventory charges and lower impact from intangible asset amortization as well as the fact that 2020 had higher charges from certain fixed overhead costs and hourly production worker labor expenses when we temporarily suspended or limited production at certain manufacturing facilities. Intangible asset amortization and excess and obsolete inventory charges did not increase ratably with the increase our net sales in 2021 and therefore were a positive impact to our gross margin percentage. These favorable items were partially offset by hedge losses recognized in the current year as part of our hedging program compared to hedge gains in the prior year, and lower average selling prices.

Operating Expenses

Research & development ("R&D") expenses increased in both amount and as a percentage of net sales in 2021 compared to 2020 primarily due to reengaging in R&D projects in 2021, including the implementation of the European Union Medical Device Regulation ("EU MDR"), compared to 2020 when COVID-19 caused delays in project spending. In addition to reengaging in projects, in 2021 we also entered into certain agreements to gain access to or acquire third-party in-process R&D projects that resulted in charges of $65.0 million.

Selling, general & administrative ("SG&A") expenses increased in 2021 compared to 2020, but decreased as a percentage of net sales. SG&A expenses increased primarily due to higher variable selling and distribution costs related to increased net sales, higher performance-based compensation in the current year as similar costs were reduced in the prior year due to the effect COVID-19 had on our operating results, higher litigation-related charges, and increased travel and medical training and education costs as we have partially resumed these activities. Despite the increase in SG&A expenses, SG&A as a percentage of net sales declined in 2021 when compared to 2020 as our SG&A expenses included many fixed costs that did not increase ratably with the increase in net sales in the 2021 period.

In 2021, we recognized an intangible asset impairment charge of $16.3 million. In 2020, we recognized goodwill and intangible asset impairment charges of $645.0 million, including charges of $470.0 million and $142.0 million related to our EMEA and Dental reporting units, respectively, in the first quarter of 2020. For more information regarding these charges, see Note 11 to our consolidated financial statements.

In December 2021, our management approved a restructuring program to reorganize our operations in preparation for the planned spinoff of ZimVie with an objective of reducing costs. In December 2019, our Board of Directors approved, and we initiated, a restructuring program with an objective of reducing costs to allow us to invest in higher priority growth opportunities. We recognized expenses of $129.1 million and $116.9 million in the years ended December 31, 2021 and 2020, respectively, attributable to restructuring and other cost reduction initiatives, primarily related to employee termination benefits, sales agent contract terminations, and consulting and project management expenses associated with these programs. For more information regarding these expenses, see Note 4 to our consolidated financial statements.

Our quality remediation expenses increased slightly to $53.1 million in 2021 compared to $50.9 million in 2020.We continue to incur quality remediation expenses to complete our remediation milestones that address inspectional observations on Form 483 and a Warning Letter issued by the FDA at our Warsaw North Campus facility, among other matters.

Acquisition, integration, divestiture and related expenses increased to $79.8 million in 2021 compared to $23.8 million in 2020 due primarily to consulting and other professional service expenses related to the planned spinoff of our Spine and Dental businesses and integration expenses related to the acquisitions made in 2020.

Other Income (Expense), net, Interest Expense, net, Loss on Early Extinguishment of Debt and Income Taxes

In 2021, our other income, net was lower than in 2020 primarily due to losses recognized from changes to the fair value of our equity investments in 2021 compared to gains recognized in the prior year and lower pension-related gains recognized in 2021 compared to 2020.

Interest expense, net, decreased in 2021 when compared to 2020 primarily due to debt paydown and fixed-to-variable interest rate swaps we entered into in 2021.

In 2021, we recognized a $165.1 million loss on the early extinguishment of debt. See Note 13 to our consolidated financial statements for additional information on this loss.

Our effective tax rate ("ETR") on earnings before income taxes was 3.9 percent and 49.9 percent for the years ended December 31, 2021 and 2020, respectively. In 2021, this was primarily driven by the foreign rate differential as our foreign locations have lower tax rates and favorable return-to-provision changes in estimate offset by unfavorable tax rate changes.

In 2020, the income tax benefit was driven by changes in estimates to uncertain tax positions, favorable tax audit settlements, jurisdictional mix of earnings and losses, and a $43.0 million tax benefit from Switzerland's Federal Act on Tax Reform and AHV Financing ("TRAF"). Other significant impacts to the ETR in 2020 included the $612.0 million goodwill impairment charge, which resulted in a loss before taxes, but had no corresponding tax benefit.

Absent discrete tax events, we expect our future ETR will be lower than the U.S. corporate income tax rate of 21.0 percent due to our mix of earnings between U.S. and foreign locations, which have lower corporate income tax rates. Our ETR in future periods could also potentially be impacted by: changes in our mix of pre-tax earnings; changes in tax rates, tax laws or their interpretation, including the European Union rules on state aid; the outcome of various federal, state and foreign audits; and the expiration of certain statutes of limitations. Currently, we cannot reasonably estimate the impact of these items on our financial results.

Segment Operating Profit

	Net Sales			Operating Profit			Operating Profit as a Percentage of Net Sales		
	Year Ended December 31,			Year Ended December 31,			Year Ended December 31,		
(dollars in millions)	2021	2020	2019	2021	2020	2019	2021	2020	2019
Americas Orthopedics	$4,102.1	$3,699.5	$4,148.8	$1,709.3	$1,528.2	$1,831.8	41.7%	41.3%	44.2%
EMEA	1,533.8	1,288.6	1,623.1	392.7	308.9	484.0	25.6	24.0	29.8
Asia Pacific	1,318.3	1,256.9	1,323.8	429.4	420.5	472.7	32.6	33.5	35.7
Americas Spine and Global Dental	882.0	779.5	886.5	136.0	105.6	150.9	15.4	13.5	17.0

In 2021, the Americas Orthopedics, EMEA and Americas Spine and Global Dental operating segments' operating profit and operating profit as a percentage of net sales increased when compared to 2020 due the recovery of elective surgical procedures when compared to the deferrals that occurred during the onset of the COVID-19 pandemic in 2020. These operating segments have various fixed costs that do not fluctuate proportionally to net sales changes, which results in improved operating profit as a percentage of net sales as net sales increase. In the Asia Pacific operating segment, while operating profit increased due to higher net sales in 2021 when compared to 2020, operating profit as a percentage of net sales decreased. The decrease in operating profit as a percentage of net sales was primarily due the effect of the China VBP which had a significant negative effect on pricing in 2021 without a corresponding reduction in cost of products sold. In addition, the amount of our foreign currency exchange rate hedge gains recognized in this operating segment in 2021 was lower than the amount recognized in 2020.

Non-GAAP Operating Performance Measures

We use financial measures that differ from financial measures determined in accordance with GAAP to evaluate our operating performance. These non-GAAP financial measures exclude, as applicable, certain inventory and manufacturing-related charges including charges to discontinue certain product lines; intangible asset amortization; goodwill and intangible asset impairment; restructuring and other cost reduction initiative expenses; quality remediation expenses; acquisition, integration, divestiture and related expenses; certain litigation gains and charges; expenses to establish initial compliance with the EU MDR; expenses related to certain R&D agreements; loss on early extinguishment of debt; other charges; any related effects on our income tax provision associated with these items; the effect of Switzerland tax reform; other certain tax adjustments; and, with respect to earnings per share information, provide for the effect of dilutive shares assuming net earnings in a period of a reported net loss. We use these non-GAAP financial measures internally to evaluate the performance of the business. Additionally, we believe these non-GAAP measures provide meaningful incremental information to investors to consider when evaluating our performance. We believe these measures offer the ability to make period-to-period comparisons that are not impacted by certain items that can cause dramatic changes in reported income but that do not impact the fundamentals of our operations. The non-GAAP measures enable the evaluation of operating results and trend analysis by allowing a reader to better identify operating trends that may otherwise be masked or distorted by these types of items that are excluded from the non-GAAP measures. In addition, adjusted diluted earnings per share is used as a performance metric in our incentive compensation programs.

The following are reconciliations from our GAAP net earnings and diluted earnings per share to our non-GAAP adjusted net earnings and non-GAAP adjusted diluted earnings per share used for internal management purposes (in millions, except per share amounts):

	Year ended December 31,		
	2021	2020	2019
Net Earnings (Loss) of Zimmer Biomet Holdings, Inc.	$ 401.6	$ (138.9)	$1,131.6
Inventory and manufacturing-related charges[1]	41.8	54.2	53.9
Intangible asset amortization[2]	615.7	597.6	584.3
Goodwill and intangible asset impairment[3]	16.3	645.0	70.1
Restructuring and other cost reduction initiatives[4]	130.5	116.9	50.0
Quality remediation[5]	53.2	49.8	87.6
Acquisition, integration, divestiture and related[6]	81.8	23.8	12.2
Litigation[7]	192.9	159.8	65.0
Litigation settlement gain[8]	–	–	(23.5)
European Union Medical Device Regulation[9]	46.5	25.3	30.9
Certain R&D agreements[10]	65.0	–	–
Loss on early extinguishment of debt[11]	165.1	–	–
Other charges[12]	11.9	10.7	119.2
Taxes on above items [13]	(292.6)	(253.4)	(226.2)
Swiss tax reform [14]	30.1	(5.0)	(315.0)
Other certain tax adjustments [15]	(9.8)	(104.2)	(13.7)
Adjusted Net Earnings	$1,550.0	$1,181.6	$1,626.4

	Year ended December 31,		
	2021	2020	2019
Diluted Earnings (Loss) per share	$ 1.91	$(0.67)	$ 5.47
Inventory and manufacturing-related charges[1]	0.20	0.26	0.26
Intangible asset amortization[2]	2.93	2.89	2.83
Goodwill and intangible asset impairment[3]	0.08	3.12	0.34
Restructuring and other cost reduction initiatives[4]	0.62	0.56	0.24
Quality remediation[5]	0.25	0.24	0.42
Acquisition, integration, divestiture and related[6]	0.39	0.12	0.06
Litigation[7]	0.92	0.77	0.31
Litigation settlement gain[8]	–	–	(0.11)
European Union Medical Device Regulation[9]	0.22	0.12	0.15
Certain R&D agreements[10]	0.31	–	–
Loss on early extinguishment of debt[11]	0.78	–	–
Other charges[12]	0.06	0.05	0.58
Taxes on above items [13]	(1.39)	(1.22)	(1.09)
Swiss tax reform [14]	0.14	(0.03)	(1.52)
Other certain tax adjustments [15]	(0.05)	(0.50)	(0.07)
Effect of dilutive shares assuming net earnings[16]	–	(0.04)	–
Adjusted Diluted EPS	$ 7.37	$ 5.67	$ 7.87

[1] Inventory and manufacturing-related charges include excess and obsolete inventory charges on certain product lines we intend to discontinue, incremental cost of products sold from stepping up inventory to its fair value from its manufactured cost in business combination accounting and other inventory and manufacturing-related charges or gains.

[2] We exclude intangible asset amortization as well as deferred tax rate changes on our intangible assets from our non-GAAP financial measures because we internally assess our performance against our peers without this amortization. Due to various levels of acquisitions among our peers, intangible asset amortization can vary significantly from company to company.

[3] In the first quarter of 2020, we recognized goodwill impairment charges of $470.0 million and $142.0 million related to our EMEA and Dental reporting units, respectively. In the second quarters of 2021 and 2020, we recognized $16.3 million and $33.0 million, respectively, of in-process research and development ("IPR&D") intangible asset impairments on certain IPR&D projects.

[4] In 2019 and 2021, we initiated global restructuring programs that include a reorganization of key businesses and an overall effort to reduce costs in order to accelerate decision-making, focus the organization on priorities to drive growth and to prepare for the planned spinoff of ZimVie. Restructuring and other cost reduction initiatives also include other cost reduction initiatives that have the goal of reducing costs across the organization. The costs include employee termination benefits; contract terminations for facilities and sales agents; and other charges, such as retention period salaries and benefits and relocation costs.

[5] We are addressing inspectional observations on Form 483 and a Warning Letter issued by the U.S. Food and Drug Administration ("FDA") following its previous inspections of our Warsaw North Campus facility, among other matters. This quality remediation has required us to devote significant financial resources and is for a discrete period of time. The majority of the expenses are related to consultants who are helping us to update previous documents and redesign certain processes.

[6] The acquisition, integration, divestiture and related net expenses we have excluded from our non-GAAP financial measures included costs from the planned spinoff of ZimVie (our Spine and Dental businesses) of $66.2 million and costs from various acquisitions.

[7] We are involved in routine patent litigation, product liability litigation, commercial litigation and other various litigation matters. We review litigation matters from both a qualitative and quantitative perspective to determine if excluding the losses or gains will provide our investors with useful incremental information. Litigation matters can vary in their characteristics, frequency and significance to our operating results. The litigation charges and gains excluded from our non-GAAP financial measures in the periods presented relate to product liability matters where we have received numerous claims on specific products, patent litigation and commercial litigation related to a common matter in multiple jurisdictions. In regards to the product liability matters, due to the complexities involved and claims filed in multiple districts, the expenses associated with these matters are significant to our operating results. Once the litigation matter has been excluded from our non-GAAP financial measures in a particular period, any additional expenses or gains from changes in estimates are also excluded, even if they are not significant, to ensure consistency in our non-GAAP financial measures from period-to-period.

[8] In the first quarter of 2019, we settled a patent infringement lawsuit out of court, and the other party agreed to pay us an upfront, lump-sum amount for a non-exclusive license to the patent.

[9] The European Union Medical Device Regulation imposes significant additional premarket and postmarket requirements. The new regulations provided a transition period until May 2021 for previously-approved medical devices to meet the additional requirements. For certain devices, this transition period can be extended until May 2024. We are excluding from our non-GAAP financial measures the incremental costs incurred to establish initial compliance with the regulations related to our previously-approved medical devices. The incremental costs primarily include temporary personnel and third-party professionals necessary to supplement our internal resources.

[10] During the year ended December 31, 2021, we entered into certain agreements to gain access to or acquire third-party IPR&D projects.

[11] We recognized a loss on early extinguishment of debt during the year ended December 31, 2021, as a result of cash tender offers for certain outstanding series of senior notes.

[12] We have incurred other various expenses from specific events or projects that we consider highly variable or that have a significant impact to our operating results that we have excluded from our non-GAAP measures. These include costs related to legal entity, distribution and manufacturing optimization, including contract terminations, gains and losses from changes in fair value on our equity investments, as well as, in the 2020 and 2019 periods, our costs of complying with a Deferred Prosecution Agreement ("DPA") with the U.S. government related to certain Foreign

Corrupt Practices Act matters involving Biomet and certain of its subsidiaries, which DPA concluded in February 2021.
(13) Represents the tax effects on the previously specified items, including the deferred tax rate changes on intangible assets. The tax effect for the U.S. jurisdiction is calculated based on an effective rate considering federal and state taxes, as well as permanent items. For jurisdictions outside the U.S., the tax effect is calculated based upon the statutory rates where the items were incurred.
(14) We recognized a tax benefit related to TRAF in addition to an impact from certain restructuring transactions in Switzerland. Also included are tax adjustments relating to the ongoing impacts of tax only amortization resulting from TRAF as well as certain restructuring transactions in Switzerland.
(15) Other certain tax adjustments relate to various discrete tax period adjustments. In 2021, the adjustments were primarily related to tax reform planning. In 2020, the adjustments were primarily related to the resolution of or changes in estimates of significant uncertain tax positions as a result of settlements or favorable rulings. In 2019, the adjustments were primarily related to changes in tax rates on deferred tax liabilities recorded on intangible assets recognized in acquisition-related accounting and adjustments from internal restructuring transactions that provide us access to offshore funds in a tax efficient manner.
(16) Due to the reported net loss for 2020, the effect of dilutive shares assuming net earnings is shown as an adjustment. Diluted share count used in Adjusted Diluted EPS is (in millions):

	Year ended December 31, 2020
Diluted shares	207.0
Dilutive shares assuming net earnings	1.4
Adjusted diluted shares	208.4

LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 2021, we had $478.5 million in cash and cash equivalents. In addition, we had $1.0 billion available to borrow under a 364-day revolving credit agreement that matures on August 19, 2022, and $1.5 billion available under a five-year revolving facility that matures on August 20, 2026. The terms of the 364-day revolving credit agreement and the 2021 five-year revolving facility are described further in Note 13 to our consolidated financial statements.

At the ZimVie spinoff date, we expect to receive approximately $500 million from ZimVie as partial consideration for the contribution of assets in connection with the separation. Additionally, we will retain 19.7 percent of the outstanding shares of ZimVie common stock after the separation. We intend to dispose of all of the ZimVie common stock after the distribution by exchanging such ZimVie common stock for Zimmer Biomet debt obligations over time.

We believe that cash flows from operations, our cash and cash equivalents on hand, cash received from the spinoff of ZimVie and available borrowings under our revolving credit facilities will be sufficient to meet our ongoing liquidity requirements for at least the next twelve months. However, due to the continued uncertainties related to the COVID-19 pandemic, it is possible our needs may change. Further, there can be no assurance that, if needed, we will be able to secure additional financing on terms favorable to us, if at all.

Sources of Liquidity

Cash flows provided by operating activities were $1,499.2 million in 2021 compared to $1,204.5 million and $1,585.8 million in 2020 and 2019, respectively. The increase in cash flows from operating activities in 2021 when compared to 2020 was primarily the result of higher net earnings in the 2021 period. Additionally, in 2020 we terminated our accounts receivable purchase arrangements in the U.S. and Japan which we estimate negatively impacted operating cash flows by approximately $300 million.

Cash flows used in investing activities were $503.6 million in 2021 compared to $613.8 million and $729.3 million in 2020 and 2019, respectively. Instrument and property, plant and equipment additions reflected ongoing investments in our product portfolio and optimization of our manufacturing and logistics network. In order to preserve cash, we prioritized investments in 2020 which resulted in lower investments in property, plant and equipment. As further discussed in Note 10 to our consolidated financial statements, we made various acquisitions in 2020 requiring initial cash outlays of $235.5 million, net of acquired cash.

Cash flows used in financing activities were $1,306.0 million in 2021. In 2021, we issued senior notes and received $1,599.8 million in proceeds, which, along with cash on hand, were used to extinguish $1,993.2 million aggregate outstanding principal amount of our senior notes pursuant to cash tender offers for certain outstanding series of our senior notes, at a total reacquisition price of $2,154.8 million. Additionally, we used cash on hand to redeem $500.0 million of other senior notes that matured in 2021. We also had deferred business combination payments of $145.0 million that were paid in 2021 under the terms of the purchase agreements.

Cash flows used in financing activities were $421.8 million in 2020. In 2020, we issued senior notes and received $1,497.1 million in proceeds, which were used to pay our $1,500.0 million senior notes at maturity on April 1, 2020. Additionally, with cash flows generated from operations, in 2020 we redeemed $250.0 million of our floating rate senior notes that matured on March 19, 2021. Further, the termination of certain accounts receivable purchase arrangements in 2020 resulted in $54.6 million of financing cash outflows to the purchasing financial institutions. These outflows represent the amount of unremitted cash that we had collected on sold accounts receivable as of December 31, 2019 that was repaid in 2020.

We place our cash and cash equivalents in highly-rated financial institutions and limit the amount of credit exposure to any one entity. We invest only in high-quality financial instruments in accordance with our internal investment policy.

As of December 31, 2021, $450.2 million of our cash and cash equivalents were held in jurisdictions outside of the U.S. Of this amount, $58.0 million is denominated in U.S. Dollars and, therefore, bears no foreign currency translation risk. The balance of these assets is denominated in currencies of the various countries where we operate. We intend to repatriate $5.0 to $6.0 billion of unremitted earnings in future years.

Material Cash Requirements from Known Contractual and Other Obligations

At December 31, 2021, we had outstanding debt of $7,068.8 million, of which $1,605.1 million was classified as current debt. Of our current debt, $750.0 million of senior notes mature on April 1, 2022, $286.5 million of Japanese Yen

denominated term loans mature on September 27, 2022, and $568.6 million of Euro denominated senior notes mature on December 13, 2022. We believe we can satisfy these debt obligations with cash generated from our operations, cash received from the spinoff of ZimVie, by issuing new debt, and/or by borrowing on our revolving credit facilities. We also estimate our interest payments will be $163.0 million in 2022 and continue to decline annually thereafter assuming we continue to pay down our debt as it matures and incur no additional borrowings.

For additional information on our debt, including types of debt, maturity dates, interest rates, debt covenants and available revolving credit facilities, see Note 13 to our consolidated financial statements.

In February, May, August and December 2021, our Board of Directors declared cash dividends of $0.24 per share. We expect to continue paying cash dividends on a quarterly basis; however, future dividends are subject to approval of the Board of Directors and may be adjusted as business needs or market conditions change.

In February 2016, our Board of Directors authorized a $1.0 billion share repurchase program effective March 1, 2016, with no expiration date. As of December 31, 2021, all $1.0 billion remained authorized.

As discussed in Note 4 to our consolidated financial statements, we have a 2021 Restructuring Plan and a 2019 Restructuring Plan. The 2021 Restructuring Plan is expected to result in total pre-tax restructuring charges of approximately $240 million, of which approximately $30 million was incurred through December 31, 2021. We expect to reduce gross annual pre-tax operating expenses by approximately $210 million relative to the 2021 baseline expenses by the end of 2024 as program benefits under the 2021 Restructuring Plan are realized. The 2019 Restructuring Plan is expected to result in total pre-tax restructuring charges of approximately $350 million to $400 million, of which approximately $225 million was incurred through December 31, 2021. We expect to reduce gross annual pre-tax operating expenses by approximately $200 million to $300 million relative to the 2019 baseline expenses by the end of 2023 as program benefits under the 2019 Restructuring Plan are realized.

As discussed in Note 17 to our consolidated financial statements, the IRS has issued proposed adjustments for years 2010 through 2012, as well as proposed adjustments for years 2013 through 2015, reallocating profits between certain of our U.S. and foreign subsidiaries. We have disputed these proposed adjustments and intend to continue to vigorously defend our positions. Although the ultimate timing for resolution of the disputed tax issues is uncertain, future payments may be significant to our operating cash flows.

Under the Tax Cuts and Jobs Act of 2017, we have a $215.3 million liability remaining from a one-time tax on the mandatory deemed repatriation of post-1986 untaxed foreign earnings and profits ("toll charge") for the deemed repatriation of unremitted foreign earnings. This amount was recorded in non-current income tax liabilities on our consolidated balance sheet as of December 31, 2021.

As discussed in Note 21 to our consolidated financial statements, we are involved in various litigation matters. We estimate the total liabilities for all litigation matters was $420.5 million as of December 31, 2021. We expect to pay these liabilities over the next few years.

In the normal course of business, we enter into purchase commitments, primarily related to raw materials. However, we do not believe these purchase commitments are material to the overall standing of our business or our liquidity.

We have entered into various agreements that may result in future payments dependent upon various events such as the achievement of certain product R&D milestones, sales milestones, or, at our discretion, maintenance of exclusive rights to distribute a product. These estimated payments related to these agreements could range from $0 to $365 million.

CRITICAL ACCOUNTING ESTIMATES

The preparation of our financial statements is affected by the selection and application of accounting policies and methods, and also requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Critical accounting estimates are those that involve a significant level of estimation uncertainty and have had or are reasonably likely to have a material impact on our financial condition and results of operations. We believe that the accounting estimates and assumptions described below involve significant subjectivity and judgment, and changes to such estimates or assumptions could have a material impact on our financial condition or operating results.

Excess Inventory and Instruments—We must determine as of each balance sheet date how much, if any, of our inventory may ultimately prove to be unsaleable or unsaleable at our carrying cost. Similarly, we must also determine if instruments on hand will be put to productive use or remain undeployed as a result of excess supply. Accordingly, inventory and instruments are written down to their net realizable value. To determine the appropriate net realizable value, we evaluate current stock levels in relation to historical and expected patterns of demand for all of our products and instrument systems and components. The basis for the determination is generally the same for all inventory and instrument items and categories except for work-in-process inventory, which is recorded at cost. Obsolete or discontinued items are generally destroyed and completely written off. Management evaluates the need for changes to the net realizable values of inventory and instruments based on market conditions, competitive offerings and other factors on a regular basis.

Income Taxes—Our income tax expense, deferred tax assets and liabilities and reserves for unrecognized tax benefits reflect management's best assessment of estimated future taxes to be paid. We are subject to income taxes in the U.S. and numerous foreign jurisdictions. Significant judgments and estimates are required in determining the consolidated income tax expense.

We estimate income tax expense and income tax liabilities and assets by taxable jurisdiction. Realization of deferred tax assets in each taxable jurisdiction is dependent on our ability to generate future taxable income sufficient to realize the benefits. We evaluate deferred tax assets on an ongoing basis and provide valuation allowances unless we determine it is "more likely than not" that the deferred tax benefit will be realized.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations in a multitude of jurisdictions across our global operations. We are subject to regulatory review or audit in virtually all of those jurisdictions and those reviews and audits may require extended periods of time to resolve. We record our income tax provisions based on our knowledge of all relevant facts and circumstances, including existing tax laws, our experience with previous settlement agreements, the status of current examinations and our understanding of how the tax authorities view certain relevant industry and commercial matters.

We recognize tax liabilities in accordance with the Financial Accounting Standards Board ("FASB") guidance on income taxes and we adjust these liabilities when our judgment changes as a result of the evaluation of new information not previously available. Due to the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from our current estimate of the tax liabilities. These differences will be reflected as increases or decreases to income tax expense in the period in which they are determined.

Commitments and Contingencies—We are involved in various ongoing proceedings, legal actions and claims arising in the normal course of doing business, including litigation related to product, labor and intellectual property. We establish liabilities for loss contingencies when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. Accruals for product liability and other claims are established with the assistance of internal and external legal counsel based on current information and historical settlement information for claims, related legal fees and for claims incurred but not reported.

Goodwill and Intangible Assets—We evaluate the carrying value of goodwill and indefinite life intangible assets annually, or whenever events or circumstances indicate that the fair value is below its carrying amount. We evaluate the carrying value of finite life intangible assets whenever events or circumstances indicate the carrying value may not be recoverable. Significant assumptions are required to estimate the fair value of goodwill and intangible assets, most notably estimated future cash flows generated by these assets and risk-adjusted discount rates. As such, these fair value measurements use significant unobservable inputs. Changes to these assumptions could require us to record impairment charges on these assets.

In our annual impairment test in the fourth quarter of 2021, all our reporting units exceeded their carrying values by more than 20 percent. Fair value was determined using income and market approaches. Fair value under the income approach was determined by discounting to present value the estimated future cash flows of the reporting units. Significant assumptions are incorporated into the income approach, such as estimated growth rates, forecasted operating expenses and risk-adjusted discount rates. Fair value under the market approach utilized the guideline public company methodology, which uses valuation indicators determined from other businesses that are similar to our reporting units.

Future impairment in our reporting units could occur if the estimates used in the income and market approaches change. If our estimates of profitability in the reporting unit decline, the fair value estimate under the income approach will decline. Additionally, changes in the broader economic environment could cause changes to our estimated discount rates and comparable company valuation indicators, which may impact our estimated fair values. Further, changes in foreign currency exchange rates could increase the cost of procuring inventory and services from foreign suppliers, which could reduce reporting unit profitability.

As previously discussed, we expect to spin off our Spine and Dental businesses effective March 1, 2022. At the separation date, we will be required to compare the carrying value of the assets disposed of in the spinoff to their fair value, and recognize impairment if the assets' carrying value exceeds their fair value. This impairment test is different than the test performed while these assets are being held and used. The impairment test while the assets are being held and used is an undiscounted cash flows recoverability test while the separation date test is done at fair value, which may be estimated using discounted cash flows. Therefore, the difference in impairment testing between assets being held and used and assets being disposed of could result in us recording an impairment charge at the separation date.

RECENT ACCOUNTING PRONOUNCEMENTS

See Note 2 to our consolidated financial statements for information on how recent accounting pronouncements have affected or may affect our financial position, results of operations or cash flows.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

MARKET RISK

We are exposed to certain market risks as part of our ongoing business operations, including risks from changes in foreign currency exchange rates, interest rates and commodity prices that could affect our financial condition, results of operations and cash flows. We manage our exposure to these and other market risks through regular operating and financing activities and through the use of derivative financial instruments. We use derivative financial instruments solely as risk management tools and not for speculative investment purposes.

FOREIGN CURRENCY EXCHANGE RISK

We operate on a global basis and are exposed to the risk that our financial condition, results of operations and cash flows could be adversely affected by changes in foreign

currency exchange rates. We are primarily exposed to foreign currency exchange rate risk with respect to transactions and net assets denominated in Euros, Swiss Francs, Japanese Yen, British Pounds, Canadian Dollars, Australian Dollars, Korean Won, Swedish Krona, Czech Koruna, Thai Baht, Taiwan Dollars, South African Rand, Russian Rubles, Indian Rupees, Turkish Lira, Polish Zloty, Danish Krone, and Norwegian Krone. We manage the foreign currency exposure centrally, on a combined basis, which allows us to net exposures and to take advantage of any natural offsets. To reduce the uncertainty of foreign currency exchange rate movements on transactions denominated in foreign currencies, we enter into derivative financial instruments in the form of foreign currency exchange forward contracts with major financial institutions. These forward contracts are designed to hedge anticipated foreign currency transactions, primarily intercompany sale and purchase transactions, for periods consistent with commitments. Realized and unrealized gains and losses on these contracts that qualify as cash flow hedges are temporarily recorded in accumulated other comprehensive income, then recognized in cost of products sold when the hedged item affects net earnings.

For contracts outstanding at December 31, 2021, we had obligations to purchase U.S. Dollars and sell Euros, Japanese Yen, British Pounds, Canadian Dollars, Australian Dollars, Korean Won, Swedish Krona, Czech Koruna, Thai Baht, Taiwan Dollars, South African Rand, Russian Rubles, Indian Rupees, Turkish Lira, Polish Zloty, Danish Krone, and Norwegian Krone and purchase Swiss Francs and sell U.S. Dollars at set maturity dates ranging from January 2022 through June 2024. The notional amounts of outstanding forward contracts entered into with third parties to purchase U.S. Dollars at December 31, 2021 were $1,295.2 million. The notional amounts of outstanding forward contracts entered into with third parties to purchase Swiss Francs at December 31, 2021 were $347.0 million.

We maintain written policies and procedures governing our risk management activities. Our policy requires that critical terms of hedging instruments be the same as hedged forecasted transactions. On this basis, with respect to cash flow hedges, changes in cash flows attributable to hedged transactions are generally expected to be offset by changes in the fair value of hedge instruments. As part of our risk management program, we also perform sensitivity analyses to assess potential changes in revenue, operating results, cash flows and financial position relating to hypothetical movements in currency exchange rates. A sensitivity analysis of changes in the fair value of foreign currency exchange forward contracts outstanding at December 31, 2021 indicated that, if the U.S. Dollar uniformly strengthened or weakened in value by 10 percent relative to all currencies, with no change in the interest differentials, the fair value of those contracts would affect earnings in a range of a decrease of approximately $98 million to an increase of approximately $91 million before income taxes in periods through June 2024.

Any change in the fair value of foreign currency exchange forward contracts as a result of a fluctuation in a currency exchange rate is expected to be largely offset by a change in the value of the hedged transaction. Consequently, foreign currency exchange contracts would not subject us to material risk due to exchange rate movements because gains and losses on these contracts offset gains and losses on the assets, liabilities and transactions being hedged.

We had net assets, excluding goodwill and intangible assets, in legal entities with non-U.S. Dollar functional currencies of $1,442.8 million at December 31, 2021.

We enter into foreign currency forward exchange contracts with terms of one to three months to manage currency exposures for monetary assets and liabilities denominated in a currency other than an entity's functional currency. As a result, foreign currency remeasurement gains/losses recognized in earnings are generally offset with gains/losses on the foreign currency forward exchange contracts in the same reporting period.

For details about these and other financial instruments, including fair value methodologies, see Note 15 to our consolidated financial statements.

COMMODITY PRICE RISK

We purchase raw material commodities such as cobalt chrome, titanium, tantalum, polymer and sterile packaging. We enter into supply contracts generally with terms of 12 to 24 months, where available, on these commodities to alleviate the effect of market fluctuation in prices. As part of our risk management program, we perform sensitivity analyses related to potential commodity price changes.

INTEREST RATE RISK

In the normal course of business, we are exposed to market risk from changes in interest rates that could affect our results of operations and financial condition. We manage our exposure to interest rate risks through our regular operations and financing activities.

We invest our cash and cash equivalents primarily in highly-rated corporate commercial paper and bank deposits. The primary investment objective is to ensure capital preservation. Currently, we do not use derivative financial instruments in our investment portfolio.

The majority of our debt is fixed-rate debt and therefore is not exposed to changes in interest rates. Based upon our overall interest rate exposure as of December 31, 2021, a change of 10 percent in interest rates, assuming the principal amount outstanding remains constant, would not have a material effect on interest expense, net. This analysis does not consider the effect of the change in the level of overall economic activity that could exist in such an environment.

CREDIT RISK

Financial instruments, which potentially subject us to concentrations of credit risk, are primarily cash and cash equivalents, derivative instruments and accounts receivable.

We place our cash and cash equivalents and enter into derivative transactions with highly-rated financial institutions and limit the amount of credit exposure to any one entity. We believe we do not have any significant credit risk on our cash and cash equivalents or derivative instruments.

Our concentrations of credit risks with respect to trade accounts receivable is limited due to the large number of customers and their dispersion across a number of geographic areas and by frequent monitoring of the creditworthiness of the customers to whom credit is granted in the normal course of business. Substantially all of our trade receivables are concentrated in the public and private hospital and healthcare industry in the U.S. and internationally or with distributors or dealers who operate in international markets and, accordingly, are exposed to their respective business, economic and country specific variables. Our ability to collect accounts receivable in some countries depends in part upon the financial stability of these hospital and healthcare sectors and the respective countries' national economic and healthcare systems. Most notably, in Europe healthcare is typically sponsored by the government. Since we sell products to public hospitals in those countries, we are indirectly exposed to government budget constraints and price reduction initiatives. To the extent the respective governments' ability to fund their public hospital programs deteriorates, we may have to record significant bad debt expenses in the future.

While we are exposed to risks from the broader healthcare industry in Europe and around the world, there is no significant net exposure due to any individual customer. Exposure to credit risk is controlled through credit approvals, credit limits and monitoring procedures, and we believe that reserves for losses are adequate.

Item 8. **Financial Statements and Supplementary Data**

Zimmer Biomet Holdings, Inc.
Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Zimmer Biomet Holdings, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Zimmer Biomet Holdings, Inc. and its subsidiaries (the "Company") as of December 31, 2021 and 2020, and the related consolidated statements of earnings, of comprehensive income (loss), of stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2021, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2021 appearing under Item 15(a)(2) (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 Annual 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 matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate 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 matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Goodwill Impairment Assessment – EMEA, Dental and Americas CMFT Reporting Units

As described in Notes 2 and 11 to the consolidated financial statements, the Company's consolidated goodwill balance was $9,192.2 million as of December 31, 2021, and the goodwill associated with the EMEA reporting unit, Dental reporting unit, and Americas CMFT reporting unit, was $317.3 million, $267.8 million and $290.9 million, respectively. Management performs an impairment test in the fourth quarter of each year or whenever events or changes in circumstances indicate that the fair value of the reporting unit is more likely than not below its carrying amount. Potential impairment of a reporting unit is identified by comparing the reporting unit's estimated fair value to its carrying amount. Management estimated the fair value of the EMEA, Dental and Americas CMFT reporting units based on income and market approaches. Fair value under the income approach was determined by discounting to present value the estimated future cash flows of the reporting unit. Fair value under the market approach utilized the guideline public company methodology, which uses valuation indicators from other businesses that are similar to the EMEA, Dental and Americas CMFT reporting units. Significant assumptions are incorporated into the discounted cash flow analysis such as revenue growth rates, forecasted operating expenses, and risk-adjusted discount rates.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment of the EMEA, Dental and Americas CMFT reporting units is a critical audit matter are (i) the significant judgment by management related to the discounted cash flow analysis when developing the fair value measurement of the reporting units; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and in evaluating management's significant assumptions related to revenue growth rates, forecasted operating expenses and risk-adjusted discount rates; 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 discounted cash flow analysis related to the valuation of the Company's reporting units. These procedures also included, among others, (i) testing management's process for developing the fair value estimate; (ii) evaluating the appropriateness of management's fair value approaches; (iii) testing the completeness and accuracy of the underlying data used in the discounted cash flow analysis, and (iv) evaluating the reasonableness of the significant assumptions used by management in the discounted cash flow analysis related to the revenue growth rates, forecasted operating expenses, and risk-adjusted discount rates. Evaluating management's assumptions related to revenue growth rates and forecasted operating expenses involved evaluating whether the assumptions used by management were reasonable considering (i) the past performance of the reporting units; (ii) the consistency with external data from market and industry sources; and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's discounted cash flow analysis and the risk-adjusted discount rate assumptions.

Tax Liabilities for Unrecognized Tax Benefits

As described in Notes 2 and 17 to the consolidated financial statements, the Company has recorded tax liabilities for unrecognized tax benefits of $558.6 million as of December 31, 2021. The calculation of the Company's estimated tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations in a multitude of jurisdictions across the Company's global operations. The Company's income tax filings are regularly under audit in multiple federal, state and foreign jurisdictions. Income tax audits may require an extended period of time to reach resolution and may result in significant income tax adjustments when interpretation of tax laws or allocation of company profits is disputed.

The principal considerations for our determination that performing procedures relating to tax liabilities for unrecognized tax benefits is a critical audit matter are the significant judgment by management when determining the tax liabilities, related to a high degree of estimation uncertainty relative to the numerous and complex tax laws and regulations, frequency of income tax audits, and potential for significant adjustments as a result of such audits. This in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures to evaluate the timely identification and accurate measurement of tax liabilities for unrecognized tax benefits. Also, the evaluation of audit evidence available to support the estimates is complex and required significant auditor judgment as the nature of the evidence is often highly subjective, and 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 the identification, accurate measurement, and recognition of tax liabilities for unrecognized tax benefits, including controls addressing completeness of the tax liabilities. These procedures also included, among others, (i) testing certain information used in the calculation of tax liabilities for unrecognized tax benefits by jurisdiction on a sample basis, (ii) assessing the completeness of the Company's identification of tax liabilities for unrecognized tax benefits and possible outcomes for each unrecognized tax benefit,

and (iii) evaluating the status and results of income tax audits with the relevant tax authorities. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's interpretation and application of relevant tax laws and regulations in various jurisdictions and assessing the reasonableness of the Company's tax positions.

/s/ PricewaterhouseCoopers LLP
Chicago, Illinois
February 25, 2022

We have served as the Company's auditor since 2000.

ZIMMER BIOMET HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EARNINGS
(in millions, except per share amounts)

	For the Years Ended December 31,		
	2021	2020	2019
Net Sales	$7,836.2	$7,024.5	$7,982.2
Cost of products sold, excluding intangible asset amortization	2,341.0	2,128.3	2,252.6
Intangible asset amortization	615.7	597.6	584.3
Research and development	497.2	372.0	449.3
Selling, general and administrative	3,323.9	3,177.8	3,343.8
Goodwill and intangible asset impairment	16.3	645.0	70.1
Restructuring and other cost reduction initiatives	129.1	116.9	50.0
Quality remediation	53.1	50.9	82.4
Acquisition, integration, divestiture and related	79.8	23.8	12.2
Operating expenses	7,056.1	7,112.3	6,844.7
Operating Profit (Loss)	780.1	(87.8)	1,137.5
Other income (expense), net	11.8	25.4	(4.8)
Interest expense, net	(208.4)	(212.0)	(226.9)
Loss on early extinguishment of debt	(165.1)	–	–
Earnings (Loss) before income taxes	418.4	(274.4)	905.8
Provision (benefit) for income taxes	16.3	(137.0)	(225.7)
Net Earnings (Loss)	402.1	(137.4)	1,131.5
Less: Net earnings (loss) attributable to noncontrolling interest	0.5	1.5	(0.1)
Net Earnings (Loss) of Zimmer Biomet Holdings, Inc.	$ 401.6	$ (138.9)	$1,131.6
Earnings (Loss) Per Common Share - Basic	$ 1.93	$ (0.67)	$ 5.52
Earnings (Loss) Per Common Share - Diluted	$ 1.91	$ (0.67)	$ 5.47
Weighted Average Common Shares Outstanding			
Basic	208.6	207.0	205.1
Diluted	210.4	207.0	206.7

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

ZIMMER BIOMET HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in millions)

	For the Years Ended December 31,		
	2021	2020	2019
Net Earnings (Loss)	$402.1	$(137.4)	$1,131.5
Other Comprehensive Income (Loss):			
Foreign currency cumulative translation adjustments, net of tax	(99.9)	25.6	(1.5)
Unrealized cash flow hedge gains/(losses), net of tax	86.4	(33.5)	30.6
Reclassification adjustments on cash flow hedges, net of tax	1.3	(38.5)	(35.1)
Adjustments to prior service cost and unrecognized actuarial assumptions, net of tax	78.4	(9.5)	(48.5)
Total Other Comprehensive Income (Loss)	66.2	(55.9)	(54.5)
Comprehensive Income (Loss)	468.3	(193.3)	1,077.0
Comprehensive Income (Loss) Attributable to Noncontrolling Interest	0.5	1.5	(0.1)
Comprehensive Income (Loss) Attributable to Zimmer Biomet Holdings, Inc.	$467.8	$(194.8)	$1,077.1

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

ZIMMER BIOMET HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions, except share amounts)

	As of December 31,	
	2021	2020
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 478.5	$ 802.1
Accounts receivable, less allowance for credit losses	1,404.9	1,452.7
Inventories	2,394.5	2,450.7
Prepaid taxes	329.5	208.8
Prepaid expenses and other current assets	277.6	169.0
Total Current Assets	4,885.0	5,083.3
Property, plant and equipment, net	2,016.5	2,047.7
Goodwill	9,192.2	9,261.8
Intangible assets, net	6,299.8	7,055.5
Other assets	1,062.9	969.4
Total Assets	$23,456.4	$24,417.7
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	$ 351.2	$ 330.0
Income taxes payable	65.1	59.5
Other current liabilities	1,446.5	1,667.4
Current portion of long-term debt	1,605.1	500.0
Total Current Liabilities	3,467.9	2,556.9
Deferred income taxes, net	665.6	790.4
Long-term income tax payable	583.2	588.1
Other long-term liabilities	609.6	656.4
Long-term debt	5,463.7	7,626.5
Total Liabilities	10,790.0	12,218.3
Commitments and Contingencies (Note 21)		
Stockholders' Equity:		
Common stock, $0.01 par value, one billion shares authorized, 312.8 million (311.4 million in 2020) issued	3.1	3.1
Paid-in capital	9,314.8	9,121.6
Retained earnings	10,292.2	10,086.9
Accumulated other comprehensive loss	(231.6)	(297.8)
Treasury stock, 103.8 million shares (103.8 million shares in 2020)	(6,717.8)	(6,719.6)
Total Zimmer Biomet Holdings, Inc. stockholders' equity	12,660.7	12,194.2
Noncontrolling interest	5.7	5.2
Total Stockholders' Equity	12,666.4	12,199.4
Total Liabilities and Stockholders' Equity	$23,456.4	$24,417.7

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

ZIMMER BIOMET HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in millions)

	Zimmer Biomet Holdings, Inc. Stockholders								
	Common Shares		Paid-in	Retained	Accumulated Other Comprehensive	Treasury Shares		Noncontrolling	Total Stockholders'
	Number	Amount	Capital	Earnings	(Loss) Income	Number	Amount	Interest	Equity
Balance January 1, 2019	307.9	$3.1	$8,686.1	$ 9,491.2	$(187.4)	(103.9)	$(6,721.7)	$ 4.8	$11,276.1
Net earnings	–	–	–	1,131.6	–	–	–	(0.1)	1,131.5
Other comprehensive loss	–	–	–	–	(54.5)	–	–	–	(54.5)
Cash dividends declared ($0.96 per share)	–	–	–	(197.2)	–	–	–	–	(197.2)
Stock compensation plans	2.0	–	234.0	1.7	–	–	1.2	–	236.9
Balance December 31, 2019	309.9	3.1	8,920.1	10,427.3	(241.9)	(103.9)	(6,720.5)	4.7	12,392.8
Net loss	–	–	–	(138.9)	–	–	–	1.5	(137.4)
Other comprehensive loss	–	–	–	–	(55.9)	–	–	–	(55.9)
Cash dividends declared ($0.96 per share)	–	–	–	(198.9)	–	–	–	–	(198.9)
Adoption of new accounting standard	–	–	–	(3.1)	–	–	–	–	(3.1)
Acquisition of noncontrolling interest	–	–	–	–	–	–	–	(1.0)	(1.0)
Stock compensation plans	1.5	–	201.5	0.5	–	0.1	0.9	–	202.9
Balance December 31, 2020	311.4	3.1	9,121.6	10,086.9	(297.8)	(103.8)	(6,719.6)	5.2	12,199.4
Net earnings	–	–	–	401.6	–	–	–	0.5	402.1
Other comprehensive income	–	–	–	–	66.2	–	–	–	66.2
Cash dividends declared ($0.96 per share)	–	–	–	(200.4)	–	–	–	–	(200.4)
Stock compensation plans	1.4	–	193.2	4.1	–	–	1.8	–	199.1
Balance December 31, 2021	312.8	$3.1	$9,314.8	$10,292.2	$(231.6)	(103.8)	$(6,717.8)	$ 5.7	$12,666.4

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

ZIMMER BIOMET HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	For the Years Ended December 31,		
	2021	2020	2019
Cash flows provided by (used in) operating activities:			
Net earnings (loss)	$ 402.1	$ (137.4)	$1,131.5
Adjustments to reconcile net earnings (loss) to net cash provided by operating activities:			
Depreciation and amortization	1,067.4	1,032.7	1,006.1
Share-based compensation	85.3	79.7	84.3
Goodwill and intangible asset impairment	16.3	645.0	70.1
Loss on early extinguishment of debt	165.1	–	–
Deferred income tax (benefit) provision	(149.7)	12.0	(538.7)
Changes in operating assets and liabilities, net of acquired assets and liabilities			
Income taxes	(123.2)	(291.1)	111.4
Receivables	(15.1)	(70.0)	(93.8)
Inventories	18.8	(40.8)	(125.2)
Accounts payable and accrued liabilities	76.4	(95.1)	(42.0)
Other assets and liabilities	(44.2)	69.5	(17.9)
Net cash provided by operating activities	1,499.2	1,204.5	1,585.8
Cash flows provided by (used in) investing activities:			
Additions to instruments	(301.8)	(291.7)	(315.9)
Additions to other property, plant and equipment	(172.0)	(117.5)	(207.1)
Net investment hedge settlements	1.9	53.5	48.1
Acquisition of intellectual property rights	(8.4)	(0.4)	(197.6)
Business combination investments, net of acquired cash	–	(235.5)	(37.1)
Investments in other assets	(23.3)	(22.2)	(19.7)
Net cash used in investing activities	(503.6)	(613.8)	(729.3)
Cash flows provided by (used in) financing activities:			
Proceeds from senior notes	1,599.8	1,497.1	549.2
Redemption of senior notes	(2,654.8)	(1,750.0)	(500.0)
Proceeds from term loans	–	–	200.0
Payments on term loans	–	–	(960.0)
Net payments on other debt	–	–	(5.3)
Dividends paid to stockholders	(200.1)	(198.5)	(196.7)
Proceeds from employee stock compensation plans	122.5	129.8	158.2
Net cash flows from unremitted collections from factoring programs	–	(54.6)	(12.2)
Business combination contingent consideration payments	(8.9)	(15.0)	(2.9)
Debt issuance costs	(13.2)	(22.3)	(3.5)
Deferred business combination payments	(145.0)	–	–
Other financing activities	(6.3)	(8.3)	(6.7)
Net cash used in financing activities	(1,306.0)	(421.8)	(779.9)
Effect of exchange rates on cash and cash equivalents	(13.2)	15.3	(1.5)
(Decrease) increase in cash and cash equivalents	(323.6)	184.2	75.1
Cash and cash equivalents, beginning of year	802.1	617.9	542.8
Cash and cash equivalents, end of period	$ 478.5	$ 802.1	$ 617.9

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

1. Business

We design, manufacture and market orthopedic reconstructive products; sports medicine, biologics, extremities and trauma products; spine, craniomaxillofacial and thoracic products; dental implants; and related surgical products. We collaborate with healthcare professionals around the globe to advance the pace of innovation. Our products and solutions help treat patients suffering from disorders of, or injuries to, bones, joints or supporting soft tissues. Together with healthcare professionals, we help millions of people live better lives.

The words "Zimmer Biomet," "we," "us," "our," "the Company" and similar words refer to Zimmer Biomet Holdings, Inc. and its subsidiaries. "Zimmer Biomet Holdings" refers to the parent company only. In 2015, we completed our merger with LVB Acquisition, Inc., the parent company of Biomet, Inc. ("Biomet").

Risks and Uncertainties - Our results have been and are expected to continue to be impacted by the COVID-19 global pandemic. The vast majority of our net sales are derived from products used in elective surgical procedures which continue to be deferred due to precautions in certain markets and staffing shortages. The consequences of COVID-19 continue to be extremely fluid and there are many market dynamics that are difficult to predict. The COVID-19 pandemic may have an unfavorable effect on our financial position, results of operations and cash flows in the near term.

Planned Spinoff - On February 5, 2021, we announced our intention to pursue a plan to spin off our Spine and Dental businesses into a new public company named ZimVie Inc. ("ZimVie"). The planned transaction is intended to benefit our stockholders by enhancing the focus of both Zimmer Biomet and ZimVie to meet the needs of patients and customers and, therefore, achieve faster growth and deliver greater value for all stakeholders. The transaction is intended to qualify as a tax-free distribution, for U.S. federal income tax purposes, to U.S. stockholders of new publicly traded stock in ZimVie. The expected completion date of the spinoff is March 1, 2022. Our Board of Directors has declared a pro rata dividend of 80.3% of the outstanding common stock of ZimVie to our stockholders of record as of the close of business on February 15, 2022. As a result of the dividend, our stockholders will receive one share of ZimVie common stock for every ten shares of our common stock. Immediately following the dividend, we will retain 19.7% of the outstanding shares of ZimVie common stock, which we intend to divest after the separation in a tax-efficient manner.

2. Significant Accounting Policies

Basis of Presentation – The consolidated financial statements include the accounts of Zimmer Biomet Holdings and its subsidiaries in which it holds a controlling financial interest. All significant intercompany accounts and transactions are eliminated.

Use of Estimates – The consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"), which requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We have made our best estimates, as appropriate under GAAP, in the recognition of our assets and liabilities. These estimates have considered the impact the COVID-19 pandemic may have on our financial position, results of operations and cash flows. Such estimates included, but were not limited to, variable consideration to our customers, our allowance for doubtful accounts for expected credit losses, the net realizable value of our inventory, the fair value of our goodwill and the recoverability of other long-lived assets. Actual results could differ materially from these estimates.

Foreign Currency Translation – The financial statements of our foreign subsidiaries are translated into U.S. Dollars using period-end exchange rates for assets and liabilities and average exchange rates for operating results. Unrealized translation gains and losses are included in accumulated other comprehensive loss in stockholders' equity. When a transaction is denominated in a currency other than the subsidiary's functional currency, we remeasure the transaction into the functional currency and recognize any transactional gains or losses in earnings.

Shipping and Handling – Amounts billed to customers for shipping and handling of products are reflected in net sales and are not significant. Expenses incurred related to shipping and handling of products are reflected in selling, general and administrative ("SG&A") expenses and were $295.8 million, $269.9 million and $292.7 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Research and Development – We expense all research and development ("R&D") costs as incurred except when there is an alternative future use for the R&D. R&D costs include salaries, prototypes, depreciation of equipment used in R&D, consultant fees, service fees paid to collaborative partners, and arrangements to gain access to or acquire third-party in-process R&D projects with no alternative future use. Where contingent milestone payments are due to third parties under R&D arrangements, we expense the milestone payment obligations when it is probable that the milestone results will be achieved.

Litigation – We record an undiscounted liability for contingent losses, including future legal costs, settlements and judgments, when we consider it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

Quality remediation – We use the financial statement line item "Quality remediation" to recognize expenses related to addressing inspectional observations on Form 483 and a warning letter issued by the FDA following its inspections of our Warsaw North Campus facility, among other matters. See Note 21 for additional information about the Form 483 and warning letter. The majority of these expenses are related to

consultants who are helping us to update previous documents and redesign certain processes.

Restructuring and other cost reduction initiatives – A restructuring is defined as a program that is planned and controlled by management, and materially changes either the scope of a business undertaken by an entity, or the manner in which that business is conducted. Restructuring charges include (i) employee termination benefits, (ii) contract termination costs and (iii) other related costs associated with exit or disposal activities.

In December 2021, our management approved a new global restructuring program to reorganize our operations in preparation for the planned spinoff of ZimVie with an objective of reducing costs. In December 2019, our Board of Directors approved, and we initiated, a new global restructuring program with an objective of reducing costs to allow us to further invest in higher priority growth opportunities. Restructuring charges for the years ended December 31, 2021, 2020 and 2019 were primarily attributable to these programs.

Acquisition, integration, divestiture and related – We use the financial statement line item, "Acquisition, integration, divestiture and related" to recognize expenses resulting from the consummation of business mergers and acquisitions and the related integration of those businesses, and expenses related to the divestiture of our businesses. Acquisition, integration, divestiture and related gains and expenses are primarily composed of:

- Consulting and professional fees related to third-party integration and divestiture consulting performed in a variety of areas, such as finance, tax, compliance, logistics and human resources, and legal fees related to the consummation of mergers and acquisitions or divestitures.
- Employee termination benefits related to terminating employees with overlapping responsibilities in various areas of our business.
- Dedicated project personnel expenses which include the salary, benefits, travel expenses and other costs directly associated with employees who are 100 percent dedicated to our integration of acquired businesses and employees who have been notified of termination, but are continuing to work on transferring their responsibilities.
- Contract termination expenses related to terminated contracts, primarily with sales agents and distribution agreements.
- Other various expenses to relocate facilities, integrate information technology, losses incurred on assets resulting from the applicable acquisition, and other various expenses.

Cash and Cash Equivalents – We consider all highly liquid investments with an original maturity of three months or less to be cash equivalents. The carrying amounts reported in the balance sheet for cash and cash equivalents are valued at cost, which approximates their fair value.

Accounts Receivable – Accounts receivable consists of trade and other miscellaneous receivables. We grant credit to customers in the normal course of business and maintain an allowance for expected credit losses. We determine the allowance for credit losses by geographic market and take into consideration historical credit experience, creditworthiness of the customer and other pertinent information. We make concerted efforts to collect all accounts receivable, but sometimes we have to write-off the account against the allowance when we determine the account is uncollectible. The allowance for credit losses was $74.6 million and $75.8 million as of December 31, 2021 and 2020, respectively.

We also have receivables purchase arrangements with unrelated third parties to transfer portions of our trade accounts receivable balance. We terminated our purchase arrangements in the U.S. and Japan during the year ended December 31, 2020, but continue to have arrangements in Europe. Funds received from the transfers are recorded as an increase to cash and a reduction to accounts receivable outstanding in our consolidated balance sheets. We report the cash flows attributable to the sale of receivables to third parties in cash flows from operating activities in our consolidated statements of cash flows. Net expenses resulting from the sales of receivables are recognized in SG&A expense. Net expenses include any resulting gains or losses from the sales of receivables, credit insurance and factoring fees. Under the previous arrangement in the U.S. and Japan, any collections that we made that were unremitted to the third parties were recognized on our consolidated balance sheets under other current liabilities and in our consolidated statements of cash flows in financing activities. In Europe, we have no continuing involvement with the factored receivable.

Inventories – Inventories are stated at the lower of cost and net realizable value, with cost determined on a first-in first-out basis.

Property, Plant and Equipment – Property, plant and equipment is carried at cost less accumulated depreciation. Depreciation is computed using the straight-line method based on estimated useful lives of ten to forty years for buildings and improvements and three to eight years for machinery and equipment. Maintenance and repairs are expensed as incurred. We review property, plant and equipment for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. An impairment loss would be recognized when estimated future undiscounted cash flows relating to the asset are less than its carrying amount. An impairment loss is measured as the amount by which the carrying amount of an asset exceeds its fair value.

Software Costs – We capitalize certain computer software and software development costs incurred in connection with developing or obtaining computer software for internal use when both the preliminary project stage is completed and it is probable that the software will be used as intended. Capitalized software costs generally include external direct costs of materials and services utilized in developing or obtaining computer software and compensation and related benefits for employees who are directly associated with the software project. Capitalized software costs are included in property, plant and equipment on our balance sheet and amortized on a straight-line or weighted average estimated user basis when the software is ready for its intended use over the estimated useful lives of the software, which approximate three to fifteen years.

For cloud computing arrangements that are considered a service contract, our capitalization of implementation costs is aligned with the internal use software requirements. However, on our consolidated balance sheet these implementation costs are recognized in other noncurrent assets. On our consolidated statement of cash flows, these implementations costs are recognized in operating cash flows. The implementation costs are recognized on a straight-line basis over the expected term of the related service contract.

Instruments – Instruments are hand-held devices used by surgeons during total joint replacement and other surgical procedures. Instruments are recognized as long-lived assets and are included in property, plant and equipment. Undeployed instruments are carried at cost or realizable value. Instruments that have been deployed to be used in surgeries are carried at cost less accumulated depreciation. Depreciation is computed using the straight-line method based on average estimated useful lives, determined principally in reference to associated product life cycles, primarily five years. We review instruments for impairment whenever events or changes in circumstances indicate that the carrying value of an instrument may not be recoverable. Depreciation of instruments is recognized as SG&A expense.

Goodwill – Goodwill is not amortized but is subject to annual impairment tests. Goodwill has been assigned to reporting units. Potential impairment of a reporting unit is identified by either comparing a reporting unit's estimated fair value to its carrying amount or doing a qualitative assessment of a reporting unit's fair value from the last quantitative assessment to determine if there is potential impairment. We may do a qualitative assessment when the results of the previous quantitative test indicated the reporting unit's estimated fair value was significantly in excess of the carrying value of its net assets and we do not believe there have been significant changes in the reporting unit's operations that would significantly decrease its estimated fair value or significantly increase its net assets. If a quantitative assessment is performed, the fair value of the reporting unit and the fair value of goodwill are determined based upon a discounted cash flow analysis and/or use of a market approach by looking at market values of comparable companies. Significant assumptions are incorporated into our discounted cash flow analyses such as estimated growth rates, forecasted operating expenses and risk-adjusted discount rates. We perform this test in the fourth quarter of the year or whenever events or changes in circumstances indicate that the fair value of the reporting unit is more likely than not below its carrying amount. If the fair value of the reporting unit is less than its carrying value, an impairment loss is recorded in the amount that the carrying value of the business unit exceeds the fair value. See Note 11 for more information regarding goodwill.

Intangible Assets – Intangible assets are initially measured at their fair value. We have determined the fair value of our intangible assets either by the fair value of the consideration exchanged for the intangible asset or the estimated after-tax discounted cash flows expected to be generated from the intangible asset. Intangible assets with a finite life, including technology, certain trademarks and trade names, customer-related intangibles, intellectual property rights and patents and licenses are amortized on a straight-line basis over their estimated useful life or contractual life, which may range from less than one year to twenty years. Intangible assets with a finite life are tested for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable.

Intangible assets with an indefinite life, including certain trademarks and trade names and in-process research and development ("IPR&D") projects, are not amortized. Indefinite life intangible assets are assessed annually to determine whether events and circumstances continue to support an indefinite life. Intangible assets with an indefinite life are tested for impairment annually or whenever events or circumstances indicate that the fair value of the reporting unit is more likely than not below its carrying amount. An impairment loss is recognized if the carrying amount exceeds the estimated fair value of the asset. The amount of the impairment loss to be recorded would be determined based upon the excess of the asset's carrying value over its fair value. The fair values of indefinite lived intangible assets are determined based upon a discounted cash flow analysis using the relief from royalty method or a qualitative assessment may be performed for any changes to the asset's fair value from the last quantitative assessment. The relief from royalty method estimates the cost savings associated with owning, rather than licensing, assets. Significant assumptions are incorporated into these discounted cash flow analyses such as estimated growth rates, royalty rates and risk-adjusted discount rates. We may do a qualitative assessment when the results of the previous quantitative test indicated that the asset's fair value was significantly in excess of its carrying value.

In determining the useful lives of intangible assets, we consider the expected use of the assets and the effects of obsolescence, demand, competition, anticipated technological advances, changes in surgical techniques, market influences and other economic factors. For technology-based intangible assets, we consider the expected life cycles of products, absent unforeseen technological advances, which incorporate the corresponding technology. Trademarks and trade names that do not have a wasting characteristic (i.e., there are no legal, regulatory, contractual, competitive, economic or other factors which limit the useful life) are assigned an indefinite life. Trademarks and trade names that are related to products expected to be phased out are assigned lives consistent with the period in which the products bearing each brand are expected to be sold. For customer relationship intangible assets, we assign useful lives based upon historical levels of customer attrition. Intellectual property rights are assigned useful lives that approximate the contractual life of any related patent or the period for which we maintain exclusivity over the intellectual property.

Income Taxes – We account for income taxes under the asset and liability method, which requires the recognition of

deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period the new tax rate is enacted.

We reduce our deferred tax assets by a valuation allowance if it is more likely than not that we will not realize some portion or all of the deferred tax assets. In making such determination, we consider all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies and recent financial operations. In the event we were to determine that we would be able to realize our deferred income tax assets in the future in excess of their net recorded amount, we would make an adjustment to the valuation allowance which would reduce the provision for income taxes.

We operate on a global basis and are subject to numerous and complex tax laws and regulations. The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations in a multitude of jurisdictions across our global operations. Our income tax filings are regularly under audit in multiple federal, state and foreign jurisdictions. Income tax audits may require an extended period of time to reach resolution and may result in significant income tax adjustments when interpretation of tax laws or allocation of company profits is disputed. Because income tax adjustments in certain jurisdictions can be significant, we record tax positions based upon our estimates. For those tax positions where it is more likely than not that a tax benefit will be sustained, we have recorded the largest amount of tax benefit with a greater than 50 percent likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements.

Derivative Financial Instruments – We measure all derivative instruments at fair value and report them on our consolidated balance sheet as assets or liabilities. We maintain written policies and procedures that permit, under appropriate circumstances and subject to proper authorization, the use of derivative financial instruments solely for risk management purposes. The use of derivative financial instruments for trading or speculative purposes is prohibited by our policy. See Note 15 for more information regarding our derivative and hedging activities.

Accumulated Other Comprehensive Income (Loss) – Accumulated other comprehensive income (loss) ("AOCI") refers to gains and losses that under generally accepted accounting principles are included in comprehensive income but are excluded from net earnings as these amounts are recorded directly as an adjustment to stockholders' equity. Our AOCI is comprised of foreign currency translation adjustments, including unrealized gains and losses on net investments hedges, unrealized gains and losses on cash flow hedges and amortization of prior service costs and unrecognized gains and losses in actuarial assumptions.

Treasury Stock – We account for repurchases of common stock under the cost method and present treasury stock as a reduction of stockholders' equity. We reissue common stock held in treasury only for limited purposes.

Noncontrolling Interest – We have investments in other companies in which we have a controlling financial interest, but not 100 percent of the equity. Further information related to the noncontrolling interests of those investments have not been provided as it is not significant to our consolidated financial statements.

Accounting Pronouncements Recently Adopted

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") 2016-13, Financial Instruments – Credit Losses (Topic 326). The new guidance describes the current expected credit loss ("CECL") model which requires an estimate of expected impairment on financial instruments over the lifetime of the assets at each reporting date. Financial instruments in scope of the guidance include financial assets measured at amortized cost. Previous accounting guidance required recognition of impairment when it was probable the loss has been incurred. Under the CECL model, lifetime expected credit losses are measured and recognized at each reporting date based on historical experience, current conditions and forecasted information. We adopted this standard as of January 1, 2020. Adoption of this standard required the modified retrospective transition method, which resulted in a cumulative-effect adjustment to retained earnings of $3.1 million. The adoption primarily impacted our trade receivables. Our concentrations of credit risks are limited due to the large number of customers and their dispersion across a number of geographic areas. Substantially all of our trade receivables are concentrated in the public and private hospital and healthcare industry in the U.S. and internationally or with distributors or dealers who operate in international markets. Our historical credit losses have not been significant due to this dispersion and the financial stability of our customers. We consider credit losses immaterial to our business and, therefore, have not provided all the disclosures otherwise required by the standard.

In August 2018, the FASB issued ASU 2018-15, Intangibles-Goodwill and Other-Internal-Use Software. ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. Our policy for capitalizing implementation costs in a hosting arrangement was already aligned with the new guidance. ASU 2018-15 also provides guidance on how these implementation costs are to be recorded in the statement of earnings, balance sheet and statement of cash flows. We adopted this standard on a prospective basis as of January 1, 2020. The adoption of this standard did not have a material impact on our financial position, results of operations or cash flows.

In December 2019, the FASB issued ASU 2019-12 Simplifying the Accounting for Income Taxes. ASU 2019-12 eliminates certain exceptions in the rules regarding the approach for intraperiod tax allocations and the methodology for calculating income taxes in an interim period, and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill, among other things. We adopted this standard as of January 1, 2021. The adoption of this standard did not have a material impact on our financial position, results of operations or cash flows.

Accounting Pronouncements Not Yet Adopted

In March 2020, the FASB issued ASU 2020-04 Reference Rate Reform (Topic 848). ASU 2020-04 provides temporary optional guidance to ease the potential burden in accounting for reference rate reform. The new guidance provides optional expedients and exceptions for applying generally accepted accounting principles to transactions affected by reference rate reform if certain criteria are met. Early adoption of this ASU is permitted, and we may elect to apply the amendments prospectively through December 31, 2022. We are currently evaluating the impact this ASU will have on our financial statements.

In July 2021, the FASB issued ASU 2021-05 Lessors – Certain Leases with Variable Lease Payments which is an amendment to Accounting Standards Codification Topic 842 – Leases ("ASC 842"). Under the current ASC 842 guidance, variable payments are excluded from the measurement of the initial net investment in the lease if the payments do not depend on an index or a rate. For sales-type or direct financing leases, this could result in the recognition of a day-one loss for leases with entire or partial variable payments. ASU 2021-05 requires lessors to classify leases with entire or partial variable payments as operating leases if otherwise a day-one loss would be recognized. The ASU is effective for fiscal years beginning after December 15, 2021, and interim periods within those years. Early adoption of this ASU is permitted. The ASU can either be applied retrospectively to leases that were commenced or modified on or after the adoption of ASC 842 or applied prospectively to leases that commence or are modified after the adoption of ASU 2021-05. We have not entered into leases that are comprised entirely of variable lease payments and therefore the adoption of this ASU will not have an impact on our financial statements.

There are no recently issued accounting pronouncements that we have not yet adopted that are expected to have a material effect on our financial position, results of operations or cash flows.

3. Revenue Recognition

We recognize revenue when our performance obligations under the terms of a contract with our customer are satisfied. This happens when we transfer control of our products to the customer, which generally occurs upon implantation or when title passes upon shipment. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring our product. Taxes collected from customers and remitted to governmental authorities are excluded from revenues.

We sell products through three principal channels: 1) direct to healthcare institutions, referred to as direct channel accounts; 2) through stocking distributors and healthcare dealers; and 3) directly to dental practices and dental laboratories. In direct channel accounts and with some healthcare dealers, inventory is generally consigned to sales agents or customers so that products are available when needed for surgical procedures. No revenue is recognized upon the placement of inventory into consignment, as we retain the ability to control the inventory. Upon implantation, we issue an invoice and revenue is recognized. Consignment sales represented approximately 80 percent of our net sales in 2021. Pricing for products is generally predetermined by contracts with customers, agents acting on behalf of customer groups or by government regulatory bodies, depending on the market. Price discounts under group purchasing contracts are generally linked to volume of implant purchases by customer healthcare institutions within a specified group. At negotiated thresholds within a contract buying period, price discounts may increase. Payment terms vary by customer, but are typically less than 90 days.

With sales to stocking distributors, some healthcare dealers and hospitals, dental practices and dental laboratories, revenue is generally recognized when control of our product passes to the customer, which can be upon shipment of the product or receipt by the customer. We estimate sales recognized in this manner represented approximately 20 percent of our net sales in 2021. These customers may purchase items in large quantities if incentives are offered or if there are new product offerings in a market, which could cause period-to-period differences in sales. It is our accounting policy to account for shipping and handling activities as a fulfillment cost rather than as an additional promised service. We have contracts with these customers or orders may be placed from available price lists. Payment terms vary by customer, but are typically less than 90 days.

We offer standard warranties to our customers that our products are not defective. These standard warranties are not considered separate performance obligations. In limited circumstances, we offer extended warranties that are separate performance obligations. We have very few contracts that have multiple performance obligations. Since we do not have significant multiple element arrangements and essentially all of our sales are recognized upon implantation of a product or when title passes, very little judgment is required to allocate the transaction price of a contract or determine when control has passed to a customer. Our costs to obtain contracts consist primarily of sales commissions to employees or third-party agents that are earned when control of our product passes to the customer. Therefore, sales commissions are expensed as part of SG&A expenses at the same time revenue is recognized. Accordingly, we do not have significant contract assets, liabilities or future performance obligations.

We offer volume-based discounts, rebates, prompt pay discounts, right of return and other various incentives which we account for under the variable consideration model. If sales incentives may be earned by a customer for purchasing a specified amount of our product, we estimate whether such incentives will be achieved and recognize these incentives as a reduction in

revenue in the same period the underlying revenue transaction is recognized. We primarily use the expected value method to estimate incentives. Under the expected value method, we consider the historical experience of similar programs as well as review sales trends on a customer-by-customer basis to estimate what levels of incentives will be earned. Occasionally, products are returned and, accordingly, we maintain an estimated refund liability based upon the expected value method that is recorded as a reduction in revenue.

We analyze sales by three geographies, the Americas; Europe, Middle East and Africa ("EMEA"); and Asia Pacific; and by the following product categories: Knees; Hips; Sports Medicine, Biologics, Foot and Ankle, Extremities and Trauma, and Craniomaxillofacial and Thoracic ("CMFT") ("S.E.T."); Spine & Dental; and Other. As discussed in Note 19, we have four operating segments which are Americas Orthopedics, EMEA, Asia Pacific and Americas Spine and Global Dental.

Our sales analysis differs from our reporting operating segments because the underlying market trends in any particular geography tend to be similar across product categories and because we primarily sell the same products in all geographies.

Net sales by geography are as follows (in millions):

	For the Years Ended December 31,		
	2021	2020	2019
Americas	$4,800.2	$4,335.4	$4,875.8
EMEA	1,671.1	1,391.3	1,746.9
Asia Pacific	1,364.9	1,297.8	1,359.5
Total	$7,836.2	$7,024.5	$7,982.2

Net sales by product category are as follows (in millions):

	For the Years Ended December 31,		
	2021	2020	2019
Knees	$2,647.9	$2,378.3	$2,780.6
Hips	1,856.1	1,750.5	1,931.5
S.E.T	1,727.8	1,525.6	1,652.5
Spine & Dental	1,008.8	897.0	1,021.8
Other	595.6	473.1	595.8
Total	$7,836.2	$7,024.5	$7,982.2

In the first quarter of 2021, we updated our product category revenue reporting. Product category sales include the following changes:

- Orthopedic robotic capital sales and services, previously reported in the Knee product category, are included in the Other product category;
- Disposable products used in computer-assisted surgeries, previously reported in the Other product category, are included in the Knees product category;
- CMFT products, previously reported in the Dental, Spine & CMFT category, are included in the S.E.T. product category;
- CMFT has been removed from the Dental, Spine & CMFT product category and the name has been changed to Spine & Dental to reflect the revenue related to the spinoff of ZimVie;
- Office based technologies products, previously reported in the Other product category, are included in the Spine & Dental product category; and
- Other immaterial adjustments across product categories related to brand alignment.

Prior period product category sales have been reclassified to conform to the current presentation.

4. Restructuring

In December 2021, our management approved a new global restructuring program (the "2021 Restructuring Plan") to reorganize our operations in preparation for the planned spinoff of ZimVie with an objective of reducing costs. The 2021 Restructuring Plan is expected to result in total pre-tax restructuring charges of approximately $240 million and reduce gross annual pre-tax operating expenses by approximately $210 million by the end of 2024 as program benefits are realized. The pre-tax restructuring charges consist of employee termination benefits; contract terminations for sales agents; and other charges, such as consulting fees and project management. The restructuring charges incurred in the year ended December 31, 2021 primarily related to employee termination benefits, sales agent contract terminations, consulting and project management. The following table summarizes the liabilities recognized related to the 2021 Restructuring Plan (in millions):

	Employee Termination Benefits	Contract Terminations	Other	Total
Balance, December 31, 2020	$ –	$ –	$ –	$ –
Additions	19.5	2.3	10.3	32.1
Cash payments	–	–	–	–
Foreign currency exchange rate changes	–	–	–	–
Balance, December 31, 2021	19.5	2.3	10.3	32.1
Expense estimated to be recognized for the 2021 Restructuring Plan	$62.0	$167.0	$11.0	$240.0

In December 2019, our Board of Directors approved, and we initiated, a new global restructuring program (the "2019 Restructuring Plan") with an objective of reducing costs to allow us to further invest in higher priority growth opportunities. The 2019 Restructuring Plan is expected to result in total pre-tax restructuring charges of approximately $350 million to $400 million and reduce gross annual pre-tax operating expenses by approximately $200 million to $300 million by the end of 2023 as program benefits are realized. The pre-tax restructuring charges consist of employee termination benefits; contract terminations for facilities and sales agents; and other charges, such as consulting fees, project management and relocation costs. The restructuring charges incurred in the year ended December 31, 2021 primarily related to employee termination benefits, distributor contract terminations, consulting and project management. The restructuring charges incurred in the year ended December 31, 2020, primarily related to employee

termination benefits, consulting and project management. The following table summarizes the liabilities recognized related to the 2019 Restructuring Plan (in millions):

	Employee Termination Benefits	Contract Terminations	Other	Total
Balance, December 31, 2018	$ –	$ –	$ –	$ –
Additions	23.2	–	13.1	36.3
Cash Payments	–	–	(9.0)	(9.0)
Balance, December 31, 2019	23.2	–	4.1	27.3
Additions	55.3	15.8	37.1	108.2
Cash payments	(41.2)	(4.9)	(26.1)	(72.2)
Foreign currency exchange rate changes	1.4	–	–	1.4
Balance, December 31, 2020	38.7	10.9	15.1	64.7
Additions	7.4	18.5	52.5	78.4
Cash payments	(29.7)	(12.9)	(64.6)	(107.2)
Foreign currency exchange rate changes	(1.6)	–	(0.1)	(1.7)
Balance, December 31, 2021	$ 14.8	$ 16.5	$ 2.9	$ 34.2
Expense incurred since the start of the 2019 Restructuring Plan	$ 85.9	$ 34.3	$102.7	$ 222.9
Expense estimated to be recognized for the 2019 Restructuring Plan	$180.0	$ 40.0	$155.0	$ 375.0

For the expense estimated to be recognized for the 2019 Restructuring Plan, we have disclosed the midpoint in our estimated range of expenses.

We do not include restructuring charges in the operating profit of our reportable segments.

In our consolidated statement of earnings, we report restructuring charges in our "Restructuring and other cost reduction initiatives" financial statement line item. We report the expenses for other cost reduction initiatives with restructuring expenses because these activities also have the goal of reducing costs across the organization. However, since the cost reduction initiative expenses are not considered restructuring, they have been excluded from the amounts presented in this note.

5. Share-Based Compensation

Our share-based payments primarily consist of stock options and restricted stock units ("RSUs"). Share-based compensation expense was as follows (in millions):

	For the Years Ended December 31,		
	2021	2020	2019
Total expense, pre-tax	$85.3	$79.7	$84.3
Tax benefit related to awards	18.7	16.9	21.8
Total expense, net of tax	$66.6	$62.8	$62.5

We had two equity compensation plans in effect at December 31, 2021: the 2009 Stock Incentive Plan ("2009 Plan") and the Stock Plan for Non-Employee Directors. We have reserved the maximum number of shares of common stock available for awards under the terms of each of these plans. We have registered 49.9 million shares of common stock under these plans. The 2009 Plan provides for the grant of nonqualified stock options and incentive stock options, long-term performance awards in the form of performance shares or units, restricted stock, RSUs and stock appreciation rights. The Compensation and Management Development Committee of the Board of Directors determines the grant date for annual grants under our equity compensation plans. The date for annual grants under the 2009 Plan to our executive officers is expected to occur in the first quarter of each year following the earnings announcements for the previous quarter and full year. The Stock Plan for Non-Employee Directors provides for awards of stock options, restricted stock and RSUs to non-employee directors. It has been our practice to issue shares of common stock upon exercise of stock options from previously unissued shares, except in limited circumstances where they are issued from treasury stock. The total number of awards which may be granted in a given year and/or over the life of the plan under each of our equity compensation plans is limited. At December 31, 2021, an aggregate of 10.4 million shares were available for future grants and awards under these plans.

Stock Options

Stock options granted to date under our plans generally vest over four years and have a maximum contractual life of 10 years. As established under our equity compensation plans, vesting may accelerate upon retirement after the first anniversary date of the award if certain criteria are met. We recognize expense related to stock options on a straight-line basis over the requisite service period, less awards expected to be forfeited using estimated forfeiture rates. Due to the accelerated retirement provisions, the requisite service period of our stock options range from one to four years. Stock options are granted with an exercise price equal to the market price of our common stock on the date of grant, except in limited circumstances where local law may dictate otherwise.

A summary of stock option activity for the year ended December 31, 2021 is as follows (options in thousands):

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Intrinsic Value (in millions)
Outstanding at January 1, 2021	7,423	$116.67		
Options granted	1,278	163.47		
Options exercised	(871)	99.92		
Options forfeited	(219)	150.10		
Options expired	(64)	149.02		
Outstanding at December 31, 2021	7,547	$125.32	6.0	$90.5
Vested or expected to vest as of December 31, 2021	7,291	$124.52	6.0	$90.0
Exercisable at December 31, 2021	4,805	$111.42	4.8	$85.6

We use a Black-Scholes option-pricing model to determine the fair value of our stock options. Expected volatility was derived from a combination of historical volatility and implied volatility because the options that were actively traded around the grant date of our stock options did not have maturities of over one year. The expected term of the stock options has been derived from historical employee exercise behavior. The risk-free interest rate was determined using the implied yield currently available for zero-coupon U.S. government issues with a remaining term approximating the expected life of the options. The dividend yield was determined by using an estimated annual dividend and dividing it by the market price of our stock on the grant date.

The following table presents information regarding the weighted average fair value of stock options granted, the assumptions used to determine fair value, the intrinsic value of options exercised and the tax benefit of options exercised in the indicated year:

	For the Years Ended December 31,		
	2021	2020	2019
Dividend yield	0.6%	0.6%	0.8%
Volatility	30.3%	22.3%	22.1%
Risk-free interest rate	0.7%	1.3%	2.4%
Expected life (years)	5.4	5.0	5.5
Weighted average fair value of options granted	$43.91	$31.65	$28.68
Intrinsic value of options exercised (in millions)	$ 54.6	$ 50.1	$ 76.8
Tax benefit of options exercised (in millions)	$ 10.8	$ 9.6	$ 15.8

As of December 31, 2021, there was $55.2 million of unrecognized share-based payment expense related to nonvested stock options granted under our plans. That expense is expected to be recognized over a weighted average period of 2.5 years.

RSUs

We have awarded RSUs to certain of our employees. The terms of the awards are generally three or four years. Some of the awards have only service conditions while some have performance and market conditions in addition to service conditions. Future service conditions may be waived if an employee retires after the first anniversary date of the award, but performance and market conditions continue to apply. Accordingly, the requisite service period used for share-based payment expense on our RSUs range from one year to four years.

A summary of nonvested RSU activity for the year ended December 31, 2021 is as follows (RSUs in thousands):

	RSUs	Weighted Average Grant Date Fair Value
Outstanding at January 1, 2021	1,070	$129.65
Granted	556	171.37
Vested	(239)	119.32
Forfeited	(348)	122.90
Outstanding at December 31, 2021	1,039	146.58

For the RSUs with service conditions only, the fair value of the awards was determined based upon the fair market value of our common stock on the date of grant. For the RSUs with market conditions, a Monte Carlo valuation technique was used to simulate the market conditions of the awards. The outcome of the simulation was used to determine the fair value of the awards.

We are required to estimate the number of RSUs that will vest and recognize share-based payment expense on a straight-line basis over the requisite service period. As of December 31, 2021, we estimate that approximately 682,437 outstanding RSUs will vest. If our estimate were to change in the future, the cumulative effect of the change in estimate will be recorded in that period. Based upon the number of RSUs that we expect to vest, the unrecognized share-based payment expense as of December 31, 2021 was $57.9 million and is expected to be recognized over a weighted-average period of 2.2 years. The fair value of RSUs that vested during the years ended December 31, 2021, 2020 and 2019 based upon our stock price on the date of vesting was $40.0 million, $33.2 million, and $26.3 million, respectively.

6. Inventories

Inventories consisted of the following (in millions):

	As of December 31,	
	2021	2020
Finished goods	$1,928.5	$1,954.6
Work in progress	202.1	223.7
Raw materials	263.9	272.4
Inventories	$2,394.5	$2,450.7

Amounts charged to the consolidated statements of earnings for excess and obsolete inventory, including certain product lines we intend to discontinue, in the years ended December 31, 2021, 2020 and 2019 were $181.7 million, $250.0 million and $221.4 million, respectively.

7. Property, Plant and Equipment

Property, plant and equipment consisted of the following (in millions):

	As of December 31,	
	2021	2020
Land	$ 27.3	$ 27.7
Building and equipment	2,311.4	2,197.8
Capitalized software costs	496.7	455.8
Instruments	3,776.2	3,518.3
Construction in progress	124.0	125.3
	6,735.6	6,324.9
Accumulated depreciation	(4,719.1)	(4,277.2)
Property, plant and equipment, net	$ 2,016.5	$ 2,047.7

Depreciation expense was $451.7 million, $435.1 million and $421.8 million for the years ended December 31, 2021, 2020 and 2019, respectively.

We had $11.6 million and $24.4 million of property, plant and equipment included in accounts payable as of December 31, 2021 and 2020, respectively.

8. Transfers of Financial Assets

We have receivables purchase arrangements with unrelated third parties to liquidate portions of our trade accounts receivable balance. The receivables relate to products sold to customers and are short-term in nature. The factorings are treated as sales of our accounts receivable. Proceeds from the transfers reflect either the face value of the accounts receivable or the face value less factoring fees.

We terminated our programs in the U.S. and Japan in the fourth quarter of 2020. We acted as the collection agent on behalf of the third party, but had no significant retained interests or servicing liabilities related to the accounts receivable sold. As of December 31, 2020, we had collected and remitted or repurchased all factored receivables at the time of the termination of those programs in 2020.

In Europe, we sell to a third party and have no continuing involvement or significant risk with the factored accounts receivable.

Funds received from the transfers are recorded as an increase to cash and a reduction of accounts receivable outstanding in the consolidated balance sheets. We report the cash flows attributable to the sale of the receivables to third parties in cash flows from operating activities in our consolidated statements of cash flows. Net expenses resulting from the sales of receivables are recognized in selling, general and administrative expense. Net expenses include any resulting gains or losses from the sales of receivables, credit insurance and factoring fees.

For the years ended December 31, 2021, 2020 and 2019, we sold receivables having an aggregate face value of $160.9 million, $1,323.0 million and $3,116.2 million to third parties in exchange for cash proceeds of $159.7 million, $1,321.3 million and $3,113.9 million, respectively. Expenses recognized on these sales during the years ended December 31, 2021, 2020 and 2019 were not significant. For the years ended December 31, 2020 and 2019, under the U.S. and Japan programs, we collected $1,308.3 million and $2,857.4 million, respectively, from our customers and remitted that amount to the third party, and we effectively repurchased $146.5 million and $184.6 million, respectively, of previously sold accounts receivable from the third party due to the programs' revolving nature. The initial collection of cash from customers and its remittance to the third party is reflected in net cash provided by/(used in) financing activities in our consolidated statements of cash flows. No amounts were unremitted to third parties as of December 31, 2021 and 2020.

9. Fair Value Measurements of Assets and Liabilities

The following financial assets and liabilities are recorded at fair value on a recurring basis (in millions):

	As of December 31, 2021			
		Fair Value Measurements at Reporting Date Using:		
Description	Recorded Balance	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Derivatives designated as hedges, current and long-term				
Foreign currency forward contracts	$52.4	$ –	$52.4	$ –
Cross-currency interest rate swaps	23.0	–	23.0	–
Derivatives not designated as hedges, current and long-term				
Foreign currency forward contracts	1.1	–	1.1	–
Total Assets	$76.5	$ –	$76.5	$ –

Description	Recorded Balance	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	As of December 31, 2021	Fair Value Measurements at Reporting Date Using:		
Liabilities				
Derivatives designated as hedges, current and long-term				
Foreign currency forward contracts	$ 0.3	$ –	$ 0.3	$ –
Cross-currency interest rate swaps	3.4	–	3.4	–
Interest rate swaps	10.5	–	10.5	–
Derivatives not designated as hedges, current and long-term				
Foreign currency forward contracts	1.5	–	1.5	–
Contingent payments related to acquisitions	45.8	–	–	45.8
Total Liabilities	$61.5	$ –	$15.7	$45.8

Description	Recorded Balance	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	As of December 31, 2020	Fair Value Measurements at Reporting Date Using:		
Assets				
Derivatives designated as hedges, current and long-term				
Foreign currency forward contracts	$ 0.5	$ –	$ 0.5	$ –
Derivatives not designated as hedges, current and long-term				
Foreign currency forward contracts	0.9	$ –	0.9	$ –
Total Assets	$ 1.4	$ –	$ 1.4	$ –
Liabilities				
Derivatives designated as hedges, current and long-term				
Foreign currency forward contracts	$ 48.5	$ –	$ 48.5	$ –
Cross-currency interest rate swaps	83.3	–	83.3	–
Derivatives not designated as hedges, current and long-term				
Foreign currency forward contracts	3.2	–	3.2	–
Contingent payments related to acquisitions	48.2	–	–	48.2
Total Liabilities	$183.2	$ –	$135.0	$48.2

We value our foreign currency forward contracts using a market approach based on foreign currency exchange rates obtained from active markets, and we perform ongoing assessments of counterparty credit risk.

We value our interest rate swaps using a market approach based on publicly available market yield curves, foreign currency exchange rates and the terms of our swaps, and we perform ongoing assessments of counterparty credit risk.

Contingent payments related to acquisitions consist of sales-based payments, and are valued using discounted cash flow techniques. The fair value of sales-based payments is based upon probability-weighted future revenue estimates, and increases as revenue estimates increase. See Note 10 for additional information regarding contingent payments related to acquisitions.

The following table provides a reconciliation of the beginning and ending balances of items measured at fair value on a recurring basis in the tables above that used significant unobservable inputs (Level 3) (in millions):

	Level 3 - Liabilities
Contingent payments related to acquisitions	
Beginning balance December 31, 2020	$ 48.2
Change in estimates	8.5
Settlements	(10.2)
Foreign currency impact	(0.7)
Ending balance December 31, 2021	$ 45.8

Changes in estimates for contingent payments related to acquisitions are recognized in Acquisition, integration, divestiture and related expenses on our consolidated statements of earnings.

10. Acquisitions

In the fourth quarter of 2020, we completed the acquisitions of A&E Medical Corporation ("A&E Medical"), a sternal closure company, and Relign Corp. ("Relign"), an arthroscopy equipment company (collectively referred to as the "2020 acquisitions"). The 2020 acquisitions were completed primarily to expand our product offerings in the CMFT and sports medicine markets. The total aggregate cash consideration paid in 2020 related to the 2020 acquisitions was $244.9 million. An additional $145.0 million of guaranteed deferred payments were made in 2021 and were included in other current liabilities on the consolidated balance sheet as of December 31, 2020. We assigned a fair value of $31.3 million for potential additional payments as of the acquisition dates related to these acquisitions that are contingent on the respective acquired companies' future product sales. The estimated fair value of the aggregate contingent payment liabilities was calculated based on the probability of achieving the specified sales growth and discounting to present value the estimated payments.

The goodwill related to the 2020 acquisitions represents the excess of the consideration transferred over the fair value of the net assets acquired. The goodwill related to the 2020

acquisitions is generated from the operational synergies and cross-selling opportunities we expect to achieve from the technologies acquired. None of the goodwill related to these acquisitions is expected to be deductible for tax purposes.

The following table summarizes the aggregate final estimates of fair value of the assets acquired and liabilities assumed related to the 2020 acquisitions (in millions):

Current assets	$ 31.7
Intangible assets subject to amortization:	
Technology	147.9
Trademarks and trade names	1.5
Customer relationships	92.7
Other	4.9
Goodwill	185.5
Other assets	5.4
Total assets acquired	469.6
Current liabilities	4.8
Deferred income taxes	43.5
Other long-term liabilities	0.1
Total liabilities assumed	48.4
Net assets acquired	$421.2

In the year ended December 31, 2021, we adjusted the preliminary fair values that were recognized as of December 31, 2020. The adjustments primarily related to the customer relationships intangible assets and the related deferred income tax liability as we refined our estimates by analyzing historical purchasing patterns of existing customers. The adjustment did not result in a significant change to intangible asset amortization expense recognized in the year ended December 31, 2021 that would have been recognized in the previous period if the adjustment were recognized as of the acquisition date. In addition, we revised our estimates related to net operating loss carryforwards based on updated tax calculations which reduced our deferred income tax liability and goodwill correspondingly. There were no other significant adjustments during the year ended December 31, 2021.

The weighted average amortization period selected for technology, trademarks and trade names, customer relationships and other intangible assets were 13 years, 12 years, 15 years and 5 years, respectively.

We have not included pro forma information and certain other information under GAAP for the 2020 acquisitions because they did not have a material impact on our financial position or results of operations.

11. Goodwill and Other Intangible Assets

The following table summarizes the changes in the carrying amount of goodwill (in millions):

	Americas Orthopedics	EMEA	Asia Pacific	Americas Spine and Global Dental	Immaterial Product Category Operating Segments	Total
Balance at January 1, 2020						
Goodwill	$ 7,699.8	$ 1,316.8	$507.4	$ –	$ 1,729.3	$11,253.3
Accumulated impairment losses	–	(567.0)	–	–	(1,086.6)	(1,653.6)
	7,699.8	749.8	507.4	–	642.7	9,599.7
Goodwill reportable segment change	1,661.3	17.0	51.0	–	(1,729.3)	–
Accumulated impairment losses reportable segment change	(1,086.6)	–	–	–	1,086.6	–
Other acquisitions	142.4	10.9	8.9	–	–	162.2
Currency translation	80.2	18.2	13.5	–	–	111.9
Impairment	(142.0)	(470.0)	–	–	–	(612.0)
Balance at December 31, 2020						
Goodwill	9,583.7	1,362.9	580.8	–	–	11,527.4
Accumulated impairment losses	(1,228.6)	(1,037.0)	–	–	–	(2,265.6)
	8,355.1	325.9	580.8	–	–	9,261.8
Goodwill reportable segment change	(1,491.3)	–	–	1,491.3	–	–
Accumulated impairment losses reportable segment change	1,220.9	–	–	(1,220.9)	–	–
Purchase accounting adjustments	15.4	5.2	2.3	–	–	22.9
Other acquisitions	2.4	–	–	–	–	2.4
Currency translation	(64.4)	(13.8)	(14.1)	(2.6)	–	(94.9)
Balance at December 31, 2021						
Goodwill	8,045.8	1,354.3	569.0	1,488.7	–	11,457.8
Accumulated impairment losses	(7.7)	(1,037.0)	–	(1,220.9)	–	(2,265.6)
	$ 8,038.1	$ 317.3	$569.0	$ 267.8	$ –	$ 9,192.2

As discussed further in Note 19, our operating and reportable segments changed starting on April 1, 2021. Goodwill has been reallocated from our previous reportable segments to reflect the new structure. However, our reporting units have not changed. The Americas Spine and Global Dental reporting units are now assigned to the new Americas Spine and Global Dental reportable segment.

We perform our annual test of goodwill impairment in the fourth quarter of every year. In connection with the 2021 annual goodwill impairment test in the fourth quarter of 2021, we estimated the fair value of our Americas Orthopedics, Americas CMFT, EMEA, Asia Pacific and Global Dental reporting units using the income and market approaches. In the annual 2021 test, all our reporting units exceeded their carrying values by more than 20 percent.

As discussed further in Note 10, we purchased A&E Medical, Relign and other immaterial companies during the year ended December 31, 2020, resulting in additional goodwill in 2020 and subsequent fair value adjustments recognized in 2021 as well.

As of March 31, 2020, we tested three of our reporting units for impairment due to: i) the significant adverse effect the COVID-19 pandemic was expected to have on our operating results, and ii) a change in reportable segments in the first quarter of 2020, which changed the cash flows and asset compositions of certain reporting units. This resulted in goodwill impairment charges of $470.0 million and $142.0 million recognized for our EMEA reporting unit and Global Dental reporting unit, respectively. The remaining two reporting units with goodwill assigned to them were not tested for impairment as we concluded it is more likely than not the fair value of these reporting units exceeded their carrying value. The goodwill balance related to the Americas Spine reporting unit was already fully impaired.

The impairment charge of $470.0 million in our EMEA reporting unit was primarily due to the COVID-19 pandemic and reportable segment change. The COVID-19 pandemic has had a significant adverse effect on both the operational and non-operational assumptions used to estimate the fair value of our EMEA reporting unit. The significant decline in our share price and that of most other publicly-traded companies resulted in us utilizing a higher risk-adjusted discount rate compared to the rate used in our previous annual goodwill impairment test to discount our future estimated cash flows to present value. On an operational basis, due to the deferral of elective surgical procedures, at the time of March 31, 2020 impairment test, we estimated that our cash flows in 2020 would be significantly lower than previously estimated in our prior annual goodwill impairment test. The change in reportable segments resulted in additional impairment due to additional assets being allocated to the EMEA reporting unit. As of December 31, 2021, $317.3 million of goodwill remained in the EMEA reporting unit.

The impairment charge of $142.0 million in our Global Dental reporting unit was primarily driven by the COVID-19 pandemic. Similar to our EMEA reporting unit, changes in the market caused an increase to the risk-adjusted discount rates utilized to discount our future estimated cash flows to present value, and we expected that the deferral of elective dental procedures would have an adverse effect on our cash flows. We estimated the cash flows from our Global Dental reporting unit might recover more slowly than our other reporting units because many dental procedures are not covered by insurance. Therefore, we estimated that economic uncertainty would likely result in patients deferring dental procedures for a longer period of time than procedures involving our other products. As of December 31, 2021, $267.8 million of goodwill remained in the Global Dental reporting unit.

The third reporting unit we tested for impairment, Americas CMFT, had an estimated fair value that exceeded its carrying value by less than 5 percent. The Americas CMFT reporting unit's estimated fair value was also adversely impacted by the COVID-19 pandemic similar to our EMEA and Global Dental reporting units. As of December 31, 2021, $290.9 million of goodwill remained in the Americas CMFT reporting unit.

We estimated the fair value of the EMEA, Global Dental and Americas CMFT reporting units based on income and market approaches. Fair value under the income approach was determined by discounting to present value the estimated future cash flows of the reporting unit. Fair value under the market approach utilized the guideline public company methodology, which uses valuation indicators from publicly-traded companies that are similar to our EMEA, Global Dental and Americas CMFT reporting units and considers differences between our reporting unit and the comparable companies.

In estimating the future cash flows of the reporting units, we utilized a combination of market and company-specific inputs that a market participant would use in assessing the fair value of the reporting units. The primary market input was revenue growth rates. These rates were based upon historical trends and estimated future growth drivers such as an aging global population, obesity and more active lifestyles. The impact of declining revenues from the COVID-19 pandemic was included in the future cash flows. Significant company specific inputs included assumptions regarding how the reporting units could leverage operating expenses as revenue grows and the impact any of our differentiated products or new products will have on revenues.

Under the guideline public company methodology, we took into consideration specific risk differences between our reporting unit and the comparable companies, such as recent financial performance, size risks and product portfolios, among other considerations.

We will continue to monitor the fair value of our reporting units in our interim and annual reporting periods. If our estimated cash flows decrease, we may have to record further impairment charges in the future. Factors that could result in our cash flows being lower than our current estimates include: 1) additional recurrence of the COVID-19 virus, including variants, causes hospitals to defer elective surgical procedures, 2) decreased revenues caused by unforeseen changes in the healthcare market, or our inability to generate new product revenue from our research and development activities, and 3) our inability to achieve the estimated operating margins in our forecasts from our restructuring programs, cost saving initiatives, and other unforeseen

factors. Additionally, changes in the broader economic environment could cause changes to our estimated discount rates and comparable company valuation indicators, which may impact our estimated fair values.

The components of identifiable intangible assets were as follows (in millions):

	Technology	Intellectual Property Rights	Trademarks and Trade Names	Customer Relationships	IPR&D	Other	Total
As of December 31, 2021:							
Intangible assets subject to amortization:							
Gross carrying amount	$ 3,804.6	$ 383.3	$ 665.3	$ 5,489.1	$ –	$ 192.0	$10,534.3
Accumulated amortization	(1,946.9)	(231.6)	(286.9)	(2,111.1)	–	(128.0)	(4,704.5)
Intangible assets not subject to amortization:							
Gross carrying amount	–	–	457.0	–	13.0	–	470.0
Total identifiable intangible assets	$ 1,857.7	$ 151.7	$ 835.4	$ 3,378.0	$13.0	$ 64.0	$ 6,299.8
As of December 31, 2020:							
Intangible assets subject to amortization:							
Gross carrying amount	$ 3,902.0	$ 383.3	$ 677.0	$ 5,589.7	$ –	$ 152.4	$10,704.4
Accumulated amortization	(1,746.2)	(211.6)	(251.5)	(1,820.9)	–	(110.9)	(4,141.1)
Intangible assets not subject to amortization:							
Gross carrying amount	–	–	462.7	–	29.5	–	492.2
Total identifiable intangible assets	$ 2,155.8	$ 171.7	$ 888.2	$ 3,768.8	$29.5	$ 41.5	$ 7,055.5

We recognized IPR&D intangible asset impairment charges of $16.3 million, $33.0 million and $70.1 million in the years ended December 31, 2021, 2020 and 2019, respectively, in "Goodwill and intangible asset impairment" on our consolidated statements of earnings. These impairments were the result of terminated projects or delays and additional costs related to a project. Since these projects had a low probability of success or were not a priority, their terminations are not expected to have a significant impact on our future cash flows.

Estimated annual amortization expense based upon intangible assets recognized as of December 31, 2021 for the years ending December 31, 2022 through 2026 is (in millions):

For the Years Ending December 31,	
2022	$602.6
2023	595.6
2024	584.4
2025	535.1
2026	480.9

12. Other Current Liabilities

Other current liabilities consisted of the following (in millions):

	As of December 31, 2021	2020
Other current liabilities:		
License and service agreements	$ 145.1	$ 172.7
Salaries, wages and benefits	357.0	319.5
Litigation and product liability	209.1	157.1
Deferred business combination payments	–	145.0
Accrued liabilities	735.3	873.1
Total other current liabilities	$1,446.5	$1,667.4

We have reclassified certain previously reported components of other current liabilities to conform to the current year presentation.

13. Debt

Our debt consisted of the following (in millions):

	As of December 31, 2021	2020
Current portion of long-term debt		
Floating Rate Notes due 2021	–	200.0
3.375% Senior Notes due 2021	–	300.0
3.150% Senior Notes due 2022	750.0	–
1.414% Euro Notes due 2022	568.6	–
Japan Term Loan A	101.6	–
Japan Term Loan B	184.9	–
Total short-term debt	$1,605.1	$500.0

	As of December 31,	
	2021	2020
Long-term debt		
3.150% Senior Notes due 2022	–	750.0
3.700% Senior Notes due 2023	86.3	300.0
1.450% Senior Notes due 2024	850.0	–
3.550% Senior Notes due 2025	863.0	2,000.0
3.050% Senior Notes due 2026	600.0	600.0
3.550% Senior Notes due 2030	257.5	900.0
2.600% Senior Notes due 2031	750.0	–
4.250% Senior Notes due 2035	253.4	253.4
5.750% Senior Notes due 2039	317.8	317.8
4.450% Senior Notes due 2045	395.4	395.4
1.414% Euro Notes due 2022	–	611.8
2.425% Euro Notes due 2026	568.6	611.8
1.164% Euro Notes due 2027	568.6	611.8
Japan Term Loan A	–	113.3
Japan Term Loan B	–	206.3
Debt discount and issuance costs	(36.4)	(48.2)
Adjustment related to interest rate swaps	(10.5)	3.1
Total long-term debt	$5,463.7	$7,626.5

At December 31, 2021, our total current and non-current debt of $7.1 billion consisted of $6.8 billion aggregate principal amount of senior notes, which included €1.5 billion of Euro-denominated senior notes ("Euro notes"), an ¥11.7 billion Japanese Yen term loan agreement ("Japan Term Loan A") and a ¥21.3 billion Japanese Yen term loan agreement ("Japan Term Loan B") that each will mature on September 27, 2022, partially offset by fair value adjustments totaling $10.5 million and debt discount and issuance costs of $36.4 million.

In 2021, we redeemed the $200.0 million outstanding principal amount of our Floating Rate Notes due 2021 and the $300.0 million outstanding principal amount of our 3.375% Senior Notes due 2021, in each case at a redemption price equal to 100% of the aggregate principal amount of the senior notes being redeemed, plus accrued and unpaid interest.

On November 24, 2021, we completed the offering of $850.0 million aggregate principal amount of our 1.450% Senior Notes due November 22, 2024 and $750.0 million aggregate principal amount of our 2.600% Senior Notes due November 24, 2031. Interest is payable on the 1.450% Senior Notes due 2024 on May 22 and November 22 of each year until maturity. Interest is payable on the 2.600% Senior Notes due 2031 on May 24 and November 24 of each year until maturity. We received net proceeds of $1,599.8 million.

On November 15, 2021, we commenced cash tender offers to purchase certain outstanding senior notes. The proceeds from the senior notes offering described above, together with cash on hand, were used to pay for the senior notes purchased in the cash tender offers. The cash tender offers resulted in the following principal amount of the notes tendered: $213.7 million of the 3.700% Senior Notes due 2023, $1,137.0 million of the 3.550% Senior Notes due 2025, and $642.5 million of the 3.550% Senior Notes due 2030. As a result, we recorded a loss on the extinguishment of debt in the amount of $165.1 million in our consolidated statement of earnings for the year ended December 31, 2021. The components of this loss were the reacquisition price of $2,154.8 million minus the carrying value of the debt of $1,982.7 million (including debt discount and issuance costs) plus debt tender fees of $5.0 million minus a gain of $12.0 million on a reverse treasury lock that we entered into to offset any increases or decreases to the premium associated with the tender offer from the date we entered into the lock.

On December 30, 2020, we redeemed $250.0 million of the $450.0 million outstanding principal amount of our Floating Rate Notes due 2021, with cash on hand.

On March 20, 2020, we completed the offering of $600.0 million aggregate principal amount of our 3.050% Senior Notes due on January 15, 2026 and $900.0 million aggregate principal amount of our 3.550% Senior Notes due on March 20, 2030. Interest is payable on the 3.050% Senior Notes due 2026 on January 15 and July 15 of each year until maturity. Interest payable on the 3.550% Senior Notes is payable semi-annually, commencing on September 20, 2020 until maturity. The proceeds from this senior notes offering, together with cash on hand, were used to repay at maturity the $1.5 billion outstanding principal amount of our 2.700% Senior Notes due on April 1, 2020.

On August 20, 2021, we entered into a new five-year revolving credit agreement (the "2021 Five-Year Credit Agreement") and a new 364-day revolving credit agreement (the "2021 364-Day Revolving Credit Agreement"), as described below. These credit agreements will be used for general corporate purposes.

The 2021 Five-Year Credit Agreement contains a five-year unsecured revolving facility of $1.5 billion (the "2021 Five-Year Revolving Facility"). The 2021 Five-Year Credit Agreement replaces the previous revolving credit agreement (the "2019 Credit Agreement"), which contained a five-year unsecured multicurrency revolving facility of $1.5 billion (the "2019 Multicurrency Revolving Facility"). There were no borrowings outstanding under the 2019 Credit Agreement at the time it was terminated.

The 2021 Five-Year Credit Agreement will mature on August 20, 2026, with two one-year extensions exercisable at our discretion and subject to required lender consent. The 2021 Five-Year Credit Agreement also includes an uncommitted incremental feature allowing us to request an increase of the facility by an aggregate amount of up to $500.0 million. As of December 31, 2021, there were no outstanding borrowings under the 2021 Five-Year Revolving Facility.

Borrowings under the 2021 Five-Year Credit Agreement bear interest at floating rates, based upon either LIBOR for the applicable interest period or at an alternate base rate, in each case, plus an applicable margin determined by reference to our senior unsecured long-term debt credit rating. We pay a facility fee on the aggregate amount of the 2021 Five-Year Revolving Facility at a rate determined by reference to our senior unsecured long-term debt credit rating. The 2021 Five-Year Credit Agreement contains customary affirmative and negative covenants and events of default for unsecured financing arrangements, including, among other things, limitations on consolidations, mergers, and sales of assets. The Five-Year Credit Agreement also requires us to maintain a consolidated indebtedness to consolidated EBITDA ratio of no greater than 4.5 to 1.0 as of the last day of any period of four consecutive fiscal quarters (with such ratio subject to increase

to 5.0 to 1.0 for a period of time in connection with a qualified material acquisition and certain other restrictions). We were in compliance with all covenants under the 2021 Five-Year Credit Agreement as of December 31, 2021.

The 2021 364-Day Revolving Credit Agreement is an unsecured revolving credit facility in the principal amount of $1.0 billion (the "2021 364-Day Revolving Facility"). The 2021 364-Day Revolving Credit Agreement replaced a credit agreement entered into on September 18, 2020 which was also a 364-day unsecured revolving credit facility of $1.0 billion (the "September 2020 Revolving Facility"). There were no borrowings outstanding under the September 2020 Revolving Facility when it was terminated.

The 2021 364-Day Revolving Facility will mature on August 19, 2022. Borrowings under the 2021 364-Day Revolving Credit Agreement bear interest at floating rates based upon either LIBOR for the applicable interest period or at an alternate base rate, in each case, plus an applicable margin determined by reference to our senior unsecured long-term debt credit rating. We pay a facility fee on the aggregate amount of the 2021 364-Day Revolving Facility at a rate determined by reference to our senior unsecured long-term debt credit rating. The 2021 364-Day Revolving Credit Agreement contains customary affirmative and negative covenants and events of default for an unsecured financing arrangement including, among other things, limitations on consolidations, mergers, and sales of assets. The 2021 364-Day Revolving Credit Agreement also requires us to maintain a consolidated indebtedness to consolidated EBITDA ratio of no greater than 4.5 to 1.0 as of the last day of any period of four consecutive fiscal quarters (with such ratio subject to increase to 5.0 to 1.0 in connection with a qualified material acquisition and certain other restrictions). We were in compliance with all covenants under the 2021 364-Day Revolving Credit Agreement, as of December 31, 2021. As of December 31, 2021, there were no outstanding borrowings under the 2021 364-Day Revolving Credit Agreement.

The estimated fair value of our senior notes as of December 31, 2021, based on quoted prices for the specific securities from transactions in over-the-counter markets (Level 2), was $7,216.4 million. The estimated fair value of Japan Term Loan A and Japan Term Loan B, in the aggregate, as of December 31, 2021, based upon publicly available market yield curves and the terms of the debt (Level 2), was $286.2 million.

We entered into interest rate swap agreements which we designated as fair value hedges of underlying fixed-rate obligations on our senior notes due 2019 and 2021. These fair value hedges were settled in 2016. In 2018 and 2019, we entered into cross-currency interest rate swaps that we designated as net investment hedges. The excluded component of these net investment hedges is recorded in interest expense, net. See Note 15 for additional information regarding our interest rate swap agreements.

At December 31, 2021 and 2020, the weighted average interest rate for our borrowings was 2.8 percent and 3.0 percent, respectively. We paid $219.0 million, $193.1 million, and $226.9 million in interest during 2021, 2020, and 2019, respectively.

14. Accumulated Other Comprehensive Income

AOCI refers to certain gains and losses that under GAAP are included in comprehensive income but are excluded from net earnings as these amounts are initially recorded as an adjustment to stockholders' equity. Amounts in AOCI may be reclassified to net earnings upon the occurrence of certain events.

Our AOCI is comprised of foreign currency translation adjustments, unrealized gains and losses on cash flow hedges, and amortization of prior service costs and unrecognized gains and losses in actuarial assumptions on our defined benefit plans. Foreign currency translation adjustments are reclassified to net earnings upon sale or upon a complete or substantially complete liquidation of an investment in a foreign entity. Unrealized gains and losses on cash flow hedges are reclassified to net earnings when the hedged item affects net earnings. Amounts related to defined benefit plans that are in AOCI are reclassified over the service periods of employees in the plan. See Note 16 for more information on our defined benefit plans.

The following table shows the changes in the components of AOCI, net of tax (in millions):

	Foreign Currency Translation	Cash Flow Hedges	Defined Benefit Plan Items	Total AOCI
Balance December 31, 2020	$ (7.2)	$(55.6)	$(235.0)	$(297.8)
AOCI before reclassifications	(99.9)	86.4	73.5	60.0
Reclassifications to statements of earnings	–	1.3	4.9	6.2
Balance December 31, 2021	$(107.1)	$ 32.1	$(156.6)	$(231.6)

The following table shows the reclassification adjustments from AOCI (in millions):

Component of AOCI	Amount of Gain / (Loss) Reclassified from AOCI For the Years Ended December 31, 2021	2020	2019	Location on Statements of Earnings
Cash flow hedges				
Foreign exchange forward contracts	$ (0.8)	$45.4	$ 38.4	Cost of products sold
Interest rate swaps	–	–	2.8	Interest expense, net
Forward starting interest rate swaps	(0.6)	(0.6)	(0.6)	Interest expense, net
	(1.4)	44.8	40.6	Total before tax
	(0.1)	6.3	5.5	Provision (benefit) for income taxes
	$ (1.3)	$38.5	$ 35.1	Net of tax
Defined benefit plans				
Prior service cost	$ 4.0	$ 3.9	$ 7.3	Other income (expense), net
Curtailment gain	–	–	7.2	Other income (expense), net
Unrecognized actuarial loss	(11.1)	(8.5)	(21.8)	Other income (expense), net
	(7.1)	(4.6)	(7.3)	Total before tax
	(2.2)	(1.7)	(2.3)	Provision (benefit) for income taxes
	$ (4.9)	$(2.9)	$ (5.0)	Net of tax
Total reclassifications	$ (6.2)	$35.6	$ 30.1	Net of tax

The following table shows the tax effects on each component of AOCI recognized in our consolidated statements of comprehensive income (loss) (in millions):

	For the Years Ended December 31,								
	Before Tax			Tax			Net of Tax		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Foreign currency cumulative translation adjustments	$(54.8)	$ (43.4)	$ 12.1	$45.1	$(69.0)	$13.6	$(99.9)	$ 25.6	$ (1.5)
Unrealized cash flow hedge gains (losses)	102.5	(42.7)	34.6	16.1	(9.2)	4.0	86.4	(33.5)	30.6
Reclassification adjustments on cash flow hedges	1.4	(44.8)	(40.6)	0.1	(6.3)	(5.5)	1.3	(38.5)	(35.1)
Adjustments to prior service cost and unrecognized actuarial assumptions	96.9	(20.9)	(56.4)	18.5	(11.4)	(7.9)	78.4	(9.5)	(48.5)
Total Other Comprehensive Income (Loss)	$146.0	$(151.8)	$(50.3)	$79.8	$(95.9)	$ 4.2	$ 66.2	$(55.9)	$(54.5)

15. Derivative Instruments and Hedging Activities

We are exposed to certain market risks relating to our ongoing business operations, including foreign currency exchange rate risk, commodity price risk, interest rate risk and credit risk. We manage our exposure to these and other market risks through regular operating and financing activities. Currently, the only risks that we manage through the use of derivative instruments are interest rate risk and foreign currency exchange rate risk.

Interest Rate Risk

Derivatives Designated as Fair Value Hedges

We currently use fixed-to-variable interest rate swaps to manage our exposure to interest rate risk from our cash investments and debt portfolio. These derivative instruments are designated as fair value hedges under GAAP. Changes in the fair value of the derivative instrument are recorded in current earnings and are offset by gains or losses on the underlying debt instrument

In June 2021, we entered into $1 billion of fixed-to-variable interest rate swaps that we have designated as fair value hedges of $1 billion of our fixed rate debt obligations.

In prior years, we entered into various fixed-to-variable interest rate swap agreements that were accounted for as fair value hedges of our senior notes due 2021. In August 2016, we received cash for these interest rate swap assets by terminating the hedging instruments with the counterparties. There was no remaining unamortized balance as of December 31, 2021 related to these discontinued hedges, since the unamortized balance was recognized in full upon the end of the maturity period of the hedged

senior notes in the third quarter of 2021. As of December 31, 2021 and December 31, 2020, the following amounts were recorded on our consolidated balance sheets related to cumulative basis adjustments for fair value hedges (in millions):

	Carrying Amount of the Hedged Liabilities		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Liabilities	
Balance Sheet Line Item	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Current portion of long-term debt	$ –	$303.0	$ –	$3.1
Long-term debt	985.2	–	(10.5)	–

Derivatives Designated as Cash Flow Hedges

In 2014, we entered into forward starting interest rate swaps that were designated as cash flow hedges of our thirty-year tranche of senior notes (the 4.450% Senior Notes due 2045) we expected to issue in 2015. The forward starting interest rate swaps mitigated the risk of changes in interest rates prior to the completion of the notes offering. The interest rate swaps were settled, and the remaining loss to be recognized at December 31, 2021 was $25.3 million, which will be recognized using the effective interest rate method over the remaining maturity period of the hedged notes.

Foreign Currency Exchange Rate Risk

We operate on a global basis and are exposed to the risk that our financial condition, results of operations and cash flows could be adversely affected by changes in foreign currency exchange rates. To reduce the potential effects of foreign currency exchange rate movements on net earnings, we enter into derivative financial instruments in the form of foreign currency exchange forward contracts with major financial institutions. We also designated our Euro notes and other foreign currency exchange forward contracts as net investment hedges of investments in foreign subsidiaries. We are primarily exposed to foreign currency exchange rate risk with respect to transactions and net assets denominated in Euros, Swiss Francs, Japanese Yen, British Pounds, Canadian Dollars, Australian Dollars, Korean Won, Swedish Krona, Czech Koruna, Thai Baht, Taiwan Dollars, South African Rand, Russian Rubles, Indian Rupees, Turkish Lira, Polish Zloty, Danish Krone, and Norwegian Krone. We do not use derivative financial instruments for trading or speculative purposes.

Derivatives Designated as Net Investment Hedges

We are exposed to the impact of foreign exchange rate fluctuations in the investments in our wholly-owned foreign subsidiaries that are denominated in currencies other than the U.S. Dollar. In order to mitigate the volatility in foreign exchange rates, we issued Euro Notes in December 2016 and November 2019, as discussed in Note 13, and designated 100 percent of the Euro Notes to hedge our net investment in certain wholly-owned foreign subsidiaries that have a functional currency of Euro. All changes in the fair value of the hedging instrument designated as a net investment hedge are recorded as a component of AOCI in our consolidated balance sheets.

At December 31, 2021, we had receive-fixed-rate, pay-fixed-rate cross-currency interest rate swaps with notional amounts outstanding of Euro 675 million, Japanese Yen 7 billion and Swiss Franc 50 million. These transactions further hedge our net investment in certain wholly-owned foreign subsidiaries that have a functional currency of Euro, Japanese Yen and Swiss Franc. All changes in the fair value of a derivative instrument designated as a net investment hedge are recorded as a component of AOCI in the consolidated balance sheets. The portion of this change related to the excluded component will be amortized into earnings over the life of the derivative while the remainder will be recorded in AOCI until the hedged net investment is sold or substantially eliminated. We recognize the excluded component in interest expense, net on our consolidated statements of earnings. The net cash received related to the receive-fixed-rate, pay-fixed-rate component of the cross-currency interest rate swaps is reflected in investing cash flows in our consolidated statements of cash flows. In the twelve-month period ended December 31, 2021, Euro 775 million of these cross-currency interest rate swaps matured at a loss of $40.0 million. The settlement of this loss with the counterparties is reflected in investing cash flows in our consolidated statements of cash flows and will remain in AOCI on our consolidated balance sheet until the hedged net investment is sold or substantially liquidated.

Derivatives Designated as Cash Flow Hedges

Our revenues are generated in various currencies throughout the world. However, a significant amount of our inventory is produced in U.S. Dollars. Therefore, movements in foreign currency exchange rates may have different proportional effects on our revenues compared to our cost of products sold. To minimize the effects of foreign currency exchange rate movements on cash flows, we hedge intercompany sales of inventory expected to occur within the next 30 months with foreign currency exchange forward contracts. We designate these derivative instruments as cash flow hedges.

We perform quarterly assessments of hedge effectiveness by verifying and documenting the critical terms of the hedge instrument and confirming that forecasted transactions have not changed significantly. We also assess on a quarterly basis whether there have been adverse developments regarding the risk of a counterparty default. For derivatives which qualify as hedges of future cash flows, the gains and losses are temporarily recorded in AOCI and then recognized in cost of products sold when the hedged item affects net earnings. On our consolidated statements of cash flows, the settlements of these cash flow hedges are recognized in operating cash flows.

For foreign currency exchange forward contracts outstanding at December 31, 2021, we had obligations to

purchase U.S. Dollars and sell Euros, Japanese Yen, British Pounds, Canadian Dollars, Australian Dollars, Korean Won, Swedish Krona, Czech Koruna, Thai Baht, Taiwan Dollars, South African Rand, Russian Rubles, Indian Rupees, Polish Zloty, Danish Krone, and Norwegian Krone and obligations to purchase Swiss Francs and sell U.S. Dollars. These derivatives mature at dates ranging from January 2022 through June 2024. As of December 31, 2021, the notional amounts of outstanding forward contracts entered into with third parties to purchase U.S. Dollars were $1,295.2 million. As of December 31, 2021, the notional amounts of outstanding forward contracts entered into with third parties to purchase Swiss Francs were $347.0 million.

Derivatives Not Designated as Hedging Instruments

We enter into foreign currency forward exchange contracts with terms of one to three months to manage currency exposures for monetary assets and liabilities denominated in a currency other than an entity's functional currency. Any foreign currency re-measurement gains/losses recognized in earnings are generally offset with gains/losses on the foreign currency forward exchange contracts in the same reporting period. The amount of these gains/losses is recorded in other income (expense), net. Outstanding contracts are recorded on the balance sheet at fair value as of the end of the reporting period. The notional amounts of these contracts are typically in a range of $1.5 billion to $2.0 billion per quarter.

As discussed in Note 13, in 2021 we entered into a reverse treasury lock related to our bond tender offer to offset any increases or decreases to the premium associated with the tender offer from the date we entered into the lock. We recognized a gain of $12.0 million that was included in the loss on early extinguishment of debt.

Income Statement Presentation

Derivatives Designated as Cash Flow Hedges

Derivative instruments designated as cash flow hedges had the following effects, before taxes, on AOCI and net earnings on our consolidated statements of earnings, consolidated statements of comprehensive income (loss) and consolidated balance sheets (in millions):

	Amount of Gain / (Loss) Recognized in AOCI				Amount of Gain / (Loss) Reclassified from AOCI		
	Years Ended December 31,				Years Ended December 31,		
Derivative Instrument	2021	2020	2019	Location on Statement of Earnings	2021	2020	2019
Foreign exchange forward contracts	$102.5	$(42.7)	$34.6	Cost of products sold	$(0.8)	$45.4	$38.4
Interest rate swaps	–	–	–	Interest expense, net	–	–	2.8
Forward starting interest rate swaps	–	–	–	Interest expense, net	(0.6)	(0.6)	(0.6)
	$102.5	$(42.7)	$34.6		$(1.4)	$44.8	$40.6

The fair value of outstanding derivative instruments designated as cash flow hedges and recorded on the consolidated balance sheet at December 31, 2021, together with settled derivatives where the hedged item has not yet affected earnings, was a net unrealized gain of $33.8 million, or $32.1 million after taxes, which is deferred in AOCI. A gain of $27.9 million, or $23.6 million after taxes, is expected to be reclassified to earnings in cost of products sold and a loss of $0.7 million, or $0.5 million after taxes, is expected to be reclassified to earnings in interest expense, net over the next twelve months.

The following table presents the effects of fair value, cash flow and net investment hedge accounting on our consolidated statements of earnings (in millions):

	Location and Amount of Gain/(Loss) Recognized in Income on Fair Value, Cash Flow and Net Investment Hedging Relationships Years Ended December 31,					
	2021		2020		2019	
	Cost of Products Sold	Interest Expense, Net	Cost of Products Sold	Interest Expense, Net	Cost of Products Sold	Interest Expense, Net
Total amounts of income and expense line items presented in the statements of earnings in which the effects of fair value, cash flow and net investment hedges are recorded	$2,341.0	$(208.4)	$2,128.3	$(212.0)	$2,252.6	$(226.9)
The effects of fair value, cash flow and net investment hedging:						
Gain on fair value hedging relationships						
Discontinued interest rate swaps	–	3.1	–	3.3	–	8.2
Interest rate swaps	–	6.4	–	–	–	–
Gain (loss) on cash flow hedging relationships						
Foreign exchange forward contracts	(0.8)	–	45.4	–	38.4	–
Interest rate swaps	–	–	–	–	–	2.8
Forward starting interest rate swaps	–	(0.6)	–	(0.6)	–	(0.6)
Gain on net investment hedging relationships						
Cross-currency interest rate swaps	–	37.5	–	53.5	–	52.2

Derivatives Not Designated as Hedging Instruments

The following gains/(losses) from these derivative instruments were recognized on our consolidated statements of earnings (in millions):

Derivative Instrument	Location on Statements of Earnings	Years Ended December 31, 2021	2020	2019
Foreign exchange forward contracts	Other income (expense), net	$(1.8)	$10.6	$(11.0)
Reverse treasury lock	Other income (expense), net	12.0	–	–

These gains/(losses) do not reflect losses of $3.7 million, $22.8 million and $3.4 million in 2021, 2020 and 2019, respectively, recognized in other income (expense), net as a result of foreign currency re-measurement of monetary assets and liabilities denominated in a currency other than an entity's functional currency.

Balance Sheet Presentation

As of December 31, 2021 and 2020, all derivative instruments are recorded at fair value on our consolidated balance sheets. On our consolidated balance sheets, we recognize individual forward contracts with the same counterparty on a net asset/liability basis if we have a master netting agreement with the counterparty. Under these master netting agreements, we are able to settle derivative instrument assets and liabilities with the same counterparty in a single transaction, instead of settling each derivative instrument separately. We have master netting agreements with all of our counterparties.

The fair value of derivative instruments on a gross basis is as follows (in millions):

	As of December 31, 2021		As of December 31, 2020	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Asset Derivatives Designated as Hedges				
Foreign exchange forward contracts	Other current assets	$42.3	Other current assets	$ 12.2
Cross-currency interest rate swaps	Other current assets	$16.3	Other current assets	$ –
Foreign exchange forward contracts	Other assets	20.9	Other assets	3.7
Cross-currency interest rate swaps	Other assets	6.7	Other assets	–
Total asset derivatives		$86.2		$ 15.9
Asset Derivatives Not Designated as Hedges				
Foreign exchange forward contracts	Other current assets	$ 1.4	Other current assets	$ 1.5
Liability Derivatives Designated as Hedges				
Foreign exchange forward contracts	Other current liabilities	$ 9.6	Other current liabilities	$ 37.4
Cross-currency interest rate swaps	Other current liabilities	0.1	Other current liabilities	55.0
Foreign exchange forward contracts	Other long-term liabilities	1.5	Other long-term liabilities	26.5
Cross-currency interest rate swaps	Other long-term liabilities	3.3	Other long-term liabilities	28.3
Interest rate swaps	Other long-term liabilities	10.5	Other long-term liabilities	–
Total liability derivatives		$25.0		$147.2
Liability Derivatives Not Designated as Hedges				
Foreign exchange forward contracts	Other current liabilities	$ 1.8	Other current liabilities	$ 3.8

The table below presents the effects of our master netting agreements on our consolidated balance sheets (in millions):

		As of December 31, 2021			As of December 31, 2020		
Description	Location	Gross Amount	Offset	Net Amount in Balance Sheet	Gross Amount	Offset	Net Amount in Balance Sheet
Asset Derivatives							
Cash flow hedges	Other current assets	$42.3	$9.5	$32.8	$12.2	$11.7	$0.5
Cash flow hedges	Other assets	20.9	1.3	19.6	3.7	3.7	–
Derivatives not designated as hedges	Other current assets	1.4	0.3	1.1	1.5	0.6	0.9

Description	Location	As of December 31, 2021 Gross Amount	Offset	Net Amount in Balance Sheet	As of December 31, 2020 Gross Amount	Offset	Net Amount in Balance Sheet
Liability Derivatives							
Cash flow hedges	Other current liabilities	9.6	9.5	0.1	37.4	11.7	25.7
Cash flow hedges	Other long-term liabilities	1.5	1.3	0.2	26.5	3.7	22.8
Derivatives not designated as hedges	Other current liabilities	1.8	0.3	1.5	3.8	0.6	3.2

The following net investment hedge gains (losses) were recognized on our consolidated statements of comprehensive income (loss) (in millions):

Derivative Instrument	Amount of Gain / (Loss) Recognized in AOCI Years Ended December 31, 2021	2020	2019
Euro Notes	$129.6	$(151.5)	$10.7
Cross-currency interest rate swaps	103.0	(143.8)	47.9
	$232.6	$(295.3)	$58.6

16. Retirement Benefit Plans

We have defined benefit pension plans covering certain U.S. and Puerto Rico employees. Plan benefits are primarily based on years of credited service and the participant's average eligible compensation. The U.S. and Puerto Rico plans are frozen; meaning there are no new participants that can join the plan and participants in the plan do not accrue additional years of service or compensation. In addition to the U.S. and Puerto Rico defined benefit pension plans, we sponsor various foreign pension arrangements, including retirement and termination benefit plans required by local law or coordinated with government sponsored plans.

We use a December 31 measurement date for our benefit plans.

Defined Benefit Plans

The components of net pension expense for our defined benefit retirement plans were as follows (in millions):

	For the Years Ended December 31, U.S. and Puerto Rico 2021	2020	2019	Foreign 2021	2020	2019
Service cost	$ 0.9	$ 0.7	$ 7.1	$ 24.7	$ 24.7	$ 19.0
Interest cost	10.5	13.9	16.2	4.9	5.4	9.0
Expected return on plan assets	(29.8)	(32.9)	(32.4)	(15.6)	(13.3)	(13.4)
Curtailment gain	–	–	(7.2)	–	–	–
Settlements	6.4	0.5	0.8	0.5	(0.5)	–
Amortization of prior service cost	0.3	0.3	(3.4)	(4.3)	(4.2)	(3.9)
Amortization of unrecognized actuarial loss	8.6	7.2	19.3	2.5	1.3	2.5
Net periodic benefit (income) expense	$ (3.1)	$(10.3)	$ 0.4	$ 12.7	$ 13.4	$ 13.2

In our consolidated statements of earnings, service cost is reported in the same location as other compensation costs arising from services rendered by the pertinent employees while the other components of net pension expense are reported in other income (expense), net.

The weighted average actuarial assumptions used to determine net pension expense for our defined benefit retirement plans were as follows:

	For the Years Ended December 31, U.S. and Puerto Rico 2021	2020	2019	Foreign 2021	2020	2019
Discount rate	2.04%	3.40%	4.38%	0.63%	0.73%	1.44%
Rate of compensation increase	–	–	3.29%	2.39%	2.28%	2.50%
Expected long-term rate of return on plan assets	6.75%	7.75%	7.75%	2.09%	2.17%	2.14%

The expected long-term rate of return on plan assets is based on the historical and estimated future rates of return on the different asset classes held in the plans. The expected long-term rate of return is the weighted average of the target asset allocation of each individual asset class. We believe that historical asset results approximate expected market returns applicable to the funding of a long-term benefit obligation.

Discount rates were determined for each of our defined benefit retirement plans at their measurement date to reflect the yield of a portfolio of high quality bonds matched against the timing and amounts of projected future benefit payments.

Changes in projected benefit obligations and plan assets were (in millions):

	For the Years Ended December 31,			
	U.S. and Puerto Rico		Foreign	
	2021	2020	2021	2020
Projected benefit obligation - beginning of year	$516.9	$472.0	$819.3	$740.4
Service cost	0.9	0.7	24.7	24.7
Interest cost	10.5	13.9	4.9	5.4
Plan amendments	–	–	–	0.2
Employee contributions	–	–	23.4	22.1
Benefits paid	(13.3)	(24.0)	(41.7)	(39.8)
Actuarial loss	3.0	55.6	6.1	12.5
Expenses paid	–	–	(0.2)	(0.3)
Settlement	(14.9)	(1.3)	(3.0)	(4.5)
Translation (gain) loss	–	–	(25.6)	58.6
Projected benefit obligation - end of year	$503.1	$516.9	$807.9	$819.3

	For the Years Ended December 31,			
	U.S. and Puerto Rico		Foreign	
	2021	2020	2021	2020
Plan assets at fair market value - beginning of year	$474.1	$444.9	$756.7	$665.2
Actual return on plan assets	50.5	51.4	86.6	40.0
Employer contributions	3.1	3.1	22.4	21.2
Employee contributions	–	–	23.4	22.1
Settlements	(14.9)	(1.3)	(3.0)	(4.5)
Benefits paid	(13.3)	(24.0)	(41.7)	(39.8)
Expenses paid	–	–	(0.2)	(0.3)
Translation (loss) gain	–	–	(23.0)	52.8
Plan assets at fair market value - end of year	$499.5	$474.1	$821.2	$756.7
Funded status	$ (3.6)	$(42.8)	$ 13.3	$(62.6)

	For the Years Ended December 31,			
	U.S. and Puerto Rico		Foreign	
	2021	2020	2021	2020
Amounts recognized in consolidated balance sheet:				
Prepaid pension	$ 2.7	$ –	$ 54.9	$ 20.4
Short-term accrued benefit liability	(0.1)	(0.1)	(1.3)	(1.3)
Long-term accrued benefit liability	(6.2)	(42.7)	(40.3)	(81.7)
Net amount recognized	$(3.6)	$(42.8)	$ 13.3	$(62.6)

The weighted average actuarial assumptions used to determine the projected benefit obligation for our defined benefit retirement plans were as follows:

	For the Years Ended December 31,					
	U.S. and Puerto Rico			Foreign		
	2021	2020	2019	2021	2020	2019
Discount rate	2.70%	2.70%	3.40%	0.73%	0.61%	0.74%
Rate of compensation increase	–	–	3.29%	2.48%	2.36%	2.45%

Plans with projected benefit obligations in excess of plan assets were as follows (in millions):

	As of December 31,			
	U.S. and Puerto Rico		Foreign	
	2021	2020	2021	2020
Projected benefit obligation	$468.5	$516.9	$38.8	$778.4
Plan assets at fair market value	462.2	474.1	8.1	709.5

Total accumulated benefit obligations and plans with accumulated benefit obligations in excess of plan assets were as follows (in millions):

	As of December 31,			
	U.S. and Puerto Rico		Foreign	
	2021	2020	2021	2020
Total accumulated benefit obligations	$503.1	$516.9	$783.0	$801.3
Plans with accumulated benefit obligations in excess of plan assets:				
Accumulated benefit obligation	468.5	516.9	36.4	560.9
Plan assets at fair market value	462.2	474.1	8.1	508.6

The benefits expected to be paid out in each of the next five years and for the five years combined thereafter are as follows (in millions):

For the Years Ending December 31,	U.S. and Puerto Rico	Foreign
2022	$ 24.6	$ 32.8
2023	25.4	34.8
2024	25.7	33.6
2025	26.3	35.0
2026	27.0	34.7
2027-2031	133.1	175.7

The U.S. and Puerto Rico defined benefit retirement plans' overall investment strategy is to balance total returns by emphasizing long-term growth of capital while mitigating risk. We have established target ranges of assets held by the plans of 30 to 65 percent for equity securities, 30 to 50 percent for debt securities and 0 to 15 percent in non-traditional investments. The plans strive to have sufficiently diversified assets so that adverse or unexpected results from one asset class will not have an unduly detrimental impact on the entire portfolio. We regularly review the investments in the plans and we may rebalance them from time-to-time based upon the target asset allocation of the plans.

For the U.S. and Puerto Rico plans, we maintain an investment policy statement that guides the investment allocation in the plans. The investment policy statement describes the target asset allocation positions described above. Our benefits committee, along with our investment advisor, monitor compliance with and administer the investment policy statement and the plans' assets and oversee the general investment strategy and objectives of the plans. Our benefits committee generally meets quarterly to review performance.

The investment strategies of foreign based plans vary according to the plan provisions and local laws. The majority of the assets in foreign based plans are located in Switzerland-based plans. These assets are held in trusts and are commingled with the assets of other Swiss companies with representatives of all the companies making the investment decisions. The overall strategy is to maximize total returns while avoiding risk. The trustees of the assets have established target ranges of assets held by the plans of 30 to 50 percent in debt securities, 20 to 37 percent in equity securities, 15 to 24 percent in real estate, 3 to 15 percent in cash funds and 0 to 12 percent in other funds.

The fair value of our U.S. and Puerto Rico pension plan assets by asset category was as follows (in millions):

	As of December 31, 2021			
		Fair Value Measurements at Reporting Date Using:		
Asset Category	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	$ 3.8	$3.8	$ –	$ –
Equity securities	342.1	–	342.1	–
Intermediate fixed income securities	153.6	–	153.6	–
Total	$499.5	$3.8	$495.7	$ –

	As of December 31, 2020			
		Fair Value Measurements at Reporting Date Using:		
Asset Category	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	$ 7.3	$ 7.3	$ –	$ –
Equity securities	304.1	–	304.1	–
Intermediate fixed income securities	162.7	–	162.7	–
Total	$474.1	$ 7.3	$466.8	$ –

The fair value of our foreign pension plan assets was as follows (in millions):

	As of December 31, 2021			
		Fair Value Measurements at Reporting Date Using:		
Asset Category	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	$ 56.6	$ 56.6	$ –	$ –
Equity securities	185.5	149.6	35.9	–
Fixed income securities	195.5	–	195.5	–
Other types of investments	223.0	–	223.0	–
Real estate	160.6	–	–	160.6
Total	$821.2	$206.2	$454.4	$160.6

	As of December 31, 2020			
		Fair Value Measurements at Reporting Date Using:		
Asset Category	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	$ 42.7	$ 42.7	$ –	$ –
Equity securities	163.9	126.8	37.1	–
Fixed income securities	262.5	–	262.5	–
Other types of investments	142.3	–	142.3	–
Real estate	145.3	–	–	145.3
Total	$756.7	$169.5	$441.9	$145.3

As of December 31, 2021 and 2020, our defined benefit pension plans' assets did not hold any direct investment in Zimmer Biomet Holdings common stock.

Equity securities are valued using a market approach, based on quoted prices for the specific security from transactions in active exchange markets (Level 1), or in some cases where we are invested in mutual or collective funds, based upon the net asset value per unit of the fund which is determined from quoted market prices of the underlying securities in the fund's portfolio (Level 2). Fixed income securities are valued using a market approach, based upon quoted prices for the specific security or from institutional bid evaluations. Real estate is valued by discounting to present value the cash flows expected to be generated by the specific properties.

The following table provides a reconciliation of the beginning and ending balances of our foreign pension plan assets measured at fair value that used significant unobservable inputs (Level 3) (in millions):

	December 31, 2021
Beginning Balance	$145.3
Gain on assets sold	0.7
Change in fair value of assets	7.0
Net purchases and sales	11.9
Translation gain	(4.3)
Ending Balance	$160.6

Contributions to the U.S. and Puerto Rico defined benefit retirement plans are estimated to be $1.8 million in 2022. Contributions to foreign defined benefit plans are estimated to be $19.1 million in 2022. We do not expect the assets in any of our plans to be returned to us in the next year.

Defined Contribution Plans

We also sponsor defined contribution plans for substantially all of the U.S. and Puerto Rico employees and certain employees in other countries.

The benefits offered under these plans are reflective of local customs and practices in the countries concerned. We expensed $52.4 million, $49.6 million and $52.6 million related to these plans for the years ended December 31, 2021, 2020 and 2019, respectively.

17 Income Taxes

The components of earnings (loss) before income taxes consisted of the following (in millions):

	For the Years Ended December 31,		
	2021	2020	2019
United States operations	$(275.7)	$(592.9)	$ (125.9)
Foreign operations	694.1	318.5	1,031.7
Total	$ 418.4	$(274.4)	$ 905.8

The provision/(benefit) for income taxes and the income taxes paid consisted of the following (in millions):

Current:			
Federal	$ 32.2	$ (96.1)	$ 65.5
State	10.4	4.6	9.8
Foreign	123.4	(57.5)	237.7
	166.0	(149.0)	313.0

Deferred:			
Federal	(115.8)	(24.2)	(90.2)
State	(21.6)	(11.5)	(4.2)
Foreign	(12.3)	47.7	(444.3)
	(149.7)	12.0	(538.7)
Provision (benefit) for income taxes	$ 16.3	$(137.0)	$(225.7)
Net income taxes paid	$ 272.8	$ 147.4	$ 192.5

A reconciliation of the U.S. statutory income tax rate to our effective tax rate is as follows:

	For the Years Ended December 31,		
	2021	2020	2019
U.S. statutory income tax rate	21.0%	21.0%	21.0%
State taxes, net of federal deduction	(3.0)	2.4	0.8
Tax impact of foreign operations, including U.S. taxes on international income and foreign tax credits	(17.4)	14.9	(10.2)
Change in valuation allowance	(1.0)	1.5	1.5
Non-deductible expenses	2.0	(2.0)	0.4
Goodwill impairment	–	(46.1)	–
Tax rate change	(0.4)	3.8	0.6
Tax impact of certain significant transactions	1.3	–	–
Tax benefit relating to foreign derived intangible income and U.S. manufacturer's deduction	0.5	5.8	(4.5)
R&D tax credit	(2.8)	2.1	(1.2)
Share-based compensation	(0.6)	0.1	(0.4)
Net uncertain tax positions, including interest and penalties	3.8	31.4	1.9
U.S. tax reform	–	–	0.1
Switzerland tax reform and certain restructuring transactions	–	15.7	(34.8)
Other	0.5	(0.7)	(0.1)
Effective income tax rate	3.9%	49.9%	(24.9)%

Our operations in Puerto Rico benefit from various tax incentive grants. These grants expire between fiscal years 2026 and 2029.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Valuation allowances are recorded to reduce deferred income tax assets when it is more likely than not that an income tax benefit will not be realized. We reclassified certain prior period amounts to conform to the current period presentation.

The components of deferred taxes consisted of the following (in millions):

	As of December 31,	
	2021	2020
Deferred tax assets:		
Inventory	$ 273.6	$ 297.2
Net operating loss carryover	463.8	511.2
Tax credit carryover	86.6	55.1
Capital loss carryover	8.6	9.0
Product liability and litigation	45.8	53.9
Accrued liabilities	103.9	86.1
Share-based compensation	32.6	30.4
Accounts receivable	19.8	19.0
Foreign currency items	–	57.4
Other	55.4	19.2
Total deferred tax assets	1,090.1	1,138.5
Less: Valuation allowances	(470.1)	(542.1)
Total deferred tax assets after valuation allowances	620.0	596.4
Deferred tax liabilities:		
Fixed assets	$ 132.7	$ 119.2
Intangible assets	687.5	787.6
Foreign currency items	3.8	–
Other	32.2	28.2
Total deferred tax liabilities	856.2	935.0
Total net deferred income taxes	$ (236.2)	$ (338.6)

We have reclassified certain previously reported components of deferred taxes to conform to the current year presentation.

At December 31, 2021, the following net operating loss, tax credit carryovers, and capital loss carryovers are available to reduce future federal, state and foreign taxable earnings (in millions):

Expiration Period:	Net operating loss carryover	Tax credit carryover	Capital loss carryover
1-5 years	$ 3.3	$15.1	$1.7
6-10 years	52.7	62.4	–
11+ years	279.5	1.6	–
Indefinite	128.3	7.5	6.9
	463.8	86.6	8.6
Valuation allowances	$401.6	$46.7	$8.6

The remaining valuation allowances booked against deferred tax assets of $13.2 million related primarily to accrued liabilities and intangible assets that management believes, more likely than not, will not be realized.

We intend to repatriate at least $5.0 to $6.0 billion of unremitted earnings, of which the additional tax related to remitting earnings is deemed immaterial as a portion of these earnings has already been taxed as toll tax or GILTI and is not subject to further U.S. federal tax. Portions of the additional

tax would also be offset by allowable foreign tax credits. Of the $5.0 to $6.0 billion amount, we have an estimated $4.6 billion of cash and intercompany notes available to repatriate and the remainder is invested in the operations of our foreign entities. The remaining amounts earned overseas are expected to be permanently reinvested outside of the United States. If the Company decides at a later date to repatriate these earnings to the U.S., the Company would be required to provide for the net tax effects on these amounts. The Company estimates that the total tax effect of this repatriation would not be significant under current enacted tax laws and regulations and at current currency exchange rates.

The following is a tabular reconciliation of the total amounts of unrecognized tax benefits (in millions):

	For the Years Ended December 31,		
	2021	2020	2019
Balance at January 1	$619.4	$ 741.8	$685.5
Increases related to prior periods	11.5	75.3	24.7
Decreases related to prior periods	(12.7)	(158.3)	(35.6)
Increases related to current period	7.3	3.4	133.2
Decreases related to settlements with taxing authorities	(65.1)	(14.6)	(60.2)
Decreases related to lapse of statute of limitations	(1.8)	(28.2)	(5.8)
Balance at December 31	$558.6	$ 619.4	$741.8
Amounts impacting effective tax rate, if recognized balance at December 31	$426.4	$ 473.9	$599.2

We recognize accrued interest and penalties related to unrecognized tax benefits as income tax expense. During 2021, we accrued interest and penalties of $8.9 million, and as of December 31, 2021, had a recognized liability for interest and penalties of $116.4 million, which does not include any increase related to business combinations.

During 2020, we released interest and penalties of $1.7 million, and as of December 31, 2020, had a recognized liability for interest and penalties of $107.5 million, which does not include any increase related to business combinations. During 2019, we accrued interest and penalties of $15.0 million, and as of December 31, 2019, had a recognized liability for interest and penalties of $109.2 million, which does not include any increase related to business combinations.

We operate on a global basis and are subject to numerous and complex tax laws and regulations. Additionally, tax laws have and continue to undergo rapid changes in both application and interpretation by various countries, including state aid interpretations and the Organization for Economic Cooperation and Development led initiatives. Our income tax filings are subject to examinations by taxing authorities throughout the world. Income tax audits may require an extended period of time to reach resolution and may result in significant income tax adjustments when interpretation of tax laws or allocation of company profits is disputed. Although ultimate timing is uncertain, the net amount of tax liability for unrecognized tax benefits may change within the next twelve months due to changes in audit status, expiration of statutes of limitations, settlements of tax assessments and other events. Management's best estimate of such change is within the range of a $140 million decrease to a $20 million increase.

We are under continuous audit by the Internal Revenue Service ("IRS") and other taxing authorities. During the course of these audits, we receive proposed adjustments from taxing authorities that may be material. Therefore, there is a possibility that an adverse outcome in these audits could have a material effect on our results of operations and financial condition. Our U.S. Federal income tax returns have been audited through 2015 and are currently under audit for years 2016-2019.

In October 2020, we reached agreement with the IRS for tax years 2006-2012 related to the reallocation of profits between the U.S. and Puerto Rico as well as other miscellaneous adjustments.

The IRS has proposed adjustments for tax years 2010-2012, primarily related to reallocating profits between certain of our U.S. and foreign subsidiaries, which remain unsettled. We have disputed these adjustments and intend to continue to vigorously defend our positions as we pursue resolution through the administrative process with the IRS Independent Office of Appeals.

The IRS has proposed adjustments for tax years 2013-2015 relating to transfer pricing involving our cost sharing agreement between the U.S. and Switzerland affiliated companies and reallocating profits between certain of our U.S. and foreign subsidiaries. This includes a proposed increase to our U.S. Federal taxable income, which would result in additional tax expense related to 2013 of approximately $370 million, subject to interest and penalties related to our cost sharing agreement. We strongly believe that the position of the IRS, with regard to this matter, is inconsistent with the applicable U.S. Treasury regulations governing our cost sharing agreement. We do not expect changes to our reserves relative to these matters within the next twelve months. We intend to vigorously contest the adjustment, and we will pursue all available administrative and, if necessary, judicial remedies. If we pursue judicial remedies in the U.S. Tax Court for years 2013-2015, a number of years will likely elapse before such matters are finally resolved. No payment of any amount related to this matter is required to be made, if at all, until all applicable proceedings have been completed.

State income tax returns are generally subject to examination for a period of 3 to 5 years after filing of the respective return. The state impact of any federal changes generally remains subject to examination by various states for a period of up to one year after formal notification to the states. We have various state income tax return positions in the process of examination, administrative appeals or litigation.

In other major jurisdictions, open years are generally 2014 or later.

A public referendum held in Switzerland passed the Federal Act on Tax Reform and AHV Financing ("TRAF"),

effective January 1, 2020. The TRAF provides transitional relief measures for companies that are losing the tax benefit of a ruling, including a "step-up" for amortizable goodwill, equal to the amount of future tax benefit they would have received under their existing ruling, subject to certain limitations. This resulted in the recording of a deferred tax asset for future deductions of tax goodwill. For 2021, we recognized benefits of $6.9 million related to certain adjustments to the estimated net deferred tax asset from the filing of tax returns.

18. Capital Stock and Earnings per Share

We are authorized to issue 250.0 million shares of preferred stock, none of which were issued or outstanding as of December 31, 2021.

The numerator for both basic and diluted earnings per share is net earnings available to common stockholders. The denominator for basic earnings per share is the weighted average number of common shares outstanding during the period. The denominator for diluted earnings per share is weighted average shares outstanding adjusted for the effect of dilutive stock options and other equity awards. The following is a reconciliation of weighted average shares for the basic and diluted share computations (in millions):

	For the Years Ended December 31,		
	2021	2020	2019
Weighted average shares outstanding for basic net earnings per share	208.6	207.0	205.1
Effect of dilutive stock options and other equity awards	1.8	–	1.6
Weighted average shares outstanding for diluted net earnings per share	210.4	207.0	206.7

For the years ended December 31, 2021 and 2019, an average of 1.3 million options and 0.9 million options, respectively, to purchase shares of common stock were not included in the computation of diluted earnings per share as the exercise prices of these options were greater than the average market price of the common stock. Since we incurred a net loss in the year ended December 31, 2020, no dilutive stock options or other equity awards were included as diluted shares.

19. Segment Data

We design, manufacture and market orthopedic reconstructive products; sports medicine, biologics, extremities and trauma products; spine, craniomaxillofacial and thoracic products ("CMFT"); dental implants; and related surgical products. Our chief operating decision maker ("CODM") allocates resources to achieve our operating profit goals through four operating segments. These operating segments, which also constitute our reportable segments, are Americas Orthopedics; EMEA; Asia Pacific; and Americas Spine and Global Dental.

As a result of changes to our organizational structure in advance of the planned spinoff of ZimVie that were effective April 1, 2021, we added an additional operating segment to reflect a change in how our CODM allocates resources to achieve our operating profit goals. The new operating segment consists of the Americas Spine and Global Dental businesses, which was carved out of the previous Americas and Global Businesses operating segment (subsequently renamed to Americas Orthopedics). The EMEA and Asia Pacific operating segments still include the spine product category results in those regions and therefore did not change.

Additionally, starting April 1, 2021 the financial information provided to the CODM from the Americas Orthopedics excluded certain costs related to operations, distribution, quality assurance and regulatory assurance that had previously been reported within this segment. This group of functions and related costs do not meet the criteria to be a separate operating segment and are now reported within Corporate functions.

We have reclassified previously reported information related to the change in operating segments and Corporate functions, along with other insignificant changes, to conform to the new presentation.

Our CODM evaluates performance based upon segment operating profit exclusive of operating expenses pertaining to certain inventory and manufacturing-related charges, intangible asset amortization, goodwill and intangible asset impairment, restructuring and other cost reduction initiatives, quality remediation, acquisition, integration, divestiture and related, litigation, litigation settlement gain, certain European Union Medical Device Regulation expenses, other charges and corporate functions. Corporate functions include corporate legal, finance, information technology, human resources and other corporate departments as well as stock-based compensation. Intercompany transactions have been eliminated from segment operating profit.

Our Americas Orthopedics operating segment is comprised principally of the U.S. and includes other North, Central and South American markets for our orthopedic product categories. This segment also includes research, development engineering, medical education, and brand management for our orthopedic product category headquarter locations. Our EMEA operating segment is comprised principally of Europe and includes the Middle East and African markets for all product categories except Dental. Our Asia Pacific operating segment is comprised principally of Japan, China and Australia and includes other Asian and Pacific markets for all product categories except Dental. The EMEA and Asia Pacific operating segments include the commercial operations as well as regional headquarter expenses to operate in those markets. The Americas Spine and Global Dental segment is comprised principally of the U.S. and includes other North, Central and South American markets for our spine business, and all geographic markets for our dental business. This segment also includes research, development engineering, medical education and brand management at the product category headquarter locations as well as other directly attributable distribution and operations expenses.

Since the Americas Orthopedics segment includes additional costs related to centralized orthopedic product category headquarter expenses, profitability metrics in this operating segment are not comparable to the EMEA and Asia Pacific operating segments. Similarly, since the Americas Spine and Global Dental segment also includes research, development engineering, medical education, and brand management at the product category headquarter locations as well as other directly attributable distribution and operations expenses, its profitability metrics are not comparable to the other operating segments.

Our CODM does not review asset information by operating segment. Instead, our CODM reviews cash flow and other financial ratios by operating segment.

Net sales and other information by segment is as follows (in millions):

	Net Sales			Operating Profit (Loss)			Depreciation and Amortization		
	Year Ended December 31,			Year Ended December 31,			Year Ended December 31,		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Americas Orthopedics	$4,102.1	$3,699.5	$4,148.8	$1,709.3	$1,528.2	$1,831.8	$ 143.1	$ 135.6	$ 126.6
EMEA	1,533.8	1,288.6	1,623.1	392.7	308.9	484.0	74.4	77.5	77.0
Asia Pacific	1,318.3	1,256.9	1,323.8	429.4	420.5	472.7	74.6	71.3	65.3
Americas Spine and Global Dental	882.0	779.5	886.5	136.0	105.6	150.9	26.0	32.7	35.6
Total	$7,836.2	$7,024.5	$7,982.2						
Corporate Functions				(632.2)	(754.1)	(750.9)	133.6	118.0	117.3
Inventory and manufacturing-related charges				(41.8)	(54.2)	(53.9)	–	–	–
Intangible asset amortization				(615.7)	(597.6)	(584.3)	615.7	597.6	584.3
Goodwill and intangible asset impairment				(16.3)	(645.0)	(70.1)	–	–	–
Restructuring and other cost reduction initiatives				(130.5)	(116.9)	(50.0)	–	–	–
Quality remediation				(53.2)	(49.8)	(87.6)	–	–	–
Acquisition, integration, divestiture and related				(81.8)	(23.8)	(12.2)	–	–	–
Litigation				(192.9)	(159.8)	(65.0)	–	–	–
Litigation settlement gain				–	–	23.5	–	–	–
European Union Medical Device Regulation				(46.5)	(25.3)	(30.9)	–	–	–
Certain R&D agreements				(65.0)	–	–	–	–	–
Other charges				(11.4)	(24.5)	(120.5)	–	–	–
Total				$ 780.1	$ (87.8)	$1,137.5	$1,067.4	$1,032.7	$1,006.1

We conduct business in the following countries that hold 10 percent or more of our total consolidated Property, plant and equipment, net (in millions):

	As of December 31,	
	2021	2020
United States	$1,212.6	$1,252.6
Other countries	803.9	795.1
Property, plant and equipment, net	$2,016.5	$2,047.7

U.S. sales were $4,529.5 million, $4,123.5 million, and $4,592.1 million for the years ended December 31, 2021, 2020 and 2019, respectively. Sales within any other individual country were less than 10 percent of our consolidated sales in each of those years. Sales are attributable to a country based upon the customer's country of domicile.

20. Leases

We own most of our manufacturing facilities, but lease various office space, vehicles and other less significant assets throughout the world. Our contracts contain a lease if they convey a right to control the use of an identified asset, either explicitly or implicitly, in exchange for consideration. As allowed by GAAP, we have elected not to recognize a right-of-use asset nor a lease liability for leases with an initial term of twelve months or less. Additionally, we have elected not to separate non-lease components from the leased components in the valuation of our right-of-use asset and lease liability for all asset classes. Our lease contracts are a necessary part of our business, but we do not believe they are significant to our overall operations. We do not have any significant finance leases. Additionally, we do not have significant leases: where we are considered a lessor; where we sublease our assets; with an initial term of twelve months or less; with related parties; with residual value guarantees; that impose restrictions or covenants on us; or that have not yet commenced, but create significant rights and obligations against us.

Our real estate leases generally have terms of between 5 to 10 years and contain lease extension options that can vary from month-to-month extensions to up to 5 year extensions. We include extension options in our lease term if we are

reasonably certain to exercise that option. In determining whether an extension is reasonably certain, we consider the uniqueness of the property for our needs, the availability of similar properties, whether the extension period payments remain the same or may change due to market rates or fixed price increases in the contract, and other economic factors. Our vehicle leases generally have terms of between 3 to 5 years and contain lease extension options on a month-to-month basis. Our vehicle leases are generally not reasonably certain to be extended.

Under GAAP, we are required to discount our lease liabilities to present value using the rate implicit in the lease, or our incremental borrowing rate for a similar term as the lease term if the implicit rate is not readily available. We generally do not have adequate information to know the implicit rate in a lease and therefore use our incremental borrowing rate. Under GAAP, the incremental borrowing rate must be on a collateralized basis, but our debt arrangements are unsecured. We have determined our incremental borrowing rate by using our credit rating to estimate our unsecured borrowing rate and applying reasonable assumptions to reduce the unsecured rate for a risk adjustment effect from collateral.

Information on our leases is as follows ($ in millions):

	For the Years Ended December 31,		
	2021	2020	2019
Lease cost	$85.8	$83.7	$76.0
Cash paid for leases recognized in operating cash flows	$86.3	$81.4	$73.6
Right-of-use assets obtained in exchange for new lease liabilities	$96.4	$83.5	$55.0

	As of December 31,	
	2021	2020
Right-of-use assets recognized in Other assets	$ 271.2	$ 274.5
Lease liabilities recognized in Other current liabilities	$ 69.3	$ 75.0
Lease liabilities recognized in Other long-term liabilities	$ 220.2	$ 217.8
Weighted-average remaining lease term	5.9 years	5.8 years
Weighted-average discount rate	2.0%	2.3%

Our variable lease costs are not significant.

Our future minimum lease payments as of December 31, 2021 were (in millions):

For the Years Ending December 31,	
2022	$ 73.8
2023	59.5
2024	47.7
2025	35.4
2026	28.7
Thereafter	62.4
Total	307.5
Less imputed interest	18.0
Total	$289.5

21. Commitments and Contingencies

On a quarterly and annual basis, we review relevant information with respect to loss contingencies and update our accruals, disclosures and estimates of reasonably possible losses or ranges of loss based on such reviews. We establish liabilities for loss contingencies on an undiscounted basis when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. If the reasonable estimate of a known or probable loss is a range, and no amount within the range is a better estimate than any other, the minimum amount of the range is accrued. For matters where a loss is believed to be reasonably possible, but not probable, or if no reasonable estimate of known or probable loss is available, no accrual has been made.

When determining the estimated loss or range of loss, significant judgment is required. Estimates of probable losses resulting from litigation and other contingences are inherently difficult to predict, particularly when the matters are in early procedural stages with incomplete facts or legal discovery, involve unsubstantiated or indeterminate claims for damages, and/or potentially involve penalties, fines or punitive damages. We recognize litigation-related charges and gains in Selling, general and administrative expense on our consolidated statement of earnings. During the years ended December 31, 2021, 2020, and 2019, we recognized $204.3 million, $166.9 million, and $52.7 million, respectively, of net litigation-related charges. At December 31, 2021 and 2020, accrued litigation liabilities were $420.5 million and $319.4 million, respectively. These litigation-related charges and accrued liabilities reflect all of our litigation-related contingencies and not just the matters discussed below. The ultimate cost of litigation could be materially different than the amount of the current estimates and accruals and could have a material adverse impact on our financial condition and results of operations.

Litigation

Durom Cup-related claims: On July 22, 2008, we temporarily suspended marketing and distribution of the Durom Cup in the U.S. Subsequently, a number of product liability lawsuits were filed against us in various U.S. and foreign jurisdictions. The plaintiffs seek damages for personal injury, and they generally allege that the Durom Cup contains defects that result in complications and premature revision of the device. We have settled the majority of these claims and others are still pending. The majority of the pending U.S. lawsuits are currently in a federal Multidistrict Litigation ("MDL") in the District of New Jersey (*In Re: Zimmer Durom Hip Cup Products Liability Litigation*). Litigation activity in the MDL is stayed pending finalization of the U.S. Durom Cup Settlement Program, an extrajudicial program created to resolve actions and claims of eligible U.S. plaintiffs and claimants. Other lawsuits are pending in various domestic and

foreign jurisdictions, and additional claims may be asserted in the future. The majority of claims outside the U.S. are pending in Germany, Netherlands and Italy.

Our understanding of clinical outcomes with the Durom Cup and other large diameter hip cups continues to evolve. We rely on significant estimates in determining the provisions for Durom Cup-related claims, including our estimate of the number of claims that we will receive and the average amount we will pay per claim. The actual number of claims and the actual amount we pay per claim may differ from our estimates. Among other factors, since our understanding of the clinical outcomes is still evolving, we cannot reasonably estimate the possible loss or range of loss that may result from Durom Cup-related claims in excess of the losses we have accrued. Although we are vigorously defending these lawsuits, their ultimate resolution is uncertain. We accrued a litigation-related charge in this matter based on an estimate of the possible loss, as discussed above.

Zimmer M/L Taper, M/L Taper with Kinectiv Technology, and Versys Femoral Head-related claims ("Metal Reaction" claims): We are a defendant in a number of product liability lawsuits relating to our M/L Taper and M/L Taper with Kinectiv Technology hip stems, and Versys Femoral Head implants. The plaintiffs seek damages for personal injury, alleging that defects in the products lead to corrosion at the head/stem junction resulting in, among other things, pain, inflammation and revision surgery.

The majority of the cases are consolidated in an MDL that was created on October 3, 2018 in the U.S. District Court for the Southern District of New York (*In Re: Zimmer M/L Taper Hip Prosthesis or M/L Taper Hip Prosthesis with Kinectiv Technology and Versys Femoral Head Products Liability Litigation*). Other related cases are pending in various state and federal courts. Additional lawsuits are likely to be filed. Although we are vigorously defending these lawsuits, their ultimate resolution is uncertain. We accrued a litigation-related charge in this matter based on an estimate of the possible loss, as discussed above.

Biomet metal-on-metal hip implant claims: Biomet is a defendant in a number of product liability lawsuits relating to metal-on-metal hip implants, most of which involve the M2a-Magnum hip system. Cases are currently consolidated in an MDL in the U.S. District Court for the Northern District of Indiana *(In Re: Biomet M2a Magnum Hip Implant Product Liability Litigation)* and in various state, federal and foreign courts, with the majority of domestic state court cases pending in Indiana and Florida.

On February 3, 2014, Biomet announced the settlement of the MDL. Lawsuits filed in the MDL by April 15, 2014 were eligible to participate in the settlement. Those claims that did not settle via the MDL settlement program have re-commenced litigation in the MDL under a new case management plan, or have been or are in the process of being remanded to their originating jurisdictions. The settlement does not affect certain other claims relating to Biomet's metal-on-metal hip products that are pending in various state and foreign courts, or other claims that may be filed in the future. Trials have commenced, and other trials are currently scheduled to occur in the future. Although each trial will be tried on its particular facts, a verdict and subsequent final judgment for the plaintiff in one or more of these cases could have a substantial impact on our potential liability. We continue to refine our estimates of the potential liability to resolve the remaining claims and lawsuits. Although we are vigorously defending these lawsuits, their ultimate resolution is uncertain. We accrued a litigation-related charge in this matter based on an estimate of the possible loss, as discussed above.

Heraeus trade secret misappropriation lawsuits: In December 2008, Heraeus Kulzer GmbH (together with its affiliates, "Heraeus") initiated legal proceedings in Germany against Biomet, Inc., Biomet Europe BV (now Zimmer Biomet Nederland BV), certain other entities and certain employees alleging that the defendants misappropriated Heraeus trade secrets when developing Biomet Europe's Refobacin and Biomet Bone Cement line of cements ("European Cements"). The lawsuit sought to preclude the defendants from producing, marketing and offering for sale their then-current line of European Cements and to compensate Heraeus for any damages incurred.

Germany: On June 5, 2014, the German appeals court in Frankfurt (i) enjoined Biomet, Inc., Biomet Europe BV and Biomet Deutschland GmbH from manufacturing, selling or offering the European Cements to the extent they contain certain raw materials in particular specifications; (ii) held the defendants jointly and severally liable to Heraeus for any damages from the sale of European Cements since 2005; and (iii) ruled that no further review may be sought (the "Frankfurt Decision"). The Heraeus and Biomet parties both sought appeal against the Frankfurt Decision. In a decision dated June 16, 2016, the German Supreme Court dismissed the parties' appeals without reaching the merits, rendering that decision final.

In December 2016, Heraeus filed papers to restart proceedings against Biomet Orthopaedics Switzerland GmbH (now Zimmer GmbH), seeking to require that entity to relinquish its CE certificates for the European Cements. In an order issued in September 2021, the District Court Darmstadt in charge of this matter decided that a technical expert is to be appointed to assess Heraeus' alleged trade secrets and the alleged misuse. In January 2017, Heraeus notified Biomet it had filed a claim for damages in the amount of €121.9 million for sales in Germany, which it first increased to €125.9 million and with a filing in June 2019 further increased to €146.7 million plus statutory interest. In a court filing, Heraeus indicated that it might further increase its claims in the course of the proceedings. In June 2021, Heraeus extended its damage claims to include Merck KGaA as a defendant, arguing that Merck KGaA and the involved Zimmer Biomet entities are jointly and severally liable for Heraeus' alleged damages. In October 2021, Merck KGaA requested that the claims against it be separated from the ongoing proceedings between Heraeus and Zimmer Biomet. As of December 31, 2021, these two proceedings remained pending in front of the Darmstadt court. In September 2017, Heraeus filed an enforcement action in the Darmstadt court against Biomet Europe (now Zimmer Biomet

Nederland B.V.), requesting that a fine be imposed against Biomet Europe for failure to disclose the amount of the European Cements which Biomet Orthopaedics Switzerland had ordered to be manufactured in Germany (e.g., for the Chinese market). In June 2018, the Darmstadt court dismissed Heraeus' request. Heraeus appealed the decision. Also in September 2017, Heraeus filed suit against Zimmer Biomet Deutschland in the court of first instance in Freiburg concerning the sale of the European Cements with certain changed raw materials. Heraeus sought an injunction on the basis that the continued use of the product names for the European Cements was misleading for customers and thus an act of unfair competition. On June 29, 2018, the court in Freiburg, Germany dismissed Heraeus' request for an injunction prohibiting the marketing of the European Cements under their current names on the grounds that the same request had already been decided upon by the Frankfurt Decision which became final and binding. Heraeus appealed this decision to the Court of Appeals in Karlsruhe, Germany. The appeals hearing occurred in December 2019 and on June 19, 2020, the court dismissed the appeal on different grounds, namely that the appeals court did not find any unfair competition in the continued use of the product names. Although the appeals court did not grant leave to appeal, Heraeus had initially filed a request for appeal with the German Supreme Court, but it withdrew that request in November 2020.

United States: On September 8, 2014, Heraeus filed a complaint against a Biomet supplier, Esschem, Inc. ("Esschem"), in the U.S. District Court for the Eastern District of Pennsylvania. The lawsuit contains allegations that focus on two copolymer compounds that Esschem sold to Biomet, which Biomet incorporated into certain bone cement products that competed with Heraeus' bone cement products. The complaint alleges that Biomet helped Esschem to develop these copolymers, using Heraeus trade secrets that Biomet allegedly misappropriated. The complaint asserts a claim under the Pennsylvania Uniform Trade Secrets Act, as well as other various common law tort claims, all based upon the same trade secret misappropriation theory. Heraeus sought to enjoin Esschem from supplying the copolymers (which are no longer supplied to Biomet) to any third party and actual damages for global sales of cements including Esschem copolymers. The complaint also seeks punitive damages, costs and attorneys' fees. Although Biomet was not a party to this lawsuit, Biomet agreed, at Esschem's request and subject to certain limitations, to indemnify Esschem for any liability, damages and legal costs related to this matter. On November 3, 2014, the court entered an order denying Heraeus' motion for a temporary restraining order. On June 30, 2016, the court entered an order denying Heraeus' request to give preclusive effect to the factual findings in the Frankfurt Decision. On June 6, 2017, the court entered an order denying Heraeus' motion to add Biomet as a party to the lawsuit. On January 26, 2018, the court entered an order granting Esschem's motion for summary judgment on statute of limitations grounds and dismissed all of Heraeus' claims with prejudice. On February 21, 2018, Heraeus filed a notice of appeal to the U.S. Court of Appeals for the Third Circuit, which heard oral argument on the appeal on October 23, 2018. On June 21, 2019, the Third Circuit partially reversed the decision of the U.S. District Court for the Eastern District of Pennsylvania granting Esschem summary judgment and remanded the case back to the lower court. On July 5, 2019, Esschem filed a petition in the Third Circuit for rehearing *en banc* and a motion in the alternative to certify a question of state law to the Supreme Court of Pennsylvania, which was denied on August 1, 2019. On January 8, 2021, the court entered a scheduling order for the completion of fact and expert discovery and filing of dispositive motions but did not set a trial date. The court also reappointed a discovery special master to adjudicate the various discovery disputes.

On December 7, 2017, Heraeus filed a complaint against Zimmer Biomet Holdings, Inc. and Biomet, Inc. in the U.S. District Court for the Eastern District of Pennsylvania alleging a single claim of trade secret misappropriation under the Pennsylvania Uniform Trade Secrets Act based on the same factual allegations as the Esschem litigation (focused on the prior formulation (-1) bone cements). On March 5, 2018, Heraeus filed an amended complaint adding a second claim of trade secret misappropriation under Pennsylvania common law. Heraeus seeks to enjoin the Zimmer Biomet parties from future manufacturing, selling and offering to sell bone cements in the U.S. and Europe, and actual damages for global sales of bone cements. The amended complaint also seeks punitive damages, costs and attorneys' fees. On April 18, 2018, the Zimmer Biomet parties filed a motion to dismiss both claims, which remains pending as of December 31, 2021. On March 8, 2019, the court stayed the case pending the Third Circuit's decision in the Esschem case described above. On May 2, 2020, the court granted the Zimmer Biomet parties' motion to further stay the proceedings pending the outcome of a U.S. International Trade Commission ("ITC") complaint filed by Heraeus. The related ITC investigation is complete, and the Heraeus complaint concluded with a January 12, 2021 Final Determination in our favor, and which Heraeus did not appeal. In June 2021, Heraeus filed a motion to lift the stay of proceedings and attached a draft motion for preliminary injunction enjoining Zimmer Biomet from continuing to manufacture and sell its current (-3) bone cements, worldwide. Zimmer Biomet notified the court that it intends to revise its pending motion to dismiss. As of December 31, 2021, the court has not dissolved the stay.

Other European Countries: Heraeus continues to pursue other related legal proceedings in Europe seeking various forms of relief, including injunctive relief and damages, against various Biomet-related and local Zimmer Biomet entities relating to the European Cements, including those described herein. On October 2, 2018, the Belgian Court of Appeal of Mons issued a judgment in favor of Heraeus relating to its request for past damages caused by the alleged misappropriation of its trade secrets, and an injunction preventing future sales of certain European Cements in Belgium (the "Belgian Decision"). We appealed this judgment to the Belgian Supreme Court. The Belgian Supreme Court dismissed our appeal in October 2019 and this decision is final. Proceedings to assess the amount of damages potentially owed to Heraeus under the Belgian Decision remained pending as of

December 31, 2021. Heraeus filed a suit in Belgium concerning the continued sale of the European Cements with certain changed materials. Like its former suit in Germany, Heraeus seeks an injunction on the basis that the continued use of the product names for the European Cements is misleading for customers and thus an act of unfair competition. On May 7, 2019, the Liège Commercial Court issued a judgment that Zimmer Biomet failed to inform its hospital and surgeon customers of the changes made to the composition of the cement with certain changed materials and ordered, as a sole remedy, that Zimmer Biomet send letters to those customers, which we have done. An appeals hearing took place on January 13, 2021. On February 10, 2021, the court of appeals dismissed the appeals of Heraeus and Zimmer Biomet, which ended the unfair competition proceedings regarding the continued use of the product names. In November 2020, Heraeus also initiated proceedings in Belgium seeking an injunction and damages related to the distribution of the European Cements in the revised formulation. Heraeus claims that the revised formulation still misappropriates its alleged trade secrets.

On February 13, 2019, a Norwegian court of first instance issued a judgment in favor of Heraeus on its claim for misappropriation of trade secrets. The court awarded damages of 19,500,000 NOK, or approximately $2.3 million, plus attorneys' fees, and issued an injunction, which was never enforced, preventing Zimmer Biomet Norway from marketing in Norway bone cements identified with the current product names and bone cements making use of the trade secrets which were acknowledged in the Frankfurt Decision. We appealed the Norwegian judgment to the court of second instance and an appeals trial was held in March 2021. On April 30, 2021, the appeals court in Norway found in favor of Zimmer Biomet and reversed the decision of the court of first instance. The appeals court ruled that Heraeus did not substantiate that the alleged trade secrets were useful and thus did not qualify as trade secrets, and additionally determined that the alleged trade secrets were not actually used or misappropriated. Heraeus sought leave to appeal to the Norwegian supreme court, which the court denied on July 13, 2021. The decision of the appeals court in favor of Zimmer Biomet is now final.

On October 29, 2019, an Italian court of first instance issued a judgment in favor of Heraeus on its claim of misappropriation of trade secrets, but did not yet order an award of damages. We filed a timely appeal of the decision and the appellate hearing took place on May 27, 2021. On July 19, 2021, the court of appeals reopened the case and ordered the appointment of a technical expert, who was subsequently appointed, to ascertain whether the trade secrets enforced by Heraeus are secret according to the law and have been protected by adequate protective measures. In March 2021, Heraeus initiated damages proceedings, claiming damages of €13.84 million, or approximately $16.6 million. We requested a dismissal of the case, or, in the alternative, a stay of the proceedings pending the outcome of the proceedings in France (see below) in which Heraeus seeks global damages (except for Germany only). As of December 31, 2021, Heraeus had not initiated damages proceedings but could do so in the future based on the non-final first instance decision.

On January 23, 2020, a Finnish Market Court issued a judgment partly in favor of Heraeus on its claim of misappropriation of certain trade secrets. Damage claims were not raised in the proceedings. We appealed the decision to the Finnish Supreme Court. On July 3, 2020, the Finnish Supreme Court declined to review the case, rendering the Market Court decision final. As of December 31, 2021, Heraeus had not yet initiated damages proceedings against us but indicated it intended to do so.

Heraeus is pursuing damages and injunctive relief in France in an effort to prevent us from manufacturing, marketing and selling the European Cements (the "France Litigation"). The European Cements are manufactured at our facility in Valence, France. On December 11, 2018, a hearing was held in the France Litigation before the commercial court in Romans-sur-Isère. On May 23, 2019, the commercial court ruled in our favor. On July 12, 2019, Heraeus filed an appeal to the court of second instance in Grenoble, France.

Based on various developments in these lawsuits in both the United States and Europe in the fourth quarter of 2021, the parties' interests in exploring a negotiated resolution, and to avoid the continuing risks associated with potential negative outcomes, the projected legal spend and management distraction associated with continuing litigation, we determined that it was in the best interest of our company and our stockholders to settle all litigation with Heraeus globally. On January 20, 2022, Zimmer Biomet and Heraeus entered into a confidential memorandum of understanding to fully resolve all global disputes between and among them relating to both Heraeus' alleged technical trade secrets misappropriation relating to bone cement and Zimmer Biomet's alleged business trade secrets misappropriation relating to bone cement. Among other terms and conditions, the confidential memorandum of understanding includes the dismissal of all lawsuits by both parties, mutual general releases benefitting both parties, and mutual covenants not to sue, as well as no admission of wrongdoing by either party and no admission concerning the validity or existence of either parties' alleged trade secrets. Zimmer Biomet and Heraeus are in the process of formalizing a definitive settlement agreement, which will reflect the material terms in the confidential memorandum of understanding. Our accrued litigation expense was adjusted in 2021 to reflect the portion of the confidential memorandum of understanding in excess of existing accruals, and our settlement payment to Heraeus will be made in agreed installments over an approximately three-year period beginning upon the execution of the settlement agreement.

Shareholder Derivative Actions: On June 14, 2019 and July 29, 2019, two shareholder derivative actions, *Green v. Begley et al.* and *Detectives Endowment Association Annuity Fund v. Begley et al.*, were filed in the Court of Chancery in the State of Delaware. On October 2, 2019 and October 11, 2019, two additional shareholder derivative actions, *Karp v. Begley et al.* and *DiGaudio v. Begley et al.*, were filed in the U.S. District Court for the District of Delaware. The plaintiff in each action seeks to maintain the action purportedly on our behalf against certain of our current and former directors and officers (the "individual defendants")

and certain former stockholders of ours who sold shares of our common stock in various secondary public offerings in 2016 (the "private equity fund defendants"). The plaintiff in each action alleges, among other things, breaches of fiduciary duties against the individual defendants and insider trading against two individual defendants and the private equity fund defendants based on factual allegations that the defendants violated federal securities laws by making materially false and/or misleading statements and/or omissions about our compliance with U.S. Food and Drug Administration ("FDA") regulations and our ability to continue to accelerate our organic revenue growth rate in the second half of 2016. On June 4, 2020, the plaintiffs in the Chancery Court actions filed a consolidated amended complaint adding three new counts and expanding the scope of the alleged materially false statements. On September 14, 2020, the defendants filed motions to dismiss the Chancery Court actions. Oral argument occurred on June 15, 2021. On August 15, 2021, the Chancery Court granted the defendants' motion to dismiss and dismissed the Chancery Court actions with prejudice. On September 22, 2021, the plaintiffs in the Chancery Court actions filed a Notice of Appeal to the Delaware Supreme Court. On September 14, 2020, the plaintiffs in the U.S. District Court actions filed a consolidated amended complaint adding certain details to their allegations. On October 9, 2020, the U.S. District Court granted the parties' joint motion to stay the U.S. District Court actions pending resolution of the Chancery Court actions. The plaintiffs in the Chancery Court and the U.S. District Court actions do not seek damages from us, but instead request damages on our behalf from the defendants of an unspecified amount, as well as attorneys' fees, costs and other relief. We have not recorded an expense related to damages in connection with these matters because any potential loss is not currently probable or reasonably estimable, and we are unable to reasonably estimate the range of loss, if any, that may result from these matters.

Regulatory Matters, Government Investigations and Other Matters

U.S. International Trade Commission Investigation: On March 5, 2019, Heraeus filed a complaint with the ITC against us and certain of our subsidiaries. The complaint alleges that Biomet misappropriated Heraeus' trade secrets in the formulation and manufacture of two bone cement products now sold by Zimmer Biomet, both of which are imported from our Valence, France facility. Heraeus requested that the ITC institute an investigation and, after the investigation, issue a limited exclusion order and cease and desist orders. On April 5, 2019, the ITC ordered an investigation be instituted into whether we have committed an "unfair act" in the importation, sale for importation, or sale after importation of certain bone cement products, the threat or effect of which is to destroy or substantially injure an industry in the United States, in violation of Section 337 of the Tariff Act of 1930, as amended ("Section 337"). An evidentiary hearing in front of an administrative law judge at the ITC was held in January 2020 and an Initial Determination was issued on May 6, 2020. In the Initial Determination, the administrative law judge held that we did not violate Section 337, and thus we are not restricted from continuing to manufacture and sell the two challenged bone cement products in the United States. On July 13, 2020, the ITC issued notice of intent to review the Initial Determination and on January 12, 2021 it issued a Final Determination which affirmed the Initial Determination with modifications and terminated the investigation with a finding of no violation of Section 337. Heraeus did not appeal the Final Determination.

FDA warning letter: In August 2018, we received a warning letter from the FDA related to observed non-conformities with current good manufacturing practice requirements of the Quality System Regulation (21 CFR Part 820) ("QSR") at our legacy Biomet manufacturing facility in Warsaw, Indiana (this facility is sometimes referred to in this report as the "Warsaw North Campus"). We have provided detailed responses to the FDA as to our corrective actions and will continue to work expeditiously to address the issues identified by the FDA during inspections in Warsaw. As of December 31, 2021, the Warsaw warning letter remained pending. Until the violations cited in the pending warning letter are corrected, we may be subject to additional regulatory action by the FDA, as described more fully below. Additionally, requests for Certificates to Foreign Governments may not be granted and premarket approval applications for Class III devices to which the QSR deviations are reasonably related will not be approved until the violations have been corrected. In addition to responding to the warning letter described above, we are in the process of addressing various FDA Form 483 inspectional observations at certain of our manufacturing facilities, including observations issued by the FDA following an inspection of the Warsaw North Campus in January 2020, which inspection the FDA has classified as Voluntary Action Indicated ("VAI"). The ultimate outcome of these matters is presently uncertain. Among other available regulatory actions, the FDA may impose operating restrictions, including a ceasing of operations, at one or more facilities, enjoining and restraining certain violations of applicable law pertaining to products, seizure of products and assessing civil or criminal penalties against our officers, employees or us. The FDA could also issue a corporate warning letter or a recidivist warning letter or negotiate the entry of a consent decree of permanent injunction with us. The FDA may also recommend prosecution by the U.S. Department of Justice. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively manufacturing, marketing and selling our products and could have a material adverse effect on our business, financial condition and results of operations.

Other Contingencies

Contractual obligations: We have entered into development, distribution and other contractual arrangements that may result in future payments dependent upon various events such as the achievement of certain product R&D milestones, sales milestones, or, at our discretion, maintenance of exclusive rights to distribute a product. Since there is uncertainty on the timing or whether such payments will have to be made, they have not been recognized on our consolidated balance sheets. These estimated payments could range from $0 to approximately $365 million.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) that are designed to provide reasonable assurance that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures. Because of inherent limitations, disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of disclosure controls and procedures are met.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of December 31, 2021, the end of the period covered by this report, our disclosure controls and procedures were effective at a reasonable assurance level.

Management's Annual Report on Internal Control over Financial Reporting

The management of Zimmer Biomet Holdings, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act, as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers, or persons performing similar functions, and effected by the Company's board of directors, management and other personnel, 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 and 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 assets of the Company;
- 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
- 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.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2021. In making this assessment, the Company's management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework* (2013).

Based on their assessment, management has concluded that, as of December 31, 2021, the Company's internal control over financial reporting is effective based on those criteria.

The Company's independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2021, as stated in its report which appears in Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There were no changes in our 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.

During the quarter ended December 31, 2021, we continued to transition certain functions into our new Global Business Services ("GBS") organization. This is part of a multiyear plan to support our growth while simplifying and centralizing key global processes to harmonize and gain efficiencies in our processes and internal controls. Although the underlying internal controls did not significantly change with this move, the responsibility to perform these internal controls has transferred to the new GBS centers as well as certain outsourced providers.

Item 9B. Other Information

During the fourth quarter of 2021, the Audit Committee of our Board of Directors approved the engagement of PricewaterhouseCoopers LLP, our independent registered public accounting firm, to perform certain non-audit services. This disclosure is made pursuant to Section 10A(i)(2) of the Exchange Act.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information required by this item is incorporated by reference from our definitive Proxy Statement for the annual meeting of stockholders to be held on May 13, 2022 (the "2022 Proxy Statement").

We have adopted the Zimmer Biomet Code of Ethics for Chief Executive Officer and Senior Financial Officers (the "finance code of ethics"), a code of ethics that applies to our Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer and Corporate Controller, and other finance organization senior employees. The finance code of ethics is publicly available in the Investor Relations section of our website, which may be accessed from our homepage at www.zimmerbiomet.com or directly at https://investor.zimmerbiomet.com. If we make any substantive amendments to the finance code of ethics or grant any waiver, including any implicit waiver, from a provision of the code to our Chief Executive Officer, Chief Financial Officer, or Chief Accounting Officer and Corporate Controller, we will disclose the nature of that amendment in the Investor Relations section of our website.

Item 11. Executive Compensation

Information required by this item is incorporated by reference from our 2022 Proxy Statement.

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

Information required by this item is incorporated by reference from our 2022 Proxy Statement.

Item 13. Certain Relationships and Related Transactions and Director Independence

Information required by this item is incorporated by reference from our 2022 Proxy Statement.

Item 14. Principal Accountant Fees and Services

Information required by this item is incorporated by reference from our 2022 Proxy Statement.

Item 15. Exhibits and Financial Statement Schedules

(a) 1. Financial Statements

The following consolidated financial statements of Zimmer Biomet Holdings, Inc. and its subsidiaries are set forth in Part II, Item 8.

Report of Independent Registered Public Accounting Firm

Consolidated Statements of Earnings for the Years Ended December 31, 2021, 2020 and 2019

Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2021, 2020 and 2019

Consolidated Balance Sheets as of December 31, 2021 and 2020

Consolidated Statements of Stockholders' Equity for the Years Ended December 31, 2021, 2020 and 2019

Consolidated Statements of Cash Flows for the Years Ended December 31, 2021, 2020 and 2019

Notes to Consolidated Financial Statements

2. Financial Statement Schedule

Schedule II. Valuation and Qualifying Accounts (in millions):

Description	Balance at Beginning of Period	Additions Charged (Credited) to Expense	Deductions / Other Additions to Reserve	Effects of Foreign Currency	Balance at End of Period
Allowance for Doubtful Accounts:					
Year Ended December 31, 2019	$ 65.7	$ 5.5	$ (5.3)	$(0.9)	$ 65.0
Year Ended December 31, 2020	65.0	21.8	(12.7)[1]	1.7	75.8
Year Ended December 31, 2021	75.8	15.1	(14.2)	(2.1)	74.6
Deferred Tax Asset Valuation Allowances:					
Year Ended December 31, 2019	$390.9	$(6.6)	$165.7[2]	$(3.9)	$546.1
Year Ended December 31, 2020	546.1	(3.8)	(3.2)[2]	3.0	542.1
Year Ended December 31, 2021	542.1	(4.4)	(64.0)[2]	(3.6)	470.1

(1) Includes the $3.1 cumulative-effect adjustment related to the adoption of ASU 2016-13, Financial Instruments – Credit Losses (Topic 326).

(2) Primarily relate to amounts generated by tax rate changes or current year activity which have offsetting changes to the associated attribute and therefore there is no resulting impact on tax expense in the consolidated financial statements.

Other financial statement schedules are omitted because they are not applicable or the required information is shown in the financial statements or the notes thereto.

3. Exhibits

INDEX TO EXHIBITS

Exhibit No	Description
3.1	Restated Certificate of Incorporation of Zimmer Biomet Holdings, Inc., dated May 17, 2021 (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed May 20, 2021)
3.2	Restated Bylaws of Zimmer Biomet Holdings, Inc., effective May 17, 2021 (incorporated by reference to Exhibit 3.3 to the Registrant's Current Report on Form 8-K filed May 20, 2021)
4.1	Description of Securities Registered under Section 12 of the Securities Exchange Act of 1934
4.2	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2019)
4.3	Indenture dated as of November 17, 2009 between Zimmer Holdings, Inc. (now known as Zimmer Biomet Holdings, Inc.) and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed December 13, 2016)
4.4	First Supplemental Indenture to the Indenture dated as of November 17, 2009 between Zimmer Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed November 17, 2009)
4.5	Form of 5.750% Note due 2039 (incorporated by reference to Exhibit 4.4 above)
4.6	Second Supplemental Indenture dated as of November 10, 2011, to the Indenture dated as of November 17, 2009 between Zimmer Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed November 10, 2011)
4.7	Third Supplemental Indenture, dated as of March 19, 2015, to the Indenture dated as of November 17, 2009 between Zimmer Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed March 19, 2015)
4.8	Form of 3.150% Notes due 2022 (incorporated by reference to Exhibit 4.7 above)
4.9	Form of 3.550% Notes due 2025 (incorporated by reference to Exhibit 4.7 above)
4.10	Form of 4.250% Notes due 2035 (incorporated by reference to Exhibit 4.7 above)
4.11	Form of 4.450% Notes due 2045 (incorporated by reference to Exhibit 4.7 above)
4.12	Fourth Supplemental Indenture, dated as of December 13, 2016, between Zimmer Biomet Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed December 13, 2016)
4.13	Form of 1.414% Notes due 2022 (incorporated by reference to Exhibit 4.12 above)
4.14	Form of 2.425% Notes due 2026 (incorporated by reference to Exhibit 4.12 above)
4.15	Agency Agreement, dated as of December 13, 2016, by and among Zimmer Biomet Holdings, Inc., as issuer, Elavon Financial Services DAC, UK Branch, as paying agent, Elavon Financial Services DAC, as registrar and transfer agent, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed December 13, 2016)

Exhibit No	Description
4.16	Amendment No. 1, dated as of January 4, 2017, to the Agency Agreement dated as of December 13, 2016, by and among Zimmer Biomet Holdings, Inc., as issuer, Elavon Financial Services DAC, UK Branch, as paying agent, Elavon Financial Services DAC, as original registrar and original transfer agent, U.S. Bank National Association, as successor registrar and successor transfer agent, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.4 to the Registrant's Registration Statement on Form 8-A filed January 4, 2017)
4.17	Fifth Supplemental Indenture, dated as of March 19, 2018, between Zimmer Biomet Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed March 19, 2018)
4.18	Form of 3.700% Notes due 2023 (incorporated by reference to Exhibit 4.17 above)
4.19	Sixth Supplemental Indenture, dated as of November 15, 2019, between Zimmer Biomet Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed November 15, 2019)
4.20	Form of 1.164% Notes due 2027 (incorporated by reference to Exhibit 4.19 above)
4.21	Agency Agreement, dated as of November 15, 2019, by and between Zimmer Biomet Holdings, Inc., as issuer, Elavon Financial Services DAC, UK Branch, as paying agent, U.S. Bank National Association, as transfer agent and registrar, and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on November 15, 2019)
4.22	Seventh Supplemental Indenture, dated as of March 20, 2020, between Zimmer Biomet Holdings, Inc. and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed March 20, 2020)
4.23	Form of 3.050% Notes due 2026 (incorporated by reference to Exhibit 4.22 above)
4.24	Form of 3.550% Notes due 2030 (incorporated by reference to Exhibit 4.22 above)
4.25	Eighth Supplemental Indenture, dated as of November 24, 2021, between Zimmer Biomet Holdings, Inc. and Computershare Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed November 24, 2021)
4.26	Form of 1.450% Notes due 2024 (incorporated by reference to Exhibit 4.25 above)
4.27	Form of 2.600% Notes due 2031 (incorporated by reference to Exhibit 4.25 above)
10.1*	Zimmer Biomet Holdings, Inc. Executive Performance Incentive Plan, as amended May 7, 2013 and further amended as of June 24, 2015 (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed November 9, 2015)
10.2*	Amendment to Zimmer Biomet Holdings, Inc. Executive Performance Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed January 7, 2016)
10.3*	Amendment to Zimmer Biomet Holdings, Inc. Executive Performance Incentive Plan, Effective May 7, 2020 (incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed May 11, 2020)
10.4*	Zimmer Biomet Deferred Compensation Plan (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed January 7, 2016)
10.5*	Restated Zimmer Biomet Holdings, Inc. Long Term Disability Income Plan for Highly Compensated Employees (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed January 7, 2016)
10.6*	Restated Benefit Equalization Plan of Zimmer Holdings, Inc. and Its Subsidiary or Affiliated Corporations Participating in the Zimmer Holdings, Inc. Savings and Investment Program (incorporated by reference to Exhibit 10.16 to the Registrant's Annual Report on Form 10-K filed February 27, 2009)
10.7*	First Amendment to the Restated Benefit Equalization Plan of Zimmer Holdings, Inc. and its Subsidiary or Affiliated Corporations Participating in the Zimmer Holdings, Inc. Savings and Investment Program (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed January 7, 2016)

Exhibit No	Description
10.8*	Offer Letter, dated as of December 18, 2017, by and between Zimmer Biomet Holdings, Inc. and Bryan C. Hanson (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed December 21, 2017)
10.9*	Change in Control Severance Agreement with Bryan C. Hanson (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed December 21, 2017)
10.10*	Chief Executive Officer Confidentiality, Intellectual Property, Non-Competition and Non-Solicitation Agreement with Bryan C. Hanson (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed December 21, 2017)
10.11*	Offer Letter by and between Zimmer Biomet Holdings, Inc. and Ivan Tornos dated as of October 11, 2018 (incorporated by reference to Exhibit 10.10 to the Registrant's Annual Report on Form 10-K filed February 26, 2019)
10.12*	Form of Change in Control Severance Agreement with Ivan Tornos, Suketu Upadhyay, Rachel Ellingson and Lori Winkler (incorporated by reference to Exhibit 10.11 to the Registrant's Annual Report on Form 10-K filed February 26, 2019)
10.13*	Change in Control Severance Agreement with Derek Davis (incorporated by reference to Exhibit 10.14 to the Registrant's Annual Report on Form 10-K filed February 27, 2009)
10.14*	Form of Confidentiality, Non-Competition and Non-Solicitation Agreement with Ivan Tornos, Suketu Upadhyay, Rachel Ellingson and Lori Winkler (incorporated by reference to Exhibit 10.12 to the Registrant's Annual Report on Form 10-K filed February 26, 2019)
10.15*	Swiss Employment Agreement by and between Zimmer GmbH and Wilfred van Zuilen dated as of May 5, 2021 (incorporated by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q filed August 3, 2021)
10.16*	Offer Letter by and between Zimmer Biomet Holdings, Inc. and Wilfred van Zuilen dated as of May 5, 2021 (incorporated by reference to Exhibit 10.5 to the Quarterly Report on Form 10-Q filed August 3, 2021)
10.17*	Change in Control Severance Agreement by and between Zimmer GmbH and Wilfred van Zuilen (incorporated by reference to Exhibit 10.6 to the Quarterly Report on Form 10-Q filed August 3, 2021)
10.18*	Confidentiality, Non-Competition and Non-Solicitation Agreement by and between Zimmer GmbH and Wilfred van Zuilen (incorporated by reference to Exhibit 10.7 to the Quarterly Report on Form 10-Q filed August 3, 2021)
10.19*	Offer Letter between Zimmer Biomet Holdings, Inc. and Suketu Upadhyay dated June 13, 2019 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed June 19, 2019)
10.20*	Letter of Appointment by and between Zimmer Asia (HK) Limited and Sang Yi dated June 15, 2020 (incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2020)
10.21*	Change in Control Severance Agreement with Sang Yi dated June 15, 2020 (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2020)
10.22*	Confidentiality, Non-Competition and Non-Solicitation Agreement with Sang Yi dated June 15, 2020 (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2020)
10.23*	Form of Change in Control Severance Agreement with Chad F. Phipps (incorporated by reference to Exhibit 10.13 to the Registrant's Annual Report on Form 10-K filed February 27, 2009)
10.24*	Form of Confidentiality, Non-Competition and Non-Solicitation Agreement with Chad F. Phipps and Derek M. Davis (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed June 26, 2015)
10.25*	Restated Zimmer Biomet Holdings, Inc. Executive Severance Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed August 6, 2018)

Exhibit No	Description
10.26*	Zimmer Biomet Holdings, Inc. Amended Stock Plan for Non-Employee Directors, as amended May 14, 2021 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed May 20, 2021)
10.27*	Form of Restricted Stock Unit Award Letter under the Zimmer Biomet Holdings, Inc. Stock Plan for Non-Employee Directors (incorporated by reference to Exhibit 10.23 to the Registrant's Annual Report on Form 10-K filed February 29, 2016)
10.28*	Zimmer Biomet Holdings, Inc. Deferred Compensation Plan for Non-Employee Directors, as amended May 14, 2021 (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed May 20, 2021)
10.29*	Form of Indemnification Agreement with Non-Employee Directors and Officers (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed July 31, 2008)
10.30*	Zimmer Biomet Holdings, Inc. Executive Physical Sub Plan (incorporated by reference to Exhibit 10.47 to the Registrant's Annual Report on Form 10-K filed February 26, 2019)
10.31*	Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (As Amended on May 14, 2021) (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed May 20, 2021)
10.32*	Form of Nonqualified Stock Option Award Agreement (four-year vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K filed February 21, 2020)
10.33*	Form of Nonqualified Stock Option Award Agreement (two-year vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.37 to the Registrant's Annual Report on Form 10-K filed February 27, 2018)
10.34*	Form of Nonqualified Stock Option Award Agreement (three-year vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan
10.35*	Form of Performance-Based Restricted Stock Unit Award Agreement (2018) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed May 8, 2018)
10.36*	Form of Performance-Based Restricted Stock Unit Award Agreement (2019) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.36 to the Registrant's Annual Report on Form 10-K filed February 26, 2019)
10.37*	Form of Performance-Based Restricted Stock Unit Award Agreement (2020) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.37 to the Registrant's Annual Report on Form 10-K filed February 21, 2020)
10.38*	Form of Performance-Based Restricted Stock Unit Award Agreement (2022) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan
10.39*	Form of Restricted Stock Unit Award Agreement (four-year vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.38 to the Registrant's Annual Report on Form 10-K filed February 21, 2020)
10.40*	Form of Restricted Stock Unit Award Agreement (three-year vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan
10.41*	Form of Restricted Stock Unit Award Agreement (two-year cliff vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q filed August 6, 2018)
10.42*	Form of Nonqualified Stock Option Award Agreement (Hanson one-time award) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed December 21, 2017)
10.43*	Form of Performance-Based Restricted Stock Unit Award Agreement (Hanson one-time award) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed December 21, 2017)

Exhibit No	Description
10.44*	Form of Restricted Stock Unit Award Agreement (Hanson one-time award) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.6 to the Registrant's Current Report on Form 8-K filed December 21, 2017)
10.45*	Form of Performance-Based Restricted Stock Unit Award Agreement (Upadhyay one-time award) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.43 to the Registrant's Annual Report on Form 10-K filed February 21, 2020)
10.46*	Aircraft Time Sharing Agreement by and between Zimmer, Inc. and Bryan C. Hanson (incorporated by reference to Exhibit 10.40 to the Registrant's Annual Report on Form 10-K filed February 27, 2018)
10.47*	First Amendment to Aircraft Time Sharing Agreement by and between Zimmer, Inc. and Bryan C. Hanson (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2019)
10.48	Term Loan Agreement ¥21,300,000,000, dated as of September 22, 2017, between Zimmer Biomet G.K. and Sumitomo Mitsui Banking Corporation (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed September 28, 2017)
10.49	First Amendment and Limited Waiver, dated as of February 25, 2020, between Zimmer Biomet G.K. and Sumitomo Mitsui Banking Corporation, to the JP¥21,300,000,000 Term Loan Agreement dated as of September 22, 2017 (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed May 11, 2020)
10.50	Second Amendment, dated as of April 28, 2020, to the Term Loan Agreement JP¥21,300,000,000 dated as of September 22, 2017, between Zimmer Biomet G.K. and Sumitomo Mitsui Banking Corporation (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed April 29, 2020)
10.51	Amended and Restated Term Loan Agreement ¥11,700,000,000, dated as of September 22, 2017, between Zimmer Biomet G.K. and Sumitomo Mitsui Banking Corporation (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed September 28, 2017)
10.52	First Amendment, dated as of April 23, 2018, to the Amended and Restated Term Loan Agreement ¥11,700,000,000 dated as of September 22, 2017 between Zimmer Biomet G.K. and Sumitomo Mitsui Banking Corporation (incorporated by reference to Exhibit 10.49 to the Registrant's Annual Report on Form 10-K filed February 21, 2020)
10.53	Second Amendment and Limited Waiver, dated as of February 25, 2020, between Zimmer Biomet G.K. and Sumitomo Mitsui Banking Corporation, to the JP¥11,700,000,000 Amended and Restated Term Loan Agreement dated as of September 22, 2017, as amended by the First Amendment dated as of April 23, 2018 (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed May 11, 2020)
10.54	Third Amendment, dated as of April 28, 2020, to the Amended and Restated Term Loan Agreement JP¥11,700,000,000 dated as of September 22, 2017, between Zimmer Biomet G.K. and Sumitomo Mitsui Banking Corporation (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed April 29, 2020)
10.55	Amended and Restated Letter of Guarantee, dated as of September 22, 2017, made by Zimmer Biomet Holdings, Inc. in favor of Sumitomo Mitsui Banking Corporation (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed September 28, 2017)
10.56	Five-Year Revolving Credit Agreement, dated as of August 20, 2021, among Zimmer Biomet Holdings, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed August 26, 2021)
10.57	364-Day Revolving Credit Agreement, dated as of August 20, 2021, among Zimmer Biomet Holdings, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed August 26, 2021)
21	List of Subsidiaries of Zimmer Biomet Holdings, Inc.
23	Consent of PricewaterhouseCoopers LLP

Exhibit No	Description
31.1	Certification pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934 of the Chief Executive Officer, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934 of the Chief Financial Officer, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Management contract or compensatory plan or arrangement.

Item 16. **Form 10-K Summary**

None

SIGNATURES

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

ZIMMER BIOMET HOLDINGS, INC.

By: /s/ Bryan Hanson
Bryan Hanson
Chairman, President and Chief Executive Officer

Dated: February 25, 2022

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

SIGNATURE	TITLE	DATE
/s/ Bryan Hanson Bryan Hanson	Chairman, President and Chief Executive Officer (Principal Executive Officer)	February 25, 2022
/s/ Suketu Upadhyay Suketu Upadhyay	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 25, 2022
/s/ Derek Davis Derek Davis	Vice President, Interim Controller and Chief Accounting Officer (Principal Accounting Officer)	February 25, 2022
/s/ Christopher Begley Christopher Begley	Director	February 25, 2022
/s/ Betsy Bernard Betsy Bernard	Director	February 25, 2022
/s/ Michael Farrell Michael Farrell	Director	February 25, 2022
/s/ Robert Hagemann Robert Hagemann	Director	February 25, 2022
/s/ Arthur Higgins Arthur Higgins	Director	February 25, 2022
/s/ Maria Teresa Hilado Maria Teresa Hilado	Director	February 25, 2022
/s/ Syed Jafry Syed Jafry	Director	February 25, 2022
/s/ Sreelakshmi Koll i Sreelakshmi Kolli	Director	February 25, 2022
/s/ Michael Michelson Michael Michelson	Director	February 25, 2022

ZIMMER BIOMET HOLDINGS, INC.
RECONCILIATION OF OPERATING PROFIT (LOSS) TO ADJUSTED OPERATING PROFIT
FOR THE YEARS ENDED DECEMBER 31, 2021, 2020, 2019, 2018, and 2017
(in millions, unaudited)

	For the Years Ended December 31,				
	2021	2020	2019	2018	2017
Operating Profit (Loss)	$ 780.1	$ (87.8)	$ 1,137.5	$ 33.8	$ 799.3
Inventory and manufacturing-related charges[1]	41.8	54.2	53.9	32.5	70.8
Intangible asset amortization[1]	615.7	597.6	584.3	595.9	603.9
Goodwill and intangible asset impairment[1]	16.3	645.0	70.1	979.7	331.5
Restructuring and other cost reduction initiatives[1]	130.5	116.9	50.0	34.2	17.6
Quality remediation[1]	53.2	49.8	87.6	165.4	195.1
Acquisition, integration, divestiture and related[1]	81.8	23.8	12.2	99.5	262.2
Litigation[1]	192.9	159.8	65.0	186.0	104.0
Litigation settlement gain[1]	–	–	(23.5)	–	–
European Union Medical Device Regulation[1]	46.5	25.3	30.9	3.7	–
Certain R&D agreements[1]	65.0	–	–	–	–
Other charges[1]	11.4	24.5	120.5	79.6	41.2
Adjusted Operating Profit	$ 2,035.2	$ 1,609.1	$ 2,188.5	$ 2,210.3	$ 2,425.6

(1) Please refer to page number 31-32 of this annual report for detailed explanations of each adjustment.

ZIMMER BIOMET HOLDINGS, INC.
RECONCILIATION OF OPERATING PROFIT (LOSS) MARGIN TO ADJUSTED OPERATING PROFIT MARGIN
FOR THE YEARS ENDED DECEMBER 31, 2021, 2020, 2019, 2018, and 2017
(unaudited)

	For the Years Ended December 31,				
	2021	2020	2019	2018	2017
Operating Profit (Loss) Margin	10.0%	(1.2)%	14.2%	0.4%	10.2%
Inventory and manufacturing-related charges[1]	0.5	0.8	0.7	0.4	0.9
Intangible asset amortization[1]	7.9	8.5	7.3	7.5	7.7
Goodwill and intangible asset impairment[1]	0.2	9.2	0.9	12.4	4.2
Restructuring and other cost reduction initiatives[1]	1.7	1.7	0.6	0.4	0.2
Quality remediation[1]	0.7	0.7	1.1	2.1	2.5
Acquisition, integration, divestiture and related[1]	1.0	0.3	0.2	1.3	3.4
Litigation[1]	2.5	2.3	0.8	2.3	1.3
Litigation settlement gain[1]	–	–	(0.3)	–	–
European Union Medical Device Regulation[1]	0.6	0.4	0.4	–	–
Certain R&D agreements[1]	0.8	–	–	–	–
Other charges[1]	0.1	0.2	1.5	1.1	0.7
Adjusted Operating Profit Margin	26.0%	22.9%	27.4%	27.9%	31.1%

(1) Please refer to page number 31-32 of this annual report for detailed explanations of each adjustment.

ZIMMER BIOMET HOLDINGS, INC.
RECONCILIATION OF DILUTED EPS TO ADJUSTED DILUTED EPS
FOR THE YEARS ENDED DECEMBER 31, 2021, 2020, 2019, 2018, and 2017
(unaudited)

	For the Years Ended December 31,				
	2021	2020	2019	2018	2017
Diluted Earnings (Loss) Per Share	$ 1.91	$(0.67)	$ 5.47	$(1.86)	$ 8.90
Inventory and manufacturing-related charges[1]	0.20	0.26	0.26	0.16	0.35
Intangible asset amortization[1]	2.93	2.89	2.83	2.93	2.96
Goodwill and intangible asset impairment[1]	0.08	3.12	0.34	4.81	1.63
Restructuring and other cost reduction initiatives[1]	0.62	0.56	0.24	0.17	0.09
Quality remediation[1]	0.25	0.24	0.42	0.81	0.96
Acquisition, integration, divestiture and related[1]	0.39	0.12	0.06	0.49	1.28
Litigation[1]	0.92	0.77	0.31	0.91	0.51
Litigation settlement gain[1]	–	–	(0.11)	–	–
European Union Medical Device Regulation[1]	0.22	0.12	0.15	0.02	–
Certain R&D agreements[1]	0.31	–	–	–	–
Loss on early extinguishment of debt[1]	0.78	–	–	–	–
Other charges[1]	0.06	0.05	0.58	0.41	0.22
Taxes on above items[1]	(1.39)	(1.22)	(1.09)	(1.18)	(2.07)
U.S. tax reform[1]	–	–	–	0.04	(6.25)
Swiss tax reform[1]	0.14	(0.03)	(1.52)	–	–
Other certain tax adjustments[1]	(0.05)	(0.50)	(0.07)	(0.02)	(0.55)
Effect of dilutive shares assuming net earnings[1]	–	(0.04)	–	(0.05)	–
Adjusted Diluted Earnings Per Share	$ 7.37	$ 5.67	$ 7.87	$ 7.64	$ 8.03

(1) Please refer to page number 31-32 of this annual report for detailed explanations of each adjustment.

ZIMMER BIOMET HOLDINGS, INC.
RECONCILIATION OF SALES GROWTH RATE TO CONSTANT CURRENCY SALES GROWTH RATE
FOR THE YEAR ENDED DECEMBER 31, 2021
(unaudited)

	For the Year Ended December 31, 2021		
	Reported % Growth	Foreign Exchange Impact	Constant Currency % Growth
Geographic Segment			
Americas	11%	– %	11%
EMEA	20	4	16
Asia Pacific	5	2	3
Consolidated	12	2	10
Product Category			
Knees	11	1	10
Hips	6	1	5
S.E.T.	13	1	12
Spine & Dental	13	1	12
Other	26	1	25
Consolidated	12	2	10

Corporate Information (As of March 3, 2022)

Shareholder Information

Headquarters
Zimmer Biomet Holdings, Inc.
345 East Main Street
Warsaw, IN 46580, U.S.A.
+1-574-267-6131
www.zimmerbiomet.com

Stock Listing
Zimmer Biomet is listed on the
New York Stock Exchange and the
SIX Swiss Exchange under the symbol ZBH.

Independent Auditors
PricewaterhouseCoopers LLP
Chicago, IL, U.S.A.

Transfer Agent
Communications concerning stock transfer requirements, loss of certificates and change of address should be directed to Zimmer Biomet's Transfer Agent:

Computershare
462 South 4th Street, Suite 1600
Louisville, KY 40202
+1-888-552-8493 (domestic)
+1-718-575-3336 (international)
Website: www.computershare.com

Investor Relations
Zimmer Biomet invites shareholders, security analysts, portfolio managers and other interested parties to contact:

Keri Mattox
+1-215-275-2431
keri.mattox@zimmerbiomet.com

Ezgi Yagci
+1-617-549-2443
ezgi.yagci@zimmerbiomet.com

Dividend Reinvestment and Stock Purchase Plan

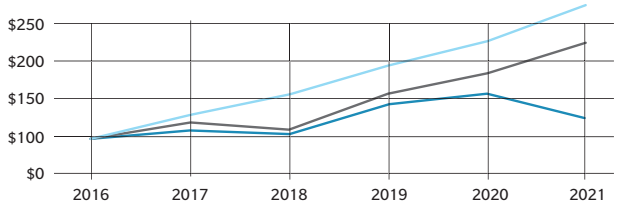
Computershare Trust Company, N.A. administers the Computershare CIP, a direct stock purchase and dividend reinvestment plan, which allows registered shareholders to purchase additional shares of Zimmer Biomet common stock through the automatic reinvestment of dividends. The plan also allows registered shareholders to purchase shares with optional cash investments of at least $25. The minimum initial investment for new investors is $10,000. Existing registered shareholders as well as new investors may enroll in the plan online at www.computershare.com/investor, or by completing and submitting an enrollment form that may be obtained by contacting Computershare at the address or telephone numbers shown above.

ZBH LISTED NYSE SIX SWISS EXCHANGE

Stock Performance Graph

Comparison of Cumulative Total Return for years ended December 31

Assumes $100 was invested on December 31, 2016 in Zimmer Biomet common stock and each index and that dividends were reinvested. Returns over the indicated period should not be considered indicative of future returns.



	2016	2017	2018	2019	2020	2021
Zimmer Biomet Holdings, Inc.	$100	$117.86	$102.18	$148.54	$154.12	$127.89
S&P 500 Stock Index	$100	$121.83	$116.49	$153.17	$181.35	$233.41
S&P 500 Health Care Equipment Index	$100	$130.90	$152.15	$196.77	$231.46	$276.26

To access Zimmer Biomet's annual report on form 10-K, quarterly reports on form 10-Q, news releases, earnings releases, proxy statements, or to obtain Zimmer Biomet's financial calendar, access SEC filings, listen to earnings calls, or to look up Zimmer Biomet stock quotes, please visit http://investor.zimmerbiomet.com.

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