Medtronic

Annual Report

Fiscal Year 2022

2022 LETTER TO SHAREHOLDERS

Medtronic

Geoff Martha
Chairman & CEO

Oct. 10, 2022

Dear Shareholders,

For decades, the Medtronic Mission has been carried out by tens of thousands of employees around the world. Alleviating pain, restoring health, and extending life remains our core purpose, and despite FY22 headwinds, our people remained resolute in their commitment to our enduring Mission.

Our origin story is one of collaboration between an engineer and a physician, and our 95,000+ employees continue to embody the innovative spirit of our founders. I would be remiss if I didn't begin with heartfelt thanks for their tireless work on behalf of our partners, customers, and patients.

The Medtronic Board of Directors and Executive Committee are actively engaged in strategic oversight, including tracking our progress against long-term goals, and they deserve special thanks for their guidance, focus, and support as we move forward.

A YEAR OF PURPOSEFUL PROGRESS, DESPITE UNCERTAINTIES

FY22 has been a year of uncertainties, with inflation, global supply chain challenges, a potential recession, and continued ripple effects from the pandemic impacting the global economy.

But our business – the business of delivering life-saving healthcare technology – is vitally important in good times and in bad. As the growing and aging human population increases, technology becomes even more important in addressing healthcare needs. And each year, advancements in materials and data science – many of which are shaped by legions of Medtronic technical experts and scientists – truly transform what technology can do for healthcare.

Our place at the nexus of healthcare and technology – coupled with our depth of expertise, diversified businesses, robust pipeline, strong balance sheet, and, most importantly, our visionary Mission – means we are well-positioned to achieve our ambition of being *the* global healthcare technology leader.

REFLECTING ON A DYNAMIC YEAR

The Mission guided us through another tumultuous year, keeping us focused on our continued transformation and helping us better serve the needs of our customers and patients.

Coming into FY22, we were feeling optimistic – the height of the pandemic seemed to be behind us, vaccines were on the rise, hospital volume and elective surgeries were growing, and it felt like the world would soon return to 'normal.' But it turned out to be a tough year, with COVID variants and healthcare worker shortages impacting procedure volumes, pipeline setbacks, and supply chain challenges.

FY22 revenue of $31.7 billion increased 5% as reported and organic, which excludes the $75 million negative impact of foreign currency translation. Non-GAAP net income and diluted EPS were $7.5 billion and $5.55, respectively, both increases of 26%. FY22 cash flow from operations of $7.3 billion increased 18%, and free cash flow of $6 billion increased 22%, representing strong free cash flow conversion of 80 percent.

Providing solid returns to our shareholders is critical, and we returned $5.5 billion in FY22 through our dividends and net share repurchase. Medtronic is an S&P Dividend Aristocrat, having increased our dividend for 45 years now – an important component of the total value we generate. This past year we paid $3.4 billion in dividends, and we're supplementing through opportunistic share repurchase, particularly in periods where we see price dislocation. In fact, we repurchased over $2.5 billion of our stock in FY22.

ACCELERATING GROWTH WITH A ROBUST PIPELINE

Despite the adversity we faced, we made solid progress, and we are making significant changes to how we do business to ensure sustainable, forward movement in FY23 and beyond.

Changes to our Operating Model increased our competitive outlook, as evidenced by a record number of product approvals – some of which came faster than expected this year. More than 230 clinical trials were conducted, and we received more than 200 regulatory approvals in the U.S., Europe, Japan, and China. The most robust product pipeline in our history has been fed by decades of creativity, passion, and collaboration from our global teams.

Progress on major future growth drivers

To make progress toward becoming the global healthcare technology leader, we must continually innovate and reinvest in our pipeline to be more competitive across more therapies.

A vast opportunity to transform the patient experience in heart valve surgery is in front of us, due to significant developments in our **transcatheter valve replacement** business. We're launching and developing aortic valve products to continue leading in this important market, and we are seeing forward momentum in mitral valve replacement clinical studies which represent a coming revolution for our Structural Heart business.

In **Cardiac Ablation Solutions**, we've emerged as a technology leader, continually re-engineering how ablation procedures are done. We've strengthened our competitive position in this critically important medtech market, building a comprehensive suite of products and solutions to equip clinicians with all the tools they need to optimize atrial fibrillation care.

Regulatory approvals and the limited market release of the **Hugo™ Robotic-Assisted Surgery System** continued, with positive feedback from surgeons across indications and geographies. Supply chain and manufacturing speed bumps impacted production, but we're addressing the issues and scaling manufacturing. While we were disappointed in the revenue push-out for this important program, we're optimizing the customer experience by integrating instruments, and remain confident we are poised to drive growth and meaningfully expand the soft-tissue robotics market for years to come.

We are pleased with feedback and continued international market adoption of our MiniMed™ 780G insulin pump and Guardian 4™ sensor. We've made substantial progress in meeting our observation and warning letter commitments and continue to regularly communicate with the FDA. The strong reception of these **diabetes** products in international markets reinforce our optimism for the impact they will have on our business when they are made available in the U.S.

We continue to systematically build supporting evidence for our **renal denervation** procedure to treat hypertension. Though we couldn't end our SPYRAL HTN ON-MED pilot study early, data were published and presented at key conferences showing those receiving RDN spent significantly more time in target blood pressure range, adding to our robust body of evidence. Based on the clinical data presented to date, we anticipate that demand will be high across a large global market, and we continue to be optimistic about this opportunity – one that we expect to lead.

Doubling down on data and AI

Our commitment to digitization, data and AI remains strong. Due to continued investments to develop and support data-enabled products and services, we've started to see returns from our focus in this space. Just three of our AI-enabled technologies that made a difference in FY22 include:

- LINQ II™ insertable cardiac monitor (ICM) with AccuRhythm™ AI, designed to continually learn and improve diagnostics for abnormal heart rhythms.
- GI Genius™ Intelligent endoscopy module, the first device that uses real-time AI to assist clinicians in detecting lesions, such as polyps or suspected tumors, during a colonoscopy.
- UniD™ Adaptive Spine Intelligence (ASI) makes spine surgery more predictable and repeatable, powered by predictive modeling and sophisticated algorithms that measure and digitally reconstruct a patient's spine to its optimal profile, enabling clinicians to deliver more predictable outcomes.

Now is the time to harness the power of 5G, edge computing, AI and machine learning and create personalized, closed loop care for patients. We created a cross-functional Enterprise Data Strategy program, led by members of our Executive Committee, to enhance the patient and customer experience that will drive growth and create new revenue sources. We'll continue investing in global digital innovation programs to further accelerate our growth.

INVESTING IN THE FUTURE

Medtronic is first and foremost a technology company, and we focused heavily on improving the pace of innovation this year. To supplement our organic product pipeline and portfolio that will drive higher topline growth and create value, we announced $2.1 billion on mergers and acquisitions in FY22.

We're methodically building care ecosystems that will significantly improve patient outcomes, while also driving value and deepening relationships with our customers. Affera, one of the four acquisitions announced in FY22 (closed in August 2022)

is a strong example – our Cardiac Ablation Solutions (CAS) pipeline now includes differentiated mapping and navigation capabilities. We've assembled a number of technologies to build our leadership in CAS, including acquiring Acutus Medical's left-heart access portfolio, which includes essential technology needed for the estimated 800,000 transseptal crossings performed annually during electrophysiology (EP) and structural heart procedures.

Continuing investments in R&D

Our balance sheet remains strong, and we continue to allocate our capital to investments that we expect will generate solid future growth and shareholder returns. Organic investment in R&D was $2.7 billion in FY22 – an all-time high in our history. We're investing heavily in programs especially targeted for faster growing medtech markets, or where we have an opportunity to create new markets. The investments we're making will play a key role in accelerating our top-line growth.

Fostering technical expertise and training

Investing in innovation and training centers helps us lay the foundation needed to fully leverage our size and breadth as we stoke our growth engine. Medtronic Technology Development Centers (TDCs) serve the entire enterprise in highly specialized areas of technical expertise, including implantable biopolymers, battery technology, and implantable AI miniaturization platforms.

Additionally, to support technological development and clinical training at a regional level, we're investing in Medtronic Innovation Centers around the world. One such center in Chengdu, China, which was completed in June 2021, offers clinical training in minimally invasive surgery, cardiovascular health, renal care, spine, orthopedics, and neurosurgery.

Accelerating patient access and equity

In the past year, Medtronic therapies improved the lives of more than 76 million people – that's more than 2 people every second – yet many communities around the world still lack access to essential healthcare. We use data and technology to address this global crisis of health inequity, streamlining detection, diagnosis, and treatment to fill the gap between the number of people who need care and the number of practitioners who can provide it. This democratizes healthcare and enables healthcare workers to reach more patients with a more personalized approach, while increasing accessibility around the world. In FY22, we dedicated more than $69 million to healthcare capacity training, reaching 350,000+ global medical professionals delivering quality care in their communities.

Medtronic LABS is an independent, Medtronic-funded nonprofit organization that uses technology to accelerate healthcare access for underserved communities around the world. With a focus on noncommunicable diseases like hypertension and diabetes, LABS combines digital technology, field operations, and partnerships to work toward its mission of expanding access to care for patients, families, and communities around the world. Since its inception, LABS has screened close to 1.2 million patients, trained over 3,000 community health workers, and improved over 40,000 lives.

PROGRESS ON OUR TRANSFORMATION

Our long-term value creation strategy, built in close partnership and oversight of our Board of Directors, sets Medtronic up to both leverage our size and scale, while empowering Operating Units to move with speed and agility – all to emphasize and accelerate innovation and growth. Our Operating Model transformation, which empowers the OUs to manage their product lines and make strategic decisions that benefit their customers, is starting to take hold.

Organizational transformation is hard, but the reality is, we can't ever stop evolving. We will always look for ways to better serve our customers and achieve our Mission. We are continually evaluating our business, structure, market conditions, and ways to position ourselves for success.

Portfolio optimization

Aligned with Tenet 2 of our Mission, we're focusing our efforts where we "display maximum strength and ability," and reducing our footprint in lower growth and lower margin businesses. To aid this continuing effort, we've assembled a team that is 100% focused on our integrations and divestitures.

In May, for example, we announced our intent to form a new, independent kidney care-focused company in partnership with DaVita Inc. The new company will merge our capabilities as a healthcare technology leader with DaVita's deep expertise and breadth as a comprehensive kidney care provider.

We continue to work on additional portfolio moves, with the goal of creating a portfolio where we have distinct expertise, synergies across the company, and ultimately, sustained higher growth.

Enhancing operational excellence: Quality and Global Operations/Supply Chain

Central to our transformation are two key components that impact all corners of the company: patient safety and quality, and global operations and supply chain. Enhancing both areas is imperative.

Patient safety, quality, and reliability are paramount to our Mission, and the issues we've seen in recent years are unacceptable. We are diligently executing our robust Patient Safety and Quality Improvement Plan (PSQIP) to remediate and sustainably improve our quality system. This includes developments in meeting our observation and warning letter commitments for Diabetes, and improvements in leading and lagging indicators overall. Work remains for us to be considered the unsurpassed leader in quality and reliability, as our Mission calls on us to be – and I know that we will succeed.

Like other companies around the world, Medtronic felt the impact of global supply chain challenges. But the pandemic exposed weaknesses across our operations, which added urgency to our plans for improvements. Our Global Operations and Supply Chain (GOSC) team is hard at work building a more resilient end-to-end supply chain that better leverages our size, scope, and scale. We're building capabilities and focusing on safety, quality, customer service, cost and waste reduction, and talent retention. When completed, the GOSC transformation will generate significant savings in the coming years and be a competitive advantage for the company. I'm confident our supply chain will become best-in-class within the medtech industry.

Environmental sustainability

In the fall of 2021, we announced our ambition to achieve net zero emissions across our value chain by FY45. In FY22 alone, we reduced our operational greenhouse gas emissions intensity by 35% compared to our FY20 baseline, and this important work will continue.

We also teamed up with the National Academy of Medicine's Grand Challenge on Climate Change and the United Kingdom National Health Service. Together, we'll work with organizations to build resiliency and minimize the carbon footprint of healthcare systems around the world.

OUR PEOPLE – OUR COMPETITIVE ADVANTAGE

Innovation is a people-powered business. We continue to invest in our people as an investment in our future, and to fulfill Tenet 5 of our Mission, which calls on us to foster a workplace that enables all employees to thrive. High levels of employee engagement are known to promote retention, foster customer loyalty and improve business performance and stakeholder value. Each year, our Organizational Health Survey measures key drivers of employee engagement, and in FY22 we saw world-class levels of Engagement, Inclusion, and Ethics. It is validating and encouraging to see these results, but there's always more work to be done to remain an employer of choice.

Our employees continue to lean into our Operating Model and embrace our culture, the Medtronic Mindset. Throughout the ups and downs of FY22, they've focused on the Mission and delivered on our commitments with drive, resilience, and creativity, and I'm honored and humbled to be part of this team.

Inclusion, diversity, and equity across all levels

ID&E is a business priority that enables a competitive advantage, because we believe that converging backgrounds and life experiences bring diverse perspectives that are needed to fuel innovation. We are building a workforce that reflects our communities at all levels, and diversity in leadership is key to this strategy. In FY22, women held 42% of manager-and-above positions globally, and people from ethnically diverse groups held 27% of manager-and-above positions in the U.S., which is strong progress toward our FY26 goals of 45% and 30%, respectively. We are proud to have earned several external accolades recognizing our progress.

The importance of ID&E is apparent at all levels of the organization, with related goals included for all employee performance reviews in FY22. Medtronic leaders understand their role, too – we introduced a "leader led" model to enhance our ID&E efforts by strengthening accountability and linking compensation and advancement incentives to these goals for executive leadership in FY22.

To better align our incentives with our renewed culture and the competitive talent market, we've updated our incentive structure to reward differentiated performance in the areas of financial performance, market share growth, quality, and ID&E goals. Leaders in each business group are responsible for ID&E priorities, and our Board is helping to oversee short- and long-term progress against standardized measurements.

Fortifying company leadership with outside-in perspectives

Fresh perspectives beget new ideas, so we deepened our bench of external talent, adding leaders with new skills and capabilities to ensure we can compete and win as we pursue new markets and technologies. We've added to our executive ranks several respected, world-class leaders with deep domain expertise, a wealth of global knowledge and proven track records of navigating complex environments to advance the business. These leaders have made a great impact already, infusing our leadership team with new energy, experience, and expertise to help accelerate our transformation.

We've applied a similar approach in adding new directors with diverse points of view to fully leverage the power of our Board of Directors. Their oversight and collective thinking guide us on our biggest initiatives and strategic bets, including exploring new therapies and areas like digitization and AI.

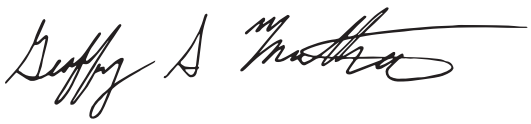
ADVANCING THE MISSION TO REACH OUR BOLD AMBITION

Two years ago, we set out to affirm our standing as *the* global healthcare technology leader. Changes to our Operating Model, culture, and incentives – combined with exciting catalysts from our pipeline that will redefine the way healthcare is delivered for millions – position us to deliver a higher level of sustainable growth.

Despite unprecedented challenges we've faced, we're seeing strong signs of progress as the work continues. Though headwinds remain, I'm confident in our ability to accelerate and sustain our growth profile over the long-term, to grow at or above our markets, and as we do so, create consistent value for our stakeholders. We're keenly focused on improving capital deployment and portfolio management, with a deep commitment to creating higher, more consistent shareholder value.

Medtronic is a technology company with a purpose. For me, it's an honor to stand alongside my colleagues and a true privilege to be part of such important work. We're fueling a durable value creation engine that will enable us to fully capitalize on the trends and opportunities at the intersection of healthcare and technology. With the Mission as our enduring north star, we're taking the organization to the next level in service to more patients in more places around the world – which is a truly extraordinary place to be.

Sincerely,



Geoff Martha
Chairman & CEO

Reconciliation of Non-GAAP Financial Measures

The Shareholder Letter set forth in this Annual Report includes financial measures that are not prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP). Management believes that such non-GAAP financial measures provide useful information to investors regarding the underlying business trends and performance of Medtronic's ongoing operations. Investors should consider non-GAAP measures set forth in the Shareholder Letter to be in addition to, and not a substitute for, financial performance measures prepared in accordance with U.S. GAAP. In addition, such non-GAAP financial measures may not be the same as, or similar to, measures presented by other companies. Reconciliations of the non-GAAP financial measures referenced in the Shareholder Letter to the most directly comparable GAAP financial measures are included in the following financial schedules.

MEDTRONIC PLC
WORLD WIDE REVENUE[1]
(Unaudited)

	YEAR-TO-DATE[2]					
	REPORTED				CONSTANT CURRENCY	
(in millions)	FY22	FY21	Growth	Currency Impact[3]	FY22	Growth
Cardiovascular	**$ 11,423**	**$ 10,772**	**6.0%**	**$ (32)**	**$ 11,455**	**6.3%**
Cardiac Rhythm & Heart Failure	5,908	5,584	5.8	(19)	5,927	6.1
Structural Heart & Aortic	3,055	2,834	7.8	(12)	3,067	8.2
Coronary & Peripheral Vascular	2,460	2,354	4.5	(1)	2,461	4.5
Medical Surgical	**9,141**	**8,737**	**4.6**	**(44)**	**9,185**	**5.1**
Surgical Innovations	6,060	5,438	11.4	(31)	6,091	12.0
Respiratory, Gastrointestinal, & Renal	3,081	3,298	(6.6)	(13)	3,094	(6.2)
Neuroscience	**8,784**	**8,195**	**7.2**	**3**	**8,781**	**7.2**
Cranial & Spinal Technologies	4,456	4,288	3.9	(7)	4,463	4.1
Specialty Therapies	2,592	2,307	12.4	13	2,579	11.8
Neuromodulation	1,735	1,601	8.4	(2)	1,737	8.5
Diabetes	**2,338**	**2,413**	**(3.1)**	**(2)**	**2,340**	**(3.0)**
TOTAL	**$ 31,686**	**$ 30,117**	**5.2%**	**$ (75)**	**$ 31,761**	**5.5%**

(1) The data in this schedule has been intentionally rounded to the nearest million and, therefore, may not sum.
(2) Fiscal year 2021 was a 53-week fiscal year with the extra week occurring in the first fiscal month of the first quarter and is included in reported prior year-to-date results. While it is difficult to calculate the impact of the extra week, the Company estimates the extra week benefited fiscal year 2021 year-to-date revenue by approximately $360 to $390 million.
(3) The currency impact to revenue measures the change in revenue between current and prior year periods using constant exchange rates.

MEDTRONIC PLC
GAAP TO NON-GAAP RECONCILIATIONS[2]
(Unaudited)

	Fiscal year ended April 29, 2022							
(in millions, except per share data)	Net Sales	Cost of Products Sold	Gross Margin Percent	Operating Profit	Operating Profit Percent	Income Before Income Taxes	Net Income attributable to Medtronic	Diluted EPS	Effective Tax Rate
GAAP	$ 31,686	$ 10,145	68.0%	$ 5,752	18.2%	$ 5,517	$5,039	$ 3.73	8.3%
Non-GAAP Adjustments:									
Restructuring and associated costs [3]	–	(117)	0.4	335	1.1	335	281	0.21	16.1
Acquisition-related items [1][4]	–	(19)	0.1	58	0.2	58	30	0.02	48.3
Certain litigation charges	–	–	–	95	0.3	95	78	0.06	17.9
(Gain)/loss on minority investments [5]	–	–	–	–	–	(12)	(9)	(0.01)	–
Medical device regulations [6]	–	(55)	0.2	102	0.3	102	86	0.06	15.7
Amortization of intangible assets	–	–	–	1,733	5.5	1,733	1,467	1.09	15.3
MCS impairment / costs [7]	–	(58)	0.2	881	2.8	881	661	0.49	25.0
Certain tax adjustments, net [8]	–	–	–	–	–	–	(50)	(0.04)	–
Prior to recasting IPR&D charges	$ 31,686	$ 9,897	68.8%	$ 8,957	28.3%	$ 8,710	$7,583	$ 5.61	12.7%
Impact of recast IPR&D charges [1]	–	–	–	(101)	(0.3)	(101)	(78)	(0.06)	22.8
Non-GAAP [1]	$ 31,686	$ 9,897	68.8%	$ 8,856	27.9%	$ 8,609	$7,505	$ 5.55	12.6%
Currency impact	75	131	(0.4)	(157)	(0.5)			(0.10)	
Currency Adjusted	**$ 31,761**	**$ 10,028**	**68.4%**	**$ 8,699**	**27.4%**			**$ 5.45**	

	Fiscal year ended April 30, 2021							
(in millions, except per share data)	Net Sales	Cost of Products Sold	Gross Margin Percent	Operating Profit	Operating Profit Percent	Income Before Income Taxes	Net Income attributable to Medtronic	Diluted EPS	Effective Tax Rate
GAAP	$ 30,117	$ 10,483	65.2%	$ 4,484	14.9%	$ 3,895	$ 3,606	$ 2.66	6.8%
Non-GAAP Adjustments:									
Restructuring and associated costs [3]	–	(128)	0.4	617	2.0	617	489	0.36	20.7
Acquisition-related items [1][4]	–	(15)	–	(15)	–	(15)	4	–	126.7
Certain litigation charges	–	–	–	118	0.4	118	95	0.07	19.5
(Gain)/loss on minority investments [5]	–	–	–	–	–	(61)	(57)	(0.04)	–
Impairment charges [9]	–	–	–	76	0.3	76	68	0.05	10.5
Medical device regulations [6]	–	(45)	0.1	83	0.3	83	68	0.05	18.1
Debt tender premium and other charges [10]	–	–	–	–	–	308	248	0.18	19.5
Amortization of intangible assets	–	–	–	1,783	5.9	1,783	1,500	1.11	15.9
Certain tax adjustments, net [11]	–	–	–	–	–	–	(41)	(0.03)	–
Non-GAAP [1]	$ 30,117	$ 10,295	65.8%	$ 7,146	23.7%	$ 6,804	$ 5,980	$ 4.42	11.8%

(1) Starting with the quarter ended April 29, 2022, the Company will no longer adjust non-GAAP financial measures for certain license payments for, or acquisitions of, technology not approved by regulators due to recent industry guidance from the U.S. Securities and Exchange Commission. Historical non-GAAP financial measures presented in our earnings release have been recast for comparability.

The impact of this change for the fiscal year ended April 29, 2022 is a decrease in non-GAAP net income and diluted EPS of $78 million and $0.06, respectively. The impact of this change for the fiscal year ended April 30, 2021 is a decrease in non-GAAP net income and diluted EPS of $25 million and $0.02.

(2) The data in this schedule has been intentionally rounded to the nearest million or $0.01 for EPS figures, and, therefore, may not sum.

(3) Associated costs include costs incurred as a direct result of the restructuring program, such as salaries for employees supporting the program and consulting expenses.

(4) The charges primarily include business combination costs, changes in fair value of contingent consideration, and specifically for the fiscal year ended April 30, 2021 changes in amounts accrued for certain contingent liabilities for recent acquisitions.

(5) We exclude unrealized and realized gains and losses on our minority investments as we do not believe that these components of income or expense have a direct correlation to our ongoing or future business operations.

(6) The charges represent estimated incremental costs of complying with the new European Union medical device regulations for previously registered products and primarily include charges for contractors supporting the project and other direct third-party expenses, which are expected to be substantially complete by the end of fiscal year 2023.

(7) The charges relate to the Company's June 2021 decision to stop the distribution and sale of the Medtronic HVAD System within the Mechanical Circulatory Support Operating Unit (MCS). The charges included $515 million of non-cash impairments, primarily related to $409 million of intangible asset impairments, as well as $366 million for commitments and obligations in connection with the decision, including patient support obligations, restructuring, and other associated costs. Medtronic is committed to serving the needs of the approximately 3,500 patients currently implanted with the HVAD System.

(8) The net benefit primarily relates to the deferred tax impact associated with a step up in tax basis for Swiss Cantonal purposes and a change in tax rates on deferred taxes associated with intellectual property, which are partially offset by the amortization on previously established deferred tax assets from intercompany intellectual property transactions and a charge related to a change in the Company's permanent reinvestment assertion on certain historical earnings.

(9) The charges relate to the abandonment of certain intangible assets in our Neuroscience segment.

(10) The charges relate to the early redemption of approximately $6.0 billion of debt.

(11) The net benefit primarily relates to the finalization of an audit at the IRS Appellate level for fiscal years 2012 through 2014 and the capitalization of certain research and development costs for U.S. income tax purposes, which are partially offset by the impact of an intercompany sale of assets, and a tax basis adjustment and amortization of previously established deferred tax assets from intercompany intellectual property transactions.

MEDTRONIC PLC
GAAP TO NON-GAAP RECONCILIATIONS(1)
(Unaudited)

(in millions)	2022	2021
Net cash provided by operating activities	$ 7,346	$ 6,240
Additions to property, plant, and equipment	(1,368)	(1,355)
Free Cash Flow (2)	$ 5,978	$ 4,885

(1) The data in this schedule has been intentionally rounded to the nearest million, and, therefore, may not sum.

(2) Free cash flow represents operating cash flows less property, plant, and equipment additions.

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

FORM 10-K

Annual report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934.
For the fiscal year ended April 29, 2022.
Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.
For the transition period from _____ to_____
Commission File No. 1-36820

Medtronic®

Medtronic plc

(Exact name of registrant as specified in its charter)

Ireland	**98-1183488**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

20 On Hatch, Lower Hatch Street Dublin 2, Ireland
(Address of principal executive offices)

+353 1 438-1700
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:		
Title of each class	Trading Symbol	Name of each exchange on which registered
Ordinary shares, par value $0.0001 per share	**MDT**	**New York Stock Exchange**
0.00% Senior Notes due 2022	**MDT/22B**	**New York Stock Exchange**
0.375% Senior Notes due 2023	**MDT/23B**	**New York Stock Exchange**
0.000% Senior Notes due 2023	**MDT/23C**	**New York Stock Exchange**
0.25% Senior Notes due 2025	**MDT/25**	**New York Stock Exchange**
0.000% Senior Notes due 2025	**MDT/25A**	**New York Stock Exchange**
1.125% Senior Notes due 2027	**MDT/27**	**New York Stock Exchange**
0.375% Senior Notes due 2028	**MDT/28**	**New York Stock Exchange**
1.625% Senior Notes due 2031	**MDT/31**	**New York Stock Exchange**
1.00% Senior Notes due 2031	**MDT/31A**	**New York Stock Exchange**
0.750% Senior Notes due 2032	**MDT/32**	**New York Stock Exchange**
2.250% Senior Notes due 2039	**MDT/39A**	**New York Stock Exchange**
1.50% Senior Notes due 2039	**MDT/39B**	**New York Stock Exchange**
1.375% Senior Notes due 2040	**MDT/40A**	**New York Stock Exchange**
1.75% Senior Notes due 2049	**MDT/49**	**New York Stock Exchange**
1.625% Senior Notes due 2050	**MDT/50**	**New York Stock Exchange**

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

Indicate by check mark	**Yes**	**No**
• Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.		
• Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act.		
• 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.		
• 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 (§229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).		
• Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definition 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 check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.		
• Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).		

Aggregate market value of voting and non-voting common equity of Medtronic plc held by non-affiliates of the registrant as of October 29, 2021, based on the closing price of $119.86 as reported on the New York Stock Exchange: approximately $161.2 billion.
Number of Ordinary Shares outstanding on June 20, 2022: 1,328,709,310

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for its 2022 Annual General Meeting are incorporated by reference into Part III hereof.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, and other written reports of Medtronic plc, organized under the laws of Ireland (together with its consolidated subsidiaries, Medtronic, the Company, or we, us, or our), and oral statements made by or with the approval of one of the Company's executive officers from time to time, may include "forward-looking" statements. All statements other than statements of historical fact contained in this Annual Report on Form 10-K, including statements regarding our future results of operations and financial position, business strategy and plans, objectives of management for future operations and current expectations or forecasts of future results, are forward-looking statements. These statements involve known and unknown risks, uncertainties, and other important factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. Our forward-looking statements may include statements related to our growth and growth strategies, developments in the markets for our products, therapies and services, financial results, product development launches and effectiveness, research and development strategy, regulatory approvals, competitive strengths, the potential or anticipated direct or indirect impact of COVID-19 ("COVID-19" or the "pandemic") on our business, results of operations and/or financial condition, restructuring and cost-saving initiatives, intellectual property rights, litigation and tax matters, governmental proceedings and investigations, mergers and acquisitions, divestitures, market acceptance of our products, therapies and services, accounting estimates, financing activities, ongoing contractual obligations, working capital adequacy, value of our investments, our effective tax rate, our expected returns to shareholders, and sales efforts. In some cases, such statements may be identified by the use of terminology such as "anticipate," "believe," "could," "estimate," "expect," "forecast," "intend," "looking ahead," "may," "plan," "possible," "potential," "project," "should," "will," and similar words or expressions. Forward-looking statements in this Annual Report include, but are not limited to, statements regarding: our ability to drive long-term shareholder value; development and future launches of products and continued or future acceptance of products, therapies and services in our segments; expected timing for completion of research studies relating to our products; market positioning and performance of our products, including stabilization of certain product markets; divestitures and the potential benefits thereof; the costs and benefits of integrating previous acquisitions; anticipated timing for United States (U.S.) Food and Drug Administration (U.S. FDA) and non-U.S. regulatory approval of new products; increased presence in new markets, including markets outside the U.S.; changes in the market and our market share; acquisitions and investment initiatives, including the timing of regulatory approvals as well as integration of acquired companies into our operations; the resolution of tax matters; the effectiveness of our development activities in reducing patient care costs and hospital stay lengths; our approach towards cost containment; our expectations regarding healthcare costs, including potential changes to reimbursement policies and pricing pressures; our expectations regarding changes to patient standards of care; our ability to identify and maintain successful business partnerships; the elimination of certain positions or costs related to restructuring initiatives; outcomes in our litigation matters and governmental proceedings and investigations; general economic conditions; the adequacy of available working capital and our working capital needs; our payment of dividends and redemption of shares; the continued strength of our balance sheet and liquidity; our accounts receivable exposure; and the potential impact of our compliance with governmental regulations and accounting guidance.

We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, results of operations, financial condition, and cash flows. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K and are subject to a number of risks, uncertainties and assumptions described in the "Risk Factors" section and elsewhere in this Annual Report on Form 10-K. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. One must carefully consider forward-looking statements and understand that such forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, and involve a variety of risks and uncertainties, known and unknown, including, among others, those discussed in the sections entitled "Government Regulation" within "Item 1. Business" and "Item 1A. Risk Factors" in this Annual Report on Form 10-K, as well as those related to:

- competition in the medical device industry;
- delays in regulatory approvals;
- the global COVID-19 pandemic, including new COVID-19 variants that may emerge, as well as potential impacts of the pandemic on healthcare staffing levels;
- reduction or interruption in our supply;
- failure to complete or achieve the intended benefits of acquisitions or divestitures;
- adverse regulatory action;
- laws and governmental regulations;
- litigation results;
- quality problems;
- healthcare policy changes;
- cybersecurity incidents;

- international operations, including the impact of armed conflicts;
- self-insurance;
- commercial insurance;
- changes in applicable tax rates;
- positions taken by taxing authorities;
- decreasing selling prices and pricing pressure;
- liquidity shortfalls;
- fluctuations in currency exchange rates;
- inflation; or
- disruption of our current plans and operations.

Consequently, no forward-looking statement may be guaranteed, and actual results may vary materially from those projected in the forward-looking statements. We intend to take advantage of the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995 regarding our forward-looking statements and are including this sentence for the express purpose of enabling us to use the protections of the safe harbor with respect to all forward-looking statements. While we may elect to update these forward-looking statements at some point in the future, whether as a result of any new information, future events, or otherwise, we have no current intention of doing so except to the extent required by applicable law.

PART I

Item 1. Business

Medtronic plc, headquartered in Dublin, Ireland, is the leading global healthcare technology company. Medtronic was founded in 1949 and today serves healthcare systems, physicians, clinicians, and patients in more than 150 countries worldwide. We remain committed to a mission written by our founder in 1960 that directs us "to contribute to human welfare by the application of biomedical engineering in the research, design, manufacture, and sale of products to alleviate pain, restore health, and extend life."

Our Mission – to alleviate pain, restore health, and extend life – empowers insight-driven care and better outcomes for our world. We remain committed to being recognized as a company of dedication, honesty, integrity, and service. Building on this strong foundation, we are embracing our role as a healthcare technology leader and evolving our business strategy in four key areas:

- Leveraging our pipeline to win market share: The combination of our good end markets, recent product launches and robust pipeline is expected to continue accelerating our growth over both the near-and long-term. We aim to bring inventive and disruptive technology to large healthcare opportunities which enables us to better meet patient needs. Patients around the world deserve access to our life-saving products, and we are driven to use our local presence and scale to increase the adoption of our products and services in markets around the globe.
- Serving more patients by accelerating innovation driven growth and delivering shareholder value: We listen to our patients and customers to better understand the challenges they face. From the patient journey, to creating agile partnerships that produce novel solutions, to making it easier for our customers to deploy our therapies – everything we do is anchored in deep insight, and creates simpler, superior experiences.
- Creating and disrupting markets with our technology: We are confident in our ability to maximize new technology, artificial intelligence (AI), and data and analytics to tailor therapies in real-time, facilitating remote monitoring and care delivery that conveniently manages conditions, and creates new standards of care.
- Empowering our operating units to be more nimble and more competitive: Our operating model, which was effective February 2021, simplified our organization to accelerate decision making, improve commercial execution, and more effectively leverage the scale of our company.

We have four operating and reportable segments that primarily develop, manufacture, distribute, and sell device-based medical therapies and services: the Cardiovascular Portfolio, the Medical Surgical Portfolio, the Neuroscience Portfolio, and the Diabetes Operating Unit. For more information regarding our segments, please see Note 19 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

CARDIOVASCULAR PORTFOLIO

The Cardiovascular Portfolio is made up of the Cardiac Rhythm & Heart Failure, Structural Heart & Aortic, and Coronary & Peripheral Vascular divisions. The primary medical specialists who use our Cardiovascular products include electrophysiologists, implanting cardiologists, heart failure specialists, cardiovascular, cardiothoracic, and vascular surgeons, and interventional cardiologists and radiologists.

Cardiac Rhythm & Heart Failure

Our Cardiac Rhythm & Heart Failure division includes the following Operating Units: Cardiac Rhythm Management; Cardiac Ablation Solutions; and Cardiovascular Diagnostics and Services. The division develops, manufactures, and markets products for the diagnosis, treatment, and management of heart rhythm disorders and heart failure. Our products include implantable devices, leads and delivery systems, products for the treatment of atrial fibrillation (AF), products designed to reduce surgical site infections, information systems for the management of patients with Cardiac Rhythm & Heart Failure devices, and an integrated health solutions business. Principal products and services offered include:

- Implantable cardiac pacemakers including the Azure MRI SureScan, Adapta, Advisa MRI SureScan, and the Micra Transcatheter Pacing System. The Micra Transcatheter Pacing System, which is leadless and does not have a subcutaneous device pocket like a conventional pacemaker, includes the Micra VR device and the Micra AV device. Both of these pacemakers treats patients with atrioventricular block.
- Implantable cardioverter defibrillators (ICDs), including the Visia AF MRI SureScan, Evera MRI SureScan, Primo MRI, and the Cobalt and Crome portfolio of BlueSync-enabled ICDs, as well as defibrillator leads, including the Sprint Quattro Secure lead.
- Implantable cardiac resynchronization therapy devices (CRT-Ds and CRT-Ps) including the Claria/Amplia/Compia family of MRI Quad CRT-D SureScan systems and the Cobalt and Crome portfolio of BlueSync-enabled CRT-Ds, as well as the Percepta/Serena/Solara family of MRI Quad CRT-P SureScan systems.
- Cardiac ablation products including the Arctic Front Advanced Cardiac cryoablation System, designed for pulmonary vein isolation in the treatment of patients with paroxysmal and persistent AF, as well as the DiamondTemp Ablation system, which is the first U.S. FDA-approved, temperature controlled, irrigated radiofrequency ablation system.
- Insertable cardiac monitoring systems, including the Reveal LINQ and LINQ II. These devices are for patients who experience infrequent symptoms such as dizziness, palpitation, syncope (fainting) and chest pain, which may indicate a cardiac arrhythmia that requires long-term monitoring or ongoing management. The LINQ II device offers improved device longevity, unmatched accuracy and a streamlined workflow with AccuRhythm AI algorithms to reduce clinic workload and data burden.
- TYRX products, including the Cardiac and Neuro Absorbable Antibacterial Envelopes, which are designed to stabilize electronic implantable devices and help prevent infection associated with implantable pacemakers, and defibrillators.
- Remote monitoring services and patient-centered software to enable efficient care coordination and specialized telehealth nurse support as well as services related to hospital operational efficiency.
- Medtronic stopped the distribution and sale of the HVAD System on June 3, 2021. We continue a support program for patients with HVAD devices, and for caregivers and healthcare professionals who participate in their care.

Structural Heart & Aortic

Our Structural Heart & Aortic division includes the following Operating Units: Structural Heart & Aortic and Cardiac Surgery. The division includes therapies to treat heart valve disorders and aortic disease. Our devices include products for the repair and replacement of heart valves, perfusion systems, positioning and stabilization systems for beating heart revascularization surgery, surgical ablation products, and comprehensive line of products and therapies to treat aortic disease, such as aneurysms, dissections, and transections. Principal products offered include:

- CoreValve family of aortic valves, including the Evolut R, Evolut PRO, and Evolut PRO+ systems for transcatheter aortic valve replacement.
- Surgical valve replacement and repair products for damaged or diseased heart valves, including both tissue

and mechanical valves; blood-handling products that form a circulatory support system to maintain and monitor blood circulation and coagulation status, oxygen supply, and body temperature during arrested heart surgery; and surgical ablation systems and positioning and stabilization technologies.

- Endovascular stent grafts and accessories, including the Endurant II Stent Graft System for the treatment of abdominal aortic aneurysms, the Valiant Captivia Thoracic Stent Graft System for thoracic endovascular aortic repair procedures, and the Heli-FX EndoAnchor System.
- Transcatheter Pulmonary Valves, including Harmony TPV and Delivery Catheter System and Melody TPV/ Ensemble II Delivery System.

Coronary & Peripheral Vascular

Our Coronary & Peripheral Vascular division includes the following Operating Units: Coronary & Renal Denervation and Peripheral Vascular Health. The division is comprised of a comprehensive line of products and therapies to treat coronary artery disease as well as peripheral vascular disease and venous disease. Our products include coronary stents and related delivery systems, including a broad line of balloon angioplasty catheters, guide catheters, guide wires, diagnostic catheters, and accessories, peripheral drug coated balloons, stent and angioplasty systems, carotid embolic protection systems for the treatment of vascular disease outside the heart, and products for superficial and deep venous disease. Principal products offered include:

- Percutaneous Coronary Intervention products including our Resolute Onyx drug-eluting stent, Euphora balloons, and Launcher guide catheters.
- Percutaneous angioplasty balloons including the IN.PACT family of drug-coated balloons, vascular stents including the Abre venous stent, directional atherectomy products including the HawkOne directional atherectomy system, and other procedure support tools.
- Products to treat superficial venous diseases in the lower extremities including the ClosureFast radiofrequency ablation system and the VenaSeal Closure System.

MEDICAL SURGICAL PORTFOLIO

The Medical Surgical Portfolio is made up of the Surgical Innovations and Respiratory, Gastrointestinal, & Renal divisions. Products and therapies of this group are used primarily by healthcare systems, physicians' offices, ambulatory care centers, and other alternate site healthcare providers. While less frequent, some products and therapies are also used in home settings.

Surgical Innovations

Our Surgical Innovations division includes the following Operating Units: Surgical Innovations and Surgical Robotics. The division develops, manufactures, and markets advanced and general surgical products, including surgical stapling devices, vessel sealing instruments, wound closure, electrosurgery products, surgical artificial intelligence (AI) and robotic-assisted surgery products, hernia mechanical devices, mesh implants, gynecology products, lung health and visualization, and therapies to treat diseases and conditions that are typically, but not exclusively, addressed by surgeons. Principal products and services offered include:

- Advanced stapling and energy products, including the Tri-Staple technology platform for endoscopic stapling, including the Endo GIA reloads and reinforced reloads with Tri-Staple Technology and the Endo GIA ultra universal stapler; the Signia Powered Stapling System; the LigaSure Exact Dissector and L-Hook Laparoscopic Sealer/Divider; and the Sonicision curved jaw cordless ultrasonic dissection system.
- Electrosurgical hardware and instruments, including the Valleylab FT10 energy platform, and the Force TriVerse electrosurgical pencils.
- Robotic and digital surgery technologies including, the Hugo robotic-assisted surgery (RAS) system designed for a broad range of soft-tissue procedures and Touch Surgery Enterprise, the first AI-powered surgical video management solution for the operating room.
- Products designed for the treatment of hernias, including the AbsorbaTack absorbable mesh fixation device for hernia repair, the Symbotex composite mesh for surgical laparoscopic and open ventral hernia repair, and Parietex ProGrip, a self-gripping, biocompatible solution for inguinal hernias.

Respiratory, Gastrointestinal, & Renal

Our Respiratory, Gastrointestinal, & Renal division includes the following Operating Units: Respiratory Interventions, Patient Monitoring, Gastrointestinal, and Renal Care Solutions. The division develops, manufactures, and

markets products in the emerging fields of minimally invasive gastrointestinal and hepatologic diagnostics and therapies, patient monitoring, respiratory interventions including airway management and ventilation therapies, and for the treatment of renal disease. Principal products and services offered include:

- Gastrointestinal and endoscopy products, including the PillCam capsule endoscopy systems, the Bravo calibration-free reflux testing systems, the EndoFLIP imaging systems, the Emprint ablation system with Thermosphere Technology, the ManoScan Bravo system, the Barrx platform through ablation with the Barrx 360 Express catheter, the GI Genius intelligent endoscopy module, the Cool-tip radiofrequency ablation system, and the HET Bipolar System.
- Airway, ventilation, and inhalation therapies products, including the Puritan Bennett 980 and 840 ventilators, the Newport e360 and HT70 ventilators, the TaperGuard Evac tube, Shiley Endotracheal Tubes, Shiley Tracheostomy Tubes, McGRATH MAC video laryngoscopes, and DAR Filters.
- Products focused on patient monitoring, including Nellcor pulse oximetry monitors and sensors, Microstream capnography monitors, Bispectral Index (BIS) brain monitoring technology, INVOS cerebral/somatic oximetry systems, Vital Sync remote monitoring, and WarmTouch convective warming.
- Products providing solutions for the treatment of renal disease, including Palindrome, Mahurkar and Mahurkar Elite Dialysis Access Catheters for renal therapy, Argyle peritoneal dialysis catheters, Carpediem dialysis machines for pediatric patients, Amplya dialysis machines for acute patients, and other products designed for use in treatment of both acute and chronic renal failure conditions.

NEUROSCIENCE PORTFOLIO

The Neuroscience Portfolio is made up of the Cranial & Spinal Technologies, Specialty Therapies, and Neuromodulation divisions. The primary medical specialists who use the products of this group include spinal surgeons, neurosurgeons, neurologists, pain management specialists, anesthesiologists, orthopedic surgeons, urologists, urogynecologists, interventional radiologists, and ear, nose, and throat specialists.

Cranial & Spinal Technologies

Our Cranial & Spinal Technologies division and Operating Unit develops, manufactures, and markets an integrated portfolio of devices and therapies for surgical technologies designed to improve the precision and workflow of neuro procedures, and a comprehensive line of medical devices and implants used in the treatment of the spine and musculoskeletal system. The division also provides biologic solutions for the orthopedic and dental markets and offers unique and highly differentiated imaging, navigation, power instruments, nerve monitoring, and robotic guidance systems used in spine and cranial procedures. Principal products and services offered include:

- Neurosurgery products, including platform technologies, implant therapies, and advanced energy products. This includes our StealthStation S8 Navigation System, Stealth Autoguide cranial robotic guidance platform, O-arm Imaging System, Mazor X robotic guidance systems used in robot-assisted spine procedures, and our Midas Rex Surgical Drills, including our MR8 high-speed drill system. This group of products also includes our cerebrospinal fluid (CSF) Management Portfolio, Visualase MRI-guided laser ablation, Aquamantys Sealers, and our PEAK Surgery System used in tissue dissection that consists of the PEAK PlasmaBlade and PULSAR Generator.
- Products to treat a variety of conditions affecting the spine, including degenerative disc disease, spinal deformity, spinal tumors, fractures of the spine, and stenosis. These products include our CD HORIZON SOLERA system, T2 STRATOSPHERE, and CLYDESDALE interbody spacers. These products also include titanium interbody implants and surface technologies, such as our Adaptix interbody system and the Titan Interbody Fusion Device with NanoLOCK technology.
- Products that facilitate less invasive thoracolumbar surgeries, including the CD HORIZON SOLERA VOYAGER Percutaneous Fixation System.
- Products to treat conditions in the cervical region of the spine, including the ZEVO Anterior Cervical Plate System, the INFINITY OCT System, and PRESTIGE LP Cervical Artificial Discs.
- Biologic solutions products, including our INFUSE Bone Graft (InductOs in the European Union (E.U.)), which contains a recombinant human bone morphogenetic

protein, rhBMP-2, for certain spinal, trauma, and oral maxillofacial applications.

- Demineralized Bone Matrix products, including MAGNIFUSE, GRAFTON/GRAFTON PLUS, and the MASTERGRAFT family of synthetic bone graft products – Matrix, Putty, and Granules.

Specialty Therapies

Our Specialty Therapies division includes the following Operating Units: Neurovascular; Ear, Nose, and Throat (ENT); and Pelvic Health. The division develops, manufactures, and markets products and therapies to treat diseases of ENT, patients afflicted with acute ischemic and hemorrhagic stroke, and help control the systems of overactive bladder, (non-obstructive) urinary retention, and chronic fecal incontinence. Principal products and services offered include:

- Pelvic health products, including our InterStim X, InterStim Micro, and InterStim II neurostimulators, and InterStim SureScan MRI leads, to help control the systems of overactive bladder, (non-obstructive) urinary retention, and chronic fecal incontinence. Our NURO System delivers Percutaneous Tibial Neuromodulation therapy to treat overactive bladder and associated symptoms of urinary urgency, urinary frequency, and urge incontinence.
- ENT products, including the Straightshot M5 Microdebrider Handpiece, the IPC system, NIM Nerve Monitoring Systems, FUSION Compact and StealthStation ENT Navigation System, as well as products for hearing restoration and obstructive sleep apnea.
- Neurovascular products to treat diseases of the vasculature in and around the brain. This includes coils, neurovascular stent retrievers, and flow diversion products, as well as access and delivery products to support procedures. Products also include the Pipeline Flex Embolization Devices, endovascular treatments for large or giant wide-necked brain aneurysms, the portfolio of Solitaire revascularization devices for treatment of acute ischemic stroke, the Riptide Aspiration System, the Onyx Liquid Embolic System, and a portfolio of associated access catheters including our React aspiration catheters also for the treatment of acute ischemic stroke.

Neuromodulation

Our Neuromodulation division and Operating Unit develops, manufactures, and markets spinal cord stimulation systems, implantable drug infusion systems for chronic pain, as well as interventional products. Principal products and services offered include:

- Spinal cord stimulation products, including rechargeable and non-rechargeable devices and a large selection of leads used to treat chronic back and/or limb pain and chronic pain resulting from diabetic peripheral neuropathy. This includes the Intellis Spinal Cord Stimulation System, with AdaptiveStim and SureScan MRI Technology, DTM (differential target multiplexed) proprietary waveform, the Evolve workflow algorithm, and Snapshot reporting. Products also include our RestoreSensor (rechargeable) SureScan MRI neurostimulation system with its proprietary AdaptiveStim technology.
- Brain modulation products, including those for the treatment of the disabling symptoms of Parkinson's disease, essential tremor, refractory epilepsy, severe, treatment-resistant obsessive-compulsive disorder (approved under a Humanitarian Device Exemption (HDE) in the U.S.), and chronic, intractable primary dystonia (approved under a HDE in the U.S.). Specifically, this includes our family of Activa Neurostimulators, including Activa SC (single-channel primary cell battery), Activa PC (dual channel primary cell battery), and Activa RC (dual channel rechargeable battery). This also includes our Percept PC Neurostimulator DBS system with BrainSense technology.
- Implantable drug infusion systems, including our SynchroMed II Implantable Infusion System, that deliver small quantities of drug directly into the intrathecal space surrounding the spinal cord.
- Interventional products, including the Kyphon Balloon, the Kyphon V, and Kyphon Assist systems and the OsteoCool RF Tumor ablation system.
- The Accurian nerve ablation system, which conducts radio frequency ablation of nerve tissues.

DIABETES OPERATING UNIT

The Diabetes Operating Unit develops, manufactures, and markets products and services for the management of Type 1 and Type 2 diabetes. The primary medical specialists who use and/or prescribe our Diabetes products are endocrinologists and primary care physicians.

Principal products and services offered include:

- Insulin pumps and consumables, including the MiniMed 770G system and MiniMed 780G system, which are all powered by SmartGuard technology. The MiniMed 770G system provides smartphone and Bluetooth connectivity, continuously delivers background insulin, monitors sugar levels, and an expanded age indication to ages two and up. The MiniMed 780G enhances the insulin pump systems by including automatic correction boluses and an adjustable glucose target down to 100 mg/dl.
- Continuous glucose monitoring (CGM) systems and sensors, including the Guardian Connect smart CGM system, the Guardian Sensor 3, and the Guardian Sensor 4, are products worn by patients capturing glucose data to reveal patterns and potential problems, such as hyperglycemic and hypoglycemic episodes.
- The InPen smart insulin pen system that combines a reusable Bluetooth-enabled insulin pen with an intuitive mobile app that helps users administer the appropriate insulin dose. The InPen application integrates with our CGM data to provide real-time CGM readings alongside insulin dose information.
- Consumables and supplies, including infusion sets.

HUMAN CAPITAL

Medtronic Workforce Overview

Medtronic's employees deliver on our Mission every day. We empower insight-driven care, experiences that put people first, and better outcomes for our world. In everything we do, we are engineering the extraordinary. We strive to be the employer of choice for the best and brightest global talent, where employees can grow and develop fulfilling careers. We aspire to create a truly inclusive, diverse, and equitable workplace that fosters innovation and creativity, and where every employee feels a sense of belonging and well-being. Medtronic has 95,000+ full-time employees, of which forty-four percent are based in the U.S. or Puerto Rico.

Inclusion, Diversity & Equity

We believe that improving health for people from all walks of life depends on our ability to unleash the creative power of our diverse global employees. By breaking down barriers to Inclusion, Diversity and Equity (ID&E), we open doors for everyone, driving progress and prosperity around the world. As of the end of fiscal year 2022, 38 percent of our U.S. workforce is ethnically diverse; women comprise 50 percent of our global workforce; and 42 percent of our manager and above employees are women. Additionally, Medtronic employee resource groups (ERGs) are employee-led affinity groups that provide career development and networking opportunities for members and strengthen ties between employees of many different backgrounds, cultures, and interests. In fiscal year 2022, there were 12 ERGs and Diversity Networks across 75 countries with more than 34,000 members.

Pay Equity

For fiscal year 2022, in the United States we have achieved 100% pay equity for gender for the third consecutive year and 100% pay equity for ethnically diverse employees. Globally we have achieved 99% pay equity for gender. We are actively working to close any remaining pay gaps by continuing to expand the annual pay equity analyses for each country we operate in.

Workforce Compensation

Our compensation framework is designed to celebrate the value and contributions of our employees. We are committed to transparent communications on compensation. Our competitive approach to compensation reflects industry benchmarks and local market standards. Our programs include annual and long-term incentives that provide the means to share in the Company's success. To attract the best leaders, we offer competitive benefits and cash and equity incentives. We reward high-performing employees with an ownership stake in the company through restricted stock, and all employees have the opportunity to purchase stock at a significant discount.

Learning & Development

The skills and dedication of our employees drive our business performance. Our comprehensive professional development programs empower our people to build rewarding careers and help us attract world-class talent. Our suite of professional development programs ensures that our employees, regardless of level, location, language or learning preferences, have access to opportunities to develop and grow. Our investment in employee development has contributed to more than 30 percent of our open roles being filled with internal employees.

In fiscal year 2022, we began our shift away from degree requirements to focus on skills-based certification for certain roles within Medtronic. Additionally, as members of the Multiple Pathways Initiative, we have used a skill – based approach to offering opportunities to expanded pools of external talent that have previously been held back due to lack of access to undergraduate education. Internally, employees can now participate through MAPS (Medtronic Advancement Pathways and Skill-building) in undergraduate courses from top-tier universities to enhance or obtain new skills, at no cost to the employee. Our change in approach has opened up opportunities for employees who have been otherwise restricted from career advancement due to degree requirements.

Employee Engagement and Culture

Through our organizational health survey, we gain valuable insight into the Medtronic employee experience and identify areas where we can improve in four key priority areas: 1) Employee Engagement, 2) Inclusion, 3) Innovation, and 4) Ethics. In our most recent survey ending in the fourth quarter of fiscal year 2022, more than 77 percent of our employees responded. Medtronic carefully reviews and implements actions based on employee feedback in order to partner and create an inclusive, innovative and supportive environment.

To enable our transformation to be the global healthcare technology leader, we introduced a reinvigorated and revived culture. The Medtronic Mindset builds on our core values of integrity, quality, inclusion and collaboration. It urges us to act boldly, compete to win, move with speed and decisiveness, foster belonging, and deliver results… the right way. Our renewed culture helps us meet the needs of our patients and customers, and ensures our Mission endures for many years to come.

Health & Safety

As a large, global employer, it is our responsibility to maintain a safe workplace and support the well-being of our employees. Throughout the COVID-19 pandemic, we have placed a high priority on employee health, providing comprehensive benefits, accommodations and resources to support our workforce through this challenging time. During fiscal year 2022, we offered on-site vaccinations to our employees, enabling a vaccination rate of nearly 90% for our U.S. and Puerto Rico – based workforce. To help limit exposure to the virus, we acted to ensure employees in business-critical functions who cannot work from home were protected, including those in research and development, quality, manufacturing, distribution, and sales. Personal protective equipment, increased sanitation, social distancing guidance, and facility updates (one-way hallways, cafeteria partitions and extra sinks) were provided to protect our employees.

Medtronic has a comprehensive approach to providing robust support for our employees and their families not only during the pandemic, but also in natural disasters, civil unrest and war, bereavement, and other challenging events. Along with other programs, the Medtronic Employee Assistance Program and the Medtronic Employee Emergency Assistance Fund have historically supported employees and their families when faced with difficult times by providing a variety of services such as mental health, safety, and financial resources and support at no cost. These programs have proven invaluable in navigating our employees through unique challenge, including in fiscal year 2022. The Medtronic Employee Emergency Assistance Fund is supported by donations from employees and the Medtronic Foundation, and over the last five years has provided over $6 million in grants to employees experiencing unexpected events creating a financial hardship.

For more information on Human Capital Management at Medtronic, please refer to our 2021 Integrated Performance Report[1] as well as Medtronic's 2021 Global Inclusion, Diversity and Equity Report[1] available on our company website.

CORPORATE SUSTAINABILITY GOALS

We see possibilities to further increase our positive impact in the world. We have identified three focus areas for our environmental, social, and governance (ESG) efforts to drive measurable impact on issues including: protecting our planet, accelerating access to healthcare technology, and advancing ID&E. In early fiscal year 2022, we set new performance targets across the following areas: Patient Safety & Product Quality; Inclusion, Diversity & Equity; Climate Stewardship; Product Stewardship; and Access & Innovation. More information about our ESG focus areas, including progress we have made to date toward achieving them, is included in our Integrated Performance Report.[1]

(1) The contents of our Integrated Performance Report and our Global Inclusion, Diversity, and Equity Report are referenced for general information only and are not incorporated by reference in the Form 10-K.

OTHER FACTORS IMPACTING OUR OPERATIONS

COVID-19 Pandemic

The global COVID-19 pandemic, together with the preventative and precautionary measures taken by businesses, communities, and governments, has impacted, and may continue to impact significant aspects of our Company and business, including future procedural volumes, supply constraints, healthcare staffing, worker absenteeism with our customers, suppliers, and in our own operations and field teams, and resulting impacts on demand for our products and therapies. See "Item 1A. Risk Factors" in this Annual Report on Form 10-K.

Research and Development

The markets in which we participate are subject to rapid technological advances. Constant improvement of existing products and introduction of new products is necessary to maintain market leadership. Our research and development (R&D) efforts are directed toward maintaining or achieving technological leadership in each of the markets we serve to help ensure that patients using our devices and therapies receive the most advanced and effective treatment possible. We remain committed to

developing technological enhancements and new indications for existing products, and less invasive and new technologies for new and emerging markets to address unmet patient needs. That commitment leads to our initiation and participation in hundreds of clinical trials each fiscal year as the demand for clinical and economic evidence remains high. Furthermore, our development activities are intended to help reduce patient care costs and the length of hospital stays in the future. We have not engaged in significant customer or government-sponsored research.

Our R&D activities include improving existing products and therapies, expanding their indications and applications for use, developing new therapies and procedures, and entering into arrangements with third parties to fund the development of certain technologies. We continue to focus on optimizing innovation, improving our R&D productivity, driving growth in emerging markets, generating clinical evidence, and assessing our R&D programs based on their ability to address unmet clinical needs, produce better patient outcomes, and create new standards of care.

Intellectual Property

We rely on a combination of patents, trademarks, tradenames, copyrights, trade secrets, and agreements (non-disclosure and non-competition agreements) to protect our business and proprietary technology. In addition, we have entered into exclusive and non-exclusive licenses relating to a wide array of third-party technologies. In the aggregate, these intellectual property assets and licenses are of material importance to our business; however, we believe that no single intellectual property asset or license is material in relation to any segment of our business or to our business as a whole.

We operate in an industry characterized by extensive patent litigation. Patent litigation may result in significant damage awards and injunctions that could prevent the manufacture and sale of affected products or result in significant royalty payments in order to continue selling the products. At any given time, we are involved as both a plaintiff and a defendant in a number of patent infringement actions, the outcomes of which may not be known for prolonged periods of time.

Sales and Distribution

We sell our medical devices and therapies through a combination of direct sales representatives and independent distributors globally. Additionally, a portion of the Company's revenue is generated from consignment inventory maintained at hospitals. Our medical supply products are used primarily in hospitals, surgical centers, and alternate care facilities, such as home care and long-term care facilities, and are marketed to materials managers, group purchasing organizations (GPOs) and integrated delivery networks (IDNs). We often negotiate with GPOs and IDNs, which enter into supply contracts for the benefit of their member facilities. Our four largest markets are the U.S., Western Europe, China, and Japan. Emerging markets are an area of increasing focus and opportunity, as we believe they remain under-penetrated.

Our marketing and sales strategy is focused on rapid, cost-effective delivery of high-quality products to a diverse group of customers worldwide. To achieve this objective, our marketing and sales teams are organized around physician specialties. This focus enables us to develop highly knowledgeable and dedicated sales representatives who are able to foster strong relationships with physicians and other customers and enhance our ability to cross-sell complementary products.

We are not dependent on any single customer for more than 10 percent of our total net sales.

Competition, Industry, and Cost Containment

We compete in both the therapeutic and diagnostic medical markets in more than 150 countries throughout the world. These markets are characterized by rapid change resulting from technological advances and scientific discoveries. Our product lines face a mix of competitors ranging from large manufacturers with multiple business lines to small manufacturers offering a limited selection of products. In addition, we face competition from providers of other medical therapies, such as pharmaceutical companies.

Major shifts in industry market share have occurred in connection with product problems, physician advisories, safety alerts, results of clinical trials to support superiority claims, and publications about our products, reflecting the importance of product quality, product efficacy and quality systems in the medical device industry. In the current environment of managed care, economically motivated customers, consolidation among healthcare providers, increased competition, declining reimbursement rates, and national and provincial tender pricing, competitively priced product offerings are essential to our business. In order to continue to compete effectively, we must continue to create or acquire advanced technology, incorporate this technology into proprietary products, obtain regulatory approvals in a timely manner, maintain high-quality manufacturing processes, and successfully market these products.

Government and private sector initiatives to limit the growth of healthcare costs, including price regulation, competitive pricing, bidding and tender mechanics, coverage and payment policies, comparative effectiveness of therapies, technology assessments and managed-care arrangements, are continuing in many countries where we do business, including the U.S. These initiatives put increased emphasis on the delivery of more cost-effective medical devices and therapies. Government programs, including Medicare and Medicaid, private healthcare insurance and managed-care plans have attempted to control costs by limiting the amount of reimbursement they

will pay for particular procedures or treatments, tying reimbursement to outcomes, shifting to population health management, and other mechanisms. Hospitals, which purchase our technology, are also seeking to reduce costs through a variety of mechanisms, including, for example, centralized purchasing, and in some cases, limiting the number of vendors that may participate in the purchasing program. Hospitals are also aligning interests with physicians through employment and other arrangements, such as gainsharing, where a hospital agrees with physicians to share any realized cost savings resulting from changes in practice patterns such as device standardization. This has created an increased level of price sensitivity among customers for our products.

Production and Availability of Raw Materials

We manufacture products at manufacturing facilities located in various countries throughout the world. We purchase many of the components and raw materials used in manufacturing our products from numerous suppliers in various countries. Certain components and raw materials are available only from a sole supplier. We work closely with our suppliers to help ensure continuity of supply while maintaining high quality and reliability. Generally, we have been able to obtain adequate supplies of such raw materials and components. However, due to the U.S. FDA's manufacturing requirements, we may not be able to quickly establish additional or replacement sources for certain components or materials if we experience a sudden or unexpected reduction or interruption in supply and are unable to develop alternative sources.

For additional information related to our manufacturing facilities refer to "Item 2. Properties" in this Annual Report on Form 10-K.

Government Regulation

Our operations and products are subject to extensive regulation by numerous government agencies, including the U.S. FDA, European regulatory authorities such as the Medicines and Healthcare Products Regulatory Agency in the United Kingdom Republic of Ireland and the Federal Institute for Drugs and Medical Devices in Germany, the China National Medical Product Administration (NMPA), and other government agencies inside and outside the U.S. To varying degrees, each of these agencies requires us to comply with laws and regulations governing the development, testing, manufacturing, labeling, marketing, distribution and post-marketing surveillance of our products. Our business is also affected by patient and data privacy laws and government payer cost containment initiatives, as well as environmental health and safety laws and regulations.

Product Approval and Monitoring

Many countries where we sell medical devices subject such medical devices and technologies to their own approval and other regulatory requirements regarding performance, safety, and quality of our products. Authorization to commercially distribute a new medical device in the U.S. is generally obtained in one of two primary ways. The first, known as pre-market notification or the 510(k) process, requires us to demonstrate that our medical device is substantially equivalent to a legally marketed medical device. The second, more rigorous process, known as pre-market approval, requires us to independently demonstrate that a medical device is safe and effective for its intended use. This process is generally much more time-consuming and expensive than the 510(k) process.

In the E.U., a single regulatory approval process exists, and conformity with the legal requirements is represented by the CE Mark. To obtain a CE Mark, defined products must meet minimum standards of performance, safety, and quality (i.e., the essential requirements), and then, according to their classification, comply with one or more of a selection of conformity assessment routes. The competent authorities of the E.U. countries separately regulate the clinical research for medical devices and the market surveillance of products once they are placed on the market. A new Medical Device Regulation was published by the E.U. in 2017 which imposes significant additional pre-market and post-market requirements (EU MDR). The regulation provided an implementation period and became effective on May 26, 2021. Medical devices marketed in the E.U. will require certification according to these new requirements, except that devices with valid CE certificates, issued pursuant to the Medical Device Directives before May 2020, can be placed on the market until May 2024.

The global regulatory environment is increasingly stringent and unpredictable. While harmonization of global regulations has been pursued, requirements continue to differ significantly among countries. We expect this global regulatory environment will continue to evolve, which could impact the cost, the time needed to approve, and ultimately, our ability to maintain existing approvals or obtain future approvals for our products. Regulations of the U.S. FDA and other regulatory agencies in and outside the U.S. impose extensive compliance and monitoring obligations on our business. These agencies review our design and manufacturing practices, labeling, 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 inspections for compliance with applicable quality system regulations, which govern the methods used in, and the facilities and controls used for, the design, manufacture, packaging, and servicing of finished medical devices intended for human use. In addition, the U.S. FDA and other regulatory bodies, both in and outside the U.S. (including the Federal Trade Commission, the Office of the Inspector General of the Department of Health and Human Services, the U.S. Department of Justice, and various state Attorneys General), monitor the promotion and advertising of our products. Any adverse regulatory action, depending on its magnitude, may limit our ability to effectively market and sell our products, limit our ability to obtain future pre-market approvals or result in a substantial modification to our business practices and operations. For additional

information, see "Item 1A. Risk Factors" *We are subject to extensive and complex laws and governmental regulations and any adverse regulatory action may materially adversely affect our financial condition and business operations*.

Trade Regulations

The movement of products, services, and investment across borders subjects us to extensive trade regulations. A variety of laws and regulations in the countries in which we transact business apply to the sale, shipment and provision of goods, services and technology across borders. These laws and regulations govern, among other things, our import, export and other business activities. We are also subject to the risk that these laws and regulations could change in a way that would expose us to additional costs, penalties or liabilities. Some governments also impose economic sanctions against certain countries, persons or entities. In addition to our need to comply with such regulations in connection with our direct activities, we also sell and provide goods, technology and services to agents, representatives and distributors who may export such items to customers and end-users. If we, or the third parties through which we do business, are not in compliance with applicable import, export control or economic sanctions laws and regulations, we may be subject to civil or criminal enforcement action, and varying degrees of liability. Such actions may disrupt or delay sales of our products or services or result in restrictions on our distribution and sales of products or services that may materially impact our business.

Anti-Boycott Laws

Under U.S. laws and regulations, U.S. companies and their subsidiaries and affiliates outside the U.S. are prohibited from participating or agreeing to participate in unsanctioned foreign boycotts in connection with certain business activities, including the sale, purchase, transfer, shipping or financing of goods or services within the U.S. or between the U.S. and countries outside of the U.S. If we, or certain third parties through which we sell or provide goods or services, violate anti-boycott laws and regulations, we may be subject to civil or criminal enforcement action and varying degrees of liability.

Data Privacy and Security Laws and Regulations

As a business with a significant global footprint, compliance with evolving regulations and standards in data privacy and cybersecurity has resulted, and may continue to result, in increased costs, new compliance challenges, and the threat of increased regulatory enforcement activity. Our business relies on the secure electronic transmission, storage and hosting of sensitive information, including personal information, protected health information, financial information, intellectual property and other sensitive information related to our customers and workforce.

Our global operational footprint comes with the obligation for compliance and adherence to individual data security, confidentiality and breach notification laws at the State Level, Federal Level, and International Level. Examples of those laws include the Health Insurance and Portability Act of 1996 (HIPAA), as amended, and the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH) in the U.S., the Global Data Protection Regulation (GDPR) within the European Union, and various other country specific requirements around the world.

Because the laws and regulations continue to expand, differ from jurisdiction to jurisdiction, and are subject to evolving (and at times inconsistent) governmental interpretation, compliance with these laws and regulations may require significant additional cost expenditures or changes in products or business that increase competition or reduce revenue. Noncompliance could result in the imposition of fines, penalties, or orders to stop noncompliant activities, or withdrawal of non-compliant products from a market.

Regulations Governing Reimbursement

The delivery of our devices is subject to regulation by the U.S. Department of Health and Human Services (HHS) and comparable state and non-U.S. agencies responsible for reimbursement and regulation of healthcare items and services. U.S. laws and regulations are imposed primarily in connection with federally funded healthcare programs, such as the Medicare and Medicaid programs, as well as the government's interest in regulating the quality and cost of healthcare. Other governments also impose regulations in connection with their healthcare reimbursement programs and the delivery of healthcare items and services.

U.S. federal healthcare laws apply when we or customers submit claims for items or services that are reimbursed under federally-funded healthcare programs, including laws related to kickbacks, false claims, self-referrals or other healthcare fraud. There are often similar state false claims, anti-kickback, and anti-self-referral and insurance laws that apply to state Medicaid and other healthcare programs and private third-party payers. In addition, as a manufacturer of U.S. FDA-approved devices reimbursable by federal healthcare programs, we are subject to the Physician Payments Sunshine Act, which requires us to annually report certain payments and other transfers of value we make to U.S.-licensed physicians or U.S. teaching hospitals. Any failure to comply with these laws and regulations could subject us or our officers and employees to criminal and civil financial penalties.

Implementation of legislative or regulatory reforms to reimbursement systems, or adverse decisions relating to our products by administrators of these systems in coverage or reimbursement, could significantly reduce reimbursement or result in the denial of coverage, which could have an impact on the acceptance of and demand for our products and the prices that our customers are willing to pay for them.

Environmental Health and Safety Laws

We are also subject to various environmental health and safety laws and regulations both within and outside the U.S. Like other companies in our industry, our manufacturing and other operations involve the use and transportation of substances regulated under environmental health and safety laws including those related to the transportation of hazardous materials.

Available Information

We maintain a website at www.medtronic.com. 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) are made available under the "Our Company – Investors" caption and "Financials – SEC Filings" subcaption of our website as soon as reasonably practicable after we electronically file them with, or furnish them to, the Securities and Exchange Commission (SEC).

Information relating to our corporate governance, including our Principles of Corporate Governance, Code of Conduct (including our Code of Ethics for Senior Financial Officers and any related amendments or waivers), Code of Business Conduct and Ethics for Members of the Board of Directors, and information concerning our executive officers, directors and Board committees (including committee charters) is available through our website at www.medtronic.com under the "Our Company – Governance" caption. Information relating to transactions in Medtronic securities by directors and officers is available through our website at www.medtronic.com under the "Our Company – Investors" caption and the "Financials – SEC Filings" subcaption.

Our website and the information contained on or connected to our website are not incorporated by reference into this Form 10-K.

The SEC maintains a website that contains reports, proxy and information statements, and other information regarding issuers, including the Company, that file electronically with the SEC. The public may obtain any documents that we file with the SEC at http://www.sec.gov. We file annual reports, quarterly reports, proxy statements, and other documents with the SEC under the Exchange Act.

Item 1A. Risk Factors

Investing in our securities involves a variety of risks and uncertainties, known and unknown, including, among others, those discussed below. Each of the following risks should be carefully considered, together with all the other information included in this Annual Report on Form 10-K, including our consolidated financial statements and the related notes and in our other filings with the SEC. Furthermore, additional risks and uncertainty not presently known to us or that we currently believe to be immaterial may also adversely affect our business. Our business, results of operations, financial condition, and cash flow and prospects could be materially and adversely affected by any of these risks or uncertainties.

Business and Operational Risks

We operate in a highly competitive industry and we may be unable to compete effectively.

We compete in both the therapeutic and diagnostic medical markets in more than 150 countries throughout the world. These markets are characterized by rapid change resulting from technological advances and scientific discoveries. In the product lines in which we compete, we face a range of competitors from large companies with multiple business lines to small, specialized manufacturers that offer a limited selection of niche products. Development by other companies of new or improved products, processes, technologies, or the introduction of reprocessed products or generic versions when our proprietary products lose their patent protection may make our existing or planned products less competitive. In addition, we face competition from providers of alternative medical therapies, such as pharmaceutical companies.

We believe our ability to compete depends upon many factors both within and beyond our control, including:

- product performance and reliability,
- product technology and innovation,
- product quality and safety,
- breadth of product lines,
- product support services,
- customer support,
- cost-effectiveness and price,
- reimbursement approval from healthcare insurance providers, and
- changes to the regulatory environment.

Competition may increase as additional companies enter our markets or modify their existing products to compete directly with ours. In addition, academic institutions, governmental agencies and other public and private research organizations also may conduct research, seek patent protection and establish collaborative arrangements for discovery, research, clinical development and

marketing of products similar to ours. These companies and institutions compete with us in recruiting and retaining qualified scientific and management personnel, as well as in acquiring necessary product technologies. From time to time we have lost, and may in the future lose, market share in connection with product problems, physician advisories, safety alerts and publications about our products, which highlights the importance of product quality, product efficacy and quality systems to our business. In the current environment of managed care, consolidation among healthcare providers, increased competition, declining reimbursement rates, and national and provincial tender pricing, as recently experienced in China, competitively priced product offerings are essential to our success. Further, our continued growth and success depend on our ability to develop, acquire and market new and differentiated products, technologies and intellectual property, and as a result we also face competition for marketing, distribution, and collaborative development agreements, establishing relationships with academic and research institutions and licenses to intellectual property. In order to continue to compete effectively, we must continue to create, invest in or acquire advanced technology, incorporate this technology into our proprietary products, obtain regulatory approvals in a timely manner, and manufacture and successfully market our products. Given these factors, we cannot guarantee that we will be able to compete effectively or continue our level of success.

The ongoing global COVID-19 pandemic has had, and may continue to have, an adverse effect on certain aspects of our business, results of operations, financial condition and cash flows. The nature and extent of future impacts are highly uncertain and unpredictable.

Our global operations and interactions with healthcare systems, providers and patients around the world expose us to risks associated with public health crises, including epidemics and pandemics such as COVID-19. In particular, the continuing preventative and precautionary measures that we and other businesses, communities, and governments have taken to mitigate the spread of the disease has led to restrictions on, disruptions in, and other related impacts on business and personal activities, including reduced customer demand for certain of our products and has resulted in many of our employees working remotely. We expect medical procedure rates to continue to vary by therapy and country, and could be impacted by regional COVID-19 case volumes, healthcare system staffing shortages, patient's willingness to schedule deferrable procedures, travel restrictions, transportation limitations, quarantine restrictions, vaccine and booster immunization rates, and new COVID-19 variants. While COVID-19 case volumes appear to be decreasing in the U.S and certain other countries as a result of higher vaccination rates, the global COVID-19 outlook remains uncertain as new variants emerge.

Together with the preventative and precautionary measures being taken, as well as the corresponding need to adapt to new and improved methods of conducting business, such as increased remote monitoring, COVID-19 is having, and may continue to have, an adverse impact on certain aspects of our Company and business, including the demand for and supply of certain of our products, operations, supply chains and distribution systems, impacts or delays to product development milestones, clinical trials, or regulatory clearances and approval timing, and our ability to generate cash flow, and may have an adverse impact on our ability to access capital. Some of our products are more sensitive to reductions in deferrable and emergent medical procedures, and, as hospital systems prioritize treatment of COVID-19 patients and otherwise comply with government guidelines, certain medical procedures have been and may continue to be suspended or postponed. It is not possible to predict the timing of deferrable medical procedures and, to the extent individuals and hospital systems de-prioritize, delay or cancel these procedures, or if unemployment or loss of insurance coverage adversely impacts an individual's ability to pay for our products and services, our business, results of operations, financial condition, and cash flows could continue to be negatively affected. Further, the COVID-19 pandemic has strained hospital systems around the world, resulting in adverse financial impacts to those systems that could result in reduced future expenditures for certain capital equipment and other products and services we provide, as well as potential disruption of product launches of our recently approved products.

A number of our global suppliers, vendors, and distributors have been adversely affected by the COVID-19 pandemic, including employee absenteeism. These impacts could impair our ability to move our products through distribution channels to end customers, and any such delay or shortage in the supply of components or materials may result in our inability to satisfy consumer demand for certain of our products in a timely manner or at all, which could harm our reputation, future sales and profitability.

COVID-19 has impacted and may further impact the global economy and capital markets, including by negatively impacting demand for a number of our products, access to capital markets (including the commercial paper market), foreign currency exchange rates, and interest rates, each of which may adversely impact our business and liquidity. We could experience loss of sales and profits due to delayed payments or insolvency of healthcare professionals, hospitals and other customers, suppliers and vendors facing liquidity issues. As a result, we may be compelled to take additional measures to preserve our cash flow.

COVID-19 could adversely impact our ability to retain key employees and the continued service and availability of skilled personnel necessary to run our complex productions and operations, including our executive officers and other key members of our management team.

While the impact of COVID-19 has had, and may continue to have, an adverse effect on our business, results of

operations, financial condition and cash flows, the nature and extent of such impact is highly uncertain and unpredictable, as we cannot predict with confidence the duration of the pandemic.

Reduction or interruption in supply or other manufacturing difficulties may adversely affect our manufacturing operations and related product sales.

The manufacture of our products requires the timely delivery of a sufficient amount of quality components and materials and is highly exacting and complex, due in part to strict regulatory requirements. We manufacture the majority of our products and procure important third-party services, such as sterilization services, at numerous facilities worldwide. We purchase many of the components, raw materials and services needed to manufacture these products from numerous suppliers in various countries. We seek to maintain continuity of supply by use of multiple options for sourcing where possible. We have generally been able to obtain adequate supplies of such raw materials, components and services, although global shortages of certain components such as semiconductors and resins have recently caused, and may in the future cause, disruptions to our product manufacturing supply chain. In addition, for reasons of quality assurance, cost effectiveness, or availability, certain components, raw materials and services needed to manufacture our products are obtained from a sole supplier. Although we work closely with our suppliers to try to ensure continuity of supply while maintaining high quality and reliability, the supply of these components, raw materials and services may be interrupted or insufficient. In addition, due to the stringent regulations and requirements of regulatory agencies, including the U.S. FDA, regarding the manufacture of our products, we may not be able to quickly establish additional or replacement sources. Additionally, many regulatory agencies are imposing regulatory requirements on safe use of chemicals and their potential impact on health and the environment which also may impact supply constraints. Furthermore, the prices of commodities and other materials used in our products, which are often volatile and outside of our control, could adversely impact our supply. We use resins, other petroleum-based materials and pulp as raw materials in some of our products, and the prices of oil and gas also significantly affect our costs for freight and utilities. A reduction or interruption in supply, and an inability to develop alternative sources for such supply, could adversely affect our ability to manufacture our products in a timely or cost-effective manner and could result in lost sales.

Other disruptions in the manufacturing process or product sales and fulfillment systems for any reason, including equipment malfunction, failure to follow specific protocols and procedures, supplier facility shut-downs, defective raw materials, natural disasters such as hurricanes, tornadoes, earthquakes, or wildfires, property damage or facility closures from riots or public protests, and other environmental factors and the impact of epidemics or pandemics, such as the COVID-19 pandemic, and actions by businesses, communities and governments in response, could lead to launch delays, product shortage, unanticipated costs, lost revenues and damage to our reputation. For example, in the past we have experienced a global information technology systems interruption that affected our customer ordering, distribution, and manufacturing processes, and we have been adversely impacted by, and may continue to be adversely impacted by, the global COVID-19 pandemic and the responses of governments and of our partners, including suppliers, manufacturers, distributors and other businesses. Furthermore, any failure to identify and address manufacturing problems prior to the release of products to our customers could result in quality or safety issues.

In addition, many of our products require sterilization before sale and several of our key products are manufactured or sterilized at a particular facility, with limited alternate facilities. If an event occurs that results in damage to or closure of one or more of such facilities, such as the Illinois Environmental Protection Agency's decision to close a supplier's sterilization facility in February 2019, we may be unable to manufacture or sterilize the relevant products to the required quality specifications or at all. Because of the time required to approve and license a manufacturing or sterilization facility, a third-party may not be available on a timely basis to replace production capacity in the event manufacturing or sterilization capacity is lost.

Our research and development efforts rely upon investments and investment collaborations, and we cannot guarantee that any previous or future investments or investment collaborations will be successful.

Our Mission is to provide a broad range of therapies to restore patients to fuller, healthier lives, which requires a wide variety of technologies, products and capabilities. The rapid pace of technological development in the medical industry and the specialized expertise required in different areas of medicine make it difficult for one company alone to develop a broad portfolio of technological solutions. In addition to internally generated growth through our research and development efforts, historically we have relied, and expect to continue to rely, upon investments and investment collaborations to provide us access to new technologies both in areas served by our existing businesses as well as in new areas.

We expect to make future investments where we believe that we can stimulate the development or acquisition of new technologies and products to further our strategic objectives and strengthen our existing businesses. Investments and investment collaborations in and with medical technology companies are inherently risky, and we cannot guarantee that any of our previous or future investments or investment collaborations will be successful or will not materially adversely affect our business, results of operations, financial condition and cash flows.

The continuing development of many of our products depends upon us maintaining strong relationships with healthcare professionals.

If we fail to maintain our working relationships with healthcare professionals, many of our products may not be developed and marketed in line with the needs and expectations of the professionals who use and support our products, which could cause a decline in our earnings and profitability. The research, development, marketing and sales of many of our new and improved products depends on our maintaining working relationships with healthcare professionals. We rely on these professionals to provide us with considerable knowledge and experience regarding the development, marketing and sale of our products. Physicians assist us as researchers, marketing and product consultants, inventors and public speakers. In addition, as a result of the COVID-19 pandemic, our access to these professionals has been limited at times, and travel restrictions, shutdowns and similar measures have impacted our ability to maintain these relationships, thereby affecting our ability to develop, market and sell new and improved products. If we are unable to maintain strong relationships with these professionals, the development and marketing of our products could suffer, which could have a material adverse effect on our business, results of operations, financial condition, and cash flows.

We have debt obligations that create risk.

We are required to use a portion of our operating cash flow to pay interest or principal on our outstanding indebtedness instead of for other corporate purposes, including funding future expansion of our business. We may also incur additional indebtedness in the future to supplement our existing liquidity and cash generated from operations to satisfy our needs for working capital and capital expenditures, to pursue growth initiatives, and to make returns of capital to shareholders. At the time we incur such additional indebtedness, or refinance or restructure existing indebtedness, we may be unable to obtain capital market financing with similar terms and currency denomination, or at all, which could have a material adverse effect on our business and results of operations. At any time, the value of our debt outstanding will fluctuate based on several factors including foreign currency exchange rate and interest rate movements.

Failure to integrate acquired businesses into our operations successfully, as well as liabilities or claims relating to such acquired businesses, could adversely affect our business.

As part of our strategy to develop and identify new products and technologies, we have made several significant acquisitions in recent years, and may make additional acquisitions in the future. Our integration of the operations of acquired businesses requires significant efforts, including the coordination of information technologies, research and development, sales and marketing, operations, manufacturing, and finance. These efforts result in additional expenses and involve significant amounts of management's time that cannot then be dedicated to other projects. Our failure to manage and coordinate the growth of acquired companies successfully could also have an adverse impact on our business. Further, acquired businesses may have liabilities, or be subject to claims, litigation or investigations that we did not anticipate or which exceed our estimates at the time of the acquisition. In addition, we cannot be certain that the businesses we acquire will become profitable or remain so. Factors that will affect the success of our acquisitions include:

- the presence or absence of adequate internal controls and/or significant fraud in the financial systems of acquired companies,
- our ability or inability to integrate information technology systems of acquired companies in a secure and reliable manner,
- liabilities, claims, litigation, investigations, or other adverse developments relating to acquired businesses or the business practices of acquired companies, including investigations by governmental entities, potential FCPA or product liability claims or other unanticipated liabilities,
- any decrease in customer loyalty and product orders caused by dissatisfaction with the combined companies' product lines and sales and marketing practices, including price increases,
- our ability to retain key employees, and
- the ability to achieve synergies among acquired companies, such as increasing sales of the integrated company's products, achieving cost savings, and effectively combining technologies to develop new products.

We also could experience negative effects on our business, results of operations, financial condition, and cash flows from acquisition-related charges, amortization of intangible assets and asset impairment charges.

Legal and Regulatory Risks

We are subject to extensive and complex laws and governmental regulations and any adverse regulatory action may materially adversely affect our financial condition and business operations.

Our medical devices and technologies, as well as our business activities, are subject to a complex set of regulations and rigorous enforcement, including by the U.S. FDA, U.S. Department of Justice, Health and Human Services-Office of the Inspector General, and numerous other federal, state, and non-U.S. governmental authorities. To varying degrees, each of these agencies requires us to comply with laws and regulations governing the development, testing, manufacturing, labeling, marketing

and distribution of our products. As a part of the regulatory process of obtaining marketing clearance for new products and new indications for existing products, we conduct and participate in numerous clinical trials with a variety of study designs, patient populations, and trial endpoints. Unfavorable clinical data from existing or future clinical trials may adversely impact our ability to obtain product approvals, our position in, and share of, the markets in which we participate, and our business, results of operations, financial condition, and cash flows. We cannot guarantee that we will be able to obtain or maintain marketing clearance for our new products or enhancements or modifications to existing products, and the failure to maintain approvals or obtain approval or clearance could have a material adverse effect on our business, results of operations, financial condition and cash flows. Even if we are able to obtain approval or clearance, it may:

- take a significant amount of time,
- require the expenditure of substantial resources,
- involve stringent clinical and pre-clinical testing, as well as increased post-market surveillance,
- involve modifications, repairs or replacements of our products, and
- limit the proposed uses of our products.

Both before and after a product is commercially released, we have ongoing responsibilities under the U.S. FDA and other applicable non-U.S. government agency regulations. For instance, many of our facilities and procedures and those of our suppliers are also subject to periodic inspections by the U.S. FDA to determine compliance with applicable regulations. The results of these inspections can include inspectional observations on the U.S. FDA's Form-483, warning letters, or other forms of enforcement. If the U.S. FDA were to conclude that we are not in compliance with applicable laws or regulations, or that any of our medical products are ineffective or pose an unreasonable health risk, the U.S. FDA could ban such medical products, detain or seize adulterated or misbranded medical products, order a recall, repair, replacement, or refund of such products, refuse to grant pending pre-market approval applications or require certificates of non-U.S governments for exports, and/or require us to notify health professionals and others that the devices present unreasonable risks of substantial harm to the public health. The U.S. FDA and other non-U.S. government agencies may also assess civil or criminal penalties against us, our officers or employees and impose operating restrictions on a company-wide basis. The U.S. FDA may also recommend prosecution to the U.S. Department of Justice. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively marketing and selling our products and limit our ability to obtain future pre-market clearances or approvals, and could result in a substantial modification to our business practices and operations. Furthermore, we occasionally receive subpoenas or other requests for information from state and federal governmental agencies, and while these investigations typically relate primarily to financial arrangements with healthcare providers, regulatory compliance and product promotional practices, we cannot predict the timing, outcome or impact of any such investigations. Any adverse outcome in one or more of these investigations could include the commencement of civil and/or criminal proceedings, substantial fines, penalties, and/or administrative remedies, including exclusion from government reimbursement programs and/or entry into Corporate Integrity Agreements (CIAs) with governmental agencies. In addition, resolution of any of these matters could involve the imposition of additional, costly compliance obligations. These potential consequences, as well as any adverse outcome from government investigations, could have a material adverse effect on our business, results of operations, financial condition, and cash flows.

In addition, the U.S. FDA has taken the position that device manufacturers are prohibited from promoting their products other than for the uses and indications set forth in the approved product labeling, and any failure to comply could subject us to significant civil or criminal exposure, administrative obligations and costs, and/or other potential penalties from, and/or agreements with, the federal government.

Governmental regulations in the U.S. and outside the U.S. are constantly changing and may become increasingly stringent. In the European Union, for example, the Medical Device Regulation which became effective in May 2021 includes significant additional pre-market and post-market requirements. Penalties for regulatory non-compliance could be severe, including fines and revocation or suspension of a company's business license, mandatory price reductions and criminal sanctions. The development and implementation of future laws and regulations may have a material adverse effect on us.

Our failure to comply with laws and regulations relating to reimbursement of healthcare goods and services may subject us to penalties and adversely impact our reputation, business, results of operations, financial condition and cash flows.

Our devices, products and therapies are purchased principally by hospitals or physicians that typically bill various third-party payers, such as governmental healthcare programs (e.g., Medicare, Medicaid and comparable non-U.S. programs), private insurance plans and managed care plans, for the healthcare services provided to their patients. The ability of our customers to obtain appropriate reimbursement for products and services from third-party payers is critical because it affects which products customers purchase and the prices they are willing to pay. As a result, our devices, products and therapies are subject to regulation regarding quality and

cost by HHS, including the Centers for Medicare & Medicaid Services (CMS), as well as comparable state and non-U.S. agencies responsible for reimbursement and regulation of health are goods and services, including laws and regulations related to kickbacks, false claims, self-referrals and healthcare fraud. Many states have similar laws that apply to reimbursement by state Medicaid and other funded programs as well as in some cases to all payers. In certain circumstances, insurance companies attempt to bring a private cause of action against a manufacturer for causing false claims. In addition, as a manufacturer of U.S. FDA-approved devices reimbursable by federal healthcare programs, we are subject to the Physician Payments Sunshine Act, which requires us to annually report certain payments and other transfers of value we make to U.S.-licensed physicians or U.S. teaching hospitals. Any failure to comply with these laws and regulations could subject us or our officers and employees to criminal and civil financial penalties.

We are also subject to risks relating to changes in government and private medical reimbursement programs and policies, and changes in legal regulatory requirements in the U.S. and around the world. Implementation of further legislative or administrative reforms to these reimbursement systems, or adverse decisions relating to coverage of or reimbursement for our products by administrators of these systems, could have an impact on the acceptance of and demand for our products and the prices that our customers are willing to pay for them.

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 impacting our ability to sell current or future products.

We are substantially dependent on patent and other proprietary rights and rely on a combination of patents, trademarks, tradenames, copyrights, trade secrets, and agreements (such as employee, non-disclosure and non-competition agreements) to protect our business and proprietary intellectual property. We also operate in an industry characterized by extensive patent litigation. Patent litigation can result in significant damage awards and injunctions that could prevent our manufacture and sale of affected products or require us to pay significant royalties in order to continue to manufacture or sell affected products. At any given time, we are generally involved as both a plaintiff and a 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 litigation, it is possible that the results of such litigation could require us to pay significant monetary damages and/or royalty payments, negatively impact our ability to sell current or future products, or that enforcement actions to protect our patent and proprietary rights against others could be unsuccessful, any of which could have a material adverse impact on our business, results of operations, financial condition, and cash flows. In addition, any public announcements related to litigation or administrative proceedings initiated or threatened against us could cause our stock price to decline.

While we intend to defend against any threats to our intellectual property, our patents, trademarks, tradenames, copyrights, trade secrets or agreements (such as employee, non-disclosure and non-competition agreements) may not adequately protect our intellectual property. Further, pending patent applications may not result in patents being issued to us, patents issued to or licensed by us may be challenged or circumvented by competitors and such patents may be found invalid, unenforceable or too limited in scope to protect our technology or provide us with any competitive advantage. In addition, our patents will expire over time, our ability to protect novel business models is uncertain, and infringement may go undetected. Third parties could obtain patents that may require us to negotiate licenses to conduct our business, and such licenses may not be available on reasonable terms or at all. In addition, license agreements could be terminated. We also rely on non-disclosure and non-competition agreements with certain employees, consultants and other parties to protect, in part, trade secrets and other proprietary rights. We cannot be certain that these agreements will not be breached, that we will have adequate remedies for any breach, that others will not independently develop substantially equivalent proprietary information, or that third parties will not otherwise gain access to our trade secrets or proprietary knowledge.

In addition, the laws of certain countries in which we market or manufacture some of our products do not protect our intellectual property rights to the same extent as the laws of the U.S., which could make it easier for competitors to capture market position. Competitors also may harm our sales by designing products that substantially mirror the capabilities of our products or technology without infringing our intellectual property rights. If we are unable to protect our intellectual property in these countries, it could have a material adverse effect on our business, results of operations, financial condition, and cash flows.

Quality problems could lead to recalls or safety alerts, product liability claims, reputational harm, adverse verdicts or costly settlements, and could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Quality is extremely important to us and our customers due to the impact on patients, and the serious and potentially

costly consequences of adverse product performance. Our business exposes us to potential product liability risks that are inherent in the design, manufacture, and marketing of medical devices. In addition, many of our products are often used in intensive care settings with seriously ill patients and some of the medical devices we manufacture and sell are designed to be implanted in the human body for long periods of time or indefinitely. Component failures, manufacturing nonconformances, design defects, off-label use, or inadequate disclosure of product-related risks or product-related information with respect to our products, if they were to occur, could result in an unsafe condition or injury to, or death of, a patient. These problems could lead to recall of, or issuance of a safety alert relating to, our products, and could result in product liability claims and lawsuits, including class actions, which could ultimately result, in certain cases, in the removal from the body of such products and claims regarding costs associated therewith. Due to the strong name recognition of the Medtronic brand, a material adverse event involving one of our products could result in diminished market acceptance and demand for all products within that brand, and could harm our reputation and ability to market products in the future. Further, we may be exposed to additional potential product liability risks related to products designed, manufactured and/or marketed in response to the COVID-19 pandemic, and unpredictable or accelerated changes in demand for certain of our products in connection with COVID-19 and its related impacts could impact development and production of products and services and could increase the risk of regulatory enforcement actions, product defects or related claims, as well as adversely impact our customer relationships and reputation.

Strong product quality is critical to the success of our goods and services. If we fall short of these standards and our products are the subject of recalls or safety alerts, our reputation could be damaged, we could lose customers and our revenue and results of operations could decline. Our success also can depend on our ability to manufacture to exact specification precision-engineered components, subassemblies and finished devices from multiple materials. If our components fail to meet these standards or fail to adapt to evolving standards, our reputation, competitive advantage and market share could be harmed. In certain situations, we may undertake a voluntary recall of products or temporarily shut down production lines based on performance relative to our own internal safety and quality monitoring and testing data.

Any of the foregoing problems, including future product liability claims or recalls, regardless of their ultimate outcome, could harm our reputation and have a material adverse effect on our business, results of operations, financial condition and cash flows.

Healthcare policy changes may have a material adverse effect on us.

In response to perceived increases in healthcare costs in recent years, there have been and continue to be actions and proposals by several governments, regulators and third-party payers globally, including the U.S. federal and state governments, to control these costs and, more generally, to reform healthcare systems. Certain of these actions and proposals, among other things, limit the prices we are able to charge for our products or the amounts of reimbursement available for our products and could limit the acceptance and availability of our products. These actions and proposals could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We rely on the proper function, security and availability of our information technology systems and data, as well as those of third parties throughout our global supply chain, to operate our business, and a breach, cyber-attack or other disruption to these systems or data could materially and adversely affect our business, results of operations, financial condition, cash flows, reputation or competitive position.

We are increasingly dependent on sophisticated information technology systems to operate our business. That technology includes systems that could be used to process, transmit and store sensitive data. Additionally, many of our products and services include integrated software and information technology that collects data regarding patients or connects to other internal systems. One of the most prevalent attacks on large organizations has been ransomware which can have a devastating impact on an organization's operations. We have invested in ransomware readiness in the pursuit of both prevention and rapid response to a ransomware event. Like all organizations, we routinely experience attempted interference with the integrity of, and interruptions in, our technology systems via events such as cyber-attacks, malicious intrusions, or other breakdowns. The consequences could mean data breaches, interference with the integrity of our products and data, compromise of intellectual property or other proprietary information, or other significant disruptions. Furthermore, we rely on third-party vendors to supply and/or support certain aspects of our information technology systems and resulting products. As we have seen with recent "Supply Chain Attacks," these third-party systems could also become vulnerable to cyber-attack, malicious intrusions, breakdowns, interference, or other significant disruptions, and may contain defects in design or manufacture or other problems that could result in system disruption or compromise the information security of our own systems. The Russia-Ukraine conflict may increase cybersecurity risks on a global basis. Lastly, we continue to grow in part through new business acquisitions and, as a result, may face risks associated with defects and vulnerabilities in their systems, or difficulties or other breakdowns or disruptions in connection with the integration of the acquisitions into our information technology systems.

Our worldwide operations mean that we are subject to laws and regulations, including data protection and cybersecurity laws and regulations, in many jurisdictions. The variety of U.S. and international privacy and cybersecurity laws and regulations impacting our operations are described in "Item 1. Business" – *Other Factors Impacting Our Operations – Data Privacy and Security Laws and Regulations*. Any data security breaches, cyber-attacks, malicious intrusions or significant disruptions could result in actions by regulatory bodies and/or civil litigation, any of which could materially and adversely affect our business, results of operations, financial condition, cash flows, reputation, or competitive position.

In addition, our information technology systems require an ongoing commitment of significant resources to maintain, protect, and enhance existing systems and develop new systems. This enables us to keep pace with continuing changes in information processing technology, evolving legal and regulatory standards, the increasing need to protect patient and customer information, changes in the techniques used to obtain unauthorized access to data and information systems, and the information technology needs associated with our changing products and services. There can be no assurance that our extensive efforts (including, but not limited to, consolidating, protecting, upgrading, and expanding our systems and capabilities, continuing to build security into the design of our products, and developing new systems to keep pace with continuing changes in information processing technology) will be successful or that additional systems issues will not arise in the future.

If our information technology systems, products or services or sensitive data are compromised, there are many consequences that could result. Consequences include, but are not limited to patients or employees being exposed to financial or medical identity theft or suffer a loss of product functionality, losing existing customers or have difficulty attracting new customers, experiencing difficulty preventing, detecting, and controlling fraud, being exposed to the loss or misuse of confidential information, having disputes with customers, physicians, and other healthcare professionals, suffering regulatory sanctions or penalties under federal laws, state laws, or the laws of other jurisdictions, experiencing increases in operating expenses or an impairment in our ability to conduct our operations, incurring expenses or losing revenues as a result of a data privacy breach, product failure, information technology outages or disruptions, or suffering other adverse consequences including lawsuits or other legal action and damage to our reputation.

The failure to comply with anti-corruption laws could materially adversely affect our business and result in civil and/or criminal sanctions.

The U.S. Foreign Corrupt Practices Act (FCPA), the Irish Criminal Justice (Corruption Offences) Act 2018, and similar anti-corruption laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to government officials for the purpose of obtaining or retaining business. Because of the predominance of government-administered healthcare systems in many jurisdictions around the world, many of our customer relationships outside of the U.S. are with governmental entities and are therefore potentially subject to such laws. We also participate in public-private partnerships and other commercial and policy arrangements with governments around the globe.

Global enforcement of anti-corruption laws has increased in recent years, including investigations and enforcement proceedings leading to assessment of significant fines and penalties against companies and individuals. Our international operations create a risk of unauthorized payments or offers of payments by one of our employees, consultants, sales agents, or distributors. We maintain policies and programs to implement safeguards to educate our employees and agents on these legal requirements, and to prevent and prohibit improper practices. However, existing safeguards and any future improvements may not always be effective, and our employees, consultants, sales agents or distributors may engage in conduct for which we could be held responsible. In addition, regulators could seek to hold us liable for conduct committed by companies in which we invest or that we acquire. Any alleged or actual violations of these regulations may subject us to government scrutiny, criminal or civil sanctions and other liabilities, including exclusion from government contracting, and could disrupt our business, adversely affect our reputation and result in a material adverse effect on our business, results of operations, financial condition and cash flows.

Laws and regulations governing international business operations could adversely impact our business.

The U.S. Department of the Treasury's Office of Foreign Assets Control (OFAC) and the U.S. Commerce Department's Bureau of Industry and Security (BIS) administer certain laws and regulations that restrict U.S. persons and, in some instances, non-U.S. persons, in conducting activities, transacting business with, or making investments in, certain countries, governments, entities and individuals subject to U.S. economic sanctions or export restrictions. Our international operations subject us to these laws and regulations, which are complex, restrict our business dealings with certain countries, governments, entities, and individuals, and are constantly changing. Further restrictions may be enacted, amended, enforced or interpreted in a manner that materially impacts our operations.

From time to time, certain of our subsidiaries have limited business dealings in countries subject to comprehensive sanctions, including Iran, Syria, Cuba and the region of Crimea. Certain of our subsidiaries sell medical devices, and may provide related services, to distributors and other purchasing bodies in such countries. These business

dealings represent an insignificant amount of our consolidated revenues and income, but expose us to a heightened risk of violating applicable sanctions regulations. Violations of these regulations are punishable by civil penalties, including fines, denial of export privileges, injunctions, asset seizures, debarment from government contracts and revocations or restrictions of licenses, as well as criminal fines and imprisonment. We have established policies and procedures designed to assist with our compliance with such laws and regulations. However, there can be no assurance that our policies and procedures will prevent us from violating these regulations in every transaction in which we may engage, and such a violation could adversely affect our reputation, business, results of operations, financial condition, and cash flows.

Climate change, or legal, regulatory or market measures to address climate change may materially adversely affect our financial condition and business operations.

Climate change resulting from increased concentrations of carbon dioxide and other greenhouse gases in the atmosphere presents risks to our current and future operations from natural disasters and extreme weather conditions, such as hurricanes, tornadoes, earthquakes, wildfires or flooding. Such extreme weather conditions and other conditions caused by or related to climate change could increase our operational costs, pose physical risks to our facilities and adversely impact our supply chain, including: manufacturing and distribution networks, the availability and cost of raw materials and components, energy supply, transportation, or other inputs necessary for the operation of our business. The impacts of climate change on global water resources may result in water scarcity, which could impact our ability to access sufficient quantities of water in certain locations and result in increased costs. Concerns over climate change could have an impact on customer demand for our products and result in new legal or regulatory requirements designed to mitigate the effects of climate change on the environment. Although it is difficult to predict and adequately prepare to meet the challenges to our business posed by climate change, if new laws or regulations are more stringent than current legal or regulatory requirements, we may experience increased compliance burdens and costs to meet the regulatory obligations as well as adverse impacts on raw material sourcing, manufacturing operations and the distribution of our products.

We are subject to environmental laws and regulations and the risk of environmental liabilities, violations and litigation.

We are subject to environmental, health, and safety laws, and regulations concerning, among other things, the generation, handling, transportation, and disposal of hazardous substances or wastes, the remediation of hazardous substances or materials at various sites, and emissions or discharges into the land, air or water. We are further subject to numerous, laws and regulations concerning, among other things, chemical constituents in medical products and end-of-life disposal and take-back programs for medical devices. Our operations and those of certain third-party suppliers involve the use of substances subject to these laws and regulations, primarily those used in manufacturing and sterilization processes. If we or our suppliers violate these environmental laws and regulations, facilities could be shut down and violators could be fined, or otherwise sanctioned. New laws and regulations, violations of these laws or regulations, stricter enforcement of existing requirements, or the discovery of previously unknown contamination could require us to incur costs or could become the basis for new or increased liabilities that could be material.

Our insurance program may not be adequate to cover future losses.

We have elected to self-insure most of our insurable risks across the Company, and we made this decision based on cost and availability factors in the insurance marketplace. We manage and maintain a portion of our self-insured program through a wholly-owned captive insurance company. We continue to maintain a directors and officers liability insurance policy with third-party insurers that provides coverage for the directors and officers of the Company. We continue to monitor the insurance marketplace to evaluate the value of obtaining insurance coverage for other categories of losses in the future. Although we believe, based on historical loss trends, that our self-insurance program accruals and our existing insurance coverage will be adequate to cover future losses, historical trends may not be indicative of future losses. The absence of third-party insurance coverage for other categories of losses increases our exposure to unanticipated claims and these losses could have a material adverse impact on our business, results of operations, financial condition and cash flows.

Changes in tax laws or exposure to additional income tax liabilities could have a material impact on our business, results of operations, financial condition and cash flows.

We are subject to income taxes, as well as non-income based taxes, in the U.S., Ireland, and various other jurisdictions in which we operate. The tax laws in the U.S., Ireland and other countries in which we and our affiliates do business could change on a prospective or retroactive basis, and any such changes could materially adversely affect our business and our effective tax rate. For example, on December 22, 2017, the U.S. enacted comprehensive tax legislation, commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"), which resulted in a significant charge to tax expense during our fiscal year 2018 associated with U.S. taxation of accumulated foreign earnings as well as the requirement to revalue U.S. deferred tax assets and liabilities resulting from the

reduction in the U.S. corporate tax rate. In addition, the Biden Administration has provided a framework for proposed U.S. tax law changes, which if enacted could have a material impact on our business, results of operations, financial condition, and cash flows.

In October 2021, the Organization for Economic Cooperation and Development (OECD) secured agreement from 136 countries to push forward with proposals to fundamentally rewrite International Tax rules which if enacted by these countries, will likely impact the amount of tax multinationals such as Medtronic pay in the future. During 2022 and 2023 more details on these proposals will be released and various consultations will take place. The OECD has set a timeline for the implementation of these proposals in 2023 but may end up being deferred to a later date.

The aggressive nature of the timeline set by the OECD may mean that all implications for business may not have been fully worked through or fully understood before rules are finalized. We continue to monitor the implications potentially resulting from this guidance. This action together with other legislative changes in many countries on the mandatory sharing of company information (financial and operational) with taxing authorities on a local and global basis under various information sharing initiatives, could lead to disagreements between jurisdictions associated with the proper allocation of profits between such jurisdictions.

We are subject to ongoing tax audits in the various jurisdictions in which we operate. Tax authorities may disagree with certain positions we have taken and assess additional taxes. We regularly assess the likely outcomes of these audits in order to determine the appropriateness of our tax provision. However, there can be no assurance that we will accurately predict the outcomes of these audits, and the actual outcomes of these audits could have a material impact on our business, results of operations, financial condition, and cash flows.

We have recorded reserves for potential payments of tax to various tax authorities related to uncertain tax positions. However, the calculation of such tax liabilities involves the application of complex tax laws, regulations and treaties (where applicable) in many jurisdictions. Therefore, any dispute with a tax authority may result in a payment that is significantly different from current estimates. If payment of these amounts ultimately proves to be less than the recorded amounts, the reversal of the liabilities generally would result in tax benefits being recognized in the period when we determine the liabilities are no longer necessary. If our estimate of tax liabilities proves to be less than the amount for which it is ultimately liable, we would incur additional charges, and such charges could have a material adverse effect on our business, results of operations, financial condition, and cash flows.

The Medtronic, Inc. tax court proceeding outcome could have a material adverse impact on our financial condition.

In March 2009, the IRS issued its audit report for Medtronic Inc. for fiscal years 2005 and 2006. Medtronic, Inc. reached agreements with the IRS on some, but not all matters related to these fiscal years. The remaining unresolved issue for fiscal years 2005 and 2006 relates to the allocation of income between Medtronic, Inc. and its wholly-owned subsidiary operating in Puerto Rico, which is one of our key manufacturing sites. An adverse outcome in this matter could materially and adversely affect our business, results of operations, financial condition, and cash flows. See Note 18 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Future potential changes to the U.S. tax laws could result in us being treated as a U.S. corporation for U.S. federal tax purposes, and the IRS may not agree with the conclusion that we should be treated as a foreign corporation for U.S federal income tax purposes.

Because Medtronic plc is organized under the laws of Ireland, we would generally be classified as a foreign corporation under the general rule that a corporation is considered tax resident in the jurisdiction of its organization or incorporation for U.S. federal income tax purposes. Even so, the IRS may assert that we should be treated as a U.S. corporation (and, therefore, a U.S. tax resident) for U.S. federal income tax purposes pursuant to Section 7874 of the U.S. Internal Revenue Code of 1986, as amended (the Code). In addition, a retroactive change to U.S. tax laws in this area could change this classification. If we were to be treated as a U.S. corporation for federal tax purposes, we could be subject to substantially greater U.S. tax liability than currently contemplated as a non-U.S. corporation.

Legislative or other governmental action relating to the denial of U.S. federal or state governmental contracts to U.S. companies that redomicile abroad could adversely affect our business.

Various U.S. federal and state legislative proposals that would deny governmental contracts to U.S. companies that move their corporate location abroad may affect us. We are unable to predict the likelihood that, or final form in which, any such proposed legislation might become law, the nature of the regulations that may be promulgated under any future legislative enactments, or the effect such enactments and increased regulatory scrutiny may have on our business.

Risks Relating to Our Jurisdiction of Incorporation

We are incorporated in Ireland, and Irish law differs from the laws in effect in the U.S. and may afford less protection to holders of our securities.

Our shareholders may have more difficulty protecting their interests than would shareholders of a corporation incorporated in a jurisdiction of the United States. It may not be possible to enforce court judgments obtained in the U.S. against us in Ireland based on the civil liability provisions of the U.S. federal or state securities laws. In addition, there is some uncertainty as to whether the courts of Ireland would recognize or enforce judgments of U.S. courts obtained against us or our directors or officers based on the civil liabilities provisions of the U.S. federal or state securities laws or hear actions against us or those persons based on those laws. We have been advised that the U.S. currently does not have a treaty with Ireland providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any U.S. federal or state court based on civil liability, whether or not based solely on U.S. federal or state securities laws, would not automatically be enforceable in Ireland.

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

As an Irish public limited company, certain capital structure decisions require shareholder approval, which may limit Medtronic's flexibility to manage its capital structure.

Under Irish law, our authorized share capital can be increased by an ordinary resolution of our shareholders and the directors may issue new ordinary or preferred shares, without shareholder approval, once authorized to do so by our articles of association or by an ordinary resolution of our shareholders. Additionally, subject to specified exceptions, Irish law grants statutory preemption rights to existing shareholders where shares are being issued for cash consideration but allows shareholders to disapply such statutory preemption rights either in our articles of association or by way of special resolution. Such disapplication can either be generally applicable or be in respect of a particular allotment of shares. Accordingly, at our 2021 Annual General Meeting, our Shareholders authorized our Board of Directors to issue up to 33% of our issued ordinary shares and further authorized our Board of Directors to issue up to 10% of such shares for cash without first offering them to our existing shareholders (provided that with respect to 5% of such shares, such allotment is to be used for the purposes of a specified capital investment). Both of these authorizations will expire on June 9, 2023, unless renewed by shareholders for a further period. We anticipate seeking new authorizations at our 2022 Annual General Meeting and in subsequent years. We cannot provide any assurance that these authorizations will always be approved, which could limit our ability to issue equity and thereby adversely affect the holders of our securities.

A transfer of our shares, other than ones effected by means of the transfer of book-entry interests in the Depository Trust Company, may be subject to Irish stamp duty.

Transfers of our shares effected by means of the transfer of book entry interests in the Depository Trust Company (DTC) will not be subject to Irish stamp duty. However, if a shareholder holds our shares directly rather than beneficially through DTC, any transfer of shares could be subject to Irish stamp duty (currently at the rate of 1% of the higher of the price paid or the market value of the shares acquired). Payment of Irish stamp duty is generally a legal obligation of the transferee. The potential for stamp duty could adversely affect the price of shares.

In certain limited circumstances, dividends we pay may be subject to Irish dividend withholding tax and dividends received by Irish residents and certain other shareholders may be subject to Irish income tax.

In certain limited circumstances, dividend withholding tax (currently at a rate of 25%) may arise in respect of dividends paid on our shares. A number of exemptions from dividend withholding tax exist such that shareholders resident in the U.S. and other specified countries that have a tax treaty with Ireland may be entitled to exemptions from dividend withholding tax.

Shareholders resident in the U.S. that hold their shares through DTC will not be subject to dividend withholding tax, provided the addresses of the beneficial owners of such shares in the records of the brokers holding such shares are recorded as being in the U.S. (and such brokers have further transmitted the relevant information to a qualifying intermediary appointed by us). However, other

shareholders may be subject to dividend withholding tax, which could adversely affect the price of their shares.

Shareholders entitled to an exemption from Irish dividend withholding tax on dividends received from us will not be subject to Irish income tax in respect of those dividends unless they have some connection with Ireland other than their shareholding in our Company (for example, they are resident in Ireland). Shareholders who are not resident nor ordinarily resident in Ireland, but who receive dividends subject to Irish dividend withholding tax, will generally have no further liability to Irish income tax on those dividends.

Our shares received by means of a gift or inheritance could be subject to Irish capital acquisitions tax.

Irish capital acquisitions tax (CAT) could apply to a gift or inheritance of our shares irrespective of the place of residence, ordinary residence or domicile of the parties. This is because our shares will be regarded as property situated in Ireland. The person who receives the gift or inheritance has primary liability for CAT. Gifts and inheritances passing between spouses are exempt from CAT. Children currently have a tax-free threshold of €335,000 in respect of taxable gifts or inheritances received from their parents. Irish Revenue typically updates the amount of this tax-free threshold on an annual basis.

Economic and Industry Risks

Changes in the prices of our goods and services and/or inflationary costs may have a material adverse effect on our business, results of operations, financial condition and cash flows.

We have experienced, and may continue to experience, decreasing prices for certain of our goods and services due to pricing pressure from managed care organizations and other third-party payers on our customers, increased market power of our customers as the medical device industry consolidates and increased competition among medical engineering and manufacturing services providers. We have also recently experienced, and may continue to experience, rising costs due to inflation. If the prices for our goods and services change or inflation continues to rise, we may be unable to sufficiently reduce our expenses or offset rising costs through increased prices to customers. As a result, our business, results of operations, financial condition and cash flows may be adversely affected.

We are subject to a variety of risks associated with global operations that could adversely affect our profitability and operating results.

We develop, manufacture, distribute and sell our products globally. We intend to continue to expand our operations and to pursue growth opportunities outside the U.S., especially in emerging markets. Operations in different countries including emerging markets could expose us to additional and greater risks and potential costs, including:

- fluctuations in currency exchange rates,
- healthcare reform legislation,
- the need to comply with different regulatory regimes worldwide that are subject to change and that could restrict our ability to manufacture and sell our products,
- local product preferences and product requirements,
- longer-term receivables than are typical in the U.S.,
- trade protection measures, tariffs and other border taxes, and import or export licensing requirements,
- less intellectual property protection in some countries outside the U.S. than exists in the U.S.,
- different labor regulations and workforce instability,
- political and economic instability, including as a result of wars and insurrections,
- the expiration and non-renewal of foreign tax rulings and/or grants,
- potentially negative consequences from changes in or interpretations of tax laws, and
- economic instability and inflation, recession or interest rate fluctuations.

The ongoing global economic competition and trade tensions between the U.S. and China present risk to Medtronic. Although we have been able to mitigate some of the impact on Medtronic from increased duties imposed by both sides (through petitioning both governments for tariff exclusions and other mitigations), the risk remains of additional tariffs and other kinds of restrictions. Tariff exclusions awarded to Medtronic by the U.S. Government require periodic renewal, and policies for granting exclusions could shift. The U.S. and China could impose other types of restrictions such as limitations on government procurement or technology export restrictions, which could affect Medtronic's access to the markets. China comprises approximately eight percent of our total revenues.

The Russia-Ukraine conflict and resulting sanctions and export restrictions are creating barriers to doing business in Russia and adversely impacting global supply chains. While we have no manufacturing, distribution or direct material suppliers in the region, we are closely monitoring the potential raw material/sub-tier supplier impact in both

Russia and Ukraine. Materials like palladium and neon, which are both dependent on Russia supply, are part of broader semiconductor shortages in industry. Additional sanctions, export restrictions, and potential countermeasures within Russia may lead to greater uncertainty and geopolitical shifts in Asia that could cause additional adverse impacts on global supply chains and our business, results of operations, financial condition and cash flows.

More generally, several governments including the U.S. have raised the possibility of policies to induce "re-shoring" of supply chains, less reliance on imported supplies, and greater national production. Examples include potential "Buy America" requirements in the U.S. If such steps triggered retaliation in other markets restricting access to foreign products in purchases by their government-owned healthcare systems, the result could be a significant impact on Medtronic.

Other significant changes or disruptions to international trade arrangements, such as termination or modifications of other existing trade agreements, may adversely affect our business, results of operations, financial condition and cash flows. In addition, a significant amount of our trade receivables are with national healthcare systems in many countries. Repayment of these receivables is dependent upon the political and financial stability of those countries. In light of these global economic fluctuations, we continue to monitor the creditworthiness of customers. Failure to receive payment of all or a significant portion of these receivables could adversely affect our business, results of operations, financial condition and cash flows.

The COVID-19 pandemic, and the responses of business and governments to the pandemic, have at times resulted in reduced availability of air transport, port closures, increased border controls or closures, increased transportation costs and increased security threats to our supply chain, and countries may continue to close borders, impose prolonged quarantines, and further restrict travel and other activities. Our business could be adversely impacted if we are unable to successfully manage these and other risks of global operations.

Finally, changes in currency exchange rates may impact the reported value of our revenues, expenses, and cash flows. We cannot predict changes in currency exchange rates, the impact of exchange rate changes, nor the degree to which we will be able to manage the impact of currency exchange rate changes.

Consolidation in the healthcare industry could have an adverse effect on our revenues and results of operations.

Many healthcare industry companies, including healthcare systems, distributors, manufacturers, providers, and insurers, are consolidating or have formed strategic alliances. As the healthcare industry consolidates, competition to provide goods and services to industry participants will become more intense. Further, this consolidation creates larger enterprises with greater negotiating power, which they can use to negotiate price concessions. If we must reduce our prices because of industry consolidation, or if we lose customers as a result of consolidation, our business, results of operations, financial condition, and cash flows could be adversely affected.

Healthcare industry cost-containment measures could result in reduced sales of our medical devices and medical device components.

Most of our customers, and the healthcare providers to whom our customers supply medical devices, rely on third-party payers, including government programs and private health insurance plans, to reimburse some or all of the cost of the procedures in which medical devices that incorporate components we manufacture or assemble are used. The continuing efforts of governmental authorities, insurance companies and other payers of healthcare costs to contain or reduce these costs could lead to patients being unable to obtain approval for payment from these third-party payers. If third-party payer payment approval cannot be obtained by patients, sales of finished medical devices that include our components may decline significantly and our customers may reduce or eliminate purchases of our components. The cost-containment measures that healthcare providers are instituting, both in the U.S. and outside of the U.S., could harm our ability to operate profitably. For example, managed care organizations have successfully negotiated volume discounts for pharmaceuticals, and GPOs and IDNs have also concentrated purchasing decisions for some customers, which has led to downward pricing pressure for medical device companies, including us.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Medtronic's principal executive office is located in Ireland and is leased by the Company, while its main operational offices are located in the Minneapolis, Minnesota metropolitan area and are owned by the Company.

The Company's total manufacturing and research space is approximately 9.6 million square feet. Approximately 37 percent of the manufacturing or research facilities are owned by Medtronic and the remaining balance is leased. The following is a summary of the Company's largest manufacturing facilities by location:

Location Country or State	Square Feet (in thousands)
Connecticut	1,138
Puerto Rico	811
Mexico	762
China	735
Minnesota	623
Italy	485
Ireland	446
Dominican Republic	304
Arizona	294
Switzerland	283
France	268
Colorado	259
Florida	255
California	210

Medtronic also maintains sales and administrative offices in the U.S. at five locations in five states and outside the U.S. at 129 locations in 62 countries. A majority of these locations are leased. The Company is using substantially all of its currently available productive space to develop, manufacture, and market its products. The Company's facilities are well-maintained, suitable for their respective uses, and adequate for current needs.

Item 3. Legal Proceedings

In accordance with Item 103 of Regulation S-K, we have adopted a $1 million disclosure threshold for proceedings under environmental laws to which a governmental authority is a party, as we believe matters under this threshold are not material to the Company. A discussion of the Company's legal proceedings and other loss contingencies are described in Note 18 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Medtronic's Common Equity, Related Shareholder Matters, and Issuer Purchases of Equity Securities

The Company's ordinary shares are listed on the New York Stock Exchange under the symbol "MDT."

The following table provides information about the shares repurchased by the Company during the fourth quarter of fiscal year 2022:

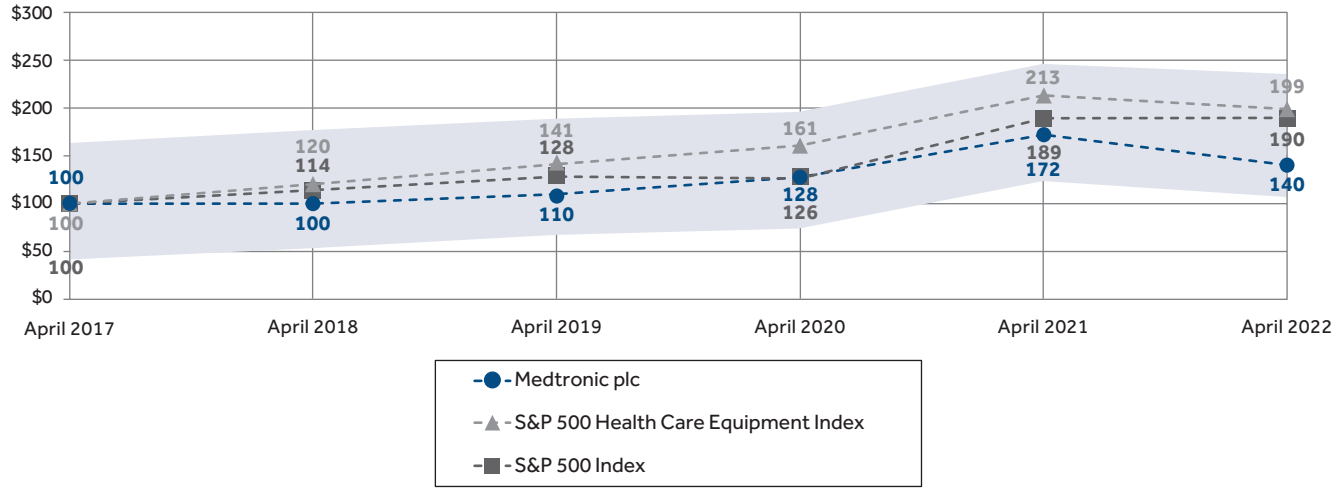
Fiscal Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as a Part of Publicly Announced Program	Maximum Approximate Dollar Value of Shares that may yet be Purchased Under the Program
1/29/2022-2/25/2022	1,130,750	$ 103.16	1,130,750	$ 4,234,214,099
2/26/2022-4/1/2022	6,141,716	107.85	6,141,716	3,571,839,180
4/2/2022-4/29/2022	5,627,112	110.47	5,627,112	2,950,215,113
Total	**12,899,578**	**$ 108.58**	**12,899,578**	**$ 2,950,215,113**

In March 2019, the Company's Board of Directors authorized the repurchase of $6.0 billion of the Company's ordinary shares. There is no specific time-period associated with these repurchase authorizations. For additional discussion, see Note 11 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

On June 20, 2022, there were approximately 22,372 shareholders of record of the Company's ordinary shares. Ordinary cash dividends declared and paid totaled $0.63 per share for each quarter of fiscal year 2022 and $0.58 per share for each quarter of fiscal year 2021. On May 26, 2022, the Company announced an increase in Medtronic's cash dividends for the first quarter of fiscal year 2023, raising the amount to $0.68 per share.

STOCK PERFORMANCE GRAPH

The following graph compares the cumulative total shareholder return on Medtronic's ordinary shares with the cumulative total shareholder return on the Standard & Poor's (S&P) 500 Index and the S&P 500 Health Care Equipment Index for the last five fiscal years. The graph assumes that $100 was invested at market close on April 24, 2017 in Medtronic's ordinary shares, the S&P 500 Index, and the S&P 500 Health Care Equipment Index and that all dividends were reinvested.



Company/Index	April 2017	April 2018	April 2019	April 2020	April 2021	April 2022
Medtronic plc	$ 100.00	$ 100.06	$ 109.91	$ 127.67	$ 172.10	$ 140.27
S&P 500 Index	100.00	114.20	128.28	126.28	189.28	189.68
S&P 500 Health Care Equipment Index	100.00	120.35	141.25	160.75	213.16	198.87

For information on the Company's equity compensation plans, see "Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters" in this Annual Report on Form 10-K.

IRISH RESTRICTIONS ON IMPORT AND EXPORT OF CAPITAL

Except as indicated below, there are no restrictions on non-residents of Ireland dealing in Irish domestic securities, which includes ordinary shares of Irish companies. Except as indicated below, dividends and redemption proceeds also continue to be freely transferable to non-resident holders of such securities. The Financial Transfers Act, 1992 provides that the Irish Minister for Finance can make provision for the restriction of financial transfers between Ireland and other countries. For the purposes of this Act, "financial transfers" include all transfers which would be movements of capital or payments within the meaning of the treaties governing the E.U. if they had been made between Member States of the E.U. This Act and underlying E.U. regulations provide for the restriction of financial transfers to certain countries, organizations, and people including the Al-Qaeda network and the Taliban, Afghanistan, Belarus, Burma (Myanmar), Democratic People's Republic of Korea, Democratic Republic of Congo, Iran, Iraq, Ivory Coast, Lebanon, Liberia, Libya, Republic of Guinea, Russia, Somalia, Sudan, Syria, Tunisia, certain persons and groups in Ukraine and Zimbabwe.

Any transfer of, or payment in respect of, a share or interest in a share involving the government of any country that is currently the subject of United Nations or E.U. sanctions, any person or body controlled by any of the foregoing, or by any person acting on behalf of the foregoing, may be subject to restrictions pursuant to such sanctions as implemented into Irish law.

IRISH TAXES APPLICABLE TO U.S. HOLDERS

Dividends paid by Medtronic will generally be subject to Irish dividend withholding tax (currently at a rate of 25 percent) unless an exemption applies.

Dividends paid to U.S. residents will not be subject to Irish dividend withholding tax provided that:

- in the case of a beneficial owner of Medtronic shares held in the Depository Trust Company (DTC), the address of the beneficial owner in the records of his or her broker is in the United States and this information is provided by the broker to the Company's qualifying intermediary; or
- in the case of a record owner, the record owner has provided to the Company's transfer agent a valid U.S. Certification of Residence (Form 6166) or valid Irish Non-Resident Form V2.

Irish income tax may also arise with respect to dividends paid on Medtronic's ordinary shares. A U.S. resident who meets one of the exemptions from dividend withholding tax described above and who does not hold Medtronic shares through a branch or agency in Ireland through which a trade is carried on generally will not have any Irish income tax liability on a dividend paid by Medtronic. In addition, if a U.S. shareholder is subject to the dividend withholding tax, the withholding payment discharges any Irish income tax liability, provided the shareholder furnishes to the Irish Revenue authorities a statement of the dividend withholding tax imposed.

While the U.S./Ireland Double Tax Treaty contains provisions regarding withholding, due to the wide scope of the exemptions from dividend withholding tax available under Irish domestic law, it would generally be unnecessary for a U.S. resident shareholder to rely on the treaty provisions.

Item 6. Reserved

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

UNDERSTANDING OUR FINANCIAL INFORMATION

The following discussion and analysis provides information management believes to be relevant to understanding the financial condition and results of operations of the Company. The discussion focuses on our financial results for the fiscal year ended April 29, 2022 (fiscal year 2022) and the fiscal year ended April 30, 2021 (fiscal year 2021). A discussion on our results of operations for fiscal year 2021 as compared to the year ended April 24, 2020 (fiscal year 2020) is included in Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the year ended April 30, 2021, filed with the SEC on June 25, 2021, and is incorporated by reference into this Form 10-K. You should read this discussion and analysis along with our consolidated financial statements and related notes thereto at April 29, 2022 and April 30, 2021 and for fiscal years 2022, 2021, and 2020, which are presented within "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K. Amounts reported in millions within this annual report are computed based on the amounts in thousands, and therefore, the sum of the components may not equal the total amount reported in millions due to rounding. Additionally, certain columns and rows within tables may not sum due to rounding.

Financial Trends

Throughout this Management's Discussion and Analysis, we present certain financial measures that facilitate management's review of the operational performance of the Company and as a basis for strategic planning; however, such financial measures are not presented in our financial statements prepared in accordance with accounting principles generally accepted in the United States (U.S.) (U.S. GAAP). These financial measures are considered "non-GAAP financial measures" and are intended to supplement, and should not be considered as superior to, financial measures presented in accordance with U.S. GAAP. We believe that non-GAAP financial measures provide information useful to investors in understanding the Company's underlying operational performance and trends and may facilitate comparisons with the performance of other companies in the medical technologies industry.

As presented in the GAAP to Non-GAAP Reconciliations section below, our non-GAAP financial measures exclude the impact of certain charges or benefits that contribute to or reduce earnings and that may affect financial trends and include certain charges or benefits that result from transactions or events that we believe may or may not recur with similar materiality or impact to our operations in future periods (Non-GAAP Adjustments).

In the event there is a Non-GAAP Adjustment recognized in our operating results, the tax cost or benefit attributable to that item is separately calculated and reported. Because the effective rate can be significantly impacted by the Non-GAAP Adjustments that take place during the period, we often refer to our tax rate using both the effective rate and the non-GAAP nominal tax rate (Non-GAAP Nominal Tax Rate). The Non-GAAP Nominal Tax Rate is calculated as the income tax provision, adjusted for the impact of Non-GAAP Adjustments, as a percentage of income before income taxes, excluding Non-GAAP Adjustments.

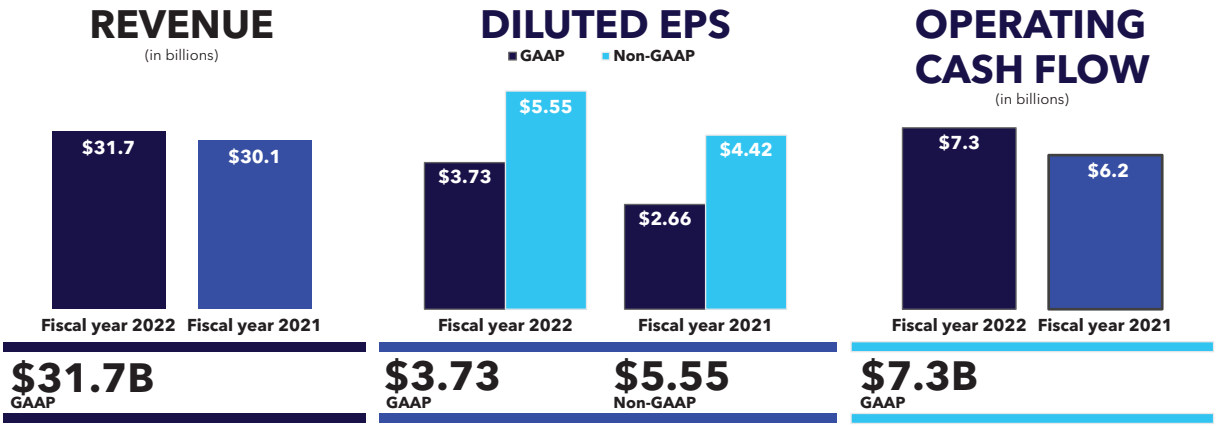
Free cash flow is a non-GAAP financial measure calculated by subtracting property, plant, and equipment additions from operating cash flows.

Refer to the "GAAP to Non-GAAP Reconciliations," "Income Taxes," and "Free Cash Flow" sections for reconciliations of the non-GAAP financial measures to their most directly comparable financial measures prepared in accordance with U.S. GAAP.

EXECUTIVE LEVEL OVERVIEW

The global healthcare system is continuing to respond to the unprecedented challenge posed by the COVID-19 pandemic ("COVID-19" or the "pandemic"). Most of our businesses were affected by a decline in global procedural volumes during fiscal year 2021, particularly in the first and second quarters. During fiscal year 2022, the pandemic, to a lesser extent, continued to affect most of our businesses, including the most recent COVID-19 lockdown in China which began in late March. In addition to the pandemic, our business faced the impacts of healthcare system staffing shortages on procedural volumes and significant supply chain disruptions in certain businesses particularly in the fourth quarter of fiscal year 2022. We cannot predict with confidence the duration and severity of the pandemic and its impact on global procedure volumes. We expect medical procedure rates may continue to vary by therapy and country and to be impacted by regional COVID-19 case volumes, vaccine and booster immunization rates, and new COVID-19 variants. Additionally, we cannot predict the impact healthcare system staffing shortages will have on procedural volumes, and the impact supply chain disruptions will have on the business.

The following is a summary of revenue, diluted earnings per share, and cash flow for fiscal years 2022 and 2021:



$31.7B GAAP

Revenue increased due to the recovery of global procedure volumes from the downturn experienced in the first and second quarters of fiscal year 2021 as a result of the COVID-19 pandemic. The net sales increase was partially offset by supply chain challenges, particularly in the fourth quarter of fiscal year 2022, as well as the impact of COVID-19 experienced in fiscal year 2022, particularly in the U.S. and China.

$3.73 GAAP

Diluted EPS increased $1.07 or 40% primarily due to the increase in revenue, decreases in cost of products sold (see non-GAAP section) and interest expense due to the $308 million debt premium in fiscal year 2021, partially offset by $881 million of MCS charges in fiscal year 2022.

$5.55 Non-GAAP

Non-GAAP Diluted EPS increased $1.13 or 26% primarily due to the increase in revenue as well as a decrease in cost of products sold due to higher COVID-19 costs and charges associated with field corrective actions in the prior year.

$7.3B GAAP

Operating cash flow increased $1.1 billion primarily driven by an increase in cash collected from customers as a result of the recovery in revenue along with a decrease in cash paid for taxes partially offset by an increase in cash paid to employees due to higher annual incentive payouts for prior year performance.

GAAP to Non-GAAP Reconciliations

Starting with the quarter ended April 29, 2022, the Company will no longer adjust non-GAAP financial measures for certain license payments for, or acquisitions of, technology not approved by regulators due to recent industry guidance from the U.S. Securities and Exchange Commission. Historical non-GAAP financial measures presented in this Annual Report on Form 10-K have been recast for comparability.

The tables below present reconciliations of our Non-GAAP financial measures to the most directly comparable financial measures prepared in accordance with U.S. GAAP for fiscal years 2022 and 2021.

	Fiscal year ended April 29, 2022				
(in millions, except per share data)	Income Before Income Taxes	Income Tax Provision (Benefit)	Net Income Attributable to Medtronic	Diluted EPS	Effective Tax Rate
GAAP	**$ 5,517**	**$ 456**	**$ 5,039**	**$ 3.73**	**8.3%**
Non-GAAP Adjustments:					
Restructuring and associated costs[1]	335	54	281	0.21	16.1
Acquisition-related items[2]	(43)	5	(48)	(0.04)	(11.6)
Certain litigation charges	95	17	78	0.06	17.9
(Gain)/loss on minority investments[3]	(12)	–	(9)	(0.01)	–
Medical device regulations[4]	102	16	86	0.06	15.7
Amortization of intangible assets	1,733	266	1,467	1.09	15.3
MCS impairment / costs[5]	881	220	661	0.49	25.0
Certain tax adjustments, net[6]	–	50	(50)	(0.04)	–
Non-GAAP	**$ 8,609**	**$ 1,084**	**$ 7,505**	**$ 5.55**	**12.6%**

(in millions, except per share data)	Fiscal year ended April 30, 2021				
	Income Before Income Taxes	Income Tax (Benefit) Provision	Net Income Attributable to Medtronic	Diluted EPS	Effective Tax Rate
GAAP	$ 3,895	$ 265	$ 3,606	$ 2.66	6.8%
Non-GAAP Adjustments:					
Restructuring and associated costs[1]	617	128	489	0.36	20.7
Acquisition-related items[2]	(15)	(20)	4	–	126.7
Certain litigation charges	118	23	95	0.07	19.5
(Gain)/loss on minority investments[3]	(61)	–	(57)	(0.04)	–
Impairment charges[7]	76	7	68	0.05	10.5
Medical device regulations[4]	83	15	68	0.05	18.1
Debt tender premium and other charges[8]	308	60	248	0.18	19.5
Amortization of intangible assets	1,783	283	1,500	1.11	15.9
Certain tax adjustments, net[9]	–	41	(41)	(0.03)	–
Non-GAAP	**$ 6,804**	**$ 802**	**$ 5,980**	**$ 4.42**	**11.8%**

(1) Associated costs include costs incurred as a direct result of the restructuring program, such as salaries for employees supporting the program and consulting expenses.
(2) The charges primarily include business combination costs, changes in fair value of contingent consideration, specifically for the fiscal year ended April 30, 2021, changes in amounts accrued for certain contingent liabilities for a past acquisition.
(3) We exclude unrealized and realized gains and losses on our minority investments as we do not believe that these components of income or expense have a direct correlation to our ongoing or future business operations.
(4) The charges represent estimated incremental costs of complying with the new European Union medical device regulations for previously registered products and primarily include charges for contractors supporting the project and other direct third-party expenses, which are expected to be substantially complete by the end of fiscal year 2023.
(5) The charges relate to the Company's June 2021 decision to stop the distribution and sale of the Medtronic HVAD System within the Mechanical Circulatory Support Operating Unit (MCS). The charges included $515 million of non-cash impairments, primarily related to $409 million of intangible asset impairments, as well as $366 million for commitments and obligations in connection with the decision, including patient support obligations, restructuring, and other associated costs. Medtronic is committed to serving the needs of the approximately 3,500 patients currently implanted with the HVAD System.
(6) The net benefit primarily relates to the deferred tax impact associated with a step up in tax basis for Swiss Cantonal purposes and a change in tax rates on deferred taxes associated with intellectual property, which are partially offset by the amortization on previously established deferred tax assets from intercompany intellectual property transactions and a charge related to a change in the Company's permanent reinvestment assertion on certain historical earnings.
(7) The charges relate to the abandonment of certain intangible assets in our Neuroscience segment.
(8) The charges relate to the early redemption of approximately $6.0 billion of debt.
(9) The net benefit primarily relates to the finalization of an audit at the IRS Appellate level for fiscal years 2012 through 2014 and the capitalization of certain research and development costs for U.S. income tax purposes, which are partially offset by the impact of an intercompany sale of assets, and a tax basis adjustment and amortization of previously established deferred tax assets from intercompany intellectual property transactions.

Free Cash Flow

Free cash flow, a non-GAAP financial measure, is calculated by subtracting additions to property, plant, and equipment from net cash provided by operating activities. Management uses this non-GAAP financial measure, in addition to U.S. GAAP financial measures, to evaluate our operating results. Free cash flow should be considered supplemental to, and not a substitute for, our reported financial results prepared in accordance with U.S. GAAP. Reconciliations between net cash provided by operating activities (the most comparable U.S. GAAP measure) and free cash flow are as follows:

(in millions)	Fiscal Year	
	2022	2021
Net cash provided by operating activities	$ 7,346	$ 6,240
Additions to property, plant, and equipment	(1,368)	(1,355)
Free cash flow	$ 5,978	$ 4,885

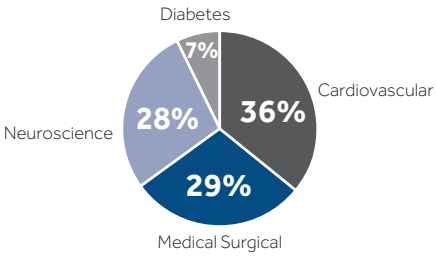
Refer to the Summary of Cash Flows section for drivers of the change in cash provided by operating activities.

NET SALES

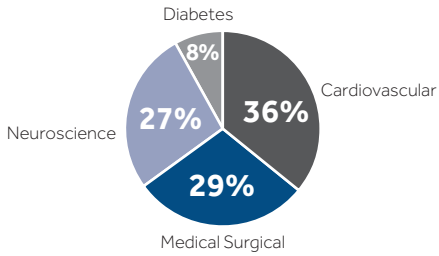
Segment and Division

The charts below illustrate the percent of net sales by segment for fiscal years 2022 and 2021:

Fiscal Year 2022



Fiscal Year 2021



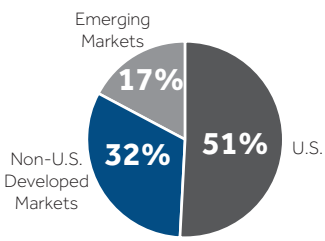
The table below includes net sales by segment and division for fiscal years 2022 and 2021:

(in millions)	Net Sales by Fiscal Year 2022	2021	Percent Change
Cardiac Rhythm & Heart Failure	$ 5,908	$ 5,584	6%
Structural Heart & Aortic	3,055	2,834	8
Coronary & Peripheral Vascular	2,460	2,354	5
Cardiovascular	11,423	10,772	6
Surgical Innovations	6,060	5,438	11
Respiratory, Gastrointestinal, & Renal	3,081	3,298	(7)
Medical Surgical	9,141	8,737	5
Cranial & Spinal Technologies	4,456	4,288	4
Specialty Therapies	2,592	2,307	12
Neuromodulation	1,735	1,601	8
Neuroscience	8,784	8,195	7
Diabetes	2,338	2,413	(3)
Total	**$ 31,686**	**$ 30,117**	**5%**

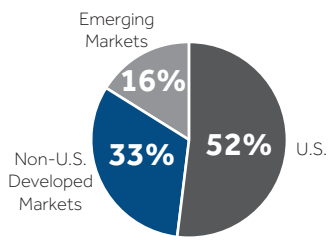
Segment and Market Geography

The charts below illustrate the percent of net sales by market geography for fiscal years 2022 and 2021:

Fiscal Year 2022



Fiscal Year 2021



The table below includes net sales by market geography for each of our segments for fiscal years 2022 and 2021:

	U.S.[1]			Non-U.S. Developed Markets[2]			Emerging Markets[3]		
(in millions)	Fiscal Year 2022	Fiscal Year 2021	% Change	Fiscal Year 2022	Fiscal Year 2021	% Change	Fiscal Year 2022	Fiscal Year 2021	% Change
Cardiovascular	$ 5,545	$ 5,248	6%	$ 3,866	$ 3,752	3%	$ 2,012	$ 1,773	13%
Medical Surgical	3,862	3,650	6	3,373	3,320	2	1,905	1,766	8
Neuroscience	5,753	5,456	5	1,801	1,724	4	1,229	1,015	21
Diabetes	974	1,171	(17)	1,085	1,019	6	279	222	26
Total	**$ 16,135**	**$ 15,526**	**4%**	**$ 10,126**	**$ 9,815**	**3%**	**$ 5,426**	**$ 4,777**	**14%**

(1) U.S. includes the United States and U.S. territories.
(2) Non-U.S. developed markets include Japan, Australia, New Zealand, Korea, Canada, and the countries of Western Europe.
(3) Emerging markets include the countries of the Middle East, Africa, Latin America, Eastern Europe, and the countries of Asia that are not included in the non-U.S. developed markets, as defined above.

The increase in net sales for fiscal year 2022 was primarily due to the recovery of global procedure volumes from the downturn experienced in the first and second quarters of fiscal year 2021 as a result of the COVID-19 pandemic. The net sales increase was partially offset by supply chain challenges, particularly in the fourth quarter of fiscal year 2022, as well as the impact of COVID-19 experienced in fiscal year 2022, particularly in the U.S. and China. For fiscal year 2022, currency had an unfavorable impact of $107 million on non-U.S. developed markets and a favorable impact of $33 million on emerging markets.

Looking ahead, a number of macro-economic and geopolitical factors could negatively impact our business, including without limitation:

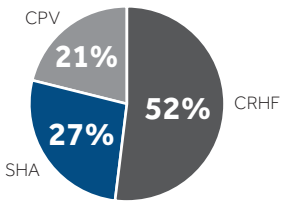
- The uncertain and uneven impact of COVID-19 on future procedural volumes, supply constraints including certain electronic components and semiconductors, healthcare staffing, worker absenteeism with our customers, suppliers, and in our own operations and field teams, and resulting impacts on demand for our products and therapies;
- The potential impact that sanctions and other measures being imposed in response to the Russia-Ukraine conflict could have on revenue and supply chain. The financial impact of the conflict in the fourth quarter of fiscal year 2022, including on accounts receivable and inventory reserves, was not material and for the fiscal year ended April 29, 2022, the business of the Company in these countries represented less than 1% of the Company's consolidated revenues and assets. Although the implications of this conflict are difficult to predict at this time, the ongoing conflict may increase pressure on the global economy and supply chains, resulting in increased future volatility risk for our business operations and performance.
- Competitive product launches and pricing pressure, geographic macro-economic risks including general price inflation, rising interest rates, reimbursement challenges, impacts from changes in the mix of our product offerings, delays in product registration approvals, replacement cycle challenges, and fluctuations in currency exchange rates; and
- National and provincial tender pricing for certain products, particularly in China.

Cardiovascular

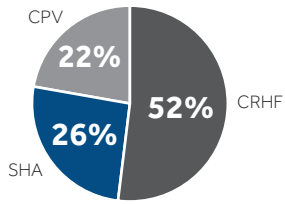
Cardiovascular products include pacemakers, insertable cardiac monitors, cardiac resynchronization therapy devices, implantable cardioverter defibrillators (ICD), leads and delivery systems, electrophysiology catheters, products for the treatment of atrial fibrillation, information systems for the management of patients with Cardiac Rhythm & Heart Failure devices, products designed to reduce surgical site infections, coronary and peripheral stents and related delivery systems, balloons and related delivery systems, endovascular stent graft systems, heart valve replacement technologies, cardiac tissue ablation systems, and open heart and coronary bypass grafting surgical products. Cardiovascular also includes Care Management Services and Cath Lab Managed Services (CLMS) within the Cardiac Rhythm & Heart Failure division. Cardiovascular net sales for fiscal year 2022 were $11.4 billion, an increase of 6 percent as compared to fiscal year 2021. Currency had an unfavorable impact on net sales for fiscal year 2022 of $32 million. The net sales increase was primarily due to the recovery of global procedure volumes from the declines experienced in fiscal year 2021 along with growth from recent product launches, partially offset by global supply chain disruptions and declines in China due to recent COVID-19 lockdowns.

The charts below illustrate the percent of Cardiovascular net sales by division for fiscal years 2022 and 2021:

Fiscal Year 2022



Fiscal Year 2021



Cardiac Rhythm & Heart Failure (CRHF) net sales increased 6 percent in fiscal year 2022 as compared to fiscal year 2021. The increase was led by Cardiac Rhythm Management with growth in TYRX antibacterial envelopes, CRT-Ds, and cardiac pacing therapies due to Micra and transvenous pacemakers. Cardiac Ablation Solutions also led growth with strong sales of Arctic Front cryoablation systems. The net sales growth was partially offset by a decline of Medtronic HVAD System net sales as a result of our June 2021 decision to stop the distribution and sale of the system. The net sales for the Medtronic HVAD system for fiscal year 2021 was $141 million.

Structural Heart & Aortic (SHA) net sales increased 8 percent in fiscal year 2022 as compared to fiscal year 2021. The increase was led by growth in transcatheter aortic valve replacement (TAVR) net sales as a result of continued adoption of the CoreValve Evolut. Cardiac Surgery also contributed to the net increase in sales as a result of broad growth across the business, particularly from strong sales of Extra-Corporeal Life Support (ECLS) devices. These increases were partially offset by declines within Aortic caused by field corrective actions (FCA) and COVID-19 challenges. The most notable field corrective actions were for the Valiant Navion Thoracic Stent Graft System FCA issued in the fourth quarter of fiscal year 2021 and the Endurant II/IIs Stent Graft Systems FCA issued in the third quarter of fiscal year 2022.

Coronary & Peripheral Vascular (CPV) net sales increased 5 percent in fiscal year 2022 as compared to fiscal year 2021. The increase was led by growth in Peripheral Vascular Health driven by strong performance of the recently launched Abre venous self-expanding stent system for Deep Venous disease, as well as our superficial venous product portfolio, including the VenaSeal and ClosureFast systems. The increase was partially offset by declines in Coronary as well as Atherectomy products due to impacts of COVID-19 on procedural volumes.

In addition to the macro-economic and geopolitical factors described in the Executive Level Overview, looking ahead, we expect Cardiovascular could be affected by the following:

- Continued growth of our Micra transcatheter pacing system. The Micra AV launched in Japan in November 2021 and received approval in China in May 2022. Micra AV expands the Micra target population from 15 percent to 45 percent of pacemaker patients.
- Continued acceptance and growth from the Azure XT and S SureScan pacing systems. Azure pacemakers feature Medtronic-exclusive BlueSync technology, which enables automatic, secure wireless remote monitoring with increased device longevity.
- Growth of the Cobalt and Crome portfolio of ICDs and CRT-Ds.
- Continued acceptance and expansion of the Claria MRI CRT-D system with AdaptivCRT and compatibility with TriageHF technology.
- Continued acceptance and expansion of the LINQ II cardiac monitor. Supply for the LINQ II cardiac monitor is improving as we continue to ramp our wafer scale manufacturing. During the third quarter of fiscal year 2022, we launched two AccuRhythm AI algorithms on the LINQ II platform to significantly reduce false positive alerts for Atrial Fibrillation and Pause while retaining sensitivity for true positive detection, and reduce clinic workload and burden.
- Growth of the CRT-P quadripolar pacing system.
- Continued growth, adoption, and utilization of the TYRX Envelope for implantable devices.
- Continued acceptance and market expansion of Arctic Front cryoablation for treatment of atrial fibrillation. In June 2021, the Arctic Front cryoablation system received a first line therapy designation from the U.S. FDA for the treatment of atrial fibrillation.
- Continued acceptance and growth of the self-expanding CoreValve Evolut transcatheter aortic valve replacement platform into intermediate risk indication globally and for the treatment of patients determined to be at low risk with surgery.
- Continued expansion and training of field support to increase coverage in the U.S. centers performing TAVR procedures.
- Continued acceptance and growth from Evolut PRO, which provides industry-leading hemodynamics, reliable delivery, enhanced durability versus SAVR procedures at 5 years, and advanced sealing with an excellent safety profile. In August 2021, the U.S. FDA approved the Evolut FX TAVR, a system enhancement designed to improve the overall procedural experience through enhancements in deliverability, implant visibility and deployment stability. During the third quarter of fiscal year 2022, Evolut PRO received NMPA approval within China.

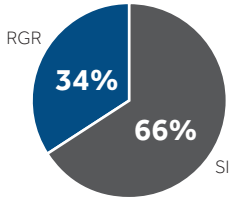
- Continued acceptance and growth from the VenaSeal Closure System in the U.S. The VenaSeal Closure System is a unique non-thermal solution to address superficial venous disease that provides improved patient comfort, reduces the recovery time, and eliminates the risk of thermal nerve injury.
- Continued acceptance and growth of the Abre venous self-expanding stent system in the U.S. as well as pressure from competitors re-entering the market. Abre is designed for the unique challenges of venous disease. It offers easy deployment, to let physicians focus on their patient, and delivers demonstrated endurance, to give patients freedom of movement.
- Our voluntary recall of the Valiant Navion Thoracic Stent Graft System and our ability to ramp production of our previous generation product, the Valiant Captivia Thoracic Stent Graft System. We are currently ramping production of the Valiant Captivia Thoracic Stent Graft System and plan to reach full production capacity in the first quarter of fiscal year 2023.
- Our June 2021 decision to stop the distribution and sale of the Medtronic HVAD System.
- Our ability to successfully develop, obtain regulatory approval of and commercialize the products within our pipeline, which include, but are not limited to, the Symplicity Spyral Multi-Electrode Renal Denervation Catheter, Pulse Field Ablation, a novel energy source that is non-thermal, Aurora Extravascular ICD and transcatheter mitral and tricuspid therapy products led by our Intrepid system.

Medical Surgical

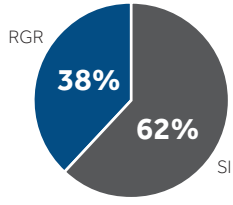
Medical Surgical's products span the entire continuum of patient care from diagnosis to recovery, with a focus on diseases of the gastrointestinal tract, lungs, pelvic region, kidneys, obesity, and preventable complications. The products include those for advanced and general surgical products, surgical stapling devices, vessel sealing instruments, wound closure, electrosurgery products, hernia mechanical devices, mesh implants, advanced ablation, interventional lung, ventilators, airway products, renal care products, and sensors and monitors for pulse oximetry, capnography, level of consciousness and cerebral oximetry. Medical Surgical's net sales for fiscal year 2022 were $9.1 billion, an increase of 5 percent as compared to fiscal year 2021. Currency had an unfavorable impact on net sales of $44 million for fiscal year 2022. The net sales increase was primarily due to the recovery of global procedure volumes from the declines experienced in fiscal year 2021 partially offset by global supply chain disruptions and declines in China due to recent COVID-19 lockdowns.

The charts below illustrate the percent of Medical Surgical net sales by division for fiscal years 2022 and 2021:

Fiscal Year 2022



Fiscal Year 2021



Surgical Innovations (SI) net sales for fiscal year 2022 increased 11 percent as compared to fiscal year 2021. Net sales growth was led by Advanced Surgical instruments, driven by the continued adoption of the Company's LigaSure, Sonicision, and Tri-Staple technologies, and Hernia and Wound Management. The increase was partially offset by declines in the fourth quarter of fiscal year 2022 resulting from global supply chain challenges, including resins, semiconductors, and packaging trays, which impacted energy and stapling products.

Respiratory, Gastrointestinal, & Renal (RGR) net sales for fiscal year 2022 decreased 7 percent as compared to fiscal year 2021. RGR net sales declines were largely due to declines in ventilator demands when compared fiscal year 2021 as demand returned to pre-pandemic levels in the fourth quarter of fiscal year 2022. These declines were partially offset by growth in Patient Monitoring, led by the Nellcor pulse oximetry sensors and the Bispectral Index (BIS) sensors, Gastrointestinal, driven by the esophageal product portfolio, as well as growth in Renal Care Solutions.

In addition to the macro-economic and geopolitical factors described in the Executive Level Overview, looking ahead we expect Medical Surgical could be affected by the following:

- Continued acceptance and future growth of Open-to-MIS techniques and tools supported by our efforts to transition open surgery to MIS (minimally invasive surgery). The Open-to-MIS initiative focuses on furthering our presence in and working to optimize open surgery globally, while capturing the market opportunity that exists in transitioning open procedures to MIS, whether through traditional MIS, or advanced technologies, including robotics.
- Continued acceptance and future growth of powered stapling and energy platform.
- Our ability to execute ongoing strategies in order to address the competitive pressure of reprocessing of our vessel sealing disposables and growth of surgical soft tissue robotics procedures in the U.S.

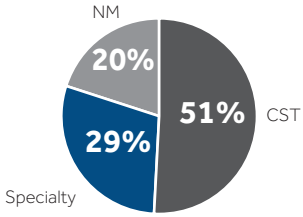
- Our ability to create markets and drive products and procedures into emerging markets. We have high quality and cost-effective surgical products designed for customers in emerging markets such as the ValleyLab LS10 single channel vessel sealing generator, which is compatible with our line of LigaSure instruments and designed for simplified use and affordability.
- Continued elevation of the standard of care for respiratory compromise, a progressive condition impacting a patient's ability to breathe effectively, which leverages our market leading MicroStream capnography technology.
- Continued acceptance and growth in patient monitoring, airway, and ventilation management. Key products in this area include the Puritan Bennett 980 ventilator, Microstream Capnography, Nellcor pulse oximetry system with OxiMax technology, Shiley tracheostomy and endotracheal tubes, McGRATH MAC video laryngoscopes, SonarMed Airway Monitoring System for the NICU, and the Nellcor Oxysoft pulse oximetry system for neonatal and adult critical care patients, which received U.S. FDA clearance during the fourth quarter of fiscal year 2022.
- Continued and future acceptance of less invasive standards of care in Gastrointestinal and Hepatology products, including the areas of GI Diagnostic and Therapeutic product lines. Recently launched products include the PillCam COLON capsule endoscopy, the Barrx platform through ablation with the Barrx 360 Express catheter, Endoflip imaging systems, Bravo Calibration-free reflux testing, and the Emprint ablation system with Thermosphere Technology, which maintains predictable spherical ablation zones throughout procedures reducing procedure time and cost.
- Continued and future acceptance of Interventional Lung Solutions. Products include our Illumisite navigation platform, combined with our portfolio of biopsy tools including the Arcpoint pulmonary needle, and to access lesions outside the airway, the CrossCountry transbronchial access tool. This comprehensive portfolio gives the power to display position and access lung nodules in the periphery of the lungs, in a minimally invasive approach to accessing difficult-to-reach areas of the lung, which may aid in the diagnosis of lung cancer.
- Expanding the use of less invasive treatments and furthering our commitment to improving options for women with abnormal uterine bleeding. Our expanded and strengthened surgical offerings are expected to complement our global gynecology business.
- Continued future growth internationally for the Hugo robotic assisted surgery (RAS) system for urologic, bariatric, gynecologic, and general surgery procedures as well as for our easy-to-access Touch Surgery Enterprise surgical video system. The Hugo RAS system, which received CE Mark in October 2021 as well as secured additional regulatory approvals in the third and fourth quarters of fiscal year 2022, is designed to help reduce unwanted variability, improve patient outcomes, and by extension, lower per procedure cost.
- The pending contribution of our Renal Care Solutions business as a result of the May 25, 2022 definitive agreement with DaVita Inc. Refer to the "Subsequent Events" section of this Management's Discussion and Analysis for additional information on the divestiture.
- Our ability to successfully develop, obtain regulatory approval of and commercialize the products within our pipeline, which include, but are not limited to, our Hugo RAS system in the U.S., our NextGen McGrath MAC video laryngoscopes, Signia power stapling devices, and our Ligasure and Sonicision vessel sealing devices.

Neuroscience

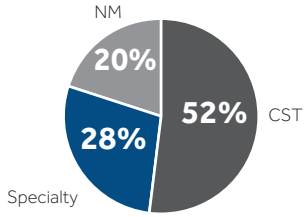
Neuroscience's products include various spinal implants, bone graft substitutes, biologic products, image-guided surgery and intra-operative imaging systems, robotic guidance systems used in the robot-assisted spine procedures, and systems that incorporate advanced energy surgical instruments. Neuroscience's products also focus on the treatment of overactive bladder, urinary retention, fecal incontinence, as well as products to treat ear, nose, and throat (ENT), and therapies to treat the diseases of the vasculature in and around the brain, including coils, neurovascular stents and flow diversion products. Neuroscience also manufactures products related to implantable neurostimulation therapies and drug delivery systems for the treatment of chronic pain, movement disorders, and epilepsy. Neuroscience's net sales for fiscal year 2022 were $8.8 billion, an increase of 7 percent as compared to fiscal year 2021. Currency had a favorable impact on net sales for fiscal year 2022 of $3 million. The net sales increase was primarily due to the recovery of global procedure volumes from the declines experienced in fiscal year 2021, partially offset by global supply chain disruptions and declines in China due to COVID-19 lockdowns and reduced sales in advance of potential national volume-based pricing (VBP) tenders.

The graphs below illustrate the percent of Neuroscience net sales by division for fiscal years 2022 and 2021:

Fiscal Year 2022



Fiscal Year 2021



Cranial & Spinal Technologies (CST) net sales for fiscal year 2022 increased 4 percent as compared to fiscal year 2021. Net sales growth was primarily driven by Neurosurgery with strong sales of the Midas Rex powered surgical instruments and StealthStation Navigation and O-arm Imaging System. Growth in CST also occurred in Spine and Biologics due to the recovery of global procedural volumes in the U.S., Japan, and Western Europe compared to the prior fiscal year. This growth was partially offset by recent reduced sales in China in advance of potential national VBP tender in Spine.

Specialty Therapies (Specialty) net sales for fiscal year 2022 increased 12 percent as compared to fiscal year 2021. Net sales growth was primarily driven by strength in Pelvic Health, ENT, and Neurovascular. Pelvic Health's growth was led by sales of the recently launched InterStim Micro neurostimulator and SureScan MRI leads. ENT growth was driven by the sales of StealthStation ENT Navigation System despite continued supply constraints in disposables, which are recovering. Neurovascular's growth was led by sales of flow diversion, hemorrhagic stroke, and liquid embolic products.

Neuromodulation (NM) net sales for fiscal year 2022 increased 8 percent as compared to fiscal year 2021. Sales growth occurred in both Pain Therapies and Brain Modulation and reflected a recovery in procedural volumes. Net sales growth was driven by strong performance of the Percept PC deep brain stimulation (DBS) device with BrainSense technology in Brain Modulation.

In addition to the macro-economic and geopolitical factors described in the Executive Level Overview, looking ahead we expect Neuroscience could be affected by the following:

- Continued growth from Enabling Technologies, including StealthStation Navigation and O-arm Imaging Systems, Midas Rex Powered Surgical Instruments, and ENT Navigation and Power Systems, as well as acceptance of the Stealth Autoguide cranial robotic guidance platform.
- Continued sales of Mazor robotic units and associated market adoption of robot-assisted spine procedures, including the Mazor X Stealth, our integrated robotics and navigation platform.
- Continued growth from spine titanium interbody implants.
- Continued adoption of our integrated solutions through the Surgical Synergy strategy, which integrates our spinal implants with enabling technologies such as imaging, navigation, power instruments, nerve monitoring, and Mazor robotics, as well as AI-driven surgical planning, personalized spinal implants, and robot-assisted surgery due to Medicrea technologies, acquired in fiscal year 2021.
- Market acceptance and continued global adoption of innovative new spine products and procedural solutions within our CST division such as our Infinity OCT System and Prestige LP cervical disc system.
- Growth in the broader vertebral compression fracture (VCF) and adjacent markets as we continue to pursue the development of other therapies to treat more patients with VCF, including continued success of both the Kyphon V vertebroplasty system and the Osteocool RF Spinal Tumor ablation system.
- Continued acceptance and growth of our ENT and Pelvic Health therapies within our Specialty Therapies division, including our InterStim therapy with InterStim II, InterStim Micro and InterStim X neurostimulators for the treatment of the symptoms of overactive bladder, urinary retention, and bowel incontinence, and capital equipment sales of the Stealth Station ENT surgical navigation system and intraoperative NIM nerve monitoring system.
- Continued acceptance and growth of the Solitaire FR revascularization device for treatment of acute ischemic stroke and the Pipeline Embolization Devices, endovascular treatments for large or giant wide-necked brain aneurysms.
- Continued acceptance of our React Catheter and Riptide aspiration system, along with our next-generation Solitaire revascularization device.
- Market acceptance and continued global adoption of our Intellis spinal cord stimulator, DTM proprietary waveform, Evolve workflow algorithm, and Snapshot reporting to treat chronic pain in major markets around the world.
- Continued acceptance and growth of our Percept PC DBS device with BrainSense technology, including its treatment of Parkinson's Disease, epilepsy, and other movement disorders.

- Market acceptance and growth from SCS therapy for treating Diabetic Peripheral Neuropathy (DPN) on Intellis rechargeable neurostimulator and Vanta recharge-free neurostimulator which received U.S. FDA approval in January 2022.
- Ongoing obligations under the U.S. FDA consent decree entered in April 2015 relating to the SynchroMed drug infusion system and the Neuromodulation quality system. The U.S. FDA lifted its distribution requirements on our implantable drug pump in October 2017 and its warning letter in November 2017.
- Our ability to successfully develop, obtain regulatory approval of and commercialize the products within our pipeline, which include, but are not limited to, our closed-loop Percept PC and RC devices with adaptive DBS (aDBS), our hemorrhagic stroke intravascular device, and our next-generation spine enabling technologies.

Diabetes

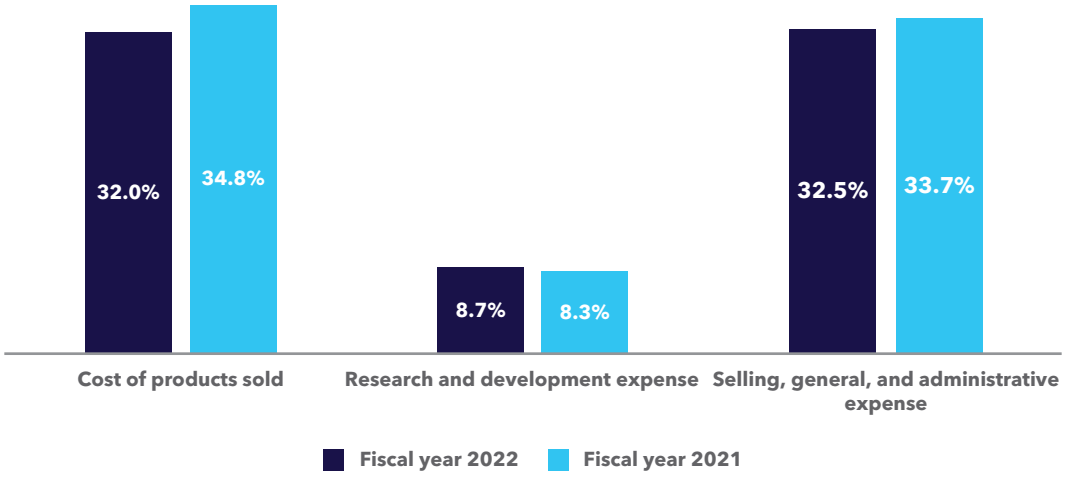
Diabetes' products include insulin pumps, continuous glucose monitoring (CGM) systems, consumables, and smart insulin pen systems. Diabetes' sales for fiscal year 2022 were $2.3 billion, a decrease of 3 percent as compared to fiscal year 2021. Currency had an unfavorable impact on net sales for fiscal year 2022 of $2 million. Diabetes' net sales decline for fiscal year 2022 was primarily attributable to declines in the U.S. partially offset by growth in the MiniMed 780G insulin pump system and integrated CGM in the international markets.

In addition to the macro-economic and geopolitical factors described in the Executive Level Overview, looking ahead we expect Diabetes could be affected by the following:

- Patient demand for the MiniMed 770G insulin pump system, which launched in the U.S. in November 2020 and in Japan in January 2022. The system is powered by SmartGuard technology and features the added benefits of smartphone connectivity and an expanded age indication to children as young as age two.
- Continued growth internationally for the MiniMed 780G insulin pump system. The MiniMed 780G system was approved in the E.U. in June 2020 and has launched in over 40 countries on four continents outside the U.S. The global adoption of sensor-augmented insulin pump systems has resulted in strong sensor attachment rates.
- Continued acceptance and growth of the Guardian Connect CGM system which displays glucose information directly to a smartphone to help ensure patients have access to their glucose levels seamlessly and discretely. The Guardian Connect CGM system is available on both Apple iOS and Android devices.
- Strengthening our position in the diabetes market as a result of the September 2020 acquisition of Companion Medical. Companion Medical offered a U.S. FDA cleared InPen smart pen system that combines the freedom of a reusable Bluetooth pen with the intelligence of an intuitive mobile application that helps users administer the appropriate insulin dose. During the third quarter of fiscal year 2021, we integrated our CGM data into the InPen application, which allows users to have their Medtronic CGM readings in real-time alongside insulin dose information, all in one view.
- Continued pump and CGM competition in an expanding global market.
- Changes in medical reimbursement policies and programs, along with additional payor coverage on insulin pumps.
- Resolution of findings contained in a December 2021 U.S. FDA warning letter relating to the MiniMed 600 series insulin pump and a remote controller device for MiniMed 508 and Paradigm pumps. We are currently working with the U.S. FDA to resolve the findings. The existence of the warning letter may limit our ability to launch certain new Diabetes products in the U.S. prior to resolution of the findings.
- Our ability to successfully develop, obtain regulatory approval of and commercialize the products within our pipeline, which include, but are not limited to, our MiniMed 780G insulin pump and the Guardian 4 sensor, which have been submitted to the U.S. FDA.

COSTS AND EXPENSES

The following is a summary of cost of products sold, research and development, and selling, general, and administrative expenses as a percent of net sales:



Cost of Products Sold

We continue to focus on reducing our costs of production through supplier management, manufacturing improvements, and optimizing our manufacturing network. Cost of products sold for fiscal year 2022 was $10.1 billion as compared to $10.5 billion for fiscal year 2021. The decrease in cost of products sold as a percentage of net sales was largely due to the conditions of the pandemic during fiscal year 2021, which resulted in recognizing a portion of our fixed overhead costs as period expenses, increases in our reserves in our excess and obsolete inventory, as well as negative impact from mix, as products in higher demand had lower gross margins. The decrease was also attributable to charges from field correction actions in the prior year. Fiscal year 2022 included $58 million of inventory write-downs associated with our June 2021 decision to stop the distribution and sale of Medtronic's HVAD System (MCS charges). Looking forward, our cost of products sold likely will be further negatively impacted by inflation and higher labor and direct material costs.

Research and Development Expense

We remain committed to deliver the best possible experiences for every patient, physician, and caregiver we serve; to create technologies that expand what's possible across the entire human body to transform lives; to turn data and insights into real action to serve real patient needs, dramatically improving care; and to expand healthcare access and deliver positive outcomes that go far beyond our products. Research and development expense for fiscal year 2022 was $2.7 billion as compared to $2.5 billion for fiscal year 2021. Fiscal year 2022 included $101 million of acquisitions of, and license payments for, technology not approved by regulators, primarily in our Diabetes segment.

Selling, General, and Administrative Expense

Our goal is to continue to leverage selling, general, and administrative expense initiatives. Selling, general, and administrative expense primarily consists of salaries and wages, other administrative costs, such as professional fees and marketing expenses, and certain acquisition and restructuring expenses. Selling, general, and administrative expense for fiscal year 2022 was $10.3 billion as compared to $10.1 billion for fiscal year 2021. The decrease in selling, general, and administrative expense as a percentage of net sales was primarily driven by net sales growth as a result of the recovery of procedural volumes partially offset by increases in employee travel as compared to the corresponding period in the prior year when travel was limited.

The following is a summary of other costs and expenses (income):

(in millions)	Fiscal Year 2022	2021
Amortization of intangible assets	$ 1,733	$ 1,783
Restructuring charges, net	60	293
Certain litigation charges	95	118
Other operating expense, net	862	315
Other non-operating income, net	(318)	(336)
Interest expense	553	925

Amortization of Intangible Assets

Amortization of intangible assets includes the amortization expense of our definite-lived intangible assets, consisting of purchased patents, trademarks, tradenames, customer relationships, purchased technology, and other intangible assets.

Restructuring Charges, Net

Enterprise Excellence

In the third quarter of fiscal year 2018, we announced a multi-year global Enterprise Excellence Program designed to drive long-term business growth and sustainable efficiency. Further program details are described in Note 4 of the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Since inception, the Company has incurred pre-tax exit and disposal costs and other costs, across all segments, of $1.6 billion in connection with the Enterprise Excellence program. In total, the Company estimates it will recognize approximately $1.8 billion of exit and disposal costs and other costs related to the Enterprise Excellence program by the end of fiscal year 2023.

For fiscal years 2022 and 2021, the Company recognized net charges of $259 million and $349 million, respectively, including $31 million and $52 million, respectively within *restructuring charges, net* in the consolidated statements of income which were primarily comprised of employee termination benefits. For fiscal years 2022 and 2021, charges also included costs incurred as a direct result of the restructuring program, such as salaries for employees supporting the program and consulting, including $116 million and $128 million, respectively, recognized within *cost of products sold,* and $112 million and $169 million, respectively, recognized within *selling, general, and administrative expense* in the consolidated statements of income.

Simplification

In the first quarter of fiscal year 2021, we initiated our Simplification restructuring program designed to make the Company a more nimble and competitive organization. Further program details are described in Note 4 of the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Since inception, the Company has incurred pre-tax exit and disposal costs and other costs, across all segments, of $349 million in connection with the Simplification program. In total, the Company estimates it will recognize approximately $450 million of exit and disposal costs and other costs related to the Simplification program by the end of fiscal year 2023.

For fiscal years 2022 and 2021, the Company recognized net charges of $82 million and $268 million, respectively, including $35 million and $241 million, respectively, within *restructuring charges, net* in the consolidated statements of income which were primarily comprised of employee termination benefits. For fiscal years 2022 and 2021, charges also included costs incurred as a direct result of the restructuring program, such as salaries for employees supporting the program and consulting, including $45 million and $27 million, respectively, recognized within *selling, general, and administrative expense* in the consolidated statements of income. The net charges for fiscal year 2021 included $97 million of incremental defined benefit pension and post-retirement related expenses for employees that accepted voluntary early retirement packages.

Certain Litigation Charges

We classify specified certain litigation charges and gains related to significant legal matters as *certain litigation charges* in the consolidated statements of income. For additional information, refer to Note 18 of the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Other Operating Expense, Net

Other operating expense, net primarily includes royalty income and expense, currency remeasurement and derivative gains and losses, Puerto Rico excise taxes, changes in the fair value of contingent consideration, changes in amounts accrued for certain contingent liabilities for a past acquisition, MCS charges, impairment charges, and income from funded research and development arrangements.

The increase in other operating expense, net was primarily driven by MCS charges recorded in fiscal year 2022. The charges of $823 million primarily included $409 million of intangible asset impairments and $366 million for commitments and obligations, including customer support obligations, restructuring, and other associated costs. The increase was partially offset by changes in fair value of contingent consideration, which resulted in $103 million of income for fiscal year 2022 as compared to $36 million of expense in fiscal year 2021. The net currency impact of remeasurement expense and our hedging programs also partially offset the increase with $70 million of income in fiscal year 2022 and $47 million of expense in fiscal year 2021. Finally, contributing to the change was a $132 million gain related to amounts accrued for certain contingent liabilities for a past acquisition and $76 million of impairment charges related to the abandonment of certain intangible assets, both in fiscal year 2021. Additional information regarding the MCS charges is described in Note 4 of the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Other Non-Operating Income, Net

Other non-operating income, net includes the non-service component of net periodic pension and postretirement benefit cost, investment gains and losses, and interest income. The decrease in other non-operating income, net for fiscal year 2022 is driven by our equity method and minority investments portfolio offset by an increase in income from the non-service component of net periodic pension and postretirement benefit cost. Gains on equity method and minority investments were $30 million and $61 million for fiscal year 2022 and 2021, respectively, and income related to the non-service component of net periodic pension and postretirement benefits were $107 million and $86 million, respectively.

Interest Expense

Interest expense includes interest incurred on our outstanding borrowings, amortization of debt issuance costs and debt premiums or discounts, amortization of gains or losses on terminated or de-designated interest rate derivative instruments, and charges recognized in connection with the tender and early redemption of senior notes. The decrease in interest expense for fiscal year 2022 was primarily due to the $308 million charge incurred as a result of the early redemption of approximately $6.0 billion of debt during fiscal year 2021.

INCOME TAXES

(in millions)	Fiscal Year 2022	2021
Income tax provision (benefit)	$ 456	$ 265
Income before income taxes	5,517	3,895
Effective tax rate	8.3%	6.8%
Non-GAAP income tax provision	$ 1,084	$ 802
Non-GAAP income before income taxes	8,609	6,804
Non-GAAP Nominal Tax Rate	12.6%	11.8%
Difference between the effective tax rate and Non-GAAP Nominal Tax Rate	4.3%	5.0%

Many of the countries we operate in have statutory tax rates lower than our U.S. statutory rate, thereby resulting in an overall effective tax rate less than the U.S. statutory rate of 21.0 percent. A significant portion of our earnings are generated from operations in Puerto Rico, Switzerland, and Ireland. The statutory tax rates for these jurisdictions range from 12.5 percent to 37.5 percent. Our earnings in Puerto Rico are subject to certain tax incentive grants which provide for tax rates lower than the country's statutory tax rates. Unless our tax incentive grants are extended, they will expire between fiscal years 2023 and 2034. The tax incentive grants, which expired during fiscal year 2022, did not have a material impact on our financial results. See Note 13 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K for additional information.

Our effective tax rate for fiscal year 2022 was 8.3 percent, as compared to 6.8 percent in fiscal year 2021. Our Non-GAAP Nominal Tax Rate for fiscal year 2022 was 12.6 percent, as compared to 11.8 percent in fiscal year 2021. The increase in both the effective tax rate and the Non-GAAP Nominal Tax Rate was primarily due to year-over-year changes in operational results by jurisdiction.

During fiscal year 2022, we recognized $89 million of operational tax benefits. The operational tax benefits included a $46 million benefit from excess tax benefits associated with stock-based compensation, and a $43 million net benefit associated with the resolution of certain income tax audits, finalization of certain tax returns, changes to uncertain tax position reserves, and changes to certain deferred income tax balances.

During fiscal year 2021, we recognized $51 million of operational tax benefits, which included a $46 million benefit from excess tax benefits associated with stock-based compensation.

An increase in our Non-GAAP Nominal Tax Rate of one percent would result in an additional income tax provision for fiscal years 2022 and 2021 of approximately $86 million and $68 million, respectively.

Certain Tax Adjustments

During fiscal year 2022, the net benefit from certain tax adjustments of $50 million, recognized in *income tax provision (benefit)* in the consolidated statement of income, included the following:

- A benefit of $82 million associated with a step up in tax basis for Swiss Cantonal purposes.
- A benefit of $82 million related to a change in tax rates on intangible assets.
- A cost of $47 million associated with the amortization of the previously established deferred tax assets from intercompany intellectual property transactions.
- A cost of $41 million associated with a change in the Company's permanent reinvestment assertion on certain historical earnings.
- A net cost of $26 million primarily associated with an intercompany sale of assets.

During fiscal year 2021, the net benefit from certain tax adjustments of $41 million, recognized in *income tax provision (benefit)* in the consolidated statement of income, included the following:

- A net benefit of $106 million associated with the resolution of an audit at the IRS Appellate level for fiscal years 2012, 2013, and 2014. The issues resolved relate to the utilization of certain net operating losses and the allocation of income between Medtronic, Inc. and its wholly owned subsidiary operating in Puerto Rico for businesses that are not the subject of the U.S. Tax Court Case for fiscal years 2005 and 2006.
- A net cost of $73 million related to a tax basis adjustment of previously established deferred tax assets from intercompany intellectual property transactions. The cumulative amount of deferred tax benefit previously recognized from intercompany intellectual property transactions and recorded as Certain Tax Adjustments is $1.5 billion. The corresponding deferred tax assets will be amortized over a period of approximately 20 years.
- A cost of $50 million associated with the amortization of the previously established deferred tax assets from intercompany intellectual property transactions.
- A net cost of $25 million associated with an internal restructuring and intercompany sale of assets.
- A benefit of $83 million related to the capitalization of certain research and development costs for U.S. income tax purposes and the establishment of a deferred tax asset at the U.S. federal statutory tax rate.

Certain tax adjustments will affect the comparability of our operating results between periods. Therefore, we consider these Non-GAAP Adjustments. Refer to the "Executive Level Overview" section of this Management's Discussion and Analysis for further discussion of these adjustments.

LIQUIDITY AND CAPITAL RESOURCES

We are currently in a strong financial position, and we believe our balance sheet and liquidity as of April 29, 2022 provide us with flexibility, and our cash, cash equivalents, and current investments, along with our credit facility and related commercial paper programs will satisfy our foreseeable operating needs.

Our liquidity and capital structure are evaluated regularly within the context of our annual operating and strategic planning processes. We consider the liquidity necessary to fund our operations, which includes working capital needs, investments in research and development, property, plant, and equipment, and other operating costs. We also consider capital allocation alternatives that balance returning value to shareholders through dividends and share repurchases, satisfying maturing debt, and acquiring businesses and technology.

Summary of Cash Flows

The following is a summary of cash provided by (used in) operating, investing, and financing activities, the effect of exchange rate changes on cash and cash equivalents, and the net change in cash and cash equivalents:

(in millions)	Fiscal Year 2022	2021
Cash provided by (used in):		
Operating activities	$ 7,346	$ 6,240
Investing activities	(1,659)	(2,866)
Financing activities	(5,336)	(4,136)
Effect of exchange rate changes on cash and cash equivalents	(231)	215
Net change in cash and cash equivalents	**$ 121**	**$ (547)**

Operating Activities

The $1.1 billion increase in net cash provided was primarily driven by an increase in cash collected from customers along with a decrease in cash paid for income taxes. The increase in net cash provided was partially offset by an increase in cash paid to employees. The increase in cash collected from customers was primarily related to COVID-19 driving decreased sales in the fourth quarter of fiscal year 2020 and first quarter of fiscal year 2021. The decrease in cash paid for income taxes was primarily due to increased estimated federal tax payments and tax payments associated with IRS audit settlements in fiscal year 2021. Cash paid to employees increased due to higher annual incentive plan payouts compared to the prior fiscal year.

Investing Activities

The $1.2 billion decrease in net cash used was primarily attributable to a decrease in cash paid for acquisitions of $903 million, as well as a decrease of net purchases of investments of $273 million as compared to fiscal year 2021.

Financing Activities

The $1.2 billion increase in net cash used was largely the result of the increase of share repurchases of $1.9 billion. The increase in net cash used was offset by a decrease in short-term borrowings of $311 million. For fiscal year 2021, financing cash flows were impacted by the Mizuho Bank term loan under which we borrowed ¥300 billion in the first quarter of fiscal year 2021, which was subsequently repaid in the fourth quarter of fiscal year 2021. Fiscal year 2021 financing cash flows were also impacted by the issuance of $7.2 billion of Euro-denominated senior notes offset by the early redemption of $6.0 billion of senior notes for $6.3 billion of total consideration, and repayment of an additional $911 million of Euro-denominated senior notes. For more information on the Mizuho Bank term loan, and issuances and redemptions of senior notes, refer to Note 6 of the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Debt and Capital

Our capital structure consists of equity and interest-bearing debt. We primarily utilize unsecured senior debt obligations to meet our financing needs and, to a lesser extent, bank borrowings. From time to time, we may repurchase our outstanding debt obligations in the open market or through privately negotiated transactions.

Total debt at April 29, 2022 was $24.1 billion, as compared to $26.4 billion at April 30, 2021. The decrease in total debt was driven by fluctuations in exchange rates as it pertains to our Euro-denominated senior notes.

Subsequent to fiscal year 2022, on May 2, 2022, we entered into a term loan agreement (Fiscal 2023 Loan Agreement) with Mizuho Bank, Ltd. for an aggregate principal amount of up to ¥300 billion with a term of 364 days. In May and June 2022, Medtronic Luxco borrowed an aggregate of ¥297 billion, or approximately $2.3 billion, of the term loan, under the Fiscal 2023 Loan Agreement. The Company used the net proceeds of the borrowings to fund the early redemption of $1.9 billion of Medtronic Inc. Senior Notes for $1.9 billion of total consideration, and $368 million of Medtronic Luxco Senior Notes for $376 million of total consideration. The Company will recognize a total loss on debt extinguishment of $53 million in the quarter ended July 29, 2022, which primarily includes cash premiums and accelerated amortization of deferred financing costs and debt discounts and premiums. The loss will be recognized in *interest expense* in the consolidated statements of income.

We repurchase our ordinary shares on occasion as part of our focus on returning value to our shareholders. In March 2019, the Company's Board of Directors authorized the repurchase of $6.0 billion of the Company's ordinary shares. There is no specific time period associated with these repurchase authorizations. During fiscal years 2022 and 2021, we repurchased a total of 22 million and 4 million shares, respectively, under these programs at an average price of $113.11 and $126.80, respectively. At April 29, 2022, we had approximately $3.0 billion remaining under the share repurchase program authorized by our Board of Directors.

For more information on credit arrangements, see Note 6 of the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Liquidity

Our liquidity sources at April 29, 2022 included $3.7 billion of cash and cash equivalents and $6.9 billion of current investments. Additionally, we maintain commercial paper programs and a Credit Facility.

Our investments primarily include available-for-sale debt securities, including U.S. and non-U.S. government and agency securities, corporate debt securities, mortgage-backed securities, certificates of deposit, and other asset-backed securities. See Note 5 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K for additional information regarding fair value measurements.

We maintain multicurrency commercial paper programs for short-term financing, which allow us to issue unsecured commercial paper notes on a private placement basis up to a maximum aggregate amount outstanding at any time of $3.5 billion. At both April 29, 2022 and April 30, 2021, we had no commercial paper outstanding. The issuance of commercial paper reduces the amount of credit available under our existing line of credit, as explained below.

We also have a $3.5 billion five-year syndicated credit facility (Credit Facility), which expires in December 2026. At each anniversary date of the Credit Facility, we can request a one-year extension of the maturity date. The Credit Facility provides backup funding for the commercial paper programs and may also be used for general corporate purposes. The Credit Facility provides us with the ability to increase our borrowing capacity by an additional $1.0 billion at any time during the term of the agreement. At April 29, 2022 and April 30, 2021, no amounts were outstanding under the Credit Facility.

Interest rates on advances of our Credit Facility are determined by a pricing matrix based on our long-term debt ratings assigned by Standard & Poor's Ratings Services (S&P) and Moody's Investors Service (Moody's). Facility fees are payable on the Credit Facility and are determined in the same manner as the interest rates. We are in compliance with all covenants related to the Credit Facility.

The following table is a summary of our S&P and Moody's long-term debt ratings and short-term debt ratings:

	Agency Rating [1]	
	April 29, 2022	April 30, 2021
Standard & Poor's Ratings Services		
Long-term debt	A	A
Short-term debt	A-1	A-1
Moody's Investors Service		
Long-term debt	A3	A3
Short-term debt	P-2	P-2

(1) Agency ratings are subject to change, and there may be no assurance that an agency will continue to provide ratings and/or maintain its current ratings. A security rating is not a recommendation to buy, sell or hold securities, and may be subject to revision or withdrawal at any time by the rating agency, and each rating should be evaluated independently of any other rating.

S&P and Moody's long-term debt ratings and short-term debt ratings at April 29, 2022 were unchanged as compared to the ratings at April 30, 2021. We do not expect the S&P and Moody's ratings to have a significant impact on our liquidity or future flexibility to access additional liquidity given our balance sheet, Credit Facility, and related commercial paper programs.

Contractual Obligations and Cash Requirements

We have future contractual obligations and other minimum commercial commitments that are entered into in the normal course of business, some of which are recorded in our consolidated balance sheet. We believe our off-balance sheet arrangements do not have a material current or anticipated future effect on our consolidated earnings, financial position, and/or cash flows.

Presented below is a summary of our off-balance sheet contractual obligations and other minimum commercial commitments at April 29, 2022, as well as long-term contractual obligations reflected in the balance sheet at April 29, 2022.

(in millions)	Maturity by Fiscal Year						
	Total	2023	2024	2025	2026	2027	Thereafter
Contractual obligations related to off-balance sheet arrangements:							
Commitments to fund minority investments, milestone payments, and royalty obligations[1]	$ 233	$ 95	$ 54	$ 30	$ 18	$ 18	$ 19
Interest payments[2]	6,902	466	460	460	394	391	4,732
Other[3]	995	445	235	121	66	34	94
Contractual obligations reflected in the balance sheet[4]:							
Debt obligations[5]	$ 24,275	$ 3,744	$ 6	$ 1,895	$ 2,133	$ 1,969	$ 14,528
Operating leases	976	213	164	130	103	82	284
Contingent consideration[6]	119	35	49	33	1	–	–
Tax obligations[7]	1,496	176	330	440	550	–	–

(1) Includes commitments related to the funding of minority investments, estimated milestone payments, and royalty obligations. While it is not certain if and/or when payments will be made, the maturity dates included in the table reflect our best estimates.

(2) Includes the contractual interest payments on our outstanding debt and excludes the impacts of debt premium and discount amortization. See Note 6 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K for additional information on our debt agreements.

(3) Includes inventory purchase commitments, research and development, and other arrangements that are legally binding and specify minimum purchase quantities or spending amounts. These purchase commitments do not exceed our projected requirements and are in the normal course of business. Excludes open purchase orders with a remaining term of less than one year.

(4) Excludes defined benefit plan obligations, guarantee obligations, uncertain tax positions, non-current tax liabilities, and litigation settlements for which we cannot make a reliable estimate of the period of cash settlement. For further information, see Notes 13, 15, and 18 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

(5) Includes the current and non-current portion of our Senior Notes and bank borrowings. Excludes debt premium and discount, unamortized gains from terminated interest rate swap agreements, and commercial paper. See Notes 6 and 7 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K for additional information on our debt agreements and interest rate swap agreements, respectively.

(6) Includes the fair value of our current and non-current portions of contingent consideration. While it is not certain if and/or when payments will be made, the maturity dates included in this table reflect our best estimates.

(7) Represents the tax obligations associated with the transition tax that resulted from U.S. Tax Reform. The transition tax will be paid over an eight-year period and will not accrue interest. See Note 13 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K for further information.

In the normal course of business, we periodically enter into agreements that require us to indemnify customers or suppliers for specific risks, such as claims for injury or property damage arising as a result of our products or the negligence of our personnel or claims alleging that our products infringe third-party patents or other intellectual property. Our maximum exposure under these indemnification provisions is unable to be estimated, and we have not accrued any liabilities within our consolidated financial statements or included any indemnification provisions in the table above. Historically, we have not experienced significant losses on these types of indemnification agreements.

Note 18 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K provides information regarding amounts we have accrued related to legal matters. In accordance with U.S. GAAP, we record a liability in our consolidated financial statements for these matters when a loss is known or considered probable and the amount can be reasonably estimated. Actual settlements may be different than estimated and could have a material effect on our consolidated earnings, financial position, and/or cash flows.

We record tax liabilities in our consolidated financial statements for amounts that we expect to repatriate from subsidiaries (to the extent the repatriation would be subject to tax); however, no tax liabilities are recorded for amounts we consider to be permanently reinvested. We expect to have access to the majority of our cash flows in the future. In addition, we continue to evaluate our legal entity structure supporting our business operations, and to the extent such evaluation results in a change to our overall business structure, we may be required to accrue for additional tax obligations.

Beyond the contractual obligations and other minimum commercial commitments outlined above, we have recurring cash requirements arising from the normal operation of our business that include capital expenditures, research and developments costs, and other operational costs.

We believe our balance sheet and liquidity provide us with flexibility, and our cash, cash equivalents, current investments, Credit Facility and related commercial paper programs as well as our ability to generate operating cash flows will satisfy our current and future contractual obligations and cash requirements. We regularly review our capital needs and consider various investing and financing alternatives to support our requirements.

ACQUISITIONS

Affera, Inc. Pending Acquisition

On January 10, 2022, Medtronic and Affera, Inc. (Affera) entered into a definitive agreement in which Medtronic will acquire Affera for $925 million, including up to $250 million of contingent consideration related to certain technical and regulatory milestones. The acquisition is pending clearance of anti-trust filings and other closing conditions.

Intersect ENT Acquisition

Subsequent to fiscal year 2022, on May 13, 2022, the Company acquired Intersect ENT. Total consideration for the transaction was approximately $1.2 billion to acquire all outstanding shares of Intersect ENT for $28.25 per share.

Additional information regarding acquisitions is included in Note 3 of the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" within this Annual Report on Form 10-K.

SUBSEQUENT EVENTS

On May 25, 2022, the Company and DaVita Inc. ("DaVita") entered into a definitive agreement with the intent to form a new, independent kidney care-focused medical device company ("NewCo") with equal equity ownership. The transaction is expected to close in calendar year 2023, subject to customary regulatory approvals and closing conditions. We are contributing our entire Renal Care Solutions business ("RCS") to NewCo. RCS is part of the Respiratory, Gastrointestinal, and Renal division in our Medical Surgical portfolio, and had revenue of $325 million in fiscal year 2022. We expect to record a non-cash pre-tax impairment of long-lived assets of $60 million to $90 million in the quarter ending July 29, 2022 related to goodwill.

CRITICAL ACCOUNTING ESTIMATES

We have used various accounting policies to prepare the consolidated financial statements in accordance with U.S. GAAP. Our significant accounting policies are disclosed in Note 1 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

The preparation of the consolidated financial statements, in conformity with U.S. GAAP, requires us to use judgment in making estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses. These estimates reflect our best judgment about economic and market conditions and the potential effects on the valuation and/or carrying value of assets and liabilities based upon relevant information available. We base our estimates on historical experience and on various assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources.

Our critical accounting estimates include the following:

Litigation Contingencies

We are involved in a number of legal actions involving product liability, intellectual property and commercial disputes, shareholder related matters, environmental proceedings, tax disputes, and governmental proceedings and investigations. The outcomes of these legal actions are not completely within our control and may not be known for prolonged periods of time. In some actions, the enforcement agencies or private claimants seek damages, as well as other civil or criminal remedies (including injunctions barring the sale of products that are the subject of the proceeding), that could require significant expenditures or result in lost revenues or limit our ability to conduct business in the applicable jurisdictions. Estimating probable losses from our litigation and governmental proceedings is inherently difficult, particularly when the matters are in early procedural stages, with incomplete scientific facts or legal discovery; involve unsubstantiated or indeterminate claims for damages; potentially involve penalties, fines, or punitive damages; or could result in a change in business practice. The Company records a liability in the consolidated financial statements for loss contingencies when a loss is known or considered probable, and the amount may 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. If a loss is reasonably possible but not known or probable, and may be reasonably estimated, the estimated loss or range of loss is disclosed. Our significant legal proceedings are discussed in Note 18 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Income Tax Reserves

We establish reserves when, despite our belief that our tax return positions are fully supportable, we believe that certain positions are likely to be challenged and that we may or may not prevail. Under U.S. GAAP, if we determine that a tax position is more likely than not of being sustained upon audit, based solely on the technical merits of the position, we recognize the benefit. We measure the benefit

by determining the amount that is greater than 50 percent likely of being realized upon settlement. We presume that all tax positions will be examined by a taxing authority with full knowledge of all relevant information. The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations in a multitude of jurisdictions across our global operations. We regularly monitor our tax positions and tax liabilities. We reevaluate the technical merits of our tax positions and recognize an uncertain tax benefit, or derecognize a previously recorded tax benefit, when there is (i) a completion of a tax audit, (ii) effective settlement of an issue, (iii) a change in applicable tax law including a tax case or legislative guidance, or (iv) the expiration of the applicable statute of limitations. Significant judgment is required in accounting for tax reserves. Although we believe that we have adequately provided for liabilities resulting from tax assessments by taxing authorities, positions taken by these tax authorities could have a material impact on our effective tax rate, consolidated earnings, financial position and/or cash flows.

Valuation of Intangible Assets and Goodwill

When we acquire a business, the assets acquired and liabilities assumed are recorded at their respective fair values at the acquisition date. Goodwill is the excess of the purchase price over the estimated fair value of net assets of acquired businesses. Intangible assets primarily include patents, trademarks, tradenames, customer relationships, purchased technology, and in-process research and development. Determining the fair value of intangible assets acquired as part of a business combination requires us to make significant estimates. These estimates include the amount and timing of projected future cash flows of each project or technology, the discount rate used to discount those cash flows to present value, and the assessment of the asset's life cycle. The estimates could be impacted by legal, technical, regulatory, economic, and competitive risks.

The test for impairment of goodwill requires us to make several estimates related to projected future cash flows to determine the fair value of the goodwill reporting units. Our estimates associated with the goodwill impairment test are considered critical due to the amount of goodwill recorded on our consolidated balance sheets and the judgment required in determining fair value. We assess the impairment of goodwill at the reporting unit level annually as of the first day of the third quarter and whenever an event occurs or circumstances change that would indicate that the carrying amount may be impaired.

We also test definite-lived intangible assets for impairment when an event occurs or circumstances change that would indicate the carrying amount of the assets or asset group may be impaired. We assess the impairment of indefinite-lived intangible assets annually in the third quarter and whenever an event occurs or circumstances change that would indicate that the carrying amount may be impaired.

Our tests for goodwill and intangible assets are based on future cash flows that require significant judgment with respect to future revenue and expense growth rates, appropriate discount rates, asset groupings, and other assumptions and estimates. We use estimates that are consistent with the highest and best use of the assets based on a market participant's view of the assets being evaluated. Actual results may differ from our estimates due to a number of factors including, among others, changes in competitive conditions, timing of regulatory approval, results of clinical trials, changes in worldwide economic conditions, and fluctuations in currency exchange rates.

NEW ACCOUNTING PRONOUNCEMENTS

Information regarding new accounting pronouncements is included in Note 1 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

SUPPLEMENTAL GUARANTOR FINANCIAL INFORMATION

Medtronic plc and Medtronic Global Holdings S.C.A. (Medtronic Luxco), a wholly-owned subsidiary guarantor, each have provided full and unconditional guarantees of the obligations of Medtronic, Inc., a wholly-owned subsidiary issuer, under the Senior Notes (Medtronic Senior Notes) and full and unconditional guarantees of the obligations of Covidien International Finance S.A. (CIFSA), a wholly-owned subsidiary issuer, under the Senior Notes (CIFSA Senior Notes). The guarantees of the CIFSA Senior Notes are in addition to the guarantees of the CIFSA Senior Notes by Covidien Ltd. and Covidien Group Holdings Ltd., both of which are wholly-owned subsidiary guarantors of the CIFSA Senior Notes. Medtronic plc and Medtronic, Inc. each have provided a full and unconditional guarantee of the obligations of Medtronic Luxco under the Senior Notes (Medtronic Luxco Senior Notes). The following is a summary of these guarantees:

Guarantees of Medtronic Senior Notes

- Parent Company Guarantor - Medtronic plc
- Subsidiary Issuer - Medtronic, Inc.
- Subsidiary Guarantor - Medtronic Luxco

Guarantees of Medtronic Luxco Senior Notes

- Parent Company Guarantor - Medtronic plc
- Subsidiary Issuer - Medtronic Luxco
- Subsidiary Guarantor - Medtronic, Inc.

Guarantees of CIFSA Senior Notes

- Parent Company Guarantor - Medtronic plc
- Subsidiary Issuer - CIFSA
- Subsidiary Guarantors - Medtronic Luxco, Covidien Ltd., and Covidien Group Holdings Ltd. (CIFSA Subsidiary Guarantors)

The following tables present summarized financial information for the fiscal year ended April 29, 2022 for the obligor groups of Medtronic and Medtronic Luxco Senior Notes, and CIFSA Senior Notes. The obligor group consists of the parent company guarantor, subsidiary issuer, and subsidiary guarantors for the applicable senior notes. The summarized financial information is presented after elimination of (i) intercompany transactions and balances among the guarantors and issuers and (ii) equity in earnings from and investments in any subsidiary that is a non-guarantor or issuer.

The summarized results of operations information for the fiscal year ended April 29, 2022 was as follows:

(in millions)	Medtronic & Medtronic Luxco Senior Notes [1]	CIFSA Senior Notes [2]
Net sales	$2,063	$ –
Operating profit	469	(5)
Loss before income taxes	(518)	(974)
Net loss attributable to Medtronic	(529)	(1,005)

The summarized balance sheet information for the fiscal year ended April 29, 2022 was as follows:

(in millions)	Medtronic & Medtronic Luxco Senior Notes [1]	CIFSA Senior Notes [2]
Total current assets[3]	$20,767	$ 6,881
Total noncurrent assets[4]	12,099	8,293
Total current liabilities[5]	32,647	24,302
Total noncurrent liabilities[6]	50,542	60,292
Noncontrolling interests	171	171

(1) The Medtronic Senior Notes and Medtronic Luxco Senior Notes obligor group consists of the following entities: Medtronic plc, Medtronic Luxco, and Medtronic, Inc. Refer to the guarantee summary above for further details.
(2) The CIFSA Senior Notes obligor group consists of the following entities: Medtronic plc, Medtronic Luxco, CIFSA, and CIFSA Subsidiary Guarantors. Please refer to the guarantee summary above for further details.
(3) Includes receivables due from non-guarantor subsidiaries of $20.2 billion and $6.9 billion for Medtronic & Medtronic Luxco Senior Notes, and CIFSA Senior Notes, respectively.
(4) Includes loans receivable due from non-guarantor subsidiaries of $6.5 billion and $8.3 billion for Medtronic & Medtronic Luxco Senior Notes, and CIFSA Senior Notes, respectively.
(5) Includes payables due to non-guarantor subsidiaries of $26.4 billion and $20.2 billion for Medtronic & Medtronic Luxco Senior Notes, and CIFSA Senior Notes, respectively.
(6) Includes loans payable due to non-guarantor subsidiaries of $29.0 billion and $46.4 billion for Medtronic & Medtronic Luxco Senior Notes, and CIFSA Senior Notes, respectively.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

CURRENCY EXCHANGE RATE RISK

Due to the global nature of our operations, we are exposed to currency exchange rate changes, which may cause fluctuations in earnings and cash flows. Fluctuations in the currency exchange rates of currency exposures that are unhedged, such as in certain emerging markets, may result in future earnings and cash flow volatility. The gross notional amount of all currency exchange rate derivative instruments outstanding at April 29, 2022 and April 30, 2021 was $13.8 billion and $14.7 billion, respectively. At April 29, 2022, these contracts were in a net unrealized gain position of $586 million. Additional information regarding our currency exchange rate derivative instruments is included in Note 7 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

A sensitivity analysis of changes in the fair value of all currency exchange rate derivative contracts at April 29, 2022 and April 30, 2021 indicates that, if the U.S. dollar uniformly strengthened/weakened by 10 percent against all currencies, it would have the following impact on the fair value of these contracts:

	Increase (decrease)	
(in millions)	**April 29, 2022**	**April 30, 2021**
10% appreciation in the U.S. dollar	$ 903	$ 995
10% depreciation in the U.S. dollar	(903)	(995)

Any gains and losses on the fair value of derivative contracts would generally be offset by gains and losses on the underlying transactions. These offsetting gains and losses are not reflected in the above analysis.

INTEREST RATE RISK

We are subject to interest rate risk on our short-term investments and our borrowings. We manage interest rate risk in the aggregate, while focusing on our immediate and intermediate liquidity needs. Our debt portfolio at April 29, 2022 was comprised of debt predominantly denominated in U.S. dollars and Euros, of which substantially all is fixed rate debt. We are also exposed to interest rate changes affecting our investments in interest rate sensitive instruments, which include our marketable debt securities.

A sensitivity analysis of the impact on our interest rate-sensitive financial instruments of a hypothetical 10 basis point change in interest rates, as compared to interest rates at April 29, 2022 and April 30, 2021, would have the following impact on the fair value of these instruments:

	Increase (decrease)	
(in millions)	**April 29, 2022**	**April 30, 2021**
10 basis point increase in interest rates	$ 53	$ 21
10 basis point decrease in interest rates	(53)	(21)

For a discussion of current market conditions and the impact on our financial condition and results of operations, see the "Liquidity" section of the Management's Discussion and Analysis in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report on Form 10-K. For additional discussion of market risk, see Notes 5 and 7 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Item 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Medtronic plc

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Medtronic plc and its subsidiaries (the "Company") as of April 29, 2022 and April 30, 2021, and the related consolidated statements of income, of comprehensive income, of equity and of cash flows for each of the three years in the period ended April 29, 2022, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended April 29, 2022 appearing under Item 15(a)(1) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of April 29, 2022, based on criteria established in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of April 29, 2022 and April 30, 2021, and the results of its operations and its cash flows for each of the three years in the period ended April 29, 2022 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 April 29, 2022, based on criteria established in *Internal Control—Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in fiscal year 2020.

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

Income Tax Reserve for the Uncertain Tax Position Related to Puerto Rico Manufacturing

As described in Notes 13 and 18 to the consolidated financial statements, management records reserves for uncertain tax positions related to unresolved matters with the Internal Revenue Service (IRS) and other taxing authorities. A remaining unresolved issue with the IRS, relates to the allocation of income between Medtronic, Inc. and its wholly-owned subsidiary operating in Puerto Rico, which is one of the Company's manufacturing sites. These reserves are subject to a high degree of estimation and management judgment. Total reserves relating to uncertain tax positions as of April 29, 2022 were $1.661 billion, of which the Puerto Rico manufacturing reserve makes up a significant portion.

The principal considerations for our determination that performing procedures relating to the income tax reserve for the uncertain tax position related to Puerto Rico manufacturing is a critical audit matter are the significant judgment by management when determining the reserve, including a high degree of estimation uncertainty relative to the unresolved issue with the IRS involving one of the Company's manufacturing sites. This in turn led to a high degree of auditor judgment, effort, and subjectivity in performing procedures and evaluating audit evidence to support management's accurate measurement of the income tax reserve for the uncertain tax position related to Puerto Rico manufacturing, as the nature of the evidence is often highly subjective.

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 recognition of the income tax reserves for uncertain tax positions, as well as controls over measurement of the reserves. These procedures also included, among others (i) testing management's process for determining the reserve for the uncertain tax position, (ii) evaluating the status and results of the related U. S. Tax Court case, and (iii) evaluating the consistency of the reserve calculation with the relevant documents related to the tax court case.

/s/ PricewaterhouseCoopers LLP

Minneapolis, Minnesota
June 23, 2022

We have served as the Company's auditor since 1963.

Medtronic plc
Consolidated Statements of Income

(in millions, except per share data)	Fiscal Year 2022	2021	2020
Net sales	$ 31,686	$ 30,117	$ 28,913
Costs and expenses:			
Cost of products sold, excluding amortization of intangible assets	10,145	10,483	9,424
Research and development expense	2,746	2,493	2,331
Selling, general, and administrative expense	10,292	10,148	10,109
Amortization of intangible assets	1,733	1,783	1,756
Restructuring charges, net	60	293	118
Certain litigation charges	95	118	313
Other operating expense, net	862	315	71
Operating profit	5,752	4,484	4,791
Other non-operating income, net	(318)	(336)	(356)
Interest expense	553	925	1,092
Income before income taxes	5,517	3,895	4,055
Income tax provision (benefit)	456	265	(751)
Net income	5,062	3,630	4,806
Net income attributable to noncontrolling interests	(22)	(24)	(17)
Net income attributable to Medtronic	$ 5,039	$ 3,606	$ 4,789
Basic earnings per share	$ 3.75	$ 2.68	$ 3.57
Diluted earnings per share	$ 3.73	$ 2.66	$ 3.54
Basic weighted average shares outstanding	1,342.4	1,344.9	1,340.7
Diluted weighted average shares outstanding	1,351.4	1,354.0	1,351.1

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

Medtronic plc
Consolidated Statements of Comprehensive Income

(in millions)	Fiscal Year 2022	2021	2020
Net income	$ 5,062	$ 3,630	$ 4,806
Other comprehensive income (loss), net of tax:			
Unrealized (loss) gain on investment securities	(301)	92	45
Translation adjustment	(2,086)	1,699	(829)
Net investment hedge	2,299	(1,694)	405
Net change in retirement obligations	574	505	(544)
Unrealized (loss) gain on cash flow hedges	727	(519)	72
Other comprehensive income (loss)	1,213	83	(851)
Comprehensive income including noncontrolling interests	6,274	3,713	3,955
Comprehensive income attributable to noncontrolling interests	(16)	(32)	(15)
Comprehensive income attributable to Medtronic	$ 6,258	$ 3,681	$ 3,940

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

Medtronic plc
Consolidated Balance Sheets

(in millions)	April 29, 2022	April 30, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 3,714	$ 3,593
Investments	6,859	7,224
Accounts receivable, less allowances and credit losses of $230 and $241, respectively	5,551	5,462
Inventories, net	4,616	4,313
Other current assets	2,318	1,955
Total current assets	**23,059**	**22,548**
Property, plant, and equipment, net	5,413	5,221
Goodwill	40,502	41,961
Other intangible assets, net	15,595	17,740
Tax assets	3,403	3,169
Other assets	3,008	2,443
Total assets	**$ 90,981**	**$ 93,083**
LIABILITIES AND EQUITY		
Current liabilities:		
Current debt obligations	$ 3,742	$ 11
Accounts payable	2,276	2,106
Accrued compensation	2,121	2,482
Accrued income taxes	704	435
Other accrued expenses	3,551	3,475
Total current liabilities	**12,394**	**8,509**
Long-term debt	20,372	26,378
Accrued compensation and retirement benefits	1,113	1,557
Accrued income taxes	2,087	2,251
Deferred tax liabilities	884	1,028
Other liabilities	1,410	1,756
Total liabilities	**38,260**	**41,481**
Commitments and contingencies (Notes 3, 16, and 18)		
Shareholders' equity:		
Ordinary shares – par value $0.0001, 2.6 billion shares authorized, 1,330,743,395 and 1,345,400,671 shares issued and outstanding, respectively	–	–
Additional paid-in capital	24,566	26,319
Retained earnings	30,250	28,594
Accumulated other comprehensive loss	(2,265)	(3,485)
Total shareholders' equity	**52,551**	**51,428**
Noncontrolling interests	171	174
Total equity	**52,722**	**51,602**
Total liabilities and equity	**$ 90,981**	**$ 93,083**

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

Medtronic plc
Consolidated Statements of Equity

(in millions, except per share data)	Ordinary Shares Number	Ordinary Shares Par Value	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity	Noncontrolling Interests	Total Equity
April 26, 2019	**1,341**	**$ –**	**$ 26,532**	**$ 26,270**	**$ (2,711)**	**$ 50,091**	**$ 121**	**$50,212**
Net income	–	–	–	4,789	–	4,789	17	4,806
Other comprehensive loss	–	–	–	–	(849)	(849)	(2)	(851)
Dividends to shareholders ($2.16 per ordinary share)	–	–	–	(2,894)	–	(2,894)	–	(2,894)
Issuance of shares under stock purchase and award plans	12	–	564	–	–	564	–	564
Repurchase of ordinary shares	(12)	–	(1,228)	–	–	(1,228)	–	(1,228)
Stock-based compensation	–	–	297	–	–	297	–	297
Changes to noncontrolling ownership interests	–	–	–	–	–	–	(1)	(1)
Cumulative effect of change in accounting principle[1]	–	–	–	(33)	–	(33)	–	(33)
April 24, 2020	**1,341**	**$ –**	**$ 26,165**	**$ 28,132**	**$ (3,560)**	**$ 50,737**	**$ 135**	**$50,872**
Net income	–	–	–	3,606	–	3,606	24	3,630
Other comprehensive income	–	–	–	–	75	75	8	83
Dividends to shareholders ($2.32 per ordinary share)	–	–	–	(3,120)	–	(3,120)	–	(3,120)
Issuance of shares under stock purchase and award plans	8	–	382	–	–	382	–	382
Repurchase of ordinary shares	(4)	–	(559)	–	–	(559)	–	(559)
Stock-based compensation	–	–	344	–	–	344	–	344
Changes to noncontrolling ownership interests	–	–	(13)	–	–	(13)	7	(6)
Cumulative effect of change in accounting principle[1]	–	–	–	(24)	–	(24)	–	(24)
April 30, 2021	**1,345**	**$ –**	**$ 26,319**	**$ 28,594**	**$ (3,485)**	**$ 51,428**	**$ 174**	**$51,602**
Net income	–	–	–	5,039	–	5,039	22	5,062
Other comprehensive income	–	–	–	–	1,219	1,219	(6)	1,213
Dividends to shareholders ($2.52 per ordinary share)	–	–	–	(3,383)	–	(3,383)	–	(3,383)
Issuance of shares under stock purchase and award plans	7	–	329	–	–	329	–	329
Repurchase of ordinary shares	(21)	–	(2,442)	–	–	(2,442)	–	(2,442)
Stock-based compensation	–	–	359	–	–	359	–	359
Changes to noncontrolling ownership interests	–	–	1	–	–	1	(19)	(18)
April 29, 2022	**1,331**	**$ –**	**$ 24,566**	**$ 30,250**	**$ (2,265)**	**$ 52,551**	**$ 171**	**$52,722**

(1) See Note 1 to the consolidated financial statements for discussion regarding the adoption of accounting standards during fiscal year 2021 and fiscal year 2020.

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

Medtronic plc
Consolidated Statements of Cash Flows

(in millions)	Fiscal Year 2022	2021	2020
Operating Activities:			
Net income	$ 5,062	$ 3,630	$ 4,806
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	2,707	2,702	2,663
Provision for credit losses	58	128	99
Deferred income taxes	(604)	(422)	(1,315)
Stock-based compensation	359	344	297
Loss on debt extinguishment	–	308	406
Asset impairment charges	515	–	–
Other, net	138	251	217
Change in operating assets and liabilities, net of acquisitions and divestitures:			
Accounts receivable, net	(477)	(761)	1,291
Inventories, net	(560)	78	(577)
Accounts payable and accrued liabilities	213	531	(44)
Other operating assets and liabilities	(65)	(549)	(609)
Net cash provided by operating activities	**7,346**	**6,240**	**7,234**
Investing Activities:			
Acquisitions, net of cash acquired	(91)	(994)	(488)
Additions to property, plant, and equipment	(1,368)	(1,355)	(1,213)
Purchases of investments	(9,882)	(11,808)	(11,039)
Sales and maturities of investments	9,692	11,345	9,574
Other investing activities, net	(10)	(54)	(37)
Net cash used in investing activities	(1,659)	(2,866)	(3,203)
Financing Activities:			
Change in current debt obligations, net	–	(311)	(17)
Proceeds from short-term borrowings (maturities greater than 90 days)	–	2,789	–
Repayments from short-term borrowings (maturities greater than 90 days)	–	(2,853)	–
Issuance of long-term debt	–	7,172	5,568
Payments on long-term debt	(1)	(7,367)	(6,110)
Dividends to shareholders	(3,383)	(3,120)	(2,894)
Issuance of ordinary shares	429	474	662
Repurchase of ordinary shares	(2,544)	(652)	(1,326)
Other financing activities	163	(268)	(81)
Net cash used in financing activities	(5,336)	(4,136)	(4,198)
Effect of exchange rate changes on cash and cash equivalents	(231)	215	(86)
Net change in cash and cash equivalents	121	(547)	(253)
Cash and cash equivalents at beginning of period	3,593	4,140	4,393
Cash and cash equivalents at end of period	$ 3,714	$ 3,593	$ 4,140
Supplemental Cash Flow Information			
Cash paid for:			
Income taxes	$ 996	$ 1,250	$ 878
Interest	540	582	643

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

Medtronic plc
Notes to Consolidated Financial Statements

1. Summary of Significant Accounting Policies

Nature of Operations

Medtronic plc (Medtronic or the Company) is the leading global healthcare technology company – alleviating pain, restoring health, and extending life for millions of people around the world. The Company provides innovative products and therapies to serve healthcare systems, physicians, clinicians, and patients. Medtronic was founded in 1949 and is headquartered in Dublin, Ireland.

Principles of Consolidation

The consolidated financial statements include the accounts of Medtronic plc, its wholly-owned subsidiaries, entities for which the Company has a controlling financial interest, and variable interest entities for which the Company is the primary beneficiary. Intercompany transactions and balances have been fully eliminated in consolidation. Certain reclassifications have been made to prior year financial statements to conform to classifications used in the current year. Amounts reported in millions within this annual report are computed based on the amounts in thousands, and therefore, the sum of the components may not equal the total amount reported in millions due to rounding. Additionally, certain columns and rows within tables may not sum due to rounding.

Use of Estimates

The preparation of the consolidated financial statements in conformity with accounting principles generally accepted in the United States (U.S.) (U.S. GAAP) requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Estimates are used when accounting for items such as income taxes, contingencies, intangible asset, and liability valuations. Actual results may or may not differ from those estimates.

COVID-19 has had, and may continue to have, an adverse effect on our business, results of operations, financial condition, and cash flows, and its future impacts remain uncertain and unpredictable. The Company has considered the disruptions caused by COVID-19 and has assessed the potential impact on certain accounting estimates including, but not limited to, the allowance for doubtful accounts, inventory reserves, return reserves, the valuation of goodwill, intangible assets, other long-lived assets, investments and contingent consideration, as of April 29, 2022 and through the date of this report. There was not a material impact to accounting estimates associated with the Company's consolidated financial statements as of and for each of the three fiscal years ended April 29, 2022, April 30, 2021, and April 24, 2020.

Fiscal Year-End

The Company utilizes a 52/53-week fiscal year, ending the last Friday in April, for the presentation of its consolidated financial statements and related notes thereto at April 29, 2022 and April 30, 2021 and for each of the three fiscal years ended April 29, 2022 (fiscal year 2022), April 30, 2021 (fiscal year 2021), and April 24, 2020 (fiscal year 2020). Fiscal year 2021 was a 53-week year, with the extra week having occurred in the first fiscal month of the first quarter.

Cash Equivalents

The Company considers highly liquid investments with maturities of three months or less from the date of purchase to be cash equivalents. These investments are carried at cost, which approximates fair value.

Investments

The Company invests in marketable debt and equity securities, investments that do not have readily determinable fair values, and investments accounted for under the equity method.

Marketable debt securities are classified and accounted for as available-for-sale. These investments are recorded at fair value in the consolidated balance sheets. The change in fair value for available-for-sale securities is recorded, net of taxes, as a component of *accumulated other comprehensive loss* on the consolidated balance sheets. The Company determines the appropriate classification of its investments in marketable debt securities at the time of purchase and reevaluates such determinations at each balance sheet date. The classification of marketable debt securities as current or long-term is based on the nature of the securities and the availability for use in current operations consistent with the Company's management of its capital structure and liquidity.

Certain of the Company's investments in marketable equity securities and other securities are long-term, strategic investments in companies that are in various stages of development and are included in *other assets* on the consolidated balance sheets. Marketable equity securities are recorded at fair value in the consolidated balance

sheets. The change in fair value of marketable equity securities is recognized within *other non-operating income, net* in the consolidated statements of income. At each reporting period, the Company makes a qualitative assessment considering impairment indicators to evaluate whether the investment is impaired. Equity securities accounted for under the equity method are initially recorded at the amount of the Company's investment and are adjusted each period for the Company's share of the investee's income or loss and dividends paid. Securities accounted for under the equity method are reviewed quarterly for changes in circumstance or the occurrence of events that suggest other than temporary impairment has occurred.

Accounts Receivable and Allowance for Doubtful Accounts and Credit Losses

The Company grants credit to customers in the normal course of business and maintains an allowance for doubtful accounts for potential credit losses. When evaluating allowances for doubtful accounts, the Company considers various factors, including historical experience and customer-specific information. Uncollectible accounts are written-off against the allowance when it is deemed that a customer account is uncollectible.

Inventories

Inventories are stated at the lower of cost or net realizable value, with cost determined on a first-in, first-out basis. The Company reduces the carrying value of inventories for items that are potentially excess, obsolete, or slow-moving based on changes in customer demand, technology developments, or other economic factors.

Property, Plant, and Equipment

Property, plant, and equipment is stated at cost and depreciated over the useful lives of the assets using the straight-line method. Additions and improvements that extend the lives of the assets are capitalized, while expenditures for repairs and maintenance are expensed as incurred. The Company assesses property, plant, and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of property, plant, and equipment asset groupings may not be recoverable. The cost of interest that is incurred in connection with significant ongoing construction projects is capitalized using a weighted average interest rate. These costs are included in property, plant, and equipment and amortized over the useful life of the related asset. Upon retirement or disposal of property, plant, and equipment, the costs and related amounts of accumulated depreciation or amortization are eliminated from the asset and accumulated depreciation accounts. The difference, if any, between the net asset value and the proceeds, is recognized in earnings.

Goodwill and Intangible Assets

Goodwill is the excess of the purchase price over the estimated fair value of net assets of acquired businesses. The Company assesses goodwill for impairment annually in the third quarter of the fiscal year and whenever an event occurs or circumstances change that would indicate the carrying amount may be impaired. Impairment testing for goodwill is performed at a reporting unit level. The test for impairment of goodwill requires the Company to make several estimates related to projected future cash flows to determine the fair value of the goodwill reporting units. The Company calculates the excess of each reporting unit's fair value over its carrying amount, including goodwill, utilizing a discounted cash flow analysis. Internal operational budgets and long-range strategic plans are used as a basis for the cash flow analysis. The Company also utilizes assumptions for working capital, capital expenditures, and terminal growth rates. The discount rate applied to the cash flow analysis is based on the weighted average cost of capital ("WACC") for each reporting unit. An impairment is recognized when the carrying amount of the reporting unit's net assets exceeds the estimated fair value of the reporting unit.

Intangible assets include patents, trademarks, tradenames, customer relationships, purchased technology, and in-process research and development (IPR&D). Intangible assets with a definite life are amortized on a straight-line basis with estimated useful lives typically ranging from three to 20 years. Amortization is recognized within *amortization of intangible assets* in the consolidated statements of income. Intangible assets with a definite life are tested for impairment whenever events or changes in circumstances indicate that the carrying amount of an intangible asset (asset group) may not be recoverable. When events or changes in circumstances indicate that the carrying amount of an intangible asset may not be recoverable, the Company calculates the excess of an intangible asset's carrying value over its undiscounted future cash flows. If the carrying value is not recoverable, an impairment is recognized based on the amount by which the carrying value exceeds the fair value. The fair value of an intangible asset (asset group) is estimated by utilizing a discounted cash flow analysis.

Acquired IPR&D represents the fair value assigned to those research and development projects that were acquired in a business combination for which the related products have not received regulatory approval and have no alternative future use. IPR&D is capitalized at its fair value as an indefinite-lived intangible asset, and any development costs incurred after the acquisition are expensed as incurred. The fair value of IPR&D is determined by estimating the future cash flows of each project and discounting the net cash flows back to their present values. Upon achieving regulatory approval or commercial viability for the related product, the indefinite-lived intangible asset is accounted for as a definite-lived asset and is amortized on a straight-line basis over the estimated useful life. If the project is not completed or is terminated or abandoned,

the Company may have an impairment related to the IPR&D, which is charged to expense. Indefinite-lived intangible assets are tested for impairment annually in the third quarter of the fiscal year and whenever events or changes in circumstances indicate that the carrying amount may be impaired. Impairment is calculated as the excess of the asset's carrying value over its fair value. Fair value is generally determined using a discounted future cash flow analysis. IPR&D with no alternative future use acquired outside of a business combination is expensed immediately.

Contingent Consideration

Certain of the Company's business combinations involve potential payment of future consideration that is contingent upon the achievement of certain product development milestones and/or contingent on the acquired business reaching certain performance milestones. The Company records contingent consideration at fair value at the date of acquisition based on the consideration expected to be transferred, estimated as the probability-weighted future cash flows, discounted back to present value. The fair value of contingent consideration is measured using projected payment dates, discount rates, probabilities of payment, and projected revenues (for revenue-based considerations). Projected revenues are based on the Company's most recent internal operational budgets and long-range strategic plans. The discount rate used is determined at the time of measurement in accordance with accepted valuation methodologies. Changes in projected revenues, probabilities of payment, discount rates, and projected payment dates may result in adjustments to the fair value measurements. Contingent consideration is remeasured each reporting period using Level 3 inputs, and the change in fair value, including accretion for the passage of time, is recognized as income or expense within *other operating expense, net* in the consolidated statements of income. Contingent consideration payments made soon after the acquisition date are classified as investing activities in the consolidated statements of cash flows. Contingent consideration payments not made soon after the acquisition date that are related to the acquisition date fair value are reported as financing activities in the consolidated statements of cash flows, and amounts paid in excess of the original acquisition date fair value are reported as operating activities in the consolidated statements of cash flows.

Self-Insurance

The Company self-insures the majority of its insurable risks, including medical and dental costs, disability coverage, physical loss to property, business interruptions, workers' compensation, comprehensive general, and product liability. Insurance coverage is obtained for risks required to be insured by law or contract. The Company uses claims data and historical experience, as applicable, to estimate liabilities associated with the exposures that the Company has self-insured.

Retirement Benefit Plan Assumptions

The Company sponsors various retirement benefit plans, including defined benefit pension plans, post-retirement medical plans, defined contribution savings plans, and termination indemnity plans, covering substantially all U.S. employees and many employees outside the U.S. See Note 15 for assumptions used in determining pension and post-retirement benefit costs and liabilities.

Derivatives

The Company recognizes all derivative financial instruments in its consolidated financial statements at fair value in accordance with authoritative guidance on derivatives and hedging, and presents assets and liabilities associated with derivative financial instruments on a gross basis in the consolidated financial statements. For derivative instruments that are designated and qualify as hedging instruments, the hedging instrument must be designated as a fair value hedge or a cash flow hedge, based upon the exposure being hedged. See Note 7 for more information on the Company's derivative instruments and hedging programs.

Fair Value Measurements

The Company follows the authoritative guidance on fair value measurements and disclosures with respect to assets and liabilities that are measured at fair value on both a recurring and nonrecurring basis. Fair value is defined as the exit price, or the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date. The authoritative guidance also establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use in valuing the asset or liability, based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the factors market participants would use in valuing the asset or liability developed based upon the best information available in the circumstances. The categorization of financial assets and financial liabilities within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The hierarchy is broken down into three levels defined as follows:

- Level 1 - Inputs are quoted prices in active markets for identical assets or liabilities.
- Level 2 - Inputs include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and inputs (other than quoted prices) that are observable for the asset or liability, either directly or indirectly.
- Level 3 - Inputs are unobservable for the asset or liability.

Financial assets that are classified as Level 1 securities include highly liquid government bonds within U.S. government and agency securities and marketable equity securities for which quoted market prices are available. In addition, the Company classifies currency forward contracts as Level 1 since they are valued using quoted market prices in active markets which have identical assets or liabilities.

The valuation for most fixed maturity securities are classified as Level 2. Financial assets that are classified as Level 2 include corporate debt securities, government and agency securities, other asset-backed securities, certificate of deposits, debt funds, and mortgage-backed securities whose value is determined using inputs that are observable in the market or may be derived principally from, or corroborated by, observable market data such as pricing for similar securities, recently executed transactions, cash flow models with yield curves, and benchmark securities. In addition, total return swaps are included in Level 2 as the Company uses inputs other than quoted prices that are observable for the asset. The Level 2 derivative instruments are primarily valued using standard calculations and models that use readily observable market data as their basis.

Financial assets are considered Level 3 when their fair values are determined using pricing models, discounted cash flow methodologies, or similar techniques, and at least one significant model assumption or input is unobservable. Financial assets that are classified as Level 3 include certain investment securities for which there is limited market activity such that the determination of fair value requires significant judgment or estimation, and auction rate securities. With the exception of auction rate securities, these securities are valued using third-party pricing sources that incorporate transaction details such as contractual terms, maturity, timing, and amount of expected future cash flows, as well as assumptions about liquidity and credit valuation adjustments by market participants. The fair value of auction rate securities is estimated by the Company using a discounted cash flow model, which incorporates significant unobservable inputs. The significant unobservable inputs used in the fair value measurement of the Company's auction rate securities are years to principal recovery and the illiquidity premium that is incorporated into the discount rate. For goodwill, other intangible assets, and IPR&D, inputs used in the fair value analysis fall within Level 3 of the fair value hierarchy due to the use of significant unobservable inputs to determine fair value.

Certain investments for which the fair value is measured using the net asset value per share (or its equivalent) practical expedient are excluded from the fair value hierarchy. Financial assets for which the fair value is measured using the net asset value per share practical expedient include certain debt funds, equity and fixed income commingled trusts, and registered investment companies.

Revenue Recognition

The Company sells its products through direct sales representatives and independent distributors. Additionally, a portion of the Company's revenue is generated from consignment inventory maintained at hospitals. The Company recognizes revenue when control is transferred to the customer. For products sold through direct sales representatives and independent distributors, control is transferred upon shipment or upon delivery, based on the contract terms and legal requirements. For consignment inventory, control is transferred when the product is used or implanted. Payment terms vary depending on the country of sale, type of customer, and type of product.

If a contract contains more than one performance obligation, the transaction price is allocated to each performance obligation based on relative standalone selling price. Shipping and handling is treated as a fulfillment activity rather than a promised service, and therefore, is not considered a performance obligation. Taxes assessed by a governmental authority that are both imposed on, and concurrent with, a specific revenue producing transaction and collected by the Company from customers (for example, sales, use, value added, and some excise taxes) are not included in revenue. For contracts that have an original duration of one year or less, the Company uses the practical expedient applicable to such contracts and does not adjust the transaction price for the time value of money.

The amount of revenue recognized reflects sales rebates and returns, which are estimated based on sales terms, historical experience, and trend analysis. In estimating rebates, the Company considers the lag time between the point of sale and the payment of the rebate claim, the stated rebate rates, and other relevant information. The Company records adjustments to rebates and returns reserves as increases or decreases of revenue.

The Company records a deferred revenue liability if a customer pays consideration before the Company transfers a good or service to the customer. Deferred revenue primarily represents remote monitoring services and equipment maintenance, for which consideration is received at the same time as consideration for the device or equipment. Revenue related to remote monitoring services and equipment maintenance is recognized over the service period as time elapses.

Shipping and Handling

Shipping and handling costs incurred to physically move product from the Company's premises to the customer's premises are recognized in *selling, general, and administrative expense* in the consolidated statements of income and were $354 million, $308 million, and $347 million in fiscal years 2022, 2021, and 2020, respectively. Other shipping and handling costs incurred to store, move, and prepare products for shipment are recognized in *cost of products sold* in the consolidated statements of income.

Research and Development

Research and development costs are expensed when incurred. Research and development costs include costs of research, engineering, and technical activities to develop a new product or service or make significant improvement to an existing product or manufacturing process. Research and development costs also include pre-approval regulatory and clinical trial expenses.

Contingencies

The Company records a liability in the consolidated financial statements for loss contingencies when a loss is known or considered probable, and the amount may 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. If a loss is reasonably possible but not known or probable, and may be reasonably estimated, the estimated loss or range of loss is disclosed.

Income Taxes

The Company has deferred taxes that arise as a result of the different treatment of transactions for U.S. GAAP and income tax accounting, known as temporary differences. The Company records the tax effect of these temporary differences as deferred tax assets and deferred tax liabilities. Deferred tax assets generally represent items that may be used as a tax deduction or credit in a tax return in future years for which the Company has already recognized the tax benefit in the consolidated statements of income. The Company establishes valuation allowances for deferred tax assets when the amount of expected future taxable income is not likely to support the use of the deduction or credit. Deferred tax liabilities generally represent tax expense for which payment has been deferred or expense has already been taken as a deduction on the Company's tax return but has not yet been recognized as an expense in the consolidated statements of income. See Footnote 13 for more information on the Company's uncertain tax positions and tax policies.

Other Operating Expense, Net

Other operating expense, net primarily includes royalty income and expense, currency remeasurement and derivative gains and losses, Puerto Rico excise taxes, changes in fair value of contingent consideration, changes in amounts accrued for certain contingent liabilities for a past acquisition, charges related to the June 2021 decision to stop the distribution and sale of Medtronic's HVAD System within the Mechanical Circulatory Support Operating Unit (MCS) (MCS charges), impairment charges, and income from funded research and development arrangements.

Other Non-Operating Income, Net

Other non-operating income, net includes the non-service component of net periodic pension and post-retirement benefit cost, investment gains and losses, and interest income.

Currency Translation

Assets and liabilities of non-U.S. dollar functional currency entities are translated to U.S. dollars at period-end exchange rates, and the currency impacts arising from the translation of the assets and liabilities are recorded as a cumulative translation adjustment, a component of *accumulated other comprehensive loss,* on the consolidated balance sheets. Elements of the consolidated statements of income are translated at the average monthly currency exchange rates in effect during the period. Currency transaction gains and losses are included in *other operating expense, net* in the consolidated statements of income.

Stock-Based Compensation

The Company measures stock-based compensation expense at the grant date based on the fair value of the award and recognizes the compensation expense over the requisite service period, which is generally the vesting period. The amount of stock-based compensation expense recognized during a period is based on the portion of the awards that are expected to vest. The Company estimates pre-vesting forfeitures at the time of grant and revises the estimates in subsequent periods.

Recently Adopted Accounting Standards

Current Expected Credit Losses

In June 2016, the Financial Accounting Standards Board (FASB) issued guidance changing the methodology to be used to measure credit losses for certain financial instruments and financial assets, including trade receivables. The new methodology requires the recognition of an allowance that reflects the current estimate of credit losses expected to be incurred over the life of the financial asset. The Company adopted this guidance using the modified retrospective method in the first quarter of fiscal year 2021. The adoption of this guidance did not have a material impact to the Company's consolidated financial statements.

Leases

In February 2016, the FASB issued guidance which requires lessees to recognize right-of-use assets and lease liabilities on the balance sheet. This guidance also requires additional qualitative and quantitative lease related disclosures in the notes to the consolidated financial statements. The Company adopted this guidance using the modified retrospective method in the first quarter of fiscal year 2020.

During the implementation, the Company elected the package of practical expedients available under the transition guidance that allowed an entity not to reassess whether any expired or existing contracts are or contain leases, the classification for any expired or existing leases or any initial direct costs for existing leases. Further, the Company made accounting policy elections to not apply the recognition requirements to short-term leases and to account for lease and nonlease components as a single lease component.

The adoption of this guidance resulted in the recognition of right-of-use assets and lease liabilities in an amount of approximately $1.0 billion, an immaterial cumulative-effect adjustment to retained earnings as of April 27, 2019, and expansion of lease related disclosures. The adoption of this guidance did not have a material impact on the Company's consolidated statements of income or consolidated statements of cash flows.

2. Revenue

The Company's revenues are principally derived from device-based medical therapies and services related to cardiac rhythm disorders, cardiovascular disease, renal disease, neurological disorders and diseases, spinal conditions and musculoskeletal trauma, chronic pain, urological and digestive disorders, ear, nose, and throat conditions, and diabetes conditions as well as advanced and general surgical care products, respiratory and monitoring solutions, and neurological surgery technologies. The Company's primary customers include healthcare systems, clinics, third-party healthcare providers, distributors, and other institutions, including governmental healthcare programs and group purchasing organizations.

The table below illustrates net sales by segment and division for fiscal years 2022, 2021, and 2020:

(in millions)	Net Sales by Fiscal Year 2022	2021	2020
Cardiac Rhythm & Heart Failure	$ 5,908	$ 5,584	$ 5,141
Structural Heart & Aortic	3,055	2,834	2,842
Coronary & Peripheral Vascular	2,460	2,354	2,486
Cardiovascular	11,423	10,772	10,468
Surgical Innovations	6,060	5,438	5,513
Respiratory, Gastrointestinal, & Renal	3,081	3,298	2,839
Medical Surgical	9,141	8,737	8,352
Cranial & Spinal Technologies	4,456	4,288	4,082
Specialty Therapies	2,592	2,307	2,147
Neuromodulation	1,735	1,601	1,497
Neuroscience	8,784	8,195	7,725
Diabetes	2,338	2,413	2,368
Total	**$ 31,686**	**$ 30,117**	**$ 28,913**

The table below includes net sales by market geography and segment for fiscal years 2022, 2021, and 2020:

	U.S.[1]			Non-U.S. Developed Markets[2]			Emerging Markets[3]		
(in millions)	Fiscal Year 2022	Fiscal Year 2021	Fiscal Year 2020	Fiscal Year 2022	Fiscal Year 2021	Fiscal Year 2020	Fiscal Year 2022	Fiscal Year 2021	Fiscal Year 2020
Cardiovascular	$ 5,545	$ 5,248	$ 5,062	$ 3,866	$ 3,752	$ 3,519	$ 2,012	$ 1,773	$ 1,887
Medical Surgical	3,862	3,650	3,532	3,373	3,320	3,169	1,905	1,766	1,651
Neuroscience	5,753	5,456	5,122	1,801	1,724	1,659	1,229	1,015	945
Diabetes	974	1,171	1,204	1,085	1,019	940	279	222	224
Total	**$ 16,135**	**$ 15,526**	**$ 14,919**	**$ 10,126**	**$ 9,815**	**$ 9,287**	**$ 5,426**	**$ 4,777**	**$ 4,707**

(1) U.S. includes the United States and U.S. territories.

(2) Non-U.S. developed markets include Japan, Australia, New Zealand, Korea, Canada, and the countries of Western Europe.

(3) Emerging markets include the countries of the Middle East, Africa, Latin America, Eastern Europe, and the countries of Asia that are not included in the non-U.S. developed markets, as defined above.

At April 29, 2022, $981 million of rebates were classified as *other accrued expenses,* and $548 million of rebates were classified as a reduction of *accounts receivable* in the consolidated balance sheet. At April 30, 2021, $906 million of rebates were classified as *other accrued expenses,* and $485 million of rebates were classified as a reduction of *accounts receivable* in the consolidated balance sheet. During fiscal year 2022, adjustments to rebate and return reserves recognized in revenue that were included in the rebate and return reserves at the beginning of the period were not material.

Deferred Revenue and Remaining Performance Obligations

Deferred revenue at April 29, 2022 and April 30, 2021 was $399 million and $368 million, respectively. At April 29, 2022 and April 30, 2021, $305 million and $276 million was included in *other accrued expenses*, respectively, and $94 million and $93 million was included in *other liabilities*, respectively. During the fiscal year ended April 29, 2022, the Company recognized $243 million of revenue that was included in deferred revenue as of April 30, 2021.

Remaining performance obligations include goods and services that have not yet been delivered or provided under existing, noncancellable contracts with minimum purchase commitments. At April 29, 2022, the estimated revenue expected to be recognized in future periods related to unsatisfied performance obligations for executed contracts with an original duration of one year or more was approximately $925 million. The Company expects to recognize revenue on the majority of these remaining performance obligations over the next three years.

3. Acquisitions

The Company had acquisitions during fiscal years 2022 and 2021 that were accounted for as business combinations. The assets and liabilities of businesses acquired were recorded and consolidated on the acquisition date at their respective fair values. Goodwill resulting from business combinations is largely attributable to future yet to be defined technologies, new customer relationships, existing workforce of the acquired businesses, and synergies expected to arise after the Company's acquisition of these businesses. The pro forma impact of acquisitions during fiscal years 2022 and 2021 was not significant, either individually or in the aggregate, to the consolidated results of the Company. The results of operations of acquired businesses have been included in the Company's consolidated statements of income since the date each business was acquired. Purchase price allocation adjustments for fiscal years 2022 and 2021 business combinations were not significant.

Fiscal Year 2022

The acquisition date fair value of net assets acquired during fiscal year 2022 was $125 million, consisting of $154 million of assets acquired and $29 million of liabilities assumed. Based upon preliminary valuations, assets acquired were primarily comprised of $50 million of technology-based intangible assets with estimated useful lives ranging from 15 to 16 years, and $80 million of goodwill. The goodwill is not deductible for tax purposes. The Company recognized $31 million of contingent consideration liabilities in connection with business combinations during fiscal year 2022, which are comprised of revenue and regulatory milestone-based payments.

Fiscal Year 2021

The acquisition date fair value of net assets acquired during fiscal year 2021 was $1.2 billion, consisting of $1.4 billion of assets acquired and $161 million of liabilities assumed. Based upon final valuations, assets acquired were primarily comprised of $417 million of technology-based intangible assets and $13 million of customer-related intangible assets with estimated useful lives ranging from 8 to 15 years, and $816 million of goodwill. The goodwill is not deductible for tax purposes. The Company recognized $253 million of contingent consideration liabilities in connection with business combinations during fiscal year 2021, which are comprised of revenue and regulatory milestone-based payments. Additionally, the Company recognized a gain of $132 million related to a change in amounts accrued for certain contingent liabilities from a past acquisition. The benefit was recognized in *other operating expense, net* in the consolidated statements of income as the purchase accounting was finalized in fiscal year 2020.

Subsequent Acquisitions

Subsequent to fiscal year 2022, on May 13, 2022, the Company's Neuroscience segment acquired Intersect ENT, a global ear, nose, and throat (ENT) medical technology leader. The acquisition expands Medtronic's portfolio of products used during ENT procedures and, combined with the Company's navigation, powered instruments, and existing tissue health products, will offer a broader suite of solutions to assist surgeons treating patients who suffer from chronic rhinosinusitis (CRS). Total consideration for the transaction, in which the Company acquired all outstanding shares of Intersect ENT for $28.25 per share, was approximately $1.2 billion. The transaction will be accounted for as a business combination using the acquisition method of accounting. This requires, among other things, that assets acquired and liabilities assumed be recognized at their fair values as of the acquisition date.

Due to the limited amount of time since the acquisition date and the significant limitations on access to Intersect ENT information prior to the acquisition date the

preliminary acquisition valuation for the business combination is incomplete at this time. As a result, the Company is unable to provide the amounts recognized as of the acquisition date for the major classes of assets acquired and liabilities assumed, including the information required for valuation of intangible assets and goodwill. We will include such disclosures in our Form 10-Q for the quarter ending July 29, 2022.

Acquired In-Process Research & Development (IPR&D)

IPR&D with no alternative future use acquired outside of a business combination is expensed immediately. During fiscal year 2022, the Company acquired $101 million of IPR&D in connection with asset acquisitions of technology not approved by regulators, which was recognized in *research and development expense* in the consolidated statements of income. During fiscal year 2021, IPR&D acquired in connection with asset acquisitions was not significant.

Contingent Consideration

Certain of the Company's business combinations involve potential payment of future consideration that is contingent upon the achievement of certain product development milestones and/or contingent on the acquired business reaching certain performance milestones. A liability is recorded for the estimated fair value of the contingent consideration on the acquisition date. The fair value of the contingent consideration is remeasured at each reporting period, and the change in fair value is recognized within *other operating expense, net* in the consolidated statements of income.

The fair value of contingent consideration at April 29, 2022 and April 30, 2021 was $119 million and $270 million, respectively. At April 29, 2022, $35 million was recorded in *other accrued expenses*, and $84 million was recorded in *other liabilities* on the consolidated balance sheets. At April 30, 2021, $78 million was reflected in *other accrued expenses*, and $192 million was reflected in *other liabilities* on the consolidated balance sheets.

The following table provides a reconciliation of the beginning and ending balances of contingent consideration:

(in millions)	Fiscal Year 2022	2021
Beginning Balance	$ 270	$ 280
Purchase price contingent consideration	31	253
Purchase price allocation adjustments	7	–
Payments	(86)	(299)
Change in fair value	(103)	36
Ending Balance	**$ 119**	**$ 270**

The recurring Level 3 fair value measurements of contingent consideration for which a liability is recorded include the following significant unobservable inputs:

(in millions)	Fair Value at April 29, 2022	Unobservable Input	Range	Weighted Average (1)
Revenue and other performance-based payments	$ 104	Discount rate	11.2%-27.2%	14.6%
		Probability of payment	100%	100%
		Projected fiscal year of payment	2023-2027	2025
Product development and other milestone-based payments	$ 15	Discount rate	5.5%	5.5%
		Probability of payment	100%	100%
		Projected fiscal year of payment	2023-2024	2024

(1) Unobservable inputs were weighted by the relative fair value of the contingent consideration liability. For projected fiscal year of payment, the amount represents the median of the inputs and is not a weighted average.

4. Restructuring Charges

Enterprise Excellence

In the third quarter of fiscal year 2018, the Company announced its Enterprise Excellence restructuring program, which was designed to leverage the Company's global size and scale, as well as enhance the customer and employee experience, with a focus on three objectives: global operations, functional optimization, and commercial optimization.

Since inception, the Company has incurred pre-tax exit and disposal costs and other costs, across all segments, of $1.6 billion in connection with the Enterprise Excellence program. In total, the Company estimates it will recognize approximately $1.8 billion of exit and disposal costs and other costs related to the program by the end of fiscal year 2023. The remaining charges are costs associated with the restructuring program, such as salaries and benefits for employees supporting the program, including program management and transition teams, and strategic and operational consulting services related to the three objectives of the program. These charges are recognized within *restructuring charges, net, cost of products sold,* and *selling, general, and administrative expense* in the consolidated statements of income.

For fiscal years 2022, 2021 and 2020, the Company recognized net charges of $259 million, $349 million, and $441 million, respectively, of which $116 million, $128 million, and $155 million, respectively, were recognized within *cost of products sold,* and $112 million, $169 million, and $168 million, respectively, were recognized within *selling, general, and administrative expense* in the consolidated statements of income.

Simplification

In the first quarter of fiscal year 2021, the Company initiated the Simplification restructuring program, designed to make the Company a more nimble and competitive organization focused on accelerating innovation, enhancing the customer experience, driving revenue growth, and winning market share, while also more efficiently and effectively leveraging the enterprise scale.

Since inception, the Company has incurred pre-tax exit and disposal costs and other costs, across all segments, of $349 million in connection with the program. In total, the Company estimates it will recognize approximately $450 million of exit and disposal costs and other costs related to the Simplification program by the end of fiscal year 2023. The remaining charges are costs associated with the restructuring program, such as salaries for employees supporting the program and consulting expenses. These charges are recognized within *restructuring charges, net*, *cost of products sold*, and *selling, general, and administrative expense* in the consolidated statements of income.

For fiscal years 2022 and 2021, the Company recognized net charges of $82 million and $268 million, respectively, of which $45 million and $27 million were recognized within *selling, general, and administrative expense* in the consolidated statements of income. The net charges for fiscal year 2021 included $97 million of incremental defined benefit pension and post-retirement related expenses for employees that accepted voluntary early retirement packages and are not included in the table below, as they are associated with costs that are accounted for under the pension and post-retirement rules. See Note 15 for further discussion on these charges.

The following table summarizes the activity related to the restructuring programs noted above for fiscal years 2022, 2021, and 2020:

(in millions)	Employee Termination Benefits	Associated Costs[1]	Asset Write-downs	Other Costs	Total
April 26, 2019	**$ 101**	**$ 9**	**$ –**	**$ 12**	**$ 122**
Charges	129	300	24	9	462
Cash payments	(128)	(290)	–	(9)	(427)
Settled non-cash	–	–	(24)	–	(24)
Accrual adjustments[2]	(13)	–	–	(8)	(21)
April 24, 2020	**89**	**19**	**–**	**4**	**112**
Charges	213	322	–	4	539
Cash payments	(162)	(319)	–	(5)	(486)
Accrual adjustments[2]	(17)	–	–	(2)	(19)
April 30, 2021	**123**	**22**	**–**	**1**	**146**
Charges	80	274	–	–	354
Cash payments	(109)	(269)	–	–	(378)
Accrual adjustments[2]	(13)	–	–	–	(13)
April 29, 2022	**$ 81**	**$ 27**	**$ –**	**$ 1**	**$ 110**

(1) Associated costs include costs incurred as a direct result of the restructuring program, such as salaries for employees supporting the program and consulting expenses.

(2) Accrual adjustments relate to certain employees identified for termination finding other positions within the Company or contract terminations being settled for less than originally estimated.

Mechanical Circulatory Support (MCS)

On June 3, 2021, the Company announced the decision to stop the distribution and sale of the Medtronic HVAD System in light of a growing body of observational clinical comparisons indicating a lower frequency of neurological adverse events and mortality with another circulatory support device available to patients compared to the HVAD system. In connection with this decision, the Company recorded charges of $726 million (MCS charges) within the Cardiovascular segment during the first quarter of fiscal year 2022, including $58 million recognized in *costs of products sold* and $668 million recognized within *other operating expense, net* in the consolidated statement of income. The charges included $515 million of non-cash impairments and write-downs primarily related to $409 million of intangible asset impairments and $58 million of inventory write-downs. The Company also recorded charges of $211 million for commitments and obligations associated with the decision, which included charges for patient support obligations, restructuring, and other associated costs. During the fourth quarter of fiscal year 2022, the Company recorded additional charges of $155 million within *other operating expense, net* primarily related to incremental commitments and obligations associated with the exit of the business. As of April 29, 2022, accruals were recorded in the consolidated balance sheet for these obligations, with $82 million reflected in *other accrued expenses* and $152 million recorded in *other liabilities*. Medtronic remains committed to serving the needs of the approximately 3,500 patients currently implanted with the HVAD system.

5. Financial Instruments

Debt Securities

The Company holds investments in marketable debt securities that are classified and accounted for as available-for-sale and are remeasured on a recurring basis. The following tables summarize the Company's investments in available-for-sale debt securities by significant investment category and the related consolidated balance sheet classification at April 29, 2022 and April 30, 2021:

	April 29, 2022					
	Valuation				Balance Sheet Classification	
(in millions)	Cost	Unrealized Gains	Unrealized Losses	Fair Value	Investments	Other Assets
Level 1:						
U.S. government and agency securities	$ 533	$ 1	$ (15)	$ 518	$ 518	$ –
Level 2:						
Corporate debt securities	4,457	4	(140)	4,321	4,321	–
U.S. government and agency securities	910	–	(41)	869	869	–
Mortgage-backed securities	592	–	(35)	558	558	–
Non-U.S. government and agency securities	17	–	–	17	17	–
Certificates of deposit	20	–	–	20	20	
Other asset-backed securities	567	–	(11)	556	556	–
Total Level 2	6,563	4	(227)	6,341	6,341	–
Level 3:						
Auction rate securities	36	–	(3)	33	–	33
Total available-for-sale debt securities	**$ 7,131**	**$ 5**	**$ (245)**	**$ 6,893**	**$ 6,859**	**$ 33**

(in millions)	April 30, 2021					
	Valuation				Balance Sheet Classification	
	Cost	Unrealized Gains	Unrealized Losses	Fair Value	Investments	Other Assets
Level 1:						
U.S. government and agency securities	$ 505	$ 26	$ (3)	$ 528	$ 528	$ –
Level 2:						
Corporate debt securities	4,557	103	(13)	4,647	4,647	–
U.S. government and agency securities	810	–	(7)	804	804	–
Mortgage-backed securities	645	21	(16)	650	650	–
Non-U.S. government and agency securities	31	1	–	33	33	–
Certificates of deposit	19	–	–	19	19	–
Other asset-backed securities	534	4	(1)	537	537	–
Debt funds	7	–	–	7	7	–
Total Level 2	6,603	129	(36)	6,696	6,696	–
Level 3:						
Auction rate securities	36	–	(3)	33	–	33
Total available-for-sale debt securities	**$ 7,144**	**$ 155**	**$ (42)**	**$ 7,257**	**$ 7,224**	**$ 33**

The amortized cost of debt securities excludes accrued interest, which is reported in *other current assets* in the consolidated balance sheets.

The following tables present the gross unrealized losses and fair values of the Company's available-for-sale debt securities that have been in a continuous unrealized loss position deemed to be temporary, aggregated by investment category at April 29, 2022 and April 30, 2021:

(in millions)	April 29, 2022			
	Less than 12 months		More than 12 months	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. government and agency securities	$ –	$ –	$ 945	$ (56)
Corporate debt securities	222	(1)	2,993	(139)
Mortgage-backed securities	–	–	507	(35)
Other asset-backed securities	–	–	526	(11)
Auction rate securities	–	–	33	(3)
Total	**$ 222**	**$ (1)**	**$ 5,004**	**$ (244)**

(in millions)	April 30, 2021			
	Less than 12 months		More than 12 months	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. government and agency securities	$ 946	$ (10)	$ –	$ –
Corporate debt securities	–	–	3,209	(13)
Mortgage-backed securities	–	–	650	(16)
Other asset-backed securities	–	–	531	(1)
Auction rate securities	–	–	33	(3)
Total	**$ 946**	**$ (10)**	**$ 4,423**	**$ (32)**

The Company reviews the fair value hierarchy classification on a quarterly basis. Changes in the ability to observe valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy. There were no transfers into or out of Level 3 during the fiscal years ended April 29, 2022 and April 30, 2021. When a determination is made to classify an asset or liability within Level 3, the determination is based upon the significance of the unobservable inputs to the overall fair value measurement.

Activity related to the Company's available-for-sale debt securities portfolio is as follows:

(in millions)	April 29, 2022	April 30, 2021	April 24, 2020
Proceeds from sales and maturities	$ 9,611	$ 10,420	$ 9,559
Gross realized gains	15	15	25
Gross realized losses	(18)	(14)	(22)

During the fiscal year ended April 30, 2021, the Company had proceeds from maturities of investments classified as held to maturity of $911 million.

The April 29, 2022 balance of available-for-sale debt securities by contractual maturity is shown in the following table. Within the table, maturities of mortgage-backed securities have been allocated based upon timing of estimated cash flows assuming no change in the current interest rate environment. Actual maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations without prepayment penalties.

(in millions)	April 29, 2022
Due in one year or less	$ 1,501
Due after one year through five years	3,465
Due after five years through ten years	1,271
Due after ten years	656
Total debt securities	**$ 6,893**

Equity Securities, Equity Method Investments, and Other Investments

The Company holds investments in equity securities with readily determinable fair values, equity investments without readily determinable fair values, investments accounted for under the equity method, and other investments. Equity securities with readily determinable fair values are included in Level 1 of the fair value hierarchy, as they are measured using quoted market prices. Equity method investments and investments without readily determinable fair values are included within Level 3 of the fair value hierarchy due to the use of significant unobservable inputs to determine fair value. To determine the fair value of these investments, the Company uses all pertinent financial information available related to the investees, including financial statements, market participant valuations from recent and proposed equity offerings, and other third-party data.

The following table summarizes the Company's equity and other investments at April 29, 2022 and April 30, 2021, which are classified as *other assets* in the consolidated balance sheets:

(in millions)	April 29, 2022	April 30, 2021
Investments with readily determinable fair value (marketable equity securities)	$ 64	$ 74
Investments without readily determinable fair values	732	537
Equity method and other investments	85	76
Total equity and other investments	**$ 881**	**$ 687**

The table below includes activity related to the Company's portfolio of equity and other investments. Gains and losses on equity and other investments are recognized in *other non-operating income, net* in the consolidated statements of income.

(in millions)	April 29, 2022	April 30, 2021	April 24, 2020
Proceeds from sales	$ 81	$ 13	$ 15
Gross gains	99	68	17
Gross losses	(52)	(3)	(30)
Impairment losses recognized	(17)	(4)	(4)

During the fiscal year ended April 29, 2022, there were $8 million of net unrealized gains on equity securities and other investments still held at April 29, 2022. During the fiscal year ended April 30, 2021, there were $63 million of net unrealized gains on equity securities and other investments still held at April 30, 2021.

6. Financing Arrangements

Current debt obligations consisted of the following:

(in millions)	April 29, 2022	April 30, 2021
Bank borrowings	$ 12	$ 2
0.000 percent three-year 2019 senior notes	798	–
0.375 percent four-year 2019 senior notes	1,596	–
0.000 percent two-year 2020 senior notes	1,330	–
Finance lease obligations	6	9
Current debt obligations	**$ 3,742**	**$ 11**

Bank Borrowings

Outstanding bank borrowings at April 29, 2022 and April 30, 2021 were not significant.

Commercial Paper

On January 26, 2015, Medtronic Global Holdings S.C.A. (Medtronic Luxco), an entity organized under the laws of Luxembourg, entered into various agreements pursuant to which Medtronic Luxco may issue United States Dollar-denominated unsecured commercial paper notes (the 2015 CP Program) on a private placement basis, and on January 31, 2020 Medtronic Luxco entered into various agreements pursuant to which Medtronic Luxco may issue Euro-denominated unsecured commercial paper notes (the 2020 CP Program) on a private placement basis. The Maximum aggregate amount outstanding at any time under the 2015 CP Program and the 2020 CP Program together may not exceed the equivalent of $3.5 billion. The Company and Medtronic, Inc. have guaranteed the obligations of Medtronic Luxco under the 2015 CP Program and the 2020 CP Program.

There was no commercial paper outstanding at April 29, 2022 and April 30, 2021, or during fiscal year 2021. During fiscal year 2022, the weighted average original maturity of the commercial paper outstanding was approximately fifteen days and the weighted average interest rate was 0.70 percent. The issuance of commercial paper reduces the amount of credit available under the Company's existing credit facility, defined below.

Line of Credit

On December 12, 2021, Medtronic Luxco, as borrower, entered into an amendment to its amended and restated credit agreement (Credit Facility), by and among Medtronic, Medtronic, Inc., Medtronic Luxco, the lenders from time to time party thereto, and Bank of America, N.A., as administrative agent and issuing bank, extending the maturity date of the Credit Facility to December 2026 and removing the cap on the number of extension options available.

The Credit Facility provides for a $3.5 billion five-year unsecured revolving credit facility (Credit Facility). At each anniversary date of the Credit Facility we can request a one-year extension of the maturity date. The Credit Facility provides the Company with the ability to increase its borrowing capacity by an additional $1.0 billion at any time during the term of the agreement. The Company and Medtronic, Inc. have guaranteed the obligations of the borrowers under the Credit Facility, and Medtronic Luxco will also guarantee the obligations of any designated borrower. The Credit Facility includes a multi-currency borrowing feature for certain specified foreign currencies. At April 29, 2022 and April 30, 2021, no amounts were outstanding under the Credit Facility.

Interest rates on advances on the Credit Facility are determined by a pricing matrix based on the Company's long-term debt ratings, assigned by Standard & Poor's Ratings Services and Moody's Investors Service. Facility fees are payable on the Credit Facility and are determined in the same manner as the interest rates. The Company is in compliance with all covenants related to the Credit Facility.

The Company's long-term debt obligations consisted of the following:

(in millions, except interest rates)	Maturity by Fiscal Year	April 29, 2022 Amount	April 29, 2022 Effective Interest Rate	April 30, 2021 Amount	April 30, 2021 Effective Interest Rate
0.000 percent three-year 2019 senior notes	2023	$ –	–%	$ 907	0.08%
0.375 percent four-year 2019 senior notes	2023	–	–	1,813	0.55
0.000 percent two-year 2020 senior notes	2023	–	–	1,511	0.12
3.500 percent ten-year 2015 senior notes	2025	1,890	3.74	1,890	3.74
0.250 percent six-year 2019 senior notes	2026	1,064	0.45	1,209	0.43
0.000 percent five-year 2020 senior notes	2026	1,064	0.25	1,209	0.22
1.125 percent eight-year 2019 senior notes	2027	1,596	1.26	1,813	1.24
3.350 percent ten-year 2017 senior notes	2027	368	3.53	368	3.53
0.375 percent eight-year 2020 senior notes	2029	1,064	0.52	1,209	0.51
1.625 percent twelve-year 2019 senior notes	2031	1,064	1.75	1,209	1.74
1.000 percent twelve-year 2019 senior notes	2032	1,064	1.06	1,209	1.05
0.750 percent twelve-year 2020 senior notes	2033	1,064	0.81	1,209	0.81
4.375 percent twenty-year 2015 senior notes	2035	1,932	4.47	1,932	4.47
6.550 percent thirty-year 2007 CIFSA senior notes	2038	253	4.67	253	4.67
2.250 percent twenty-year 2019 senior notes	2039	1,064	2.35	1,209	2.34
6.500 percent thirty-year 2009 senior notes	2039	158	6.56	158	6.56
1.500 percent twenty-year 2019 senior notes	2040	1,064	1.59	1,209	1.58
5.550 percent thirty-year 2010 senior notes	2040	224	5.58	224	5.58
1.375 percent twenty-year 2020 senior notes	2041	1,064	1.47	1,209	1.46
4.500 percent thirty-year 2012 senior notes	2042	105	4.54	105	4.54
4.000 percent thirty-year 2013 senior notes	2043	305	4.09	305	4.09
4.625 percent thirty-year 2014 senior notes	2044	127	4.67	127	4.67
4.625 percent thirty-year 2015 senior notes	2045	1,813	4.69	1,813	4.69
1.750 percent thirty-year 2019 senior notes	2050	1,064	1.88	1,209	1.87
1.625 percent thirty-year 2020 senior notes	2051	1,064	1.76	1,209	1.75
Finance lease obligations	2023-2035	56	9.15	62	9.29
Debt discount, net	2023-2051	(52)	–	(75)	–
Deferred financing costs	2023-2051	(109)	–	(125)	–
Long-term debt		**$ 20,372**		**$ 26,378**	

Senior Notes

The Company has outstanding unsecured senior obligations, described as senior notes in the tables above (collectively, the Senior Notes). The Senior Notes rank equally with all other unsecured and unsubordinated indebtedness of the Company. The Company is in compliance with all covenants related to the Seniors Notes.

In June 2019, Medtronic Luxco issued six tranches of Euro-denominated Senior Notes with an aggregate principal of €5.0 billion, with maturities ranging from fiscal year 2021 to fiscal year 2050, resulting in cash proceeds of approximately $5.6 billion, net of discounts and issuance costs. The Company used the net proceeds of the offering to fund the cash tender offer and early redemption of $5.2 billion of Medtronic Inc., CIFSA, and Medtronic Luxco Senior Notes for $5.6 billion of total consideration. The Company recognized a loss on debt extinguishment of $413 million in fiscal year 2020, which primarily included cash premiums and accelerated amortization of deferred financing costs and debt discounts and premiums. The loss was recognized in *interest expense* in the consolidated statement of income.

In September 2020, Medtronic Global Holdings S.C.A. (Medtronic Luxco) issued an additional six tranches of Euro-denominated Senior Notes with an aggregate principal of €6.3 billion, with maturities ranging from fiscal year 2023 to fiscal year 2051, resulting in cash proceeds of approximately $7.2 billion, net of discounts and issuance costs. The Company used the net proceeds of the offering to fund the early redemption of $4.3 billion of Medtronic Inc. and CIFSA Senior Notes and €1.5 billion of Medtronic Luxco Senior Notes for $6.3 billion of total consideration in October 2020. Additionally, the Company used the

proceeds to repay its €750 million floating rate senior notes at maturity in March 2021. The Company recognized a loss on debt extinguishment of $308 million in fiscal year 2021, which primarily included cash premiums and accelerated amortization of deferred financing costs and debt discounts and premiums. The loss was recognized in *interest expense* in the consolidated statement of income.

The Euro-denominated debt issued in June 2019 and September 2020 is designated as a net investment hedge of certain of the Company's European operations. Refer to Note 7 for additional information regarding the net investment hedge.

Term Loan Agreements

On May 12, 2020, Medtronic Luxco entered into a term loan agreement (Fiscal 2021 Loan Agreement) by and among Medtronic Luxco, Medtronic plc, Medtronic, Inc., and Mizuho Bank, Ltd. as administrative agent and as lender. The Fiscal 2021 Loan Agreement provided an unsecured term loan in an aggregate principal amount of up to ¥300 billion, with a term of six months and the option to extend for an additional six months at Medtronic Luxco's option. On May 13, 2020, Medtronic Luxco borrowed the entire amount of the term loan under the Fiscal 2021 Loan Agreement. The Japanese Yen-denominated debt was designated as a net investment hedge for certain of the Company's Japanese operations. Borrowings under the Fiscal 2021 Loan Agreement carried interest at the TIBOR Rate (as defined in the Fiscal 2021 Loan Agreement) plus a margin of 0.50% per annum. Medtronic plc and Medtronic, Inc. guaranteed the obligations of Medtronic Luxco under the Fiscal 2021 Loan Agreement. On November 12, 2020, the Company exercised its option to extend the term loan for an additional six months. During the fourth quarter of fiscal year 2021, the Company de-designated the Yen-denominated debt as a net investment hedge and repaid the term loan in full, including interest.

Subsequent to fiscal year 2022, on May 2, 2022, Medtronic Luxco entered into a term loan agreement (Fiscal 2023 Loan Agreement) by and among Medtronic Luxco, Medtronic plc, Medtronic, Inc., and Mizuho Bank, Ltd. as administrative agent and as lender. The Fiscal 2023 Loan Agreement provides an unsecured term loan in an aggregate principal amount of up to ¥300 billion with a term of 364 days. Borrowings under the Fiscal 2023 Loan Agreement bear interest at the TIBOR Rate (as defined in the Fiscal 2023 Loan Agreement) plus a margin of 0.40% per annum. Medtronic plc and Medtronic, Inc. have guaranteed the obligations of Medtronic Luxco under the Fiscal 2023 Loan Agreement. In May and June 2022, Medtronic Luxco borrowed an aggregate of ¥297 billion, or approximately $2.3 billion, of the term loan, under the Fiscal 2023 Loan Agreement. The Company used the net proceeds of the borrowings to fund the early redemption of $1.9 billion of Medtronic Inc.'s 3.500% Senior Notes due 2025 for $1.9 billion of total consideration, and $368 million of Medtronic Luxco's 3.350% Senior Notes due 2027 for $376 million of total consideration. The Company will recognize a total loss on debt extinguishment of $53 million in the quarter ended July 29, 2022, which primarily includes cash premiums and accelerated amortization of deferred financing costs and debt discounts and premiums. The loss will be recognized in *interest expense* in the consolidated statements of income.

Contractual maturities of debt for the next five fiscal years and thereafter, excluding deferred financing costs and debt discount, net, are as follows:

(in millions)		
2023	$	3,744
2024		6
2025		1,895
2026		2,133
2027		1,969
Thereafter		14,528
Total	$	24,275

Financial Instruments Not Measured at Fair Value

At April 29, 2022, the estimated fair value of the Company's Senior Notes was $22.9 billion compared to a principal value of $24.2 billion. At April 30, 2021 the estimated fair value was $28.6 billion compared to a principal value of $26.5 billion. The fair value was estimated using quoted market prices for the publicly registered Senior Notes, which are classified as Level 2 within the fair value hierarchy. The fair values and principal values consider the terms of the related debt and exclude the impacts of debt discounts and hedging activity.

7. Derivatives and Currency Exchange Risk Management

The Company uses operational and economic hedges, including currency exchange rate derivative contracts and interest rate derivative instruments, to manage the impact of currency exchange and interest rate changes on earnings and cash flows. In addition, the Company uses cross currency interest rate swaps to manage currency risk related to certain debt. In order to minimize earnings and cash flow volatility resulting from currency exchange rate changes, the Company enters into derivative instruments, principally forward currency exchange rate contracts. These contracts are designed to hedge anticipated foreign currency transactions and changes in the value of specific assets and liabilities. At inception of the contract, the derivative is designated as either a freestanding derivative or a cash flow hedge. Currencies of our derivative instruments include the Euro, Japanese Yen, Chinese Yuan, and others. The Company does not enter into currency exchange rate derivative contracts for speculative purposes. The gross notional amount of all currency exchange rate derivative instruments outstanding was $13.8 billion and $14.7 billion at April 29, 2022 and April 30, 2021, respectively.

The Company also uses derivative and non-derivative instruments to manage the impact of currency exchange rate changes on net investments in foreign currency-denominated operations. The information that follows explains the various types of derivatives and financial instruments used by the Company, reasons the Company uses such instruments, and the impact such instruments have on the Company's consolidated balance sheets and statements of income.

Freestanding Derivative Contracts

Freestanding derivative contracts are primarily used to offset the Company's exposure to the change in value of specific foreign-currency-denominated assets and liabilities, and to offset variability of cash flows associated with forecasted transactions denominated in foreign currencies. The gross notional amount of the Company's freestanding currency exchange rate contracts outstanding at April 29, 2022 and April 30, 2021 was $4.9 billion and $5.7 billion, respectively. The Company's freestanding currency exchange rate contracts are not designated as hedges, and therefore, changes in the value of these contracts are recognized in earnings, thereby offsetting the current earnings effect of the related change in value of foreign-currency-denominated assets, liabilities, and cash flows.

The Company also uses total return swaps to hedge the liability of a non-qualified, deferred compensation plan. The gross notional amount of the Company's total return swaps outstanding at April 29, 2022 and April 30, 2021 was $226 million and $243 million, respectively. The Company's total return swaps are not designated as hedges, and therefore, changes in the value of these instruments are recognized in earnings. The cash flows related to the Company's freestanding derivative contracts are reported as operating or financing activities, depending on the nature of the underlying hedged item, in the consolidated statements of cash flows.

Cash Flow Hedges

Forward contracts designated as cash flow hedges are designed to hedge the variability of cash flows associated with forecasted transactions denominated in a foreign currency that will take place in the future. The gross notional amount of these contracts, designated as cash flow hedges, outstanding at April 29, 2022 and April 30, 2021 was $8.8 billion and $9.0 billion, respectively, and will mature within the subsequent three-year period. For derivative instruments that are designated and qualify as a cash flow hedge, the gain or loss on the derivative instrument is reported as a component of *accumulated other comprehensive loss*. The gain or loss on the derivative instrument is reclassified into earnings and is included in *other operating expense, net* or *cost of products sold* in the consolidated statements of income in the same period or periods during which the hedged transaction affects earnings. Amounts excluded from the measurement of hedge effectiveness are recognized in earnings in the current period. The cash flows related to all of the Company's derivative instruments designated as cash flow hedges are reported as operating activities in the consolidated statements of cash flows. No components of the hedge contracts were excluded in the measurement of hedge effectiveness, and no forward contracts designated as cash flow hedges were derecognized or discontinued during fiscal years 2022, 2021, or 2020.

At April 29, 2022 and April 30, 2021, the Company had $474 million in after-tax unrealized gains and $253 million in after-tax unrealized losses, respectively, associated with cash flow hedging instruments recorded in *accumulated other comprehensive loss*. The Company expects that $368 million of after-tax net unrealized gains at April 29, 2022 will be recognized in the consolidated statements of income over the next 12 months.

Net Investment Hedges

The Company has designated Euro-denominated debt as a net investment hedge of certain of its European operations to manage the exposure to currency and exchange rate movements for foreign currency-denominated net investments in foreign operations. At April 29, 2022, the Company had €16.0 billion, or $17.0 billion, of outstanding Euro-denominated debt designated as a hedge of its net investment in certain of its European operations, which will mature in fiscal year 2023 through fiscal year 2051.

In February 2021, the Company de-designated ¥300 billion of outstanding Yen-denominated debt previously designated as a net investment hedge and concurrently entered into freestanding forward derivative contracts with

a total notional value of ¥300 billion, or approximately $2.9 billion. These forward contracts were not designated as hedges. The Company used the proceeds from these forward derivative contracts to repay the ¥300 billion of Yen-denominated debt in conjunction with the maturity of these forward contracts in March and April of 2021.

For instruments that are designated and qualify as net investment hedges, the gains or losses are reported as a component of *accumulated other comprehensive loss*. The gains or losses are reclassified into earnings upon a liquidation event or deconsolidation of the foreign subsidiary. Amounts excluded from the assessment of effectiveness are recognized in *other operating expense, net*. The cash flows related to the Company's derivative instruments designated as net investment hedges are reported as investing activities in the consolidated statements of cash flows.

At April 29, 2022 and April 30, 2021, the Company had $841 million in after-tax unrealized gains and $1.5 billion in after-tax unrealized losses associated with net investment hedges recorded in *accumulated other comprehensive loss,* respectively. The Company does not expect any of the after-tax unrealized gains at April 29, 2022 to be recognized in the consolidated statements of income over the next 12 months.

The Company did not recognize any gains or losses during fiscal years 2022, 2021, or 2020 on instruments that no longer qualify as net investment hedges.

Gains and Losses on Hedging Instruments and Derivatives not Designated as Hedging Instruments

The amount of the gains and losses on our hedging instruments and the classification of those gains and losses within our consolidated financial statements for fiscal years 2022, 2021, and 2020 were as follows:

	(Gain) Loss Recognized in Accumulated Other Comprehensive Income			(Gain) Loss Reclassified into Income			
	Fiscal Year			Fiscal Year			
(in millions)	2022	2021	2020	2022	2021	2020	Location of (Gain) Loss in Income Statement
Cash flow hedges							
Currency exchange rate contracts	$ (953)	$ 519	$ (397)	$ (144)	$ (17)	$ (335)	Other operating expense, net
Currency exchange rate contracts	18	108	–	61	15	–	Cost of products sold
Net investment hedges	(2,299)	1,694	(405)	–	–	(9)	Other operating expense, net
Total	**$ (3,234)**	**$ 2,321**	**$ (802)**	**$ (83)**	**$ (2)**	**$ (344)**	

The amount of the gains and losses on our derivative instruments not designated as hedging instruments and the classification of those gains and losses within our consolidated financial statements for fiscal years 2022, 2021, and 2020 were as follows:

	(Gain) Loss Recognized in Income Fiscal Year			
(in millions)	2022	2021	2020	Location of (Gain) Loss in Income Statement
Derivatives not designated as hedging instruments				
Currency exchange rate contracts	$ (54)	$ 247	$ (133)	Other operating expense, net
Total return swaps	1	(81)	7	Other operating expense, net
Total	**$ (53)**	**$ 166**	**$ (126)**	

Balance Sheet Presentation

The following tables summarize the balance sheet classification and fair value of derivative instruments included in the consolidated balance sheets at April 29, 2022 and April 30, 2021. The fair value amounts are presented on a gross basis, and are segregated between derivatives that are designated and qualify as hedging instruments and those that are not designated and do not qualify as hedging instruments, and are further segregated by type of contract within those two categories.

	Fair Value - Assets			Fair Value - Liabilities		
(in millions)	April 29, 2022	April 30, 2021	Balance Sheet Classification	April 29, 2022	April 30, 2021	Balance Sheet Classification
Derivatives designated as hedging instruments						
Currency exchange rate contracts	$ 481	$ 49	Other current assets	$ 43	$ 190	Other accrued expenses
Currency exchange rate contracts	168	22	Other assets	16	94	Other liabilities
Total derivatives designated as hedging instruments	649	70		60	285	
Derivatives not designated as hedging instruments						
Currency exchange rate contracts	46	14	Other current assets	49	11	Other accrued expenses
Total return swaps	–	18	Other current assets	20	–	Other accrued expenses
Total derivatives not designated as hedging instruments	46	32		69	11	
Total derivatives	**$ 695**	**$ 102**		**$ 129**	**$ 296**	

The following table provides information by level for the derivative assets and liabilities that are measured at fair value on a recurring basis:

	April 29, 2022		April 30, 2021	
(in millions)	Level 1	Level 2	Level 1	Level 2
Derivative assets	$ 695	$ 109	$ 85	$ 18
Derivative liabilities	–	20	296	–

The Company has elected to present the fair value of derivative assets and liabilities within the consolidated balance sheets on a gross basis, even when derivative transactions are subject to master netting arrangements and may otherwise qualify for net presentation. The cash flows related to collateral posted and received are reported gross as investing and financing activities, respectively, in the consolidated statements of cash flows.

The following tables provide information as if the Company had elected to offset the asset and liability balances of derivative instruments, netted in accordance with various criteria as stipulated by the terms of the master netting arrangements with each of the counterparties. Derivatives not subject to master netting arrangements are not eligible for net presentation.

	April 29, 2022			
		Gross Amount Not Offset on the Balance Sheet		
(in millions)	Gross Amount of Recognized Assets (Liabilities)	Financial Instruments	Cash Collateral (Received) Posted	Net Amount
Derivative assets:				
Currency exchange rate contracts	$ 695	$ (109)	$ (254)	$ 332
Derivative liabilities:				
Currency exchange rate contracts	(109)	109	–	–
Total return swaps	(20)	–	–	(20)
	(129)	109	–	(20)
Total	**$ 566**	**$ –**	**$ (254)**	**$ 312**

	April 30, 2021			
		Gross Amount Not Offset on the Balance Sheet		
(in millions)	Gross Amount of Recognized Assets (Liabilities)	Financial Instruments	Cash Collateral (Received) Posted	Net Amount
Derivative assets:				
Currency exchange rate contracts	$ 85	$ (83)	$ –	$ 1
Total return swaps	18	–	–	18
	102	(83)	–	19
Derivative liabilities:				
Currency exchange rate contracts	(296)	83	46	(167)
Total	**$ (194)**	**$ –**	**$ 46**	**$ (148)**

Concentrations of Credit Risk

Financial instruments, which potentially subject the Company to significant concentrations of credit risk, consist principally of interest-bearing investments, forward exchange derivative contracts, and trade accounts receivable. Global concentrations of credit risk with respect to trade accounts receivable are limited due to the large number of customers and their dispersion across many geographic areas. The Company monitors the creditworthiness of its customers to which it grants credit terms in the normal course of business.

The Company maintains cash and cash equivalents, investments, and certain other financial instruments (including currency exchange rate and interest rate derivative contracts) with various major financial institutions. The Company performs periodic evaluations of the relative credit standings of these financial institutions and limits the amount of credit exposure with any one institution. In addition, the Company has collateral credit agreements with its primary derivatives counterparties. Under these agreements, either party is required to post eligible collateral when the market value of transactions covered by the agreement exceeds specific thresholds, thus limiting credit exposure for both parties. As of April 29, 2022, the Company received net cash collateral of $254 million from its counterparties. As of April 30, 2021, the Company posted net cash collateral of $46 million to its counterparties. Cash collateral posted is recorded as a reduction in *cash and cash equivalents*, with the offset recorded as an increase in *other current assets* in the consolidated balance sheets. Cash collateral received is recorded as an increase in *cash and cash equivalents* with the offset recorded in *other accrued expenses* in the consolidated balance sheets.

8. Inventories

Inventory balances, net of reserves, were as follows:

(in millions)	April 29, 2022	April 30, 2021
Finished goods	$ 3,070	$ 2,906
Work-in-process	682	611
Raw materials	864	796
Total	**$ 4,616**	**$ 4,313**

9. Goodwill and Other Intangible Assets

Goodwill

The following table presents the changes in the carrying amount of goodwill by segment:

(in millions)	Cardiovascular	Medical Surgical	Neuroscience	Diabetes	Total
April 24, 2020	$ 6,831	$ 20,176	$ 10,920	$ 1,914	$ 39,841
Goodwill as a result of acquisitions	248	12	210	346	816
Purchase accounting adjustments	(2)	(5)	3	(4)	(8)
Currency translation and other	132	1,012	167	1	1,312
April 30, 2021	7,209	21,195	11,300	2,257	41,961
Goodwill as a result of acquisitions	55	–	26	–	80
Purchase accounting adjustments	21	3	3	(2)	25
Currency translation and other	(125)	(1,241)	(196)	(1)	(1,563)
April 29, 2022	**$ 7,160**	**$ 19,957**	**$ 11,132**	**$ 2,254**	**$ 40,502**

The Company did not recognize any goodwill impairments during fiscal years 2022, 2021, or 2020.

Intangible Assets

The following table presents the gross carrying amount and accumulated amortization of intangible assets:

	April 29, 2022		April 30, 2021	
(in millions)	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Definite-lived:				
Customer-related	$ 16,953	$ (7,005)	$ 17,036	$ (6,058)
Purchased technology and patents	10,802	(5,667)	11,286	(5,156)
Trademarks and tradenames	473	(266)	475	(251)
Other	80	(69)	82	(68)
Total	**$ 28,308**	**$ (13,006)**	**$ 28,879**	**$ (11,533)**
Indefinite-lived:				
IPR&D	$ 293	$ –	$ 394	$ –

During fiscal year 2022, the Company recognized $409 million of definite-lived intangible asset impairment charges in connection with MCS within the Cardiovascular Portfolio. The intangible asset impairment charge primarily related to purchased technology and patents. Refer to Note 4 Restructuring Charges for additional information on what led to the impairment. During fiscal year 2021, the Company recognized $30 million of definite-lived intangible asset charges in connection with the abandonment of certain intangible assets within the Neuroscience segment. During fiscal year 2020, the Company recognized $37 million of definite-lived intangible asset charges, including $33 million and $4 million recognized in connection with business exits in the Neuroscience and Cardiovascular segments, respectively. Definite-lived intangible asset charges are recognized in *other operating expense, net* in the consolidated statements of income.

Indefinite-lived intangible asset impairment charges were not significant for fiscal year 2022. During fiscal year 2021, the Company recognized $45 million of indefinite-lived intangible asset impairment charges related to the abandonment of certain IPR&D projects in the Neuroscience segment. During fiscal year 2020, the Company recognized $35 million of indefinite-lived intangible asset impairment charges, including $25 million relating to a partial impairment of an IPR&D project within the Neuroscience segment and $10 million in connection with the discontinuation of an IPR&D project within the Cardiovascular segment. Indefinite-lived intangible asset impairment charges are recognized in *other operating expense, net* in the consolidated statements of income. Due to the nature of IPR&D projects, the Company may experience future delays or failures to obtain regulatory approvals to conduct clinical trials, failures of such clinical trials, delays or failures to obtain required market clearances, other failures to achieve a commercially viable product, or the discontinuation of certain projects, and as a result, may recognize impairment losses in the future.

Amortization Expense

Intangible asset amortization expense was $1.7 billion for fiscal year 2022 and $1.8 billion for fiscal years 2021 and 2020. Estimated aggregate amortization expense by fiscal year based on the current carrying value and remaining estimated useful lives of definite-lived intangible assets at April 29, 2022, excluding any possible future amortization associated with acquired IPR&D which has not met technological feasibility, is as follows:

(in millions)	Amortization Expense
2023	$ 1,659
2024	1,624
2025	1,602
2026	1,588
2027	1,564

10. Property, Plant, and Equipment

Property, plant, and equipment balances and corresponding estimated useful lives were as follows:

(in millions)	April 29, 2022	April 30, 2021	Estimated Useful Lives (in years)
Equipment	$ 6,489	$ 6,308	Generally 2-7, up to 15
Computer software	2,617	2,346	Up to 5
Land and land improvements	170	178	Up to 20
Buildings and leasehold improvements	2,351	2,370	Up to 40
Construction in progress	1,737	1,498	–
Property, plant, and equipment	13,365	12,700	
Less: Accumulated depreciation	(7,952)	(7,479)	
Property, plant, and equipment, net	$ 5,413	$ 5,221	

Depreciation expense of $974 million, $919 million, and $907 million was recognized in fiscal years 2022, 2021, and 2020, respectively.

11. Shareholders' Equity

Share Capital

Medtronic plc is authorized to issue 2.6 billion Ordinary Shares, $0.0001 par value; 40 thousand Euro Deferred Shares, €1.00 par value; 127.5 million Preferred Shares, $0.20 par value; and 500 thousand A Preferred Shares, $1.00 par value.

Euro Deferred Shares

The authorized share capital of the Company includes 40 thousand Euro Deferred Shares, with a par value of €1.00 per share. At April 29, 2022, no Euro Deferred Shares were issued or outstanding.

Preferred Shares

The authorized share capital of the Company includes 127.5 million of Preferred Shares, with a par value of $0.20 per share. At April 29, 2022, no Preferred Shares were issued or outstanding.

A Preferred Shares

The authorized share capital of the Company includes 500 thousand A Preferred Shares, with a par value of $1.00 per share. During the third quarter of fiscal year 2022 the Company redeemed the previously outstanding 1,872 A Preferred Shares for $0.075 million. At April 29, 2022, no A Preferred Shares were outstanding.

Dividends

The timing, declaration, and payment of future dividends to holders of the Company's ordinary shares falls within the discretion of the Company's Board of Directors and depends upon many factors, including the statutory requirements of Irish law, the Company's earnings and financial condition, the capital requirements of the Company's businesses, industry practice and any other factors the Board of Directors deems relevant.

Ordinary Share Repurchase Program

Shares are repurchased on occasion to support the Company's stock-based compensation programs and to return capital to shareholders. During fiscal years 2022 and 2021, the Company repurchased approximately 22 million and 4 million shares, respectively, at an average price of $113.11 and $126.80, respectively.

In March 2019, the Company's Board of Directors authorized $6.0 billion for repurchase of the Company's ordinary shares. There is no specific time-period associated with these repurchase authorizations. At April 29, 2022, the Company had used $3.0 billion of the $6.0 billion authorized under the repurchase program, leaving approximately $3.0 billion available for future repurchases. The Company accounts for repurchases of ordinary shares using the par value method and shares repurchased are cancelled.

12. Stock Purchase and Award Plans

In fiscal year 2022, the Company granted stock awards under the Medtronic plc 2013 Plan (2013 Plan) and the 2021 Medtronic plc Long Term Incentive Plan (2021 Plan). The 2021 Plan was approved by the Company's shareholders on December 9, 2021, and provides for a maximum of 115 million ordinary shares to be issued, in addition to the 14 million ordinary shares previously approved for issuance under the 2013 Plan. The 2021 Plan provides for the grant of non-qualified and incentive stock options, stock appreciation rights, restricted stock, restricted stock units, performance awards, and other stock and cash-based awards. At April 29, 2022, there were approximately 127 million shares available for future grants under the 2021 Plan.

Stock-Based Compensation Expense

The following table presents the components and classification of stock-based compensation expense recognized for stock options, restricted stock, performance share units, and employee stock purchase plan (ESPP) in fiscal years 2022, 2021, and 2020:

(in millions)	Fiscal Year 2022	2021	2020
Stock options	$ 70	$ 72	$ 61
Restricted stock	184	185	205
Performance share units	66	49	–
Employee stock purchase plan	39	38	31
Total stock-based compensation expense	**$ 359**	**$ 344**	**$ 297**
Cost of products sold	$ 36	$ 35	$ 28
Research and development expense	40	38	36
Selling, general, and administrative expense	283	272	233
Total stock-based compensation expense	359	344	297
Income tax benefits	(62)	(59)	(51)
Total stock-based compensation expense, net of tax	**$ 297**	**$ 285**	**$ 246**

Stock Options

Options are granted at the exercise price, which is equal to the closing price of the Company's ordinary shares on the grant date. The majority of the Company's options are non-qualified options with a 10-year life and a 4-year ratable vesting term. The Company uses the Black-Scholes option pricing model (Black-Scholes model) to determine the fair value of stock options at the grant date. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the Company's stock price, and expected dividends.

The following table provides the weighted average fair value of options granted to employees and the related assumptions used in the Black-Scholes model:

	Fiscal Year 2022	2021	2020
Weighted average fair value of options granted	$ 22.83	$ 16.15	$ 15.49
Assumptions used:			
Expected life (years)	6.0	6.0	6.1
Risk-free interest rate	0.90%	0.33%	1.88%
Volatility	23.04%	24.17%	17.97%
Dividend yield	1.95%	2.36%	2.09%

The following table summarizes stock option activity during fiscal year 2022:

	Options (in thousands)	Wtd. Avg. Exercise Price	Wtd. Avg. Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at April 30, 2021	27,972	$ 84.38		
Granted	4,153	129.03		
Exercised	(3,222)	70.52		
Expired/Forfeited	(641)	107.42		
Outstanding at April 29, 2022	28,263	92.00	5.5	$ 450
Expected to vest at April 29, 2022	8,818	110.27	8.4	35
Exercisable at April 29, 2022	18,804	82.62	4.0	414

The following table summarizes the total cash received from the issuance of new shares upon stock option award exercises, the total intrinsic value of options exercised, and the related tax benefit during fiscal years 2022, 2021, and 2020:

	Fiscal Year		
(in millions)	**2022**	**2021**	**2020**
Cash proceeds from options exercised	$ 209	$ 277	$ 484
Intrinsic value of options exercised	174	205	349
Tax benefit related to options exercised	40	47	75

Unrecognized compensation expense related to outstanding stock options at April 29, 2022 was $90 million and is expected to be recognized over a weighted average period of 2.5 years.

Restricted Stock

Restricted stock units are expensed over the vesting period and are subject to forfeiture if employment terminates prior to the lapse of the restrictions. The expense recognized for restricted stock units is equal to the grant date fair value, which is equal to the closing stock price on the date of grant. Restricted stock units either have a 4-year ratable vesting term or cliff vest after three years. The Company also grants shares of performance-based restricted stock units that typically cliff vest after three years only if the Company has also achieved certain performance objectives. Performance awards are expensed over the performance period based on the probability of achieving the performance objectives. Restricted stock units are not considered issued or outstanding ordinary shares of the Company. Dividend equivalent units are accumulated on restricted stock units during the vesting period.

The following table summarizes restricted stock activity during fiscal year 2022:

	Units (in thousands)	**Wtd. Avg. Grant Price**
Nonvested at April 30, 2021	5,980	$ 97.66
Granted	1,935	127.47
Vested	(2,089)	93.05
Forfeited	(456)	107.53
Nonvested at April 29, 2022	5,370	108.92

The following table summarizes the weighted-average grant date fair value of restricted stock granted, total fair value of restricted stock vested and related tax benefit during fiscal years 2022, 2021, and 2020:

	Fiscal Year		
(in millions, except per share data)	**2022**	**2021**	**2020**
Weighted-average grant-date fair value per restricted stock	$ 127.47	$ 99.48	$ 103.52
Fair value of restricted stock vested	194	280	242
Tax benefit related to restricted stock vested	52	65	62

Unrecognized compensation expense related to restricted stock as of April 29, 2022 was $316 million and is expected to be recognized over a weighted average period of 2.5 years.

Performance Share Units

Beginning in fiscal year 2021, the Company granted performance share units to officers and key employees. Performance share units typically cliff vest after three years. The awards include three metrics: relative total shareholder return (rTSR), revenue growth, and return on investor capital (ROIC). rTSR is considered a market condition metric, and the expense is determined at the grant date and will not be adjusted even if the market condition is not met. Revenue growth and ROIC are considered performance metrics, and the expense is recorded over the performance period, which will be reassessed each reporting period based on the probability of achieving the various performance conditions. The number of shares earned at the end of the three-year period will vary, based on only actual performance, from 0% to 200% of the target number of performance share units granted. Performance share units are subject to forfeiture if employment terminates prior to the lapse of the restrictions. Performance share units are not considered issued or outstanding ordinary shares of the Company. Dividend equivalent units are accumulated on performance share units for each component of the award during the vesting period.

The Company calculates the fair value of the performance share units for each component individually. The fair value of the rTSR metric will be determined using the Monte Carlo valuation model. The fair value of the revenue growth and ROIC metrics are equal to the closing stock price on the grant date.

The following table summarizes performance share unit activity during fiscal year 2022:

	Units (in thousands)	Wtd. Avg. Grant Price
Nonvested at April 30, 2021	828	$ 129.05
Granted	831	149.16
Forfeited	(78)	138.31
Nonvested at April 29, 2022	1,581	138.95

The following table summarizes the weighted-average grant date fair value of performance share units granted, total fair value of performance share units vested and related tax benefit during fiscal year 2022 and 2021:

(in millions, except per share data)	Fiscal Year 2022	2021
Weighted-average grant-date fair value per performance share units	$ 149.16	$ 129.04
Fair value of performance share units vested	–	–
Tax benefit related to performance share units vested	–	–

Unrecognized compensation expense related to performance share units as of April 29, 2022 was $84 million and is expected to be recognized over a weighted average period of 1.9 years.

Employees Stock Purchase Plan

The Medtronic plc Amended and Restated 2014 Employees Stock Purchase Plan allows participating employees to purchase the Company's ordinary shares at a discount through payroll deductions. The expense recognized for shares purchased under the Company's ESPP is equal to the 15 percent discount the employee receives. Employees purchased 2 million shares at an average price of $98.75 per share in fiscal year 2022. At April 29, 2022, approximately 7 million ordinary shares were available for future purchase under the ESPP.

13. Income Taxes

The income tax provision (benefit) is based on income before income taxes reported for financial statement purposes. The components of income before income taxes, based on tax jurisdiction, are as follows:

(in millions)	Fiscal Year 2022	2021	2020
U.S.	$ 436	$ (358)	$ 466
International	5,081	4,253	3,589
Income before income taxes	**$ 5,517**	**$ 3,895**	**$ 4,055**

The income tax provision (benefit) consists of the following:

(in millions)	Fiscal Year 2022	2021	2020
Current tax expense:			
U.S.	$ 467	$ 287	$ 151
International	599	439	375
Total current tax expense	1,066	726	526
Deferred tax (benefit) expense:			
U.S.	(402)	(625)	(138)
International	(209)	165	(1,139)
Net deferred tax benefit	(611)	(461)	(1,277)
Income tax provision (benefit)	**$ 456**	**$ 265**	**$ (751)**

Tax assets (liabilities), shown before jurisdictional netting of deferred tax assets (liabilities), are comprised of the following:

(in millions)	April 29, 2022	April 30, 2021[1]
Deferred tax assets:		
Intangible assets	$ 2,334	$ 1,536
Net operating loss, capital loss, and credit carryforwards	5,982	6,114
Capitalization of research and development	597	408
Other accrued liabilities	483	442
Accrued compensation	332	411
Pension and post-retirement benefits	66	234
Stock-based compensation	146	132
Inventory	146	164
Lease obligations	92	106
Federal and state benefit on uncertain tax positions	60	55
Interest limitation	386	352
Other	374	336
Gross deferred tax assets	10,998	10,290
Valuation allowance	(6,583)	(5,822)
Total deferred tax assets	**4,415**	**4,468**
Deferred tax liabilities:		
Intangible assets	(1,488)	(1,856)
Realized loss on derivative financial instruments	(66)	(75)
Right of use leases	(89)	(102)
Unrealized gain on available-for-sale securities and derivative financial instruments	–	(16)
Accumulated depreciation	(121)	(151)
Outside basis difference of subsidiaries	(129)	(101)
Other	(70)	(81)
Total deferred tax liabilities	(1,963)	(2,382)
Prepaid income taxes	474	458
Income tax receivables	358	353
Tax assets, net	**$ 3,284**	**$ 2,897**
Reported as (after valuation allowance and jurisdictional netting):		
Other current assets	$ 765	$ 756
Tax assets	3,403	3,169
Deferred tax liabilities	(884)	(1,028)
Tax assets, net	**$ 3,284**	**$ 2,897**

(1) Certain prior year amounts have been reclassified to conform to current year presentation

No deferred taxes have been provided on the approximately $79.3 billion and $74.2 billion of undistributed earnings of the Company's subsidiaries at April 29, 2022 and April 30, 2021, respectively, since these earnings have been, and under current plans will continue to be, permanently reinvested in these subsidiaries. Due to the number of legal entities and jurisdictions involved, the complexity of the legal entity structure of the Company, and the complexity of the tax laws in the relevant jurisdictions, the Company believes it is not practicable to estimate, within any reasonable range, the amount of additional taxes which may be payable upon distribution of these undistributed earnings.

At April 29, 2022, the Company had approximately $25.4 billion of net operating loss carryforwards in certain non-U.S. jurisdictions, of which $20.0 billion have no expiration, and the remaining $5.4 billion will expire during fiscal years 2023 through 2042. Included in these net operating loss carryforwards are $18.6 billion of net operating losses related to a subsidiary of the Company, substantially all of which were recorded in fiscal year 2008 as a result of the receipt of a favorable tax ruling from certain non-U.S. taxing authorities. The Company has recorded a full valuation allowance against these net operating losses, as management does not believe that it is more likely than not that these net operating losses will be utilized. Certain of the remaining non-U.S. net operating loss carryforwards of $6.8 billion have a valuation allowance recorded against the carryforwards, as management does not believe that it is more likely than not that these net operating losses will be utilized.

At April 29, 2022, the Company had $222 million of U.S. federal net operating loss carryforwards, of which $47 million have no expiration. The remaining loss carryforwards will expire during fiscal years 2023 through 2036. For U.S. state purposes, the Company had $1.4 billion of net operating loss carryforwards at April 29, 2022, $72 million of which have no expiration. The remaining U.S. state loss carryforwards will expire during fiscal years 2023 through 2042.

At April 29, 2022, the Company also had $254 million of tax credits available to reduce future income taxes payable, of which $120 million have no expiration. The remaining credits will expire during fiscal years 2023 through 2042.

The Company has established valuation allowances of $6.6 billion and $5.8 billion at April 29, 2022 and April 30, 2021, respectively, primarily related to the uncertainty of the utilization of certain deferred tax assets which are primarily comprised of tax loss and credit carryforwards in various jurisdictions. The increase in the valuation allowance during fiscal year 2022 is primarily related to the step up in tax basis for Swiss Cantonal purposes, the generation of certain net operating losses and the effects of currency fluctuations. These valuation allowances would result in a reduction to the income tax provision in the consolidated statements of income if they are ultimately not required.

The Company's effective income tax rate varied from the U.S. federal statutory tax rate as follows:

	Fiscal Year		
	2022	**2021**	**2020**
U.S. federal statutory tax rate	21.0%	21.0%	21.0%
Increase (decrease) in tax rate resulting from:			
U.S. state taxes, net of federal tax benefit	0.2	(1.1)	0.5
Research and development credit	(1.3)	(2.3)	(2.1)
Puerto Rico excise tax	(1.1)	(2.0)	(1.5)
International	(11.2)	(12.6)	(10.0)
Stock based compensation	(0.8)	(0.8)	(1.5)
Interest on uncertain tax positions	0.5	0.9	1.3
Base erosion anti-abuse tax	0.9	0.5	2.6
Foreign derived intangible income benefit	(1.0)	(1.9)	(1.2)
Certain tax adjustments	(0.9)	(1.0)	(30.8)
Legal entity restructuring	–	1.8	–
U.S. tax on foreign earnings	2.2	3.4	2.8
Other, net	(0.2)	0.9	0.4
Effective tax rate	**8.3%**	**6.8%**	**(18.5)%**

During fiscal year 2022, the net benefit from certain tax adjustments of $50 million, recognized in *income tax provision (benefit)* in the consolidated statement of income, included the following:

- A benefit of $82 million associated with a step up in tax basis for Swiss Cantonal purposes.
- A benefit of $82 million related to a change in tax rates on intangible assets.
- A cost of $47 million associated with the amortization of the previously established deferred tax assets from intercompany intellectual property transactions.

- A cost of $41 million associated with a change in the Company's permanent reinvestment assertion on certain historical earnings.
- A net cost of $26 million primarily associated with an intercompany sale of assets.

During fiscal year 2021, the net benefit from certain tax adjustments of $41 million, recognized in *income tax provision (benefit)* in the consolidated statement of income, included the following:

- A net benefit of $106 million associated with the resolution of an audit at the IRS Appellate level for fiscal years 2012, 2013, and 2014. The issues resolved relate to the utilization of certain net operating losses and the allocation of income between Medtronic, Inc. and its wholly owned subsidiary operating in Puerto Rico for businesses that are not the subject of the U.S. Tax Court Case for fiscal years 2005 and 2006.
- A net cost of $73 million related to a tax basis adjustment of previously established deferred tax assets from intercompany intellectual property transactions. The cumulative amount of deferred tax benefit previously recognized from intercompany intellectual property transactions and recorded as Certain Tax Adjustments is $1.5 billion. The corresponding deferred tax assets will be amortized over a period of approximately 20 years.
- A cost of $50 million associated with the amortization of the previously established deferred tax assets from intercompany intellectual property transactions.
- A net cost of $25 million associated with an internal restructuring and intercompany sale of assets.
- A benefit of $83 million related to the capitalization of certain research and development costs for U.S. income tax purposes and the establishment of a deferred tax asset at the U.S. federal statutory tax rate.

During fiscal year 2020, the net benefit from certain tax adjustments of $1.2 billion, recognized in *income tax provision (benefit)* in the consolidated statement of income, included the following:

- A net benefit of $63 million related to the finalization of certain state tax impacts from U.S. Tax Reform, and the issuance of certain final U.S. Treasury Regulations associated with U.S. Tax Reform. The primary impact of these regulations resulted in the Company re-establishing its permanently reinvested assertion on certain foreign earnings and reversing the previously accrued tax liability. This benefit was partially offset by additional tax associated with a previously executed internal reorganization of certain foreign subsidiaries.
- A benefit of $252 million related to tax legislative changes in Switzerland, which abolished certain preferential tax regimes the Company benefited from and replaced them with a new set of internationally accepted measures. The legislation provided for higher effective tax rates but allowed for a transitional period whereby an amortizable asset was created for Swiss federal income tax purposes that will be amortized and deducted over a 10-year period.
- A benefit of $658 million related to the release of a valuation allowance previously recorded against certain net operating losses. Luxembourg enacted tax legislation during the year requiring the Company to reassess the realizability of certain net operating losses. The Company evaluated both the positive and negative evidence and released valuation allowance equal to the expected benefit from the utilization of certain net operating losses in connection with a planned intercompany sale of intellectual property.
- A benefit of $269 million associated with the intercompany sale of intellectual property and the establishment of a deferred tax asset.

Currently, the Company's operations in Puerto Rico, Singapore, Dominican Republic, Costa Rica, and China have various tax holidays and tax incentive grants. The tax reductions as compared to the local statutory rate favorably impacted earnings by $248 million, $301 million, and $231 million in fiscal years 2022, 2021, and 2020, respectively, and diluted earnings per share by $0.18, $0.22, and $0.17, in fiscal years 2022, 2021, and 2020, respectively. The tax holidays are conditional upon the Company meeting certain thresholds required under statutory law. The tax incentive grants, unless extended, will expire between fiscal years 2023 and 2034. The Company's historical practice has been to renew, extend, or obtain new tax incentive grants upon expiration of existing tax incentive grants. If the Company is not able to renew, extend, or obtain new tax incentive grants, the expiration of existing tax incentive grants could have a material impact on the Company's financial results in future periods. The tax incentive grants which expired during fiscal year 2022 did not have a material impact on the Company's consolidated financial statements.

The Company had $1.7 billion, $1.7 billion, and $1.9 billion of gross unrecognized tax benefits at April 29, 2022, April 30, 2021, and April 24, 2020, respectively. A reconciliation of the beginning and ending amount of unrecognized tax benefits for fiscal years 2022, 2021, and 2020 is as follows:

(in millions)	Fiscal Year 2022	2021	2020
Gross unrecognized tax benefits at beginning of fiscal year	$ 1,668	$ 1,862	$ 1,836
Gross increases:			
Prior year tax positions	1	88	12
Current year tax positions	40	62	55
Gross decreases:			
Prior year tax positions	(29)	(106)	(9)
Settlements	(8)	(216)	(5)
Statute of limitation lapses	(11)	(21)	(27)
Gross unrecognized tax benefits at end of fiscal year	1,661	1,668	1,862
Cash advance paid to taxing authorities	(859)	(859)	(859)
Gross unrecognized tax benefits at end of fiscal year, net of cash advance	**$ 802**	**$ 809**	**$ 1,003**

If all of the Company's unrecognized tax benefits at April 29, 2022, April 30, 2021, and April 24, 2020 were recognized, $1.6 billion, $1.6 billion, and $1.8 billion would impact the Company's effective tax rate, respectively. Although the Company believes that it has adequately provided for liabilities resulting from tax assessments by taxing authorities, positions taken by these tax authorities could have a material impact on the Company's effective tax rate in future periods. The Company has recorded gross unrecognized tax benefits, net of cash advance, of $787 million as a noncurrent liability. The Company estimates that within the next 12 months it is reasonably possible that its uncertain tax positions excluding interest, could decrease by as much as $15 million, net as a result of statute of limitation lapses.

The Company recognizes interest and penalties related to income tax matters in *income tax provision (benefit)* in the consolidated statements of income and records the liability in the current or noncurrent *accrued income taxes* in the consolidated balance sheets, as appropriate. The Company had $117 million, $99 million, and $225 million of accrued gross interest and penalties at April 29, 2022, April 30, 2021, and April 24, 2020, respectively. During fiscal years 2022, 2021, and 2020, the Company recognized gross interest expense of $17 million, income of $44 million, and expense of $53 million, respectively, in *income tax provision (benefit)* in the consolidated statements of income.

The Company reserves for uncertain tax positions related to unresolved matters with the IRS and other taxing authorities. These reserves are subject to a high degree of estimation and management judgment. Resolution of these significant unresolved matters, or positions taken by the IRS or other tax authorities during future tax audits, could have a material impact on the Company's financial results in future periods. The Company continues to believe that its reserves for uncertain tax positions are appropriate and that it has meritorious defenses for its tax filings and will vigorously defend them during the audit process, appellate process, and through litigation in courts, as necessary.

The major tax jurisdictions where the Company conducts business which remain subject to examination are as follows:

Jurisdiction	Earliest Year Open
United States - federal and state	2005
Australia	2018
Brazil	2017
Canada	2013
China	2015
Costa Rica	2018
Dominican Republic	2019
France	2019
Germany	2014
India	2002
Ireland	2012
Israel	2010
Italy	2005
Japan	2018
Korea	2017
Luxembourg	2017
Mexico	2017
Puerto Rico	2011
Singapore	2016
Switzerland	2010
United Kingdom	2017

See Note 18 for additional information regarding the status of current tax audits and proceedings.

14. Earnings Per Share

Basic earnings per share is computed based on the weighted average number of ordinary shares outstanding. Diluted earnings per share is computed based on the weighted number of ordinary shares outstanding, increased by the number of additional shares that would have been outstanding had the potentially dilutive ordinary shares been issued, and reduced by the number of shares the Company could have repurchased with the proceeds from issuance of the potentially dilutive shares. Potentially dilutive ordinary shares include stock-based awards granted under stock-based compensation plans and shares committed to be purchased under the employee stock purchase plan.

The table below sets forth the computation of basic and diluted earnings per share:

	Fiscal Year		
(in millions, except per share data)	2022	2021	2020
Numerator:			
Net income attributable to ordinary shareholders	$ 5,039	$ 3,606	$ 4,789
Denominator:			
Basic – weighted average shares outstanding	1,342.4	1,344.9	1,340.7
Effect of dilutive securities:			
Employee stock options	6.6	6.6	7.2
Employee restricted stock units	1.6	2.1	2.8
Other	0.8	0.5	0.4
Diluted – weighted average shares outstanding	1,351.4	1,354.0	1,351.1
Basic earnings per share	$ 3.75	$ 2.68	$ 3.57
Diluted earnings per share	$ 3.73	$ 2.66	$ 3.54

The calculation of weighted average diluted shares outstanding excludes options to purchase approximately 5 million ordinary shares in fiscal year 2022 and 4 million ordinary shares in fiscal years 2021 and 2020 because their effect would have been anti-dilutive on the Company's earnings per share.

15. Retirement Benefit Plans

The Company sponsors various retirement benefit plans, including defined benefit pension plans, post-retirement medical plans, defined contribution savings plans, and termination indemnity plans, covering substantially all U.S. employees and many employees outside the U.S. The net expense related to these plans was $459 million, $668 million, and $467 million in fiscal years 2022, 2021, and 2020, respectively.

In the U.S., the Company maintains qualified pension plans designed to provide guaranteed minimum retirement benefits to all eligible U.S. participants. Pension coverage for non-U.S. employees is provided, to the extent deemed appropriate, through separate plans. In addition to the benefits provided under the qualified pension plan, retirement benefits associated with wages in excess of the IRS allowable limits are provided to certain employees under a non-qualified plan. U.S. and Puerto Rico employees are also eligible to receive a medical benefit component, in addition to normal retirement benefits, through the Company's post-retirement benefits.

At April 29, 2022 and April 30, 2021, the funded status of the Company's benefit plans was $74 million overfunded and $705 million underfunded, respectively.

During fiscal year 2021, as part of the Simplification restructuring program, the Company offered certain eligible U.S. employees voluntary early retirement packages, resulting in incremental expense of $97 million recognized. Of this amount, $73 million related to U.S. pension benefits, $11 million related to defined contribution plans, $11 million related to U.S. post-retirement benefits, and $2 million related to cash payments and administrative fees. See Note 4 for additional information on the Simplification restructuring program.

As of April 24, 2020, the Company announced the freezing of U.S. pension benefits beginning in 2027. Employees will continue to earn benefits as required by the plan until April 30, 2027, after which date benefits will no longer be earned and employees will earn benefits under a new defined contribution structure. The Company recognized curtailment benefits of $94 million in fiscal year 2020 as a result of this change.

Defined Benefit Pension Plans

The change in benefit obligation and funded status of the Company's U.S. and Non-U.S. pension benefits are as follows:

(in millions)	U.S. Pension Benefits Fiscal Year 2022	U.S. Pension Benefits Fiscal Year 2021	Non-U.S. Pension Benefits Fiscal Year 2022	Non-U.S. Pension Benefits Fiscal Year 2021
Accumulated benefit obligation at end of year:	$ 3,396	$ 3,786	$ 1,638	$ 2,035
Change in projected benefit obligation:				
Projected benefit obligation at beginning of year	$ 3,979	$ 3,723	$ 2,294	$ 2,024
Service cost	98	106	64	70
Interest cost	102	109	26	28
Employee contributions	–	–	12	12
Plan curtailments and settlements	–	–	(11)	(4)
Actuarial (gain) loss[1]	(513)	99	(394)	6
Benefits paid	(141)	(129)	(48)	(41)
Special termination benefits	–	73	–	–
Currency exchange rate changes and other	–	–	(203)	200
Projected benefit obligation at end of year	**$ 3,526**	**$ 3,979**	**$ 1,740**	**$ 2,294**
Change in plan assets:				
Fair value of plan assets at beginning of year	$ 3,660	$ 2,982	$ 1,900	$ 1,404
Actual return on plan assets	15	715	(12)	232
Employer contributions	24	95	70	149
Employee contributions	–	–	12	12
Plan settlements	–	–	(1)	(4)
Benefits paid	(141)	(129)	(48)	(41)
Currency exchange rate changes and other	–	–	(188)	149
Fair value of plan assets at end of year	**$ 3,559**	**$ 3,660**	**$ 1,732**	**$ 1,900**
Funded status at end of year:				
Fair value of plan assets	$ 3,559	$ 3,660	$ 1,732	$ 1,900
Benefit obligations	3,526	3,979	1,740	2,294
Over (under) funded status of the plans	33	(319)	(8)	(394)
Recognized asset (liability)	**$ 33**	**$ (319)**	**$ (8)**	**$ (394)**
Amounts recognized on the consolidated balance sheets consist of:				
Non-current assets	$ 313	$ 110	$ 240	$ 48
Current liabilities	(21)	(20)	(6)	(6)
Non-current liabilities	(259)	(408)	(242)	(436)
Recognized asset (liability)	**$ 33**	**$ (319)**	**$ (8)**	**$ (394)**
Amounts recognized in accumulated other comprehensive loss:				
Prior service cost (credit)	$ –	$ –	$ (4)	$ (6)
Net actuarial loss	854	1,220	161	530
Ending balance	**$ 854**	**$ 1,220**	**$ 157**	**$ 524**

(1) Actuarial gains and losses result from changes in actuarial assumptions (such as changes in the discount rate and revised mortality rates). The actuarial gain in fiscal year 2022 was primarily related to increases in discount rates. The actuarial loss in fiscal year 2021 was primarily related to decreases in discount rates.

In certain countries outside the U.S., fully funding pension plans is not a common practice, as funding provides no income tax benefit. Consequently, certain pension plans were partially funded at April 29, 2022 and April 30, 2021. U.S. and non-U.S. pension plans with accumulated benefit obligations in excess of plan assets consist of the following:

(in millions)	Fiscal Year 2022	2021
Accumulated benefit obligation	$ 830	$ 5,089
Projected benefit obligation	880	5,198
Plan assets at fair value	356	4,561

U.S. and non-U.S. pension plans with projected benefit obligations in excess of plan assets consist of the following:

(in millions)	Fiscal Year 2022	2021
Projected benefit obligation	$ 907	$ 5,921
Plan assets at fair value	379	5,159

The net periodic benefit cost of the plans includes the following components:

	U.S. Pension Benefits			Non-U.S. Pension Benefits		
	Fiscal Year			Fiscal Year		
(in millions)	2022	2021	2020	2022	2021	2020
Service cost	$ 98	$ 106	$ 106	$ 64	$ 70	$ 59
Interest cost	102	109	126	26	28	28
Expected return on plan assets	(226)	(242)	(225)	(64)	(59)	(58)
Amortization of prior service cost	–	1	1	(1)	(1)	(1)
Amortization of net actuarial loss	64	69	56	22	25	14
Settlement and curtailment (gain) loss	–	–	–	(10)	1	–
Special termination benefits	–	73	–	–	–	–
Net periodic benefit cost	**$ 39**	**$ 116**	**$ 64**	**$ 37**	**$ 64**	**$ 42**

The other changes in plan assets and projected benefit obligations recognized in *other comprehensive income* for fiscal year 2022 are as follows:

(in millions)	U.S. Pension Benefits	Non-U.S. Pension Benefits
Net actuarial gain	$ (303)	$ (317)
Amortization of prior service credit	–	1
Amortization and settlement recognition of actuarial loss	(64)	(22)
Effect of exchange rates	–	(29)
Total recognized in other comprehensive income	**(367)**	**(367)**
Total recognized in net periodic benefit cost and other comprehensive income	**$ (328)**	**$ (331)**

The actuarial assumptions are as follows:

	U.S. Pension Benefits			Non-U.S. Pension Benefits		
	Fiscal Year			Fiscal Year		
	2022	2021	2020	2022	2021	2020
Critical assumptions – projected benefit obligation:						
Discount rate	4.23%-4.48%	2.80%-3.50%	3.10%-3.70%	0.60%-25.40%	0.30%-13.30%	0.30%-13.30%
Rate of compensation increase	4.83%	4.83%	3.90%	2.70%	2.90%	2.91%
Critical assumptions – net periodic benefit cost:						
Discount rate – benefit obligation	2.80%-3.46%	3.10%-3.70%	3.90%-4.30%	0.25%-12.80%	0.30%-13.90%	0.40%-13.90%
Discount rate – service cost	2.50%-3.51%	2.60%-3.90%	3.70%-4.00%	0.24%-12.80%	0.30%-13.90%	0.40%-13.90%
Discount rate – interest cost	2.08%-2.87%	2.80%-3.20%	3.50%-4.30%	0.08%-12.80%	0.30%-13.90%	0.40%-13.90%
Expected return on plan assets	5.60%-7.40%	7.50%	7.90%	3.67%	3.78%	4.19%
Rate of compensation increase	3.90%-4.83%	3.90%	3.90%	2.90%	2.91%	2.87%

The Company utilizes a full yield curve approach methodology to estimate the service and interest cost components of net periodic pension cost and net periodic post-retirement benefit cost for the Company's pension and other post-retirement benefits. The full yield curve approach applies specific spot rates along the yield curve to their underlying projected cash flows in estimation of the cost components. The current yield curves represent high quality, long-term fixed income instruments.

The expected long-term rate of return on plan assets assumptions are determined using a building block approach, considering historical averages and real returns of each asset class. In certain countries, where historical returns are not meaningful, consideration is given to local market expectations of long-term returns.

Retirement Benefit Plan Investment Strategy

The Company sponsors trusts that hold the assets for U.S. pension plans and other U.S. post-retirement benefit plans, primarily retiree medical benefits. For investment purposes, the Medtronic U.S. pension and other U.S. post-retirement benefit plans employ similar investment strategies with different asset allocation targets.

The Company has a Qualified Plan Committee (the Plan Committee) that sets investment guidelines for U.S. pension plans and other U.S. post-retirement benefit plans with the assistance of external consultants. These guidelines are established based on market conditions, risk tolerance, funding requirements, and expected benefit payments. The Plan Committee also oversees the investment allocation process, selects the investment managers, and monitors asset performance. As pension liabilities are long-term in nature, the Company employs a long-term total return approach to maximize the long-term rate of return on plan assets for a prudent level of risk. An annual analysis on the risk versus the return of the investment portfolio is conducted to justify the expected long-term rate of return assumption.

The investment portfolios contain a diversified allocation of investment categories, including equities, fixed income securities, hedge funds, and private equity. Securities are also diversified in terms of domestic and international, short- and long-term, growth and value styles, large cap and small cap stocks, and active and passive management.

Outside the U.S., pension plan assets are typically managed by decentralized fiduciary committees. There is significant variation in policy asset allocation from country to country. Local regulations, funding rules, and financial and tax considerations are part of the funding and investment allocation process in each country. The weighted average target asset allocations at April 29, 2022 for the plans are 41% equity securities, 33% debt securities, and 26% other.

The plans did not hold any investments in the Company's ordinary shares at April 29, 2022 or April 30, 2021.

The Company's U.S. plans target asset allocations at April 29, 2022, compared to the U.S. plans actual asset allocations at April 29, 2022 and April 30, 2021 by asset category, are as follows:

U.S. Plans

	Target Allocation	Actual Allocation	
	April 29, 2022	April 29, 2022	April 30, 2021
Asset Category:			
Equity securities	34%	36%	39%
Debt securities	51	45	32
Other	15	19	29
Total	**100%**	**100%**	**100%**

Strong performance on equity securities during the fiscal year resulted in asset allocations different than targets. Management expects to move the allocations closer to target over the intermediate term.

Retirement Benefit Plan Asset Fair Values

The following is a description of the valuation methodologies used for retirement benefit plan assets measured at fair value:

Short-term investments: Valued at the closing price reported in the active markets in which the individual security is traded.

Mutual funds: Comprised of investments in equity and fixed income securities held in pooled investment vehicles. The valuations of mutual funds are based on the respective net asset values which are determined by the fund daily at market close. The net asset values are calculated based on the valuation of the underlying assets which are determined using observable inputs. The net asset values are publicly reported.

Equity commingled trusts: Comprised of investments in equity securities held in pooled investment vehicles. The valuations of equity commingled trusts are based on the respective net asset values which are determined by the fund daily at market close. The net asset values are calculated based on the valuation of the underlying assets which are determined using observable inputs. The net asset values are not publicly reported, and funds are valued at the net asset value practical expedient.

Fixed income commingled trusts: Comprised of investments in fixed income securities held in pooled investment vehicles. The valuations of fixed income commingled trusts are based on the respective net asset values which are determined by the fund daily at market close. The net asset values are calculated based on the valuation of the underlying assets which are determined using observable inputs. The net asset values are not publicly reported, and funds are valued at the net asset value practical expedient.

Partnership units: Valued based on the year-end net asset values of the underlying partnerships. The net asset values of the partnerships are based on the fair values of the underlying investments of the partnerships. Quoted market prices are used to value the underlying investments of the partnerships, where the partnerships consist of the investment pools which invest primarily in common stocks. Partnership units include partnerships, private equity investments, and real asset investments. Partnerships primarily include long/short equity and absolute return strategies. These investments may be redeemed monthly with notice periods ranging from 45 to 95 days. At April 29, 2022, there are no funds in the process of liquidation. Private equity investments consist of common stock and debt instruments of private companies. For private equity funds, the sum of the unfunded commitments at April 29, 2022 is $204 million, and the estimated liquidation period of these funds is expected to be one to 15 years. Real asset investments consist of commodities, derivatives, Real Estate Investment Trusts, and illiquid real estate holdings. These investments have redemption and liquidation periods ranging from 30 days to 10 years. At April 29, 2022, there are no real estate investments in the process of liquidation. Valuation procedures are utilized to arrive at fair value if a quoted market price is not available for a partnership investment.

Registered investment companies: Valued at net asset values which are not publicly reported. The net asset values are calculated based on the valuation of the underlying assets. The underlying assets are valued at the quoted market prices of shares held by the plan at year-end in the active market on which the individual securities are traded.

Insurance contracts: Comprised of investments in collective (group) insurance contracts, consisting of individual insurance policies. The policyholder is the employer, and each member is the owner/beneficiary of their individual insurance policy. These policies are a part of the insurance company's general portfolio and participate in the insurer's profit-sharing policy on an excess yield basis.

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

The following tables provide information by level for the retirement benefit plan assets that are measured at fair value, as defined by U.S. GAAP. Certain investments for which the fair value is measured using the net asset value per share (or its equivalent) practical expedient are not presented within the fair value hierarchy. The fair value amounts presented for these investments are intended to permit reconciliation to the total fair value of plan assets at April 29, 2022 and April 30, 2021.

U.S. Pension Benefits

(in millions)	Fair Value at April 29, 2022	Fair Value Measurements Using Inputs Considered as Level 1	Level 2	Level 3	Investments Measured at Net Asset Value
Short-term investments	$ 73	$ 73	$ –	$ –	$ –
Mutual funds	125	125	–	–	–
Equity commingled trusts	1,281	–	–	–	1,281
Fixed income commingled trusts	1,069	–	–	–	1,069
Partnership units	1,011	–	–	1,011	–
	$ 3,559	**$ 197**	**$ –**	**$ 1,011**	**$ 2,350**

(in millions)	Fair Value at April 30, 2021	Fair Value Measurements Using Inputs Considered as Level 1	Level 2	Level 3	Investments Measured at Net Asset Value
Short-term investments	$ 232	$ 232	$ –	$ –	$ –
Mutual funds	99	99	–	–	–
Equity commingled trusts	1,420	–	–	–	1,420
Fixed income commingled trusts	1,050	–	–	–	1,050
Partnership units	860	–	–	860	–
	$ 3,660	**$ 331**	**$ –**	**$ 860**	**$ 2,470**

The following tables provide a reconciliation of the beginning and ending balances of U.S. pension benefit assets measured at fair value that used significant unobservable inputs (Level 3):

(in millions)	Partnership Units
April 24, 2020	$ 625
Total realized gains, net	8
Total unrealized gains, net	89
Purchases and sales, net	139
April 30, 2021	**860**
Total realized gains, net	28
Total unrealized gains, net	72
Purchases and sales, net	51
April 29, 2022	**$ 1,011**

Non-U.S. Pension Benefits

(in millions)	Fair Value at April 29, 2022	Fair Value Measurements Using Inputs Considered as Level 1	Level 2	Level 3	Investments Measured at Net Asset Value
Registered investment companies	$ 1,689	$ –	$ –	$ –	$ 1,689
Insurance contracts	43	–	–	43	–
	$ 1,732	$ –	$ –	$ 43	$ 1,689

(in millions)	Fair Value at April 30, 2021	Fair Value Measurements Using Inputs Considered as Level 1	Level 2	Level 3	Investments Measured at Net Asset Value
Registered investment companies	$ 1,850	$ –	$ –	$ –	$ 1,850
Insurance contracts	49	–	–	49	–
	$ 1,900	$ –	$ –	$ 49	$ 1,850

Non-U.S. pension benefit assets that are valued using significant unobservable inputs (Level 3) was $43 million and $49 million as of April 29, 2022 and April 30, 2021, respectively. The decrease in the fair value of the assets was due to insurance contracts being sold.

There were no transfers into or out of Level 3 for both the U.S. and non-U.S. pension plans during the fiscal years ended April 29, 2022 and April 30, 2021.

Retirement Benefit Plan Funding

It is the Company's policy to fund retirement costs within the limits of allowable tax deductions. During fiscal year 2022, the Company made discretionary contributions of approximately $24 million to the U.S. pension plan. Internationally, the Company contributed approximately $70 million for pension benefits during fiscal year 2022. The Company anticipates that it will make contributions of $21 million and $52 million to its U.S. pension benefit plans and non-U.S. pension benefit plans, respectively, in fiscal year 2023. Based on the guidelines under the U.S. Employee Retirement Income Security Act of 1974 and the various guidelines which govern the plans outside the U.S., the majority of anticipated fiscal year 2023 contributions will be discretionary. The Company believes that pension assets, returns on invested pension assets, and Company contributions will be able to meet its pension and other post-retirement obligations in the future.

Retiree benefit payments, which reflect expected future service, are anticipated to be paid as follows:

(in millions)	Gross Payments	
Fiscal Year	U.S. Pension Benefits	Non-U.S. Pension Benefits
2023	$ 150	$ 61
2024	160	55
2025	172	59
2026	182	59
2027	193	65
2028 – 2032	1,110	367
Total	**$ 1,966**	**$ 666**

Post-retirement Benefit Plans

The net periodic benefit cost associated with the Company's post-retirement benefit plans was income of $20 million, $6 million, and $15 million in fiscal years 2022, 2021, and 2020, respectively. The Company's projected benefit obligation for all post-retirement benefit plans was $276 million and $337 million at April 29, 2022 and April 30, 2021, respectively. The Company's fair value of plan assets for all post-retirement benefit plans was $325 million and $345 million at April 29, 2022 and April 30, 2021, respectively. The post-retirement benefit plan assets at both April 29, 2022 and April 30, 2021 primarily comprised of equity and fixed commingled trusts, consistent with the U.S. retirement benefit plan assets outlined in the fair value leveling tables above.

Defined Contribution Savings Plans

The Company has defined contribution savings plans that cover substantially all U.S. employees and certain non-U.S. employees. The general purpose of these plans is to provide additional financial security during retirement by providing employees with an incentive to make regular savings. Company contributions to the plans are based on employee contributions and Company performance. Expense recognized under these plans was $403 million, $495 million, and $376 million in fiscal years 2022, 2021, and 2020, respectively.

Effective May 1, 2005, the Company froze participation in the original defined benefit pension plan in the U.S. and implemented two new plans: an additional defined benefit pension plan, the Personal Pension Account (PPA), and a new defined contribution plan, the Personal Investment Account (PIA). Employees in the U.S. hired on or after May 1, 2005 but before January 1, 2016 had the option to participate in either the PPA or the PIA. Participants in the PPA receive an annual allocation of their salary and bonus on which they will receive an annual guaranteed rate of return, which is based on the ten-year Treasury bond rate. Participants in the PIA also receive an annual allocation of their salary and bonus; however, they are allowed to determine how to invest their funds among identified fund alternatives. The cost associated with the PPA is included in U.S. Pension Benefits in the tables presented earlier. The defined contribution cost associated with the PIA was approximately $48 million, $50 million, and $52 million in fiscal years 2022, 2021, and 2020, respectively.

Effective January 1, 2016, the Company froze participation in the existing defined benefit (PPA) and contribution (PIA) pension plans in the U.S. and implemented a new form of benefit under the existing defined contribution plan for legacy Covidien employees and employees in the U.S. hired on or after January 1, 2016 or rehired after July 1, 2020. Participants in the Medtronic Core Contribution (MCC) also receive an annual allocation of their salary and bonus and are allowed to determine how to invest their funds among identified fund alternatives. The defined contribution cost associated with the MCC was approximately $83 million, $73 million, and $66 million and in fiscal years 2022, 2021, and 2020, respectively.

16. Leases

The Company leases office, manufacturing, and research facilities and warehouses, as well as transportation, data processing, and other equipment. The Company determines whether a contract is a lease or contains a lease at inception date. Upon commencement, the Company recognizes a right-of-use asset and lease liability. Right-of-use assets represent the Company's right to use the underlying asset for the lease term. Lease liabilities are the Company's obligation to make the lease payments arising from a lease. As the Company's leases typically do not provide an implicit rate, the Company's lease liabilities are measured on a discounted basis using the Company's incremental borrowing rate. Lease terms used in the recognition of right-of-use assets and lease liabilities include only options to extend the lease that are reasonably certain to be exercised. Additionally, lease terms underlying the right-of-use assets and lease liabilities consider terminations that are reasonably certain to be executed.

The Company's lease agreements include leases that have both lease and associated nonlease components. The Company has elected to account for lease components and the associated nonlease components as a single lease component. The consolidated balance sheets do not include recognized assets or liabilities for leases that, at the commencement date, have a term of twelve months or less and do not include an option to purchase the underlying asset that is reasonably certain to be exercised. The Company recognizes such leases in the consolidated statements of income on a straight-line basis over the lease term. Additionally, the Company recognizes variable lease payments not included in its lease liabilities in the period in which the obligation for those payments is incurred. Variable lease payments for fiscal year 2022, 2021, and 2020 were not material.

The Company's lease agreements include leases accounted for as operating leases and those accounted for as finance leases. The right-of-use assets, lease liabilities, lease costs, cash flows, and lease maturities associated with the Company's finance leases were not material to the consolidated financial statements at April 29, 2022 or April 30, 2021 or for fiscal year 2022, 2021 and 2020. Finance lease right-of-use assets are included in *property, plant, and equipment, net*, and finance lease liabilities are included in *current debt obligations* and *long-term debt* on the consolidated balance sheets.

The following table summarizes the balance sheet classification of the Company's operating leases and amounts of the right-of-use assets and lease liabilities at April 29, 2022 and April 30, 2021:

(in millions)	Balance Sheet Classification	April 29, 2022	April 30, 2021
Right-of-use assets	Other assets	$ 854	$ 998
Current liability	Other accrued expenses	167	186
Non-current liability	Other liabilities	703	829

The following table summarizes the weighted-average remaining lease term and weighted-average discount rate for the Company's operating leases at April 29, 2022, April 30, 2021, and April 24, 2020:

	April 29, 2022	April 30, 2021	April 24, 2020
Weighted-average remaining lease term	7.3 Years	7.5 years	7.2 years
Weighted-average discount rate	2.0%	2.3%	3.0%

The following table summarizes the components of total operating lease cost for fiscal year 2022, 2021, and 2020:

	Fiscal Year		
(in millions)	2022	2021	2020
Operating lease cost	$ 195	$ 216	$ 223
Short-term lease cost	65	35	46
Total operating lease cost	**$ 260**	**$ 251**	**$ 269**

The following table summarizes the cash paid for amounts included in the measurement of operating lease liabilities and right-of-use assets obtained in exchange for operating lease liabilities for fiscal year 2022, 2021, and 2020:

	Fiscal Year		
(in millions)	2022	2021	2020
Cash paid for amounts included in the measurement of operating lease liabilities	$ 174	$ 216	$ 221
Right-of-use assets obtained in exchange for operating lease liabilities	78	230	174

The following table summarizes the maturities of the Company's operating leases at April 29, 2022:

(in millions) **Fiscal Year**	**Operating Leases**
2023	$ 213
2024	164
2025	130
2026	103
2027	82
Thereafter	284
Total expected lease payments	**976**
Less: Imputed interest	(105)
Total lease liability	**$ 871**

The Company makes certain products available to customers under lease arrangements, including arrangements whereby equipment is placed with customers who then purchase consumable products to accompany the use of the equipment. Income arising from arrangements where the Company is the lessor is recognized within *net sales* in the consolidated statements of income and the Company's net investments in sales-type leases are included in *other current assets* and *other assets* in the consolidated balance sheets. Lessor income and the related assets and lease maturities were not material to the consolidated financial statements at or for the fiscal year ended April 29, 2022 and April 30, 2021.

17. Accumulated Other Comprehensive Loss

The following table provides changes in AOCI, net of tax and by component:

(in millions)	Unrealized (Loss) Gain on Investment Securities	Cumulative Translation Adjustments	Net Investment Hedges	Net Change in Retirement Obligations	Unrealized (Loss) Gain on Cash Flow Hedges	Total Accumulated Other Comprehensive (Loss) Income
April 26, 2019	**$ (45)**	**$ (1,383)**	**$ (169)**	**$ (1,308)**	**$ 194**	**$ (2,711)**
Other comprehensive income (loss) before reclassifications	43	(827)	405	(596)	309	(666)
Reclassifications	2	–	–	52	(237)	(183)
Other comprehensive income (loss)	45	(827)	405	(544)	72	(849)
April 24, 2020	**–**	**(2,210)**	**236**	**(1,852)**	**266**	**(3,560)**
Other comprehensive income (loss) before reclassifications	92	1,691	(1,694)	432	(541)	(20)
Reclassifications	–	–	–	73	22	95
Other comprehensive income (loss)	92	1,691	(1,694)	505	(519)	75
April 30, 2021	**92**	**(519)**	**(1,458)**	**(1,347)**	**(253)**	**(3,485)**
Other comprehensive income (loss) before reclassifications	(304)	(2,080)	2,299	514	781	1,210
Reclassifications	3	–	–	60	(54)	9
Other comprehensive income (loss)	(301)	(2,080)	2,299	574	727	1,219
April 29, 2022	**$ (209)**	**$ (2,599)**	**$ 841**	**$ (773)**	**$ 474**	**$ (2,265)**

The income tax on gains and losses on investment securities in other comprehensive income before reclassifications during fiscal years 2022, 2021, and 2020 was a benefit of $51 million, an expense of $31 million and a benefit of $13 million, respectively. During fiscal years 2022, 2021, and 2020, realized gains and losses on investment securities reclassified from AOCI were reduced by income taxes of $1 million, $2 million and $3 million, respectively. When realized, gains and losses on investment securities reclassified from AOCI are recognized within *other non-operating income, net*. Refer to Note 5 for additional information.

During fiscal years 2022, 2021, and 2020, the income tax on cumulative translation adjustment was a benefit of $8 million, an expense of $7 million, and a benefit of $9 million, respectively.

During fiscal years 2022, 2021, and 2020, there were no tax impacts on net investment hedges. Refer to Note 7 for additional information.

The net change in retirement obligations in other comprehensive income includes amortization of net actuarial losses included in net periodic benefit cost. The income tax on the net change in retirement obligations in other comprehensive income before reclassifications during fiscal years 2022, 2021, and 2020 resulted in an expense of $134 million and $115 million, and a benefit of $159 million, respectively. During fiscal years 2022, 2021, and 2020, the gains and losses on defined benefit and pension items reclassified from AOCI were reduced by income taxes of $20 million, $16 million, and $12 million, respectively. When realized, net gains and losses on defined benefit and pension items reclassified from AOCI are recognized within *other non-operating income, net*. Refer to Note 15 for additional information.

The income tax on unrealized gains and losses on cash flow hedges in other comprehensive income before reclassifications during fiscal years 2022, 2021, and 2020 was an expense of $152 million, a benefit of $87 million, and an expense of $88 million, respectively. Amounts reclassified from AOCI related to cash flow hedges included income taxes of $26 million, $14 million, and $80 million for fiscal years 2022, 2021, and 2020, respectively. When realized, gains and losses on currency exchange rate contracts reclassified from AOCI are recognized within *other operating expense, net* or *cost of products sold*. Refer to Note 7 for additional information.

18. Commitments and Contingencies

Legal Matters

The Company and its affiliates are involved in a number of legal actions from time to time involving product liability, employment, intellectual property and commercial disputes, shareholder related matters, environmental proceedings, tax disputes, and governmental proceedings and investigations, including those described below. With respect to governmental proceedings and investigations, like other companies in our industry, the Company is subject to extensive regulation by national, state, and local governmental agencies in the United States and in other jurisdictions in which the Company and its affiliates operate. As a result, interaction with governmental agencies is ongoing. The Company's standard practice is to cooperate with regulators and investigators in responding to inquiries. The outcomes of legal actions are not within the Company's complete control and may not be known for prolonged periods of time. In some actions, the enforcement agencies or private claimants seek damages, as well as other civil or criminal remedies (including injunctions barring the sale of products that are the subject of the proceeding), that could require significant expenditures, result in lost revenues, or limit the Company's ability to conduct business in the applicable jurisdictions.

The Company records a liability in the consolidated financial statements on an undiscounted basis for loss contingencies related to legal actions when a loss is known or considered probable and the amount may 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. If a loss is reasonably possible but not known or probable, and may be reasonably estimated, the estimated loss or range of loss is disclosed. When determining the estimated loss or range of loss, significant judgment is required. Estimates of probable losses resulting from litigation and governmental proceedings involving the Company are inherently difficult to predict, particularly when the matters are in early procedural stages with incomplete scientific facts or legal discovery, involve unsubstantiated or indeterminate claims for damages, potentially involve penalties, fines or punitive damages, or could result in a change in business practice. The Company classifies certain specified litigation charges and gains related to significant legal matters as *certain litigation charges* in the consolidated statements of income. During fiscal years 2022, 2021, and 2020, the Company recognized $95 million, $118 million, and $313 million, respectively, of additional certain litigation charges. At April 29, 2022 and April 30, 2021, total accrued litigation charges were approximately $0.3 billion and $0.4 billion, respectively. The ultimate cost to the Company with respect to accrued litigation could be materially different than the amount of the current estimates and accruals and could have a material adverse impact on the Company's consolidated earnings, financial position, and/or cash flows. The Company includes accrued litigation in *other accrued expenses* and *other liabilities* on the consolidated balance sheets. While it is not possible to predict the outcome for most of the legal matters discussed below, the Company believes it is possible that the costs associated with these matters could have a material adverse impact on the Company's consolidated earnings, financial position, and/or cash flows.

Product Liability Matters

Pelvic Mesh Litigation

The Company is currently involved in litigation in various state and federal courts against manufacturers of pelvic mesh products alleging personal injuries resulting from the implantation of those products. Two subsidiaries of Covidien supplied pelvic mesh products to one of the manufacturers, C.R. Bard (Bard), named in the litigation. The litigation includes a federal multi-district litigation in the U.S. District Court for the Northern District of West Virginia and cases in various state courts and jurisdictions outside the

U.S. Generally, complaints allege design and manufacturing claims, failure to warn, breach of warranty, fraud, violations of state consumer protection laws and loss of consortium claims. In fiscal year 2016, Bard paid the Company $121 million towards the settlement of 11,000 of these claims. In May 2017, the agreement with Bard was amended to extend the terms to apply to up to an additional 5,000 claims. That agreement does not resolve the dispute between the Company and Bard with respect to claims that do not settle, if any. As part of the agreement, the Company and Bard agreed to dismiss without prejudice their pending litigation with respect to Bard's obligation to defend and indemnify the Company. The Company estimates law firms representing approximately 16,200 claimants have asserted or may assert claims involving products manufactured by Covidien's subsidiaries. As of June 1, 2022, the Company had reached agreements to settle approximately 15,900 of these claims. The Company's accrued expenses for this matter are included within accrued litigation as discussed above.

Hernia Mesh Litigation

Starting in fiscal year 2020, plaintiffs began filing lawsuits against certain subsidiaries of the Company in U.S. state and federal courts alleging personal injury from hernia mesh products sold by those subsidiaries. The majority of the pending cases are in Massachusetts state court, where they have been consolidated before a single judge. As of June 6, 2022, subsidiaries of the Company have been named as defendants in lawsuits filed on behalf of approximately 5,900 individual plaintiffs, and certain plaintiffs' law firms have advised the Company that they may file additional cases in the future. On June 6, 2022, the Judicial Panel on Multidistrict Litigation transferred 83 actions involving the Company's hernia mesh to a federal Multidistrict Litigation in the U.S. District Court for the District of Massachusetts for pretrial proceedings. The pending lawsuits relate almost entirely to hernia mesh products that have not been subject to recalls, withdrawals, or other adverse regulatory action. The Company has not recorded an expense related to damages in connection with these matters because any potential loss is not currently probable and reasonably estimable. Additionally, the Company is unable to reasonably estimate the range of loss, if any, that may result from these matters.

Environmental Proceedings

The Company is involved in various stages of investigation and cleanup related to environmental remediation matters at a number of sites. These projects relate to a variety of activities, including removal of solvents, metals and other hazardous substances from soil and groundwater. The ultimate cost of site cleanup and timing of future cash flows is difficult to predict given uncertainties regarding the extent of the required cleanup, the interpretation of applicable laws and regulations, and alternative cleanup methods.

The Company is a successor to a company which owned and operated a chemical manufacturing facility in Orrington, Maine from 1967 until 1982, and is responsible for the costs of completing an environmental site investigation as required by the Maine Department of Environmental Protection (MDEP). MDEP served a compliance order on Mallinckrodt LLC and U.S. Surgical Corporation, subsidiaries of Covidien, in December 2008, which included a directive to remove a significant volume of soils at the site. After a hearing on the compliance order before the Maine Board of Environmental Protection (Maine Board) to challenge the terms of the compliance order, the Maine Board modified the MDEP order and issued a final order requiring removal of two landfills, capping of the remaining three landfills, installation of a groundwater extraction system and long-term monitoring of the site and the three remaining landfills. The Company has proceeded with remediation in accordance with the MDEP order as modified by the Maine Board order.

Since the early 2000s, the Company or its predecessors have also been involved in a lawsuit filed in the U.S. District Court for the District of Maine by the Natural Resources Defense Council and the Maine People's Alliance. Plaintiffs sought an injunction requiring the Company's predecessor to conduct extensive studies of mercury contamination of the Penobscot River and Bay and options for remediating such contamination, and to perform appropriate remedial activities, if necessary.

Following a trial in March 2002, the court held that conditions in the Penobscot River and Bay may pose an imminent and substantial endangerment and that the Company's predecessor was liable for the cost of performing a study of the River and Bay. Following a second trial in June 2014, the court ordered that further engineering study and engineering design work was needed to determine the nature and extent of remediation in the Penobscot River and Bay. The court also appointed an engineering firm to conduct such studies and issue a report on potential remediation alternatives. In connection with these proceedings, reports have been produced including a variety of cost estimates for a variety of potential remedial options. In March 2021, the parties notified the court that they had agreed on a settlement in principle of all issues in this matter. Finalization of the proposed settlement remains subject to court approval.

The Company's accrued expenses for environmental proceedings are included within accrued litigation as discussed above.

Income Taxes

In March 2009, the IRS issued its audit report on Medtronic, Inc. for fiscal years 2005 and 2006. Medtronic, Inc. reached agreement with the IRS on some, but not all matters related to these fiscal years. The remaining unresolved issue for fiscal years 2005 and 2006 relates to the allocation of income between Medtronic, Inc. and its wholly-owned subsidiary operating in Puerto Rico, which is one of the Company's key manufacturing sites. The U.S. Tax Court reviewed this dispute, and in June 2016, issued an opinion with respect to the allocation of income between the parties for fiscal years 2005 and 2006. The Tax Court

generally rejected the IRS's position, but also made certain modifications to the Medtronic, Inc. tax returns as filed. In April 2017, the IRS filed a Notice of Appeal to the U.S. Court of Appeals for the Eighth Circuit regarding the Tax Court opinion. Oral argument for the Appeal occurred in March 2018. The Court of Appeals issued its opinion in August 2018 and remanded the case back to the Tax Court for additional factual findings. The Tax Court trial relating to the issues remanded by the Court of Appeals concluded during June 2021. The parties are awaiting the Tax Court decision, which will remain subject to appeal by either party upon its issuance.

The IRS has issued its audit reports on Medtronic, Inc. for fiscal years 2007 through 2016. Medtronic, Inc. and the IRS have reached agreement on all significant issues except for the allocation of income between Medtronic, Inc. and its wholly-owned subsidiary operating in Puerto Rico for the businesses that are the subject of the U.S. Tax Court matter for fiscal years 2005 and 2006.

Medtronic, Inc.'s fiscal years 2017, 2018, and 2019 U.S. federal income tax returns are currently being audited by the IRS.

Covidien LP (a wholly owned subsidiary of Medtronic plc) has either reached agreement with the IRS or the statute of limitations has lapsed on its U.S. federal income tax returns through fiscal year 2018.

Although it is not possible to predict the outcome for most of the income tax matters discussed above, the Company believes it is possible that charges associated with these matters could have a material adverse impact on the Company's consolidated earnings, financial position, and/or cash flows.

Refer to Note 13 for additional discussion of income taxes.

Guarantees

In the normal course of business, the Company and/or its affiliates periodically enter into agreements that require one or more of the Company and/or its affiliates to indemnify customers or suppliers for specific risks, such as claims for injury or property damage arising as a result of the Company or its affiliates' products, the negligence of the Company's personnel, or claims alleging that the Company's products infringe on third-party patents or other intellectual property. The Company also offers warranties on various products. The Company's maximum exposure under these guarantees is unable to be estimated. Historically, the Company has not experienced significant losses on these types of guarantees.

The Company believes the ultimate resolution of the above guarantees is not expected to have a material effect on the Company's consolidated earnings, financial position, and/or cash flows.

19. Segment and Geographic Information

There were no changes to the reportable segments during the fiscal year ended April 29, 2022. The Company's four principal operating and reportable segments are as follows: Cardiovascular Portfolio, Neuroscience Portfolio, Medical Surgical Portfolio, and Diabetes Operating Unit.

The Company's management has chosen to organize the entity based upon therapy solutions provided by each segment. The four principal segments are strategic businesses that are managed separately, as each one develops and manufactures products and provides services oriented toward targeted therapy solutions.

The primary products and services from which the Cardiovascular Portfolio segment derives its revenues include products for the diagnosis, treatment, and management of cardiac rhythm disorders and cardiovascular disease, as well as services to diagnose, treat, and manage heart and vascular-related disorders and diseases.

The primary products and services from which the Medical Surgical Portfolio segment derives its revenues include those focused on diseases of the respiratory system, gastrointestinal tract, renal system, lungs, pelvic region, kidneys, obesity, and other preventable complications.

The primary products and services from which the Neuroscience Portfolio segment derives its revenues include those focused on neurostimulation therapies and drug delivery systems for the treatment of chronic pain, as well as various areas of the spine and brain, along with pelvic health and conditions of the ear, nose, and throat.

The primary products from which the Diabetes Operating Unit segment derives its revenues include those focused on diabetes management, including insulin pumps, continuous glucose monitoring systems, smart insulin pens, and insulin pump consumables.

Segment disclosures are on a performance basis, consistent with internal management reporting. Net sales of the Company's segments include end-customer revenues from the sale of products the segment develops, manufactures, and distributes. Refer to Note 2 for discussion on net sales by segment. There are certain corporate and centralized expenses that are not allocated to the segments. The Company's management evaluates the performance of the segments and allocates resources based on net sales and segment operating profit. Segment operating profit represents income before income taxes, excluding interest expense, amortization of intangible assets, centralized distribution costs, non-operating income or expense items, certain corporate charges, and other items not allocated to the segments.

The accounting policies of the segments are the same as those described in Note 1. Certain depreciable assets may be recorded by one segment, while the depreciation expense is allocated to another segment. The allocation of depreciation expense is based on the proportion of the assets used by each segment.

Segment Operating Profit

(in millions)	Fiscal Year 2022	2021	2020
Cardiovascular	$ 4,512	$ 3,850	$ 3,719
Medical Surgical	3,572	3,021	3,044
Neuroscience	3,765	3,162	2,915
Diabetes	583	598	546
Segment operating profit	12,432	10,632	10,224
Interest expense	(553)	(925)	(1,092)
Other non-operating income, net	318	336	356
Amortization of intangible assets	(1,733)	(1,783)	(1,756)
Corporate	(1,724)	(1,577)	(1,239)
Centralized distribution costs	(1,752)	(1,877)	(1,420)
Restructuring and associated costs	(335)	(617)	(441)
Acquisition-related items	43	15	(66)
Certain litigation charges	(95)	(118)	(313)
Impairment charges	–	(76)	–
MCS impairment / costs	(881)	–	–
IPR&D charges	(101)	(31)	(25)
Exit of businesses	–	–	(52)
Debt tender premium and other charges	–	–	7
Medical device regulations	(102)	(83)	(48)
Contribution to Medtronic Foundation	–	–	(80)
Income before income taxes	**$ 5,517**	**$ 3,895**	**$ 4,055**

Total Assets and Depreciation Expense

(in millions)	Total Assets April 29, 2022	April 30, 2021	Depreciation Expense 2022	2021	2020
Cardiovascular	$ 14,490	$ 15,027	$ 214	$ 212	$ 210
Medical Surgical	36,940	39,319	200	195	194
Neuroscience	16,917	17,151	265	236	233
Diabetes	3,797	3,671	67	53	38
Segments	72,144	75,168	746	696	675
Corporate	18,837	17,915	228	223	232
Total	**$ 90,981**	**$ 93,083**	**$ 974**	**$ 919**	**$ 907**

Geographic Information

Net sales are attributed to the country based on the location of the customer taking possession of the products or in which the services are rendered. Geographic property, plant, and equipment are attributed to the country based on the physical location of the assets.

The following table presents net sales for fiscal years 2022, 2021, and 2020, and property, plant, and equipment, net at April 29, 2022 and April 30, 2021 for the Company's country of domicile, countries with significant concentrations, and all other countries:

	Net sales			Property, plant, and equipment, net	
(in millions)	**2022**	**2021**	**2020**	**April 29, 2022**	**April 30, 2021**
Ireland	$ 101	$ 100	$ 85	$ 177	$ 170
United States	16,135	15,526	14,919	3,821	3,688
Rest of world	15,450	14,491	13,909	1,415	1,363
Total other countries, excluding Ireland	31,585	30,017	28,828	5,236	5,051
Total	**$ 31,686**	**$ 30,117**	**$ 28,913**	**$ 5,413**	**$ 5,221**

No single customer represented over 10 percent of the Company's consolidated net sales in fiscal years 2022, 2021, or 2020.

20. Subsequent Events

On May 25, 2022, the Company and DaVita Inc. ("DaVita") entered into a definitive agreement with the intent to form a new, independent kidney care-focused medical device company ("NewCo") with equal equity ownership. The transaction is expected to close in calendar year 2023, subject to customary regulatory approvals and closing conditions. Medtronic is contributing its entire Renal Care Solutions business ("RCS") to NewCo. RCS is part of the Respiratory, Gastrointestinal, and Renal division in the Company's Medical Surgical portfolio, and had revenue of $325 million in fiscal year 2022.

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

Not applicable.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act)) and changes in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this annual report, our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) are effective.

Management's Annual Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company (as defined in Exchange Act Rule 13a-15(f)). Management conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management concluded that the Company's internal control over financial reporting was effective as of April 29, 2022. The effectiveness of the Company's internal control over financial reporting as of April 29, 2022 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

During the quarter ended April 29, 2022, there were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) under the Exchange Act) that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting. The Company has not experienced any material impacts to its internal controls over financial reporting despite the COVID-19 pandemic.

Item 9B. Other Information

As reported in our Quarterly Reports on Form 10-Q for the first three quarters of fiscal year 2022, Medtronic has engaged in certain activities that it is required to disclose pursuant to Section 13(r)(1)(D)(ii) of the Securities Exchange Act of 1934, as amended. In particular, during the first three quarters of fiscal year 2022, Medtronic engaged in certain regulatory activities involving Russia's Federal Security Service ("FSB") related to its medical devices that were expressly authorized by the U.S. Government under applicable economic sanctions regulations.

During the first three quarters of fiscal year 2022, in the normal course of business and consistent with the OFAC authorizations as in effect at the time, Medtronic Russia filed a total of nine notifications with the FSB, as required under local Russian law for the import of medical devices that make use of encryption functionality. These activities did not directly result in any revenues or profits for Medtronic. Medtronic did not engage in these activities during the fourth quarter of fiscal year 2022. To the extent that notifications with the FSB remain permissible under U.S. law, Medtronic may decide to continue engaging in such activities for the limited purposes of complying with local law requirements in Russia.

PART III

Part III of this Annual Report on Form 10-K incorporates information by reference from the Company's 2022 definitive proxy statement, which will be filed no later than 120 days after April 29, 2022.

Item 10. Directors, Executive Officers, and Corporate Governance

The sections entitled "Proposal 1 – Election of Directors – Directors and Nominees," "Corporate Governance – Committees of the Board and Meetings," and "Share Ownership Information – Delinquent Section 16(a) Report" in the Company's Proxy Statement for our 2022 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 29, 2022, are incorporated herein by reference.

Set forth below are the names and ages of our Executive Officers of Medtronic, as well as information regarding their positions with Medtronic, their periods of service in these capacities, and their business experiences. There are no family relationships among any of the officers named, nor is there any arrangement or understanding pursuant to which any person was selected as an officer.

The following table shows the name, age, and position as of April 29, 2022 of each of our Executive Officers:

Name	Age	Position with the Company
Geoffrey S. Martha	52	Chairman and Chief Executive Officer
Ivan K. Fong	60	Executive Vice President, General Counsel and Corporate Secretary of the Company
Karen L. Parkhill	56	Executive Vice President and Chief Financial Officer
Carol A. Surface	56	Executive Vice President and Chief Human Resources Officer
Robert ten Hoedt	61	Executive Vice President and President, EMEA Region, President, APAC Region
Robert J. White	59	Executive Vice President and President, Medical Surgical Portfolio
John Liddicoat, M.D.	58	Executive Vice President and President, Americas Region
Sean Salmon	57	Executive Vice President and President, Diabetes Operating Unit, President, Cardiovascular Portfolio
Brett Wall	57	Executive Vice President and President, Neuroscience Portfolio

Geoffrey S. Martha, age 52, is Chairman of the Board of Directors and Chief Executive Officer of Medtronic. Geoff assumed the role of CEO on April 27, 2020 and became Chairman of the Board on December 11, 2020. Prior to his role as Chairman and CEO, he served as President of Medtronic from November 2019 through April 2020 and joined the Board of Directors in November 2019. Previously, Mr. Martha served as Executive Vice President and President, Restorative Therapies Group, a role he held since August 2015. Mr. Martha previously served as Senior Vice President of Strategy and Business Development of the Company beginning in January 2015 and of Medtronic, Inc. beginning in August 2011. Prior to that, he served as Managing Director of Business Development at GE Healthcare from April 2007 to July 2011; General Manager for GE Capital Technology Finance Services from November 2003 to March 2007; Senior Vice President, Business Development for GE Capital Vendor Financial Services from February 2002 to October 2003; General Manager for GE Capital Colonial Pacific Leasing from February 2001 to January 2002; and Vice President, Business Development for Potomac Federal, the GE Capital federal financing investment bank from May 1998 to January 2001.

Ivan K. Fong, age 60, has been Executive Vice President, General Counsel and Corporate Secretary of the Company since February 2022. Prior to that, he held several leadership positions at 3M Company from 2012 to 2022, including Executive Vice President, Chief Legal and Policy Officer and Secretary. Prior to joining 3M Company, Mr. Fong served as General Counsel of the U.S. Department of Homeland Security from 2009 to 2012. Prior to his role with the U.S. Government, he was Chief Legal

Officer and Secretary for Cardinal Health, Inc from 2005 to 2009. Mr. Fong currently serves on the Board of Cboe Global Markets.

Karen L. Parkhill, age 56, joined the Company as Executive Vice President and Chief Financial Officer in June 2016. From 2011 to 2016, Ms. Parkhill served as Vice Chairman and Chief Financial Officer of Comerica Incorporated. Ms. Parkhill was a member of Comerica's Management Executive Committee and the Comerica Bank Board of Directors. Prior to joining Comerica, Ms. Parkhill worked for J.P. Morgan Chase & Co. in various capacities from 1992 to 2011, including serving as Chief Financial Officer of the Commercial Banking business from 2007 to 2011. Ms. Parkhill is also a current member of the Board of Directors for American Express.

Carol A. Surface, age 56, has been Executive Vice President and Chief Human Resources Officer of the Company since January 2015 and of Medtronic, Inc. since September 2013. Prior to that, she was the Executive Vice President and Chief Human Resources Officer at Best Buy Co., Inc. from March 2010 to September 2013, and held a series of HR leadership roles at PepsiCo Inc., from May 2000 to March 2010.

Robert ten Hoedt, age 61, has been Executive Vice President and President, EMEA Region of the Company since January 2015 and of Medtronic, Inc. since May 2014, as well as President, APAC Region starting March 2022. Prior to that, he was Senior Vice President and President, EMEA and Canada from 2009 to 2014; Vice President CardioVascular Europe and Central Asia from 2006 to 2009; Vice President and General Manager, Vitatron from 1999 to 2006; Gastro-Uro leader from 1994 to 1999; and Marketing Manager, Neurological from 1991 to 1994.

Robert J. White, age 59, is Executive Vice President and President, Medical Surgical Portfolio. Since 2017, Mr. White has served as Executive Vice President and Group President of the Minimally Invasive Therapies Group of Medtronic. Prior to that, he was Senior Vice President and President, Asia Pacific from January 2015 to December 2017. He had served as President, Emerging Markets, President, Respiratory and Monitoring Solutions and Vice President and General Manager of Patient Monitoring at Covidien. He also held various leadership positions at GE Healthcare and IBM. Mr. White is also a current member of the Board of Directors of Smith & Nephew plc.

John Liddicoat, M.D., age 58, was named Executive Vice President and President, Americas Region in September 2018. Dr. Liddicoat joined Medtronic in 2006 as Vice President of Atrial Fibrillation Technologies. In December of 2006, Dr. Liddicoat was named Vice President and General Manager of the Structural Heart Disease Business. Beginning in August 2014, Dr. Liddicoat served as Senior Vice President and President, Cardiac Rhythm and Heart Failure.

Sean Salmon, age 57, has been Executive Vice President and Group President, Diabetes Group of the company since October 2019, and also assumed the role of Executive Vice President and President, Cardiovascular Portfolio in January 2021. Mr. Salmon previously served as Senior Vice President and President of Coronary and Structural Heart Business within the Cardiac and Vascular Group of the Company beginning in July 2014. Mr. Salmon is a seasoned leader who has been with Medtronic since 2004 and spent the past 16 years in increasingly senior levels of management. Prior to joining Medtronic, Mr. Salmon worked at CR Bard and Johnson & Johnson.

Brett Wall, age 57, is Executive Vice President and President of Medtronic's Neuroscience Portfolio. Mr. Wall previously served as Senior Vice President and President of the Brain Therapies division of Medtronic within the Restorative Therapies Group from March 2016 to November 2019. Prior to that, Mr. Wall served as SVP and President of Medtronic's Neurovascular business. Prior to joining Medtronic, he served as Covidien's SVP and President of Neurovascular as well as Senior Vice President and President of the International Vascular Therapies business for Covidien. Mr. Wall also served as Senior Vice President and President, International at ev3, Inc. From 2000 to 2008, Brett held various marketing and sales positions with ev3, Inc. and Micro Therapeutics, Inc. Mr. Wall has also worked at Boston Scientific as Director of Marketing, Cardiovascular, Asia Pacifica and Marketing Manager, Japan, from September 1995 to September 2000.

Item 11. Executive Compensation

The sections entitled "Corporate Governance – Director Compensation," "Corporate Governance – Committees of the Board and Meetings," "Compensation Discussion and Analysis," and "Executive Compensation" in Medtronic's Proxy Statement for the Company's 2022 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 29, 2022, are incorporated herein by reference. The section entitled "Compensation Committee Report" in Medtronic's Proxy Statement for the Company's 2022 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 29, 2022, is furnished herein by reference.

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

The sections entitled "Share Ownership Information – Significant Shareholders," "Share Ownership Information – Beneficial Ownership of Management," and "Executive Compensation – Equity Compensation Plan Information" in Medtronic's Proxy Statement for the Company's 2022 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 29, 2022, are incorporated herein by reference.

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

The sections entitled "Corporate Governance – Director Independence" and "Corporate Governance – Related Party Transactions and Other Matters" in Medtronic's Proxy Statement for the Company's 2022 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 29, 2022, are incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The sections entitled "Corporate Governance – Committees of the Board and Meetings" and "Audit and Non-Audit Fees" in Medtronic's Proxy Statement for the Company's 2022 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 29, 2022, are incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) 1. Financial Statement Schedules

Schedule II. Valuation and Qualifying Accounts – years ended April 29, 2022, April 30, 2021, and April 24, 2020.

MEDTRONIC PLC AND SUBSIDIARIES
SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS

(in millions)	Balance at Beginning of Fiscal Year	Additions		Deductions	Balance at End of Fiscal Year
		Charges to Income	Charges to Other Accounts	Other Changes (Debit) Credit	
Allowance for doubtful accounts:					
Fiscal year ended April 29, 2022	$ 241	$ 58	$ –	$ (69)[a]	$ 230
Fiscal year ended April 30, 2021	208	128	–	(95)[a]	241
Fiscal year ended April 24, 2020	190	99	–	(81)[a]	208
Inventory reserve:					
Fiscal year ended April 29, 2022	$ 629	$ 156	$ –	$(157)[b]	$ 628
Fiscal year ended April 30, 2021	544	483	–	(398)[b]	629
Fiscal year ended April 24, 2020	521	282	–	(259)[b]	544
Deferred tax valuation allowance:					
Fiscal year ended April 29, 2022	$ 5,822	$ 884	$ (19)[e]	$(103)[d]	$ 6,583
Fiscal year ended April 30, 2021	5,482	342	170 [e]	(172)[d]	5,822
Fiscal year ended April 24, 2020	6,300	119	(6)[c]	(744)[d]	5,482
				(187)[e]	

(a) Primarily consists of uncollectible accounts written off, less recoveries.
(b) Primarily reflects utilization of the inventory reserve.
(c) Reflects the impact from acquisitions and amounts recognized in accumulated other comprehensive income/loss.
(d) Primarily reflects carryover attribute utilization and expiration.
(e) Primarily reflects the effects of currency fluctuations.

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

2. Exhibits

Exhibit No.	Description
3.1	Certificate of Incorporation of Medtronic plc (incorporated by reference to Exhibit 3.1 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
3.2	Amended and Restated Memorandum and Articles of Association of Medtronic plc (incorporated by reference to Exhibit 3.2 to Medtronic plc's Registration Statement on Form S-3, filed on February 6, 2017, File No. 333-215895).
4.1	Form of Indenture between Medtronic, Inc. and Wells Fargo Bank, National Association regarding 2009 offering (incorporated by reference to Exhibit 4.1 to Medtronic, Inc.'s Registration Statement on Form S-3, filed on March 9, 2009, File No. 333-157777).
4.2	First Supplemental Indenture, dated March 12, 2009, between Medtronic, Inc. and Wells Fargo Bank, National Association (including the Forms of Notes thereof) (incorporated by reference to Exhibit 4.1 to Medtronic, Inc.'s Current Report on Form 8-K, filed on March 12, 2009, File No. 001-07707).
4.3	Second Supplemental Indenture, dated March 16, 2010, between Medtronic, Inc. and Wells Fargo Bank, National Association (including the Forms of Notes thereof) (incorporated by reference to Exhibit 4.1 to Medtronic, Inc.'s Current Report on Form 8-K, filed on March 16, 2010, File No. 001-07707).
4.4	Third Supplemental Indenture, dated March 15, 2011, between Medtronic, Inc. and Wells Fargo Bank, National Association (including the Forms of Notes thereof) (incorporated by reference to Exhibit 4.1 to Medtronic, Inc.'s Current report on Form 8-K, filed on March 16, 2011, File No. 001-07707).
4.5	Fourth Supplemental Indenture, dated March 19, 2012, between Medtronic, Inc. and Wells Fargo Bank, National Association (including the Forms of Notes thereof) (incorporated by reference to Exhibit 4.2 to Medtronic, Inc.'s Current Report on Form 8-K, filed on March 20, 2012, File No. 001-07707).
4.6	Fifth Supplemental Indenture, dated March 26, 2013, between Medtronic, Inc. and Wells Fargo Bank, National Association (including the Forms of Notes thereof) (incorporated by reference to Exhibit 4.1 to Medtronic, Inc.'s Current Report on Form 8-K, filed on March 26, 2013, File No. 001-07707).
4.7	Sixth Supplemental Indenture, dated February 27, 2014, between Medtronic, Inc. and Wells Fargo Bank, National Association (including the Form of Global Note thereof) (incorporated by reference to Exhibit 4.2 to Medtronic, Inc.'s Current Report on Form 8-K, filed on February 27, 2014, File No. 001-07707).
4.8	Seventh Supplemental Indenture, dated as of January 26, 2015, by and among Medtronic plc, Medtronic, Inc., Medtronic Global Holdings S.C.A. and Wells Fargo Bank, National Association (incorporated by reference to Exhibit 4.2 to Medtronic plc's Current Report on Form 8-K12B, filed on January 27, 2015, File No. 001-36820).
4.9	Indenture, dated December 10, 2014, between Medtronic, Inc. and Wells Fargo Bank, National Association (incorporated by reference to Exhibit 4.1 to Medtronic, Inc.'s Current Report on Form 8-K filed with the Commission on December 10, 2014, File No. 001-07707).
4.10	First Supplemental Indenture, dated December 10, 2014, between Medtronic, Inc. and Wells Fargo Bank, National Association (including Form of Floating Rate Senior Notes due 2020, Form of 1.500% Senior Notes due 2018, Form of 2.500% Senior Notes due 2020, Form of 3.150% Senior Notes due 2022, Form of 3.500% Senior Notes due 2025, Form of 4.375% Senior Notes due 2035 and Form of 4.625% Senior Notes due 2045) (incorporated by reference to Exhibit 4.2 of Medtronic, Inc.'s Current Report on Form 8-K filed with the Commission on December 10, 2014, File No. 001-07707).
4.11	Second Supplemental Indenture, dated as of January 26, 2015, by and among Medtronic plc and Wells Fargo Bank, National Association (incorporated by reference to Exhibit 4.3 to Medtronic plc's Current Report on Form 8-K12B, filed on January 27, 2015, File No. 001-36820).
4.12	Third Supplemental Indenture, dated as of January 26, 2015, by and among Medtronic Global Holdings S.C.A. and Wells Fargo Bank, National Association (incorporated by reference to Exhibit 4.4 to Medtronic plc's Current Report on Form 8-K12B, filed on January 27, 2015, File No. 001-36820).
4.13	Indenture, dated as of October 22, 2007, by and among Covidien International Finance S.A., Covidien Ltd. and Deutsche Bank Trust Company Americas (incorporated by reference to Exhibit 4.1(a) to Covidien plc's Current Report on Form 8-K filed on October 22, 2007, File No. 001-33259).
4.14	Fourth Supplemental Indenture, dated as of October 22, 2007, by and among Covidien International Finance S.A., Covidien Ltd. and Deutsche Bank Trust Company Americas (incorporated by reference to Exhibit 4.1(e) to Covidien plc's Current Report on Form 8-K filed on October 22, 2007, File No. 001-33259).
4.15	Fifth Supplemental Indenture, dated as of June 4, 2009, by and among Covidien International Finance S.A., Covidien Ltd., Covidien plc and Deutsche Bank Trust Company Americas (incorporated by reference to Exhibit 4.1 to Covidien plc's Current Report on Form 8-K12G3 filed on June 5, 2009, File No. 001-33259).
4.16	Sixth Supplemental Indenture, dated as of June 28, 2010, among Covidien International Finance S.A., Covidien Ltd., Covidien plc and Deutsche Bank Trust Company Americas (incorporated by reference to Exhibit 4.1 to Covidien plc's Current Report on Form 8-K filed on June 28, 2010, File No. 001-33259).
4.17	Seventh Supplemental Indenture, dated as of May 30, 2012, among Covidien International Finance S.A., Covidien Ltd., Covidien plc and Deutsche Bank Trust Company Americas (incorporated by reference to Exhibit 4.1 to Covidien plc's Current Report on Form 8-K filed on May 30, 2012, File No. 001-33259).

Exhibit No.	Description
4.18	Eighth Supplemental Indenture, dated as of May 16, 2013, among Covidien International Finance S.A., Covidien Ltd., Covidien plc and Deutsche Bank Trust Company Americas (incorporated by reference to Exhibit 4.1 to Covidien plc's Current Report on Form 8-K filed on May 16, 2013, File No. 001-33259).
4.19	Ninth Supplemental Indenture, dated as of January 26, 2015, by and among Medtronic plc, Medtronic Global Holdings S.C.A., Covidien public limited company, Covidien International Finance S.A., Covidien Ltd. and Deutsche Bank Trust Company Americas (incorporated by reference to Exhibit 4.5 to Medtronic plc's Current Report on Form 8-K12B, filed on January 27, 2015, File No. 001-36820).
4.20	Senior Indenture, dated as of March 28, 2017, by and among Medtronic plc, Medtronic Global Holdings S.C.A., Medtronic, Inc., and Wells Fargo Bank, N.A. (incorporated by reference to Exhibit 4.1 to Medtronic plc's Current Report on Form 8-K, filed on March 28, 2017, File No. 001-36820).
4.21	First Supplemental Indenture, dated as of March 28, 2017, by and among Medtronic plc, Medtronic Global Holdings S.C.A., Medtronic, Inc., and Wells Fargo Bank, N.A. (incorporated by reference to Exhibit 4.2 to Medtronic plc's Current Report on Form 8-K, filed on March 28, 2017, File No. 001-36820).
4.22	Second Supplemental Indenture, dated as of March 7, 2019, by and among Medtronic plc, Medtronic Global Holdings S.C.A., Medtronic, Inc., Wells Fargo Bank, N.A., and Elavon Financial Services DAC, UK Branch (incorporated by reference to Exhibit 4.1 to Medtronic plc's Current Report on Form 8-K, filed on March 7, 2019, File No. 001-36820).
4.23	Third Supplemental Indenture, dated as of July 2, 2019, among Medtronic Global Holdings S.C.A., Medtronic, Inc. and Medtronic plc, Wells Fargo Bank, N.A., as trustee, and Elavon Financial Services DAC (incorporated by reference to Exhibit 4.1 to Medtronic plc' Current Report on Form 8-K, filed July 2, 2019, File No. 001-36820).
4.24	Fourth Supplemental Indenture, dated as of September 29, 2020, among Medtronic Global Holdings S.C.A., Medtronic, Inc. and Medtronic plc, Wells Fargo Bank, N.A., as trustee, and Elavon Financial Services DAC, as paying agent (including the forms of the 2023 Notes, the 2025 Notes, the 2028 Notes, the 2032 Notes, the 2040 Notes and the 2050 Notes) (incorporated by reference to Exhibit 4.1 to Medtronic plc' Current Report on Form 8-K, filed September 29, 2020, File No. 001-36820).
#4.25	Description of Registrant's Securities.
10.1	Amended and Restated Credit Agreement, dated as of December 12, 2018, by and among Medtronic Global Holdings, SCA, certain subsidiaries named therein, Medtronic, Inc., Medtronic PLC, the lenders from time to time party thereto, and Bank of America, N.A. as Administration Agent (incorporated by reference to Exhibit 10.1 to Medtronic plc's Current Report on Form 8-K, filed on December 13, 2018, File No. 001-36820).
10.2	Amendment No. 1 and Extension Agreement to the Amended and Restated Credit Agreement, dated as of December 12, 2019, among Medtronic Global Holdings S.C.A., Medtronic, Inc., Medtronic PLC, the Lenders party thereto and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.1 to Medtronic plc's Current Report on Form 10-Q, filed on February 28, 2020, File No. 001-36820).
10.3	Term Loan Agreement, dated as of May 12, 2020, among Medtronic Global Holdings S.C.A., Medtronic, Inc., Medtronic PLC, the Lenders party thereto and Mizuho Bank, LTD., as Administrative Agent (incorporated by reference to Exhibit 10.1 to Medtronic plc's Current Report on Form 8-K, filed on May 12, 2020, File No. 001-36820).
10.4	Form of Deed of Indemnification (incorporated by reference to Exhibit 10.1 to Medtronic plc's Current Report on Form 8-K12B, filed on January 27, 2015, File No. 001-36820).
10.5	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.2 to Medtronic plc's Current Report on Form 8-K12B, filed on January 27, 2015, File No. 001-36820).
*10.6	Change of Control Severance Plan—Section 16B Officers (as amended and restated as of January 26, 2015) (incorporated by reference to Exhibit 10.14 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
*10.7	Letter Agreement by and between Medtronic, Inc. and Carol Surface dated August 22, 2013 (incorporated by reference to Exhibit 10.44 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 25, 2014, filed on June 20, 2014, File No. 001-07707).
*10.8	Letter Agreement by and between Medtronic, Inc. and Bradley E. Lerman dated May 2, 2014 (incorporated by reference to Exhibit 10.4 of Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended July 25, 2014, filed on August 29, 2014, File No. 001-07707).
*10.9	Letter Agreement by and between Medtronic, Inc. and Karen Parkhill dated May 2, 2016 (incorporated by reference to Exhibit 10.1 to Medtronic, plc's Current Report on Form 8-K, filed on May 4, 2016, File No. 001-36820).
*10.10	Office of Chairman and Chief Executive Officer Letter Agreement (incorporated by reference to Exhibit 10.1 to Medtronic plc's Quarterly Report on Form 10-Q, filed on December 3, 2019, File No. 001-36820).
*10.11	Form of Offer Letter Amendment (incorporated by reference to Exhibit 10.25 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 23, 2015, filed on February 27, 2015, File No. 001-36820).
*10.12	1998 Outside Director Stock Compensation Plan (as amended and restated effective as of January 1, 2008) (incorporated by reference to Exhibit 10.3 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended January 25, 2008, filed on, filed on March 4, 2008, File No. 001-07707).
*10.13	Amendment to the 1998 Outside Director Stock Compensation Plan (incorporated by reference to Exhibit 10.2 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).

Exhibit No.	Description
*10.14	2003 Long-Term Incentive Plan (as amended and restated effective January 1, 2008) (incorporated by reference to Exhibit 10.4 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended January 28, 2008, filed on March 4, 2008, File No. 001-07707).
*10.15	Amendment to the 2003 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.3 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
*10.16	Form of Restricted Stock Award Agreement under 2003 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.3 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended January 28, 2005, filed on March 7, 2005, File No. 001-07707).
*10.17	Form of Non-Qualified Stock Option Agreement under 2003 Long-Term Incentive Plan (four year vesting) (incorporated by reference to Exhibit 10.1 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended January 28, 2005, filed on March 7, 2005, File No. 001-07707).
*10.18	Form of Non-Qualified Stock Option Agreement under 2003 Long-Term Incentive Plan (immediate vesting) (incorporated by reference to Exhibit 10.2 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended January 28, 2005, filed on March 7, 2005, File No. 001-07707).
*10.19	Form of Restricted Stock Units Award Agreement under 2003 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.20 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 29, 2005, filed on June 29, 2005, File No. 001-07707).
*10.20	Form of Performance Share Award Agreement under 2003 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.21 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 29, 2005, filed on June 29, 2005, File No. 001-07707).
*10.21	Form of Non-Qualified Stock Option Agreement under 2003 Long-Term Incentive Plan effective June 22, 2006 (incorporated by reference to Exhibit 10.23 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 28, 2006, filed on June 28, 2006, File No. 001-07707).
*10.22	Form of Restricted Stock Award Agreement under 2003 Long-Term Incentive Plan effective June 22, 2006 (incorporated by reference to Exhibit 10.24 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 28, 2006, filed on June 28, 2006, File No. 001-07707).
*10.23	Form of Restricted Stock Unit Award Agreement under 2003 Long-Term Incentive Plan effective June 22, 2006 (incorporated by reference to Exhibit 10.25 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 28, 2006, filed on June 28, 2006, File No. 001-07707).
*10.24	Form of Performance Award Agreement under 2003 Long-Term Incentive Plan effective June 22, 2006 (incorporated by reference to Exhibit 10.26 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 28, 2006, filed on June 28, 2006, File No. 001-07707).
*10.25	Form of Restricted Stock Award Agreement under 2003 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.3 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended October 26, 2007, filed on December 4, 2007, File No. 001-07707).
*10.26	Form of Restricted Stock Unit Award Agreement under 2003 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended October 26, 2007, filed on December 4, 2007, File No. 001-07707).
*10.27	Form of Non-Qualified Stock Option Agreement under 2003 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.39 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 25, 2008, filed on June 24, 2008, File No. 001-07707).
*10.28	Form of Restricted Stock Unit Award Agreement under 2003 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.40 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 25, 2008, filed on June 24, 2008, File No. 001-07707).
*10.29	Form of Restricted Stock Unit Award Agreement under 2003 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.41 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 25, 2008, filed on June 24, 2008, File No. 001-07707).
*10.30	Israeli Amendment to the 2003 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.5 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended January 25, 2008, filed on March 4, 2008, File No. 001-07707).
*10.31	2008 Stock Award and Incentive Plan (as amended and restated effective August 27, 2009) (incorporated by reference to Exhibit 10.2 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended October 30, 2009, filed on December 9, 2009, File No. 001-07707).
*10.32	Amendment to the 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.4 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
*10.33	Form of Restricted Stock Unit Award Agreement under 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.2 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended July 25, 2008, filed on September 3, 2008, File No. 001-07707).
*10.34	Form of Restricted Stock Award Agreement under 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.3 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended July 25, 2008, filed on September 3, 2008, File No. 001-07707).

Exhibit No.	Description
*10.35	Form of Restricted Stock Award Agreement under 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.4 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended July 25, 2008, filed on September 3, 2008, File No. 001-07707).
*10.36	Form of Restricted Stock Unit Award Agreement under 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.5 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended July 25, 2008, filed on September 3, 2008, File No. 001-07707).
*10.37	Form of Non-Qualified Stock Option Agreement under 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.6 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended July 25, 2008, filed on September 3, 2008, File No. 001-07707).
*10.38	Terms of Non-Employee Director Compensation under 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.42 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 27, 2012, filed on June 26, 2012, File No. 001-07707).
*10.39	Form of Non-Employee Director Initial Option Agreement under 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.1 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended October 24, 2008, filed on December 3, 2008, File No. 001-07707).
*10.40	Form of Non-Employee Director Annual Option Agreement under 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.2 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended October 24, 2008, filed on December 3, 2008, File No. 001-07707).
*10.41	Form of Non-Employee Director Deferred Unit Award Agreement under 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.3 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended October 24, 2008, filed on December 3, 2008, File No. 001-07707).
*10.42	Form of Non-Employee Restricted Stock Unit Award Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.65 to Medtronic plc's Annual Report on Form 10-K for the year ended April 24, 2015, filed on June 23, 2015, File No. 001-36820).
*10.43	Israeli Amendment to the Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.10 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
*10.44	Form of Restricted Stock Award Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.1 to Medtronic plc's Quarterly Report on Form 10-K for the quarter ended July 28, 2017, filed on September 1, 2017, File No. 001-36820).
*10.45	Medtronic plc Amended and Restated 2013 Stock Award and Incentive Plan (as amended and restated generally effective December 8, 2017) (incorporated by reference to Exhibit 10.1 to Medtronic plc's Current Report on Form 8-K, filed on December 12, 2017, File No. 001-36820).
*10.46	Form of Non-qualified Stock Option Agreement Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.50 to Medtronic plc's Annual Report on Form 10-K, filed June 22, 2018, File No. 001-36820).
*10.47	Form of Restricted Stock Unit Award Agreement Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.51 to Medtronic plc's Annual Report on Form 10-K, filed June 22, 2018, File No. 001-36820).
*10.48	Form of Restricted Stock Award Agreement Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.52 to Medtronic plc's Annual Report on Form 10-K, filed June 22, 2018, File No. 001-36820)
*10.49	Form of Long Term Performance Award Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.53 to Medtronic plc's Annual Report on Form 10-K, filed June 22, 2018, File No. 001-36820).
*10.50	Form of Non-Qualified Stock Option Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.31 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 23, 2015, filed on February 27, 2015, File No. 001-36820).
*10.51	Form of Performance Share Unit Award Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.1 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended October 30, 2020, filed on December 3, 2020, File No. 001-36820).
*10.52	Form of Non-Employee Director Deferred Unit Award Agreement under the 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.3 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended October 24, 2008, filed on December 3, 2008, File No. 001-07707).
*10.53	Form of Non-Qualified Stock Option Agreement under 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.2 to Medtronic, Inc.'s Current Report on Form 8-K, filed on August 27, 2013, File No. 001-07707).
*10.54	Form of Restricted Stock Unit Award Agreement (U.S. Employees) under 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.3 to Medtronic, Inc.'s Current Report on Form 8-K, filed on August 27, 2013, File No. 001-07707).
*10.55	Form of Restricted Stock Unit Award Agreement (Non-U.S. Employees) under 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.4 to Medtronic, Inc.'s Current Report on Form 8-K, filed on August 27, 2013, File No. 001-07707).
*10.56	Form of Restricted Stock Unit Award Agreement (Time-Based) under 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.5 to Medtronic, Inc.'s Current Report on Form 8-K, filed on August 27, 2013, File No. 001-07707).

Exhibit No.	Description
*10.57	Form of Restricted Stock Unit Award Agreement (Israeli-Employees) under 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.8 to Medtronic, Inc.'s Current Report on Form 8-K, filed on August 27, 2013, File No. 001-07707).
*10.58	Form of Non-Qualified Stock Option Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.48 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 23, 2015, filed on February 27, 2015, File No. 001-36820).
*10.59	Form of Restricted Stock Unit Award Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.49 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 23, 2015, filed on February 27, 2015, File No. 001-36820).
*10.60	Form of Restricted Stock Unit Award Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.50 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 23, 2015, filed on February 27, 2015, File No. 001-36820).
*10.61	Form of Restricted Stock Unit Award Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.51 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 23, 2015, filed on February 27, 2015, File No. 001-36820).
*10.62	Form of Stock Option Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.53 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 23, 2015, filed on February 27, 2015, File No. 001-36820).
*10.63	Form of Restricted Stock Unit Award Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.54 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 23, 2015, filed on February 27, 2015, File No. 001-36820).
*10.64	Form of Restricted Stock Award Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.69 to Medtronic plc's Annual Report on Form 10-K for the year ended April 24, 2020, filed on June 19, 2020, File No. 001-36820).
*10.65	Form of Non-Qualified Stock Option Agreement under Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.70 to Medtronic plc's Annual Report on Form 10-K for the year ended April 24, 2020, filed on June 19, 2020, File No. 001-36820).
*10.66	Medtronic plc 2014 Amended and Restated Employees Stock Purchase Plan (incorporated by reference to Exhibit 10.8 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
*10.67	Medtronic plc Incentive Plan (as amended and restated effective January 26, 2015) (incorporated by reference to Exhibit 10.11 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
*10.68	Medtronic plc Supplemental Executive Retirement Plan (as restated generally effective January 26, 2015) (incorporated by reference to Exhibit 10.15 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
*10.69	Medtronic Non-Qualified Retirement Plan Supplemental (restated November 6, 2020, and formerly known as the Supplemental Executive Retirement Plan) (incorporated by reference to Exhibit 10.3 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended October 30, 2020, filed on December 3, 2020, File No. 001-36820).
*10.70	Medtronic plc Savings and Investment Plan (as amended and restated generally effective January 26, 2015) (incorporated by reference to Exhibit 4.22 to Medtronic plc's Registration Statement on Form S-8 filed on January 28, 2015, File No. 333-201737).
*10.71	Medtronic plc Puerto Rico Employees' Savings and Investment Plan (as amended and restated generally effective January 26, 2015) (incorporated by reference to Exhibit 4.23 to Medtronic plc's Registration Statement on Form S-8 filed on January 28, 2015, File No. 333-201737).
*10.72	Medtronic plc Capital Accumulation Plan Deferral Program (as amended and restated generally effective January 26, 2015) (incorporated by reference to Exhibit 10.13 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
*10.73	Capital Accumulation Plan Deferral Program (as amended and restated generally effective January 1, 2017) (incorporated by reference to Exhibit 10.1 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended October 28, 2016, filed on December 5, 2016, File No. 001-36820).
*10.74	Amended and Restated Covidien Supplemental Savings and Retirement Plan (restated November 6, 2020) (incorporated by reference to Exhibit 10.2 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended October 30, 2020, filed on December 3, 2020, File No. 001-36820).
*10.75	Medtronic Capital Accumulation Plan Deferral Program (restated November 6, 2020) (incorporated by reference to Exhibit 10.4 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended October 30, 2020, filed on December 3, 2020, File No. 001-36820).
10.76	Amendment No. 3 and Extension Agreement to the Amended and Restated Credit Agreement, dated as of December 13, 2021, by and among Medtronic Global Holdings S.C.A., certain subsidiaries of Medtronic plc from time to time party thereto, Medtronic, Inc., Medtronic plc, the lenders from time to time party thereto and Bank of America N.A., as administrative agent. (incorporated by reference to Exhibit 10.01 to Medtronic plc's Current Report on Form 8-K, filed on December 14, 2021, File No. 001-36820).

Exhibit No.	Description
*10.77	Medtronic Capital Accumulation Plan Deferral Program (as restated generally effective January 1, 2017) (Conformed through the Amendment generally effective as of January 1, 2022) (incorporated by reference to Exhibit 10.1 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 28, 2022, filed on March 3, 2022, File No. 001-36820).
*10.78	2021 Medtronic plc Long Term Incentive Plan (incorporated by reference to Exhibit 10.2 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 28, 2022, filed on March 3, 2022, File No. 001-36820).
*10.79	Performance Share Unit Agreement 2021 Medtronic plc Long Term Incentive Plan (incorporated by reference to Exhibit 10.3 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 28, 2022, filed on March 3, 2022, File No. 001-36820).
*10.80	Non-Qualified Stock Option Agreement 2021 Medtronic plc Long Term Incentive Plan (incorporated by reference to Exhibit 10.4 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 28, 2022, filed on March 3, 2022, File No. 001-36820).
*10.81	Restricted Stock Unit Award Agreement for awards vesting 100% on the third anniversary of the grant date–2021 Medtronic plc Long Term Incentive Plan (incorporated by reference to Exhibit 10.5 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 28, 2022, filed on March 3, 2022, File No. 001-36820).
*10.82	Restricted Stock Unit Award Agreement for awards vesting ratably on the first, second, third, and fourth anniversary of the grant date–2021 Medtronic plc Long Term Incentive Plan (incorporated by reference to Exhibit 10.6 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 28, 2022, filed on March 3, 2022, File No. 001-36820).
#21	List of Subsidiaries of Medtronic plc.
#22	List of Senior Notes, Issuers and Guarantors.
#23	Consent of Independent Registered Public Accounting Firm.
#24	Power of Attorney.
#31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
#31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
#32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
#32.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
#101.SCH	XBRL Taxonomy Extension Schema Document
#101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
#101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
#101.LAB	XBRL Taxonomy Extension Label Linkbase Document
#101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
#104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Exhibits that are management contracts or compensatory plans or arrangements.

\# Filed herewith

Item 16. Form 10-K Summary

Registrants may voluntarily include a summary of information required by Form 10-K under this Item 16. The Company has not elected to include such summary information.

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.

Medtronic plc

Dated: June 23, 2022

By: /s/ Geoffrey S. Martha
Geoffrey S. Martha
Chairman and Chief Executive Officer

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

Medtronic plc

Dated: June 23, 2022

By: /s/ Geoffrey S. Martha
Geoffrey S. Martha
Chairman and Chief Executive Officer
(Principal Executive Officer)

Dated: June 23, 2022

By: /s/ Karen L. Parkhill
Karen L. Parkhill
Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)

Dated: June 23, 2022

By: /s/ Jennifer M. Kirk
Jennifer M. Kirk
Global Controller and
Chief Accounting Officer
(Principal Accounting Officer)

Directors

Richard H. Anderson*
Craig Arnold*
Scott C. Donnelly*
Andrea J. Goldsmith, PH.D.*
Randall J. Hogan,*
Kevin E. Lofton*
Geoffrey S. Martha
Elizabeth G. Nabel, M.D.*
Denise M. O'Leary*
Kendall J. Powell*

*Ivan K. Fong, by signing his name hereto, does hereby sign this document on behalf of each of the above named directors of the registrant pursuant to powers of attorney duly executed by such persons.

Dated: June 23, 2022

By: /s/ Ivan K. Fong
Ivan K. Fong

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