

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 28, 2017.
- 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 PUBLIC LIMITED COMPANY  
(Exact name of registrant as specified in its charter)

Ireland  
(Jurisdiction of incorporation)

98-1183488  
(I.R.S. Employer Identification No.)

20 On Hatch, Lower Hatch Street  
Dublin 2, Ireland  
(Address of principal executive office)  
+353 1 438-1700  
(Registrant's telephone number)  
Securities registered pursuant to Section 12(b) of the Act:

Title of each class  
Ordinary shares, par value \$0.0001 per share

Name of each exchange on which registered  
New York Stock Exchange, Inc.

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes  No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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, indicated 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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

Aggregate market value of voting and non-voting common equity of Medtronic PLC held by non-affiliates of the registrant as of October 28, 2016, based on the closing price of \$81.93, as reported on the New York Stock Exchange: approximately \$112.4 billion. Number of Ordinary Shares outstanding on June 21, 2017: 1,359,026,669

DOCUMENTS INCORPORATED BY REFERENCE

Portions of Registrant's Proxy Statement for its 2017 Annual General Meeting are incorporated by reference into Part III hereto.



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## **Investor Information**

### **Annual Meeting and Record Dates**

Medtronic Public Limited Company, organized under the laws of Ireland (Medtronic plc, Medtronic, the Company, or we, us, or our) will hold its 2017 Annual General Meeting of Shareholders (2017 Annual Meeting) on Friday, December 8, 2017 at 8:00 a.m., local Dublin time at the Conrad Dublin Hotel Earlsfort Terrace Dublin 2, Ireland. The record date for the 2017 Annual Meeting is October 10, 2017 and all shareholders of record at the close of business on that day will be entitled to vote at the 2017 Annual Meeting.

### **Medtronic Website**

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 available through our website ([www.medtronic.com](http://www.medtronic.com)) under the "About Medtronic - Investors" caption and "Financial Information - SEC Filings" subcaption) free of charge as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC).

Information relating to corporate governance at Medtronic, including our Principles of Corporate Governance, Code of Conduct (including our Code of Ethics for Senior Financial Officers), 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](http://www.medtronic.com) under the "About Medtronic - Corporate Governance" caption. Information relating to transactions in Medtronic securities by directors and officers is available through our website at [www.medtronic.com](http://www.medtronic.com) under the "About Medtronic - Investors" caption and the "Financial Information - SEC Filings" subcaption.

The information listed above may also be obtained upon request from the Medtronic Investor Relations Department, 710 Medtronic Parkway, Minneapolis, MN 55432 USA.

We are not including the information on our website as a part of, or incorporating it by reference into, our Form 10-K.

### **Available Information**

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 the Company files with the SEC at <http://www.sec.gov>. The Company files annual reports, quarterly reports, proxy statements, and other documents with the SEC under the Exchange Act. The public may read and copy any materials that the Company files with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 800-SEC-0330.

### **Stock Transfer Agent and Registrar**

Wells Fargo Shareowner Services<sup>SM</sup> acts as transfer agent and registrar, dividend paying agent, and direct stock purchase plan agent for Medtronic and maintains all shareholder records for the Company. If you are a registered shareholder, you may access your account information online at [www.shareowneronline.com](http://www.shareowneronline.com). If you have questions regarding the Medtronic stock you own, stock transfers, address or name changes, direct deposit of dividends, lost dividend checks, lost stock certificates, or duplicate mailings, please contact Wells Fargo Shareowner Services<sup>SM</sup> by writing or calling: Wells Fargo Shareowner Services<sup>SM</sup>, 1110 Centre Pointe Curve, Suite 101, Mendota Heights, MN 55120 USA, Telephone: 888-648-8154 or 651-450-4064, Fax: 651-450-4033, [www.wellsfargo.com/shareownerservices](http://www.wellsfargo.com/shareownerservices).

### **Direct Stock Purchase Plan**

Medtronic's transfer agent, Wells Fargo Bank N.A, administers the direct stock purchase plan, which is called the Shareowner Service Plus Plan<sup>SM</sup>. Features of this plan include direct stock purchase and reinvestment of dividends to purchase shares of Medtronic stock. All registered shareholders and potential investors may participate.

To request information on the Shareowner Service Plus Plan<sup>SM</sup>, or to enroll in the plan, contact Wells Fargo Shareowner Services<sup>SM</sup> at 888-648-8154 or 651-450-4064. You may also enroll via the Internet by visiting [www.shareowneronline.com](http://www.shareowneronline.com) and selecting "Direct Purchase Plan."

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## PART I

### Item 1. Business

#### OVERVIEW

Medtronic plc, headquartered in Dublin, Ireland, is among the world's largest medical technology, services and solutions companies - alleviating pain, restoring health, and extending life for millions of people around the world. Medtronic was founded in 1949 and today serves hospitals, physicians, clinicians, and patients in approximately 160 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."

With innovation and market leadership, we have pioneered advances in medical technology in all of our businesses. Our commitment to enhance our offerings by developing and acquiring new products, wrap-around programs, and solutions to meet the needs of a broader set of stakeholders is driven by the following primary strategies:

- **Therapy Innovation:** Delivering a strong launch cadence of meaningful therapies and procedures.
- **Globalization:** Addressing the inequity in health care access globally, primarily in emerging markets.
- **Economic Value:** Becoming a leader in value-based health care by offering new services and solutions to improve outcomes and efficiencies, lower costs by reducing hospitalizations, improve remote clinical management, and increase patient engagement.

Our primary customers include hospitals, clinics, third-party health care providers, distributors, and other institutions, including governmental health care programs and group purchasing organizations (GPOs).

On January 26, 2015 (Acquisition Date), Medtronic completed the acquisition of Covidien plc, a public limited company organized under the laws of Ireland (Covidien) in a cash and stock transaction valued at \$50.0 billion. In connection with the transaction, Medtronic, Inc., a Minnesota corporation (Medtronic, Inc.), and Covidien were combined under and became subsidiaries of Medtronic plc. Covidien was a global leader in the development, manufacture and sale of healthcare products for use in clinical and home settings. On a pro forma basis, as if the Covidien merger had occurred at the beginning of fiscal year 2015, our combined net sales would have been \$28.4 billion. The merger with Covidien provides us with increased financial strength and flexibility and is expected to meaningfully accelerate all three strategies discussed above.

We reorganized our reporting structure and aligned our segments and the underlying divisions and businesses in fiscal year 2015 due to the acquisition of Covidien. The majority of Covidien's operations are included in the Minimally Invasive Therapies Group. For more information on our segments, please see Note 22 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

We currently function in four operating segments that primarily manufacture and sell device-based medical therapies. Our operating segments with each of their reported net sales for fiscal year 2017, along with their related divisions, are as follows:

**Cardiac and Vascular Group** (Fiscal year 2017 net sales of \$10.5 billion)

- Cardiac Rhythm & Heart Failure
- Coronary & Structural Heart
- Aortic & Peripheral Vascular

**Minimally Invasive Therapies Group** (Fiscal year 2017 net sales of \$9.9 billion)

- Surgical Solutions
- Patient Monitoring & Recovery

**Restorative Therapies Group** (Fiscal year 2017 net sales of \$7.4 billion)

- Spine
- Brain Therapies
- Specialty Therapies
- Pain Therapies

**Diabetes Group** (Fiscal year 2017 net sales of \$1.9 billion)

- Intensive Insulin Management
- Non-Intensive Diabetes Therapies
- Diabetes Service & Solutions

## CARDIAC AND VASCULAR GROUP

### Cardiac Rhythm & Heart Failure Disease Management (CRHF)

Our CRHF 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 CRHF devices, ventricular assist systems, and an integrated health solutions business.

The following are the principal products and services offered by our CRHF division:

**Implantable Cardiac Pacemakers (Pacemakers)** Our latest generations of pacemaker systems are the Advisa MRI SureScan models, the Micra Transcatheter Pacing System, and the Ensura MRI SureScan model. The Micra Transcatheter Pacing System, which is leadless and does not have a subcutaneous device pocket like a conventional pacemaker, and the Advisa MRI SureScan models have received United States (U.S.) Food and Drug Administration (FDA) approval and Conformité Européenne (CE) Mark approval, while the Ensura MRI SureScan models have received CE Mark approval.

**Implantable Cardioverter Defibrillators (ICDs)** Our latest generation ICD is the Evera MRI SureScan, the first ICD system with CE Mark, PMDA (Japan), and U.S. FDA, approval for full-body MRI scans for both 1.5T and 3T scanners. The Evera system is paired with the reliable Sprint Quattro Secure lead, the only defibrillator lead with more than 12 years of proven performance with active monitoring.

**Implantable Cardiac Resynchronization Therapy Devices (CRT-Ds and CRT-Ps)** Our latest generation of CRTs, the Claria/Amplia/Compia family of MRI Quad CRT-D SureScan systems and the Percepta/Serena/Solara family of MRI Quad CRT-P SureScan systems, have received U.S. FDA approval and CE Mark. The Claria CRT-D MRI and Percepta CRT-P MRI devices feature EffectivCRT, which is a new algorithm that verifies left ventricular pacing effectiveness and automatically tailors the therapy to individual patients. These devices also include the proprietary AdaptivCRT algorithm, which reduces a patient's odds of a 30-day heart failure readmission and has demonstrated a reduction in AF risk compared to echo-optimized biventricular pacing.

**AF Products** Our portfolio of AF products includes the Arctic Front Advance Cardiac Cryoballoon System, which includes the U.S. FDA approved Arctic Front Advance ST Cryoablation Catheter, designed for pulmonary vein isolation in the treatment of patients with drug refractory paroxysmal AF. Additionally, we have a second-generation CE Mark approved Phased RF System, PVAC Gold, which uses duty cycled, phased radio frequency energy for the treatment of symptomatic paroxysmal persistent and long-standing persistent AF.

**Diagnostics and Monitoring Devices** Our Reveal LINQ is our newest Insertable Cardiac Monitor (ICM) System. The system is used to record the heart's electrical activity before, during, and after transient symptoms such as syncope (i.e., fainting) and palpitations to assist in diagnosis.

**Mechanical Circulatory Support Products (MCS)** Our MCS products include miniaturized implantable heart pumps, or ventricular assist devices, patient accessories and surgical tools to treat patients suffering from advanced heart failure.

**TYRX Products** Our TYRX products include the Absorbable Antibacterial Envelope and the TYRX Neuro Absorbable Antibacterial Envelope, which are designed to stabilize electronic implantable devices and help prevent infection associated with implantable pacemakers, defibrillators, and spinal cord neurostimulators.

**Services and Solutions** Our Care Management Services products and services include remote monitoring and patient-centered software to enable efficient care coordination and specialized telehealth nurse support. Our Cath Lab Managed Services business is focused on developing partnerships with hospitals to provide services directly related to hospital operational efficiency.

### Coronary & Structural Heart Disease Management (CSH)

Our CSH division includes therapies to treat coronary artery disease (CAD), and heart valve disorders. 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 as well as products for the repair and replacement of heart valves, perfusion systems, positioning and stabilization systems for beating heart revascularization surgery, and surgical ablation products.

The following are the principal products offered by our CSH division:

**Transcatheter Heart Valves (TCVs)** Our latest generation TCVs include the CoreValve family of aortic valves. CoreValve, which is the only TCV system shown to be superior to open-heart surgery, has received U.S. FDA approval for extreme and high risk

patients. Our second-generation recapturable TCV system, CoreValve Evolut R, has received U.S. FDA approval and CE Mark approval for the 23, 26, 29, and 34 millimeter sizes of the valve. Our third-generation system, CoreValve Evolut PRO has received U.S. FDA approval.

***Percutaneous Coronary Intervention (PCI)*** Our latest generation PCI stent products include our Resolute Integrity drug-eluting stent systems, which have received U.S. FDA approval, as well as our Resolute Onyx drug-eluting stent systems, which have received both CE Mark and U.S. FDA approval.

***Heart Surgery*** Our Heart Surgery business offers a complete line of surgical valve replacement and repair products for damaged or diseased heart valves. Our replacement products include both tissue and mechanical valves. We also offer a complete line of 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. Additionally, we offer surgical ablation systems and positioning and stabilization technologies.

#### **Aortic & Peripheral Vascular Disease Management (APV)**

Our APV division is comprised of a comprehensive line of products and therapies to treat aortic disease (such as aneurysms, dissections, and transections) as well as peripheral vascular disease (PVD), and critical limb ischemia (CLI). Our products include endovascular stent graft systems, peripheral drug coated balloons, stent and angioplasty systems, and carotid embolic protection systems for the treatment of vascular disease outside the heart, as well as products for superficial and deep venous disease.

The following are the principal products offered by our APV division:

***Endovascular Stent Grafts (Aortic)*** Our Aortic products are designed to treat aortic aneurysms in either the abdomen or thoracic regions of the aorta. Our product line includes a range of endovascular stent grafts and accessories including the market-leading Endurant 2S Abdominal Aortic Aneurysm (AAA) Stent Graft System, the Valiant Captivia Thoracic Aortic Aneurysm (TAA) stent graft system, and the Apto Heli-FX EndoAnchor System.

***Peripheral Vascular (PV)*** Our primary PV products include percutaneous angioplasty balloons including the IN.PACT family of drug-coated balloons, vascular stents, such as the Protégé & Everflex self-expanding stents and Visi-Pro balloon expandable stents, directional atherectomy products, such as the HawkOne plaque excision system, and other procedure support tools.

***EndoVenous (EV)*** Our EndoVenous product lines are used to treat superficial and deep venous diseases in the lower extremities and include the ClosureFast RF ablation system, the VenaSeal medical adhesive system while also now focusing on embolisms with the Concerto detachable coil system, the Micro Vascular Plug (MVP), the PV ONYX liquid embolic system and other procedure support products.

### **MINIMALLY INVASIVE THERAPIES GROUP**

#### **Surgical Solutions**

Our Surgical Solutions division develops, manufactures, and markets advanced surgical, general surgical, and hernia products and therapies to treat diseases and conditions that are typically, but not exclusively, addressed by surgeons. In addition, we develop, manufacture, and market several unique products in the emerging fields of minimally invasive gastrointestinal diagnostics, ablation, and interventional lung.

The following are the principal products offered by our Surgical Solutions division:

***Surgical Innovations*** Our Surgical Innovations business includes sales of stapling, vessel sealing, fixation (hernia mechanical devices), mesh, hardware and surgical instruments, as well as wound closure, and electro-surgical products. Key advanced surgical products include: 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 iDrive and Signia powered stapling systems; the LigaSure vessel sealing system, which features specialty/application specific handpieces powered by proprietary hardware platforms; the Sonicision cordless ultrasonic dissection system; AbsorbaTack absorbable mesh fixation device for hernia repair; Symbotex composite mesh for surgical laparoscopic and open ventral hernia repair; and Parietex ProGrip, a selfgripping, biocompatible solution for inguinal hernias.

***Early Technologies*** Our Early Technologies products include ablation products, and interventional lung and gastrointestinal solutions. This includes the PillCam SB and PillCam COLON, a minimally-invasive, swallowed optical endoscopy technology; superDimension to evaluate lung lesions; the Cool-tip radiofrequency ablation system; the Evident microwave ablation system; and the HALO ablation catheters for treatment of Barrett's esophagus.

## **Patient Monitoring & Recovery (PMR)**

Our PMR division develops, manufactures, and markets products and therapies to enable complication-free recovery to enhance patient outcomes.

The following are the principal products offered by our PMR division:

**Patient Monitoring** Our Patient Monitoring products include sensors, monitors, and temperature management products. Key patient monitoring products include: Capnostream with Microstream technology capnography monitors, the Nellcor Bedside SpO<sub>2</sub> patient monitoring system, the Bispectral Index (BIS) brain monitoring technology, the INVOS Cerebral/Somatic Oximeter, and related modules and sensors.

**Airway & Ventilation** Our Airway & Ventilation business primarily includes sales of airway, ventilator and inhalation therapy products. Key airway & ventilation products include: the Puritan Bennett 840 and 980 ventilators, the Newport e360 and HT70 ventilators, the TaperGuard Evac tube, Shiley Endotracheal Tubes, Shiley Tracheostomy Tubes, DAR Filters, and resuscitation bags.

**Patient Care** Our Patient Care products include medical surgical products, such as operating room supply products and electrodes, as well as incontinence, wound care, urology, suction products, and SharpSafety products, which includes needles, syringes, and sharps disposal products. In addition, we manufacture Original Equipment Manufacturer (OEM) products, which are various medical supplies manufactured for other medical products companies. Under our Medi-Trace brand, we offer a comprehensive line of monitoring, diagnostic, and defibrillation electrodes.

**Deep Vein Thrombosis** Our Deep Vein Thrombosis business primarily includes sales of compression product lines. Key Deep Vein Thrombosis products include Kendall SDC compression system, A-V Impulse Foot Compression System, and T.E.D. anti-embolism stockings.

**Nutritional Insufficiency** Our Nutritional Insufficiency business primarily includes sales of enteral feeding products. Key nutritional insufficiency products include Kangaroo enteral feeding systems.

**Renal Care Solutions** Our Renal Care Solutions business delivers a broad portfolio of meaningful innovations and solutions for the treatment of renal disease. Our global portfolio of products include dialysis catheters for renal therapy access, fistula cannula for cannulation during dialysis treatment, and a comprehensive portfolio of equipment and consumables for performing dialysis treatment for both acute and chronic renal failure conditions.

## **RESTORATIVE THERAPIES GROUP**

### **Spine**

Our Spine division develops, manufactures, and markets a comprehensive line of medical devices and implants used in the treatment of the spine and musculoskeletal system. Our products and therapies treat a variety of conditions affecting the spine, including degenerative disc disease, spinal deformity, spinal tumors, fractures of the spine, and stenosis. Our Spine division also provides biologic solutions for the orthopedic and dental markets and, in concert with our Neurosurgery business, we offer unique and highly differentiated navigation, neuromonitoring, and power technologies designed for spine procedures.

The following are the principal products offered by our Spine division:

**Core Spine** Our Core Spine products include the CD HORIZON SOLERA and LEGACY Systems, and the CAPSTONE, CLYDESDALE, and ELEVATE interbody spacers. In addition, Medtronic offers a number of products that facilitate less invasive thoracolumbar surgeries, including the CD HORIZON VOYAGER, SOLERA SEXTANT and LONGITUDE Percutaneous Fixation Systems. Products used to treat conditions in the cervical region of the spine include the ZEVO and ATLANTIS VISION ELITE Anterior Cervical Plate Systems, the VERTEX SELECT Reconstruction System, and the PRESTIGE and BRYAN Cervical Artificial Discs.

**Biologics Products** Our Biologics products include 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 (DBM) products, including MagniFuse, Grafton/Grafton Plus, and PROGENIX, and the MASTERGRAFT family of synthetic bone graft products - Matrix, Putty, and Granules.

### **Brain Therapies**

Our Brain Therapies division offers an integrated portfolio of devices and therapies for the treatment of neurological disorders and diseases, as well as surgical technologies designed to improve the precision and workflow of neuro procedures.



The following are the principal products offered by our Brain Therapies division:

**Neurovascular** Our Neurovascular business develops, manufactures, and markets products and therapies to treat diseases of the vasculature in and around the brain. Our products include coils, neurovascular stents, and flow diversion products, as well as access and delivery products to support procedures. Our products also include the Pipeline Flex Embolization Devices, endovascular treatments for large or giant wide-necked brain aneurysms; the Solitaire FR revascularization device for treatment of acute ischemic stroke; and the Apollo Onyx delivery micro catheter, the first detachable tip micro-catheter available in the U.S.

**Brain Modulation** Our Brain Modulation portfolio of products include those for the treatment of the disabling symptoms of essential tremor, Parkinson's disease, refractory epilepsy (outside the U.S.), 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.). Our family of Activa Neurostimulators for Brain Modulation includes Activa SC (single-channel primary cell battery), Activa PC (dual channel primary cell battery), and Activa RC (dual channel rechargeable battery).

**Neurosurgery** Our Neurosurgery portfolio of products include both platform technologies and implant therapies. The StealthStation Navigation System and O-arm Imaging System are both platforms used in cranial, spinal, sinus, and orthopedic procedures. The Midas Rex Surgical Drills are used in cranial, spinal, and orthopedic procedures. Visualase MRI-Guided Laser Ablation is used in neurosurgery procedures, and our CSF Management Portfolio is used in treating hydrocephalus and other conditions impacting the intracranial pressure.

### **Specialty Therapies**

Our Specialty Therapies division is comprised of Pelvic Health & Gastric Therapies, ENT, and Advanced Energy. ENT develops, manufactures, and markets products and therapies to treat diseases of the ear, nose and throat (ENT). Our Advanced Energy business includes products in the emerging field of advanced energy surgical incision technology, as well as the haemostatic sealing of soft tissue and bone.

The following are the principal products offered by our Specialty Therapies division:

**Pelvic Health & Gastric Therapies** Our sacral neuromodulation uses InterStim, a neurostimulator, to help control the systems of overactive bladder, (non-obstructive) urinary retention, and chronic fecal incontinence. In addition, our percutaneous tibial neuromodulation uses the NURO device for the treatment of overactive bladder and associated symptoms of urinary urge incontinence, urinary urgency, urinary frequency. Currently, Enterra Therapy is the only gastric electrical stimulation therapy approved in the U.S. (under a HDE), Europe, Australia, and Canada for use in the treatment of intractable nausea and vomiting associated with gastroparesis. The system, which contains a small neurostimulator and two leads, stimulates the smooth muscles of the lower stomach.

**ENT** Our products for the treatment of ENT diseases and conditions include Straightshot M5 Microdebrider Handpiece, the IPC system, NIM Nerve Monitoring Systems, Fusion ENT Navigation System, as well as products for hearing restoration and obstructive sleep apnea.

**Advanced Energy** Our PEAK Surgery System is a tissue dissection system that consists of the PEAK PlasmaBlade and PULSAR Generator and is cleared for use in a variety of settings, including plastic reconstructive surgery, general surgery, and certain conditions of ENT. Our Aquamantys System uses patented transcollation technology to provide haemostatic sealing of soft tissue and bone and is cleared for use in a variety of surgical procedures, including orthopedic surgery, spine, solid organ resection and thoracic procedures.

### **Pain Therapies**

Our Pain Therapies division includes neurostimulation systems and implantable drug infusion systems for chronic pain, as well as interventional products.

The following are the principal products offered by our Pain Therapies division:

**Neurostimulation Systems for Chronic Pain** Our portfolio of neurostimulation systems includes rechargeable and non-rechargeable devices and a large selection of leads used to treat chronic back and/or limb pain. Our portfolio of products includes pain neurostimulation systems with SureScan MRI Technology, including the RestoreSensor (rechargeable) SureScan MRI, with its proprietary AdaptiveStim technology.

**Implantable Drug Infusion Systems** Our SynchroMed II Implantable Infusion System delivers small quantities of drug directly into the intrathecal space surrounding the spinal cord. These devices are used to treat chronic, intractable pain and severe spasticity associated with cerebral palsy, multiple sclerosis, spinal cord and traumatic brain injuries, and stroke.

**Interventional Products** Our interventional products include the Xpander II Balloon Kyphoplasty system, the Kyphon-V vertebroplasty system and the OsteoCool RF Tumor ablation system.

## DIABETES GROUP

Our Diabetes group consists of three divisions (Intensive Insulin Management, Non-Intensive Diabetes Therapies, and Diabetes Services & Solutions) that develop, manufacture, and market advanced, integrated diabetes management solutions that include insulin pump therapy, continuous glucose monitoring (CGM) systems, and therapy management software.

The following are the principal products offered by our Diabetes divisions:

**Integrated Diabetes Management Solutions** Our Integrated Diabetes Management Solutions business has the first hybrid closed loop system in the world - the MiniMed 670G System - which received U.S. FDA approval during the second quarter of fiscal year 2017, and launched in the U.S. in June 2017. Additionally, in the U.S., we offer the MiniMed 630G System with SmartGuard predictive low-glucose management. Outside the U.S., we offer our MiniMed 640G System, an integrated system with the Enhanced Enlite CGM sensor that features SmartGuard technology, which automatically suspends insulin delivery when sensor glucose levels are predicted to approach a low limit and then resumes insulin delivery once levels recover.

**Professional CGM** Our Professional CGM business offers physicians a product called the iPro2/iPro Professional CGM System. Patients wear the iPro2/iPro recorder to capture glucose data that is later uploaded in a physician's office to reveal glucose patterns and potential problems, including hyperglycemic and hypoglycemic episodes, leading to more informed treatment decisions.

**Connected Care** Our Connected Care business continues to innovate and offer new connected care solutions, including the MiniMed Connect, which is the only system providing remote access to pump and sensor data on the user's smartphone.

**CareLink Therapy Management Software** Our CareLink Therapy Management Software business offers web-based therapy management software solutions, including CareLink Personal software for patients and CareLink Pro software for healthcare professionals, to help patients and their health care providers control their diabetes.

## CUSTOMERS AND COMPETITORS

**Cardiac and Vascular Group** The primary medical specialists who use our Cardiac and Vascular products include electrophysiologists, implanting cardiologists, heart failure specialists, cardiovascular, cardiothoracic, and vascular surgeons, and interventional cardiologists and radiologists. Our primary competitors are Abbott Laboratories (Abbott), Boston Scientific Corporation (Boston Scientific), LivaNova plc, Edwards Lifesciences Corporation (Edwards), and C.R. Bard, Inc. (Bard).

**Minimally Invasive Therapies Group** The primary medical specialists who use the products and therapies of this group include hospitals, physicians' offices, and ambulatory care centers, other alternate site healthcare providers and less frequently in home settings. Our primary competitors are Johnson & Johnson, Boston Scientific, Baxter International Inc., and Bard.

**Restorative Therapies Group** The primary medical specialists who use the products of this group include spinal surgeons, neurosurgeons, neurologists, pain management specialists, anesthesiologists, orthopedic surgeons, urologists, colorectal surgeons, urogynecologists, interventional radiologists, and ear, nose, and throat specialists. Our primary competitors include Johnson & Johnson, Boston Scientific, Abbott, Stryker Corporation (Stryker), NuVasive, Inc., and Zimmer Biomet Holdings, Inc. (Zimmer).

**Diabetes Group** The primary medical specialists who use and/or prescribe our Diabetes products are endocrinologists, diabetologists, and internists. Our primary competitors are Johnson & Johnson, DexCom, Inc., Tandem Diabetes Care Inc., Insulet Corporation, and F. Hoffmann-La Roche Ltd.

## OTHER FACTORS IMPACTING OUR OPERATIONS

### Research and Development

The markets in which we participate may be subject to rapid technological advances. Constant improvement of 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 in order 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 many 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.

During fiscal years 2017, 2016, and 2015, we spent \$2.2 billion (7.4 percent of net sales), \$2.2 billion (7.7 percent of net sales), and \$1.6 billion (8.1 percent of net sales) on R&D, respectively. Our R&D activities include improving existing products and therapies, expanding their indications and applications for use, and developing new therapies and procedures. We continue to focus on optimizing innovation, improving our R&D productivity, driving growth in emerging markets, clinical evidence generation, and assessing our R&D programs based on their ability to deliver economic value to our customers.

## **Acquisitions and Divestitures**

Our strategy to provide a broad range of therapies to restore patients' health and extend lives 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 an all-encompassing portfolio of technological solutions. In addition to internally generated growth through our R&D efforts, historically we have relied, and expect to continue to rely, upon acquisitions, investments, and alliances to provide access to new technologies both in areas served by our existing businesses as well as in new areas and markets.

We expect to make future investments or acquisitions where we believe that we are able to stimulate the development of, or acquire new technologies and products to further our strategic objectives, and strengthen our existing businesses. Mergers and acquisitions of medical technology companies are inherently risky and no assurance may be given that any of our previous or future acquisitions will be successful or will not materially adversely affect our consolidated results of operations, financial condition, and/or cash flows.

For additional information, see Note 2 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K, "Item 1A. Risk Factors - Failure to integrate acquired businesses into our operations successfully could adversely affect our business," and "Item 1A. Risk Factors - We may not complete the planned disposition of the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses within the Patient Monitoring & Recovery division of our Minimally Invasive Therapies Group on the anticipated timeline or at all, and, even if completed, we may not achieve the benefits we anticipate."

### *Acquisition of HeartWare International, Inc.*

On August 23, 2016, the Cardiac and Vascular Group acquired HeartWare International, Inc. (HeartWare), a medical device company that develops and manufactures miniaturized implantable heart pumps, or ventricular assist devices, to treat patients around the world suffering from advanced heart failure. Total consideration for the transaction was approximately \$1.1 billion. Based upon a preliminary acquisition valuation, we acquired \$602 million of technology-based and customer-related intangible assets and \$23 million of tradenames, and \$427 million of goodwill. In addition, we acquired \$245 million of debt through the acquisition, of which we redeemed \$203 million as part of a cash tender offer in August 2016. The remaining \$42 million of debt acquired is due December 2017.

### *Acquisition of Smith & Nephew's Gynecology Business*

On August 5, 2016, the Minimally Invasive Therapies Group acquired Smith & Nephew's gynecology business, which expands and strengthens our minimally invasive surgical offerings and further complements its existing global gynecology business. Total consideration for the transaction was approximately \$350 million. We acquired \$167 million of customer-related and technology-related intangible assets and \$180 million of goodwill.

### *Anticipated Divestiture of Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency Businesses*

On April 18, 2017, we announced that we entered into a definitive agreement with Cardinal Health Inc. to sell the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses within the PMR division of our Minimally Invasive Therapies Group. Among the product lines included in the transaction are the dental/animal health, chart paper, wound care, incontinence, electrodes, SharpSafety, thermometry, perinatal protection, blood collection, compression, and enteral feeding offerings. The transaction also will include 17 dedicated manufacturing facilities. We will retain our Respiratory & Monitoring Solutions business, which includes airway, ventilators, monitors, sensors, and health informatics product lines, as well as our Renal Care Solutions business, both of which are within the PMR division. The transaction is expected to close in the second quarter of fiscal year 2018, subject to the receipt of regulatory approvals and satisfaction of other customary closing conditions. Under the terms of the

definitive agreement, we will receive \$6.1 billion in cash, subject to certain adjustments, with total after-tax proceeds estimated to be approximately \$5.5 billion.

## **Patents and Licenses**

We rely on a combination of patents, trademarks, tradenames, copyrights, trade secrets, and non-disclosure and non-competition agreements to establish and protect our proprietary technology. We have filed and obtained numerous patents in the U.S. and abroad, and regularly file patent applications worldwide in our continuing effort to establish and protect our proprietary technology. U.S. patents typically have a 20-year term from the application date while patent protection outside the U.S. varies from country to country. In addition, we have entered into exclusive and non-exclusive licenses relating to a wide array of third-party technologies. We have also obtained certain trademarks and tradenames for our products to distinguish our genuine products from our competitors' products, and we maintain certain details about our processes, products, and strategies as trade secrets. In the aggregate, these intellectual property assets and licenses are of material importance to our business; however, we believe that no single patent, technology, trademark, intellectual property asset or license is material in relation to any segment of our business as a whole. Our efforts to protect our intellectual property and avoid disputes over proprietary rights have included ongoing review of third-party patents and patent applications. For additional information see "Item 1A. Risk Factors - We are substantially dependent on patent and other proprietary rights and failing to protect such rights or to be successful in litigation related to our rights or the rights of others may result in our payment of significant monetary damages and/or royalty payments, negatively impact our ability to sell current or future products, or prohibit us from enforcing our patent and other proprietary rights against others" and Note 20 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

## **Markets and Distribution Methods**

We sell most of our medical devices and therapies through direct sales representatives in the U.S. and a combination of direct sales representatives and independent distributors in markets outside the U.S. For certain portions of our business, we also sell through distributors in the U.S. Our medical supplies products are used primarily in hospitals, surgi-centers and alternate care facilities, such as home care and long-term care facilities, and are marketed to materials managers, GPOs and integrated delivery networks (IDNs) primarily through third-party distributors, although we also have direct sales representatives. We often negotiate with GPOs and IDNs, which enter into supply contracts for the benefit of their member facilities. Our three largest markets are the U.S., Western Europe, 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 - including physicians, hospitals, other medical institutions, and GPOs. To achieve this objective, we organize our marketing and sales teams 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 believe that we maintain excellent working relationships with physicians and others in the medical industry that enable us to gain a detailed understanding of therapeutic and diagnostic developments, trends, and emerging opportunities and respond quickly to the changing needs of physicians and patients. We attempt to enhance our presence in the medical community through active participation in medical meetings and by conducting comprehensive training and educational activities. We believe that these activities contribute to physician expertise.

In keeping with the increased emphasis on cost-effectiveness in health care delivery, the current trend among hospitals and other customers is to consolidate into larger purchasing groups to enhance purchasing power. This enhanced purchasing power may lead to pressure on pricing and increased use of preferred vendors. Our customer base continues to evolve to reflect such economic changes across the geographic markets we serve. We are not dependent on any single customer for more than 10 percent of our total net sales.

## **Competition and Industry**

We compete in both the therapeutic and diagnostic medical markets in approximately 160 countries throughout the world. These markets are characterized by rapid change resulting from technological advances and scientific discoveries. Our product lines face a mixture 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, and publications about our products, reflecting the importance of product quality, product efficacy, and quality systems in the medical device industry. In addition, in the current environment of managed care, economically motivated customers, consolidation among health care providers, increased competition, and declining reimbursement rates, we have been increasingly required to compete on the basis of price. 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.

### **Worldwide Operations**

Our global operations are accompanied by certain financial and other risks. Relationships with customers and effective terms of sale vary by country. Currency exchange rate fluctuations may affect revenues, earnings, and cash flows from operations. We use operational and economic hedges, as well as currency exchange rate derivative contracts, to manage the impact of currency exchange rate changes on earnings and cash flow. See "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" and Note 9 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K. In addition, the repatriation of earnings of certain subsidiaries outside the U.S. may result in substantial U.S. tax cost.

For financial reporting purposes, net sales and property, plant, and equipment attributable to significant geographic areas are presented in Note 22 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

### **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. For reasons of quality assurance, sole source availability, or cost effectiveness, 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. Due to the U.S. FDA's requirements regarding manufacturing of our products, we may not be able to quickly establish additional or replacement sources for certain components or materials. Generally, we have been able to obtain adequate supplies of such raw materials and components. However, a sudden or unexpected reduction or interruption in supply, and an inability to develop alternative sources for such supply, could adversely affect our operations. We have reporting and disclosure requirements related to the use of certain minerals, known as "conflict minerals" (tantalum, tin, tungsten (or their ores), and gold) which are mined from the Democratic Republic of the Congo and adjoining countries. Pursuant to these requirements, we are required to report on Form SD the procedures we employ to determine the sourcing of such minerals and metals produced from those minerals. There are costs associated with complying with these disclosure requirements, including for diligence in regards to the sources of any conflict minerals used in our products, in addition to the cost of remediation and other changes to products, processes, or sources of supply as a consequence of such verification activities. In addition, the implementation of these rules could adversely affect the sourcing, supply, and pricing of materials used in our products. As of the date of our conflict minerals report for the 2016 calendar year, we were unable to obtain the necessary information on conflict minerals from all of our suppliers and were unable to determine that all of our products are conflict free. We may continue to face difficulties in gathering this information in the future. We may face reputational challenges if we determine that certain of our products contain minerals not determined to be conflict free or if we are unable to sufficiently verify the origins for all conflict minerals used in our products through the procedures we implement.

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

### **Working Capital Practices**

Our goal is to carry sufficient levels of inventory to meet the product delivery needs of our customers. We also provide payment terms to customers in the normal course of business and rights to return product under warranty to meet the operational demands of our customers.

### **Employees**

On April 28, 2017, we employed more than 91,000 full-time employees. Our employees are vital to our success. We believe we have been successful in attracting and retaining qualified personnel in a highly competitive labor market due to our competitive compensation and benefits, and our rewarding work environment.

### **Seasonality**

Worldwide sales do not reflect a significant degree of seasonality; however, the number of medical procedures incorporating Medtronic products is generally lower during summer months, due to summer vacation schedules in the northern hemisphere, particularly in European countries. In addition, pulse oximetry sales may be impacted by flu season.

## Government Regulation and Other Considerations

Our products are subject to regulation by numerous government agencies, including the U.S. FDA and similar agencies 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, and distribution of our products. Our business is also affected by patient privacy laws, cost containment initiatives and environmental health and safety laws and regulations. The primary laws and regulations that affect our business are described below.

### *Product Approval Processes*

Authorization to commercially distribute a new medical device or technology in the U.S. is generally received in one of two ways. The first, known as pre-market notification or the 510(k) process, requires us to demonstrate that our new medical device or technology is substantially equivalent to a legally marketed medical device or technology. In this process, we must submit data that supports our equivalence claim. If human clinical data is required, it must be gathered in compliance with U.S. FDA investigational device exemption regulations. We must receive an order from the U.S. FDA finding substantial equivalence to another legally marketed medical device or technology before we are able to commercially distribute the new medical device or technology. Modifications to cleared medical devices or technologies may be made without using the 510(k) process if the changes do not significantly affect safety or effectiveness. Minimally Invasive Therapies Group products are generally subject to the pre-market notification process. A very small number of our devices are exempt from pre-market review.

The second, more rigorous process, known as pre-market approval (PMA), requires us to independently demonstrate that the new medical device is safe and effective. We do this by collecting data regarding design, materials, bench and animal testing, and human clinical data for the medical device. The U.S. FDA will authorize commercial distribution if it determines there is reasonable assurance that the medical device is safe and effective. This determination is based on the benefit outweighing the risk for the population intended to be treated with the device. This process is much more detailed, time-consuming, and expensive than the 510(k) process. A third, seldom used, process for approval exists for humanitarian use devices, intended for patient populations of less than 4,000 patients per year in the U.S. This exemption is similar to the PMA process; however, a full showing of product effectiveness from large clinical trials is not required. The threshold for approving these products is probable benefit and safety.

Many countries outside the U.S. to which we sell medical devices also subject such medical devices and technologies to their own regulatory requirements. Frequently, regulatory approval may first be obtained in a country outside of the U.S. prior to application in the U.S. due to differing regulatory requirements; however, some countries, such as China for example, require approval in the country of origin first. Most countries outside of the U.S. require that product approvals be recertified on a regular basis, generally every five years. The recertification process requires that we evaluate any device or technology changes and any new regulations or standards relevant to the device or technology and, where needed, conduct appropriate testing to document continued compliance. Where recertification applications are required, they must be approved in order to continue selling our products in those countries. Because export control and economic sanctions laws and regulations are complex and constantly changing, it is possible that laws and regulations may be enacted, amended, enforced or interpreted in a manner materially impacting our ability to sell or distribute products.

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. A notified body assesses the quality management systems of the manufacturer and the product conformity to the essential and other requirements within the medical device directive. We are subject to inspection by notified bodies for compliance. The competent authorities of the E.U. countries, generally in the form of their ministries or departments of health, oversee the clinical research for medical devices and are responsible for market surveillance of products once they are placed on the market. We are required to report device failures and injuries potentially related to product use to these authorities in a timely manner. Various penalties exist for non-compliance with the laws transcribing the medical device directives. A new Medical Device Regulation has been published by the E.U. in 2017 which will impose significant additional premarket and postmarket requirements. The regulation has a three-year implementation period, and after that time all products marketed in the E.U. will require certification according to these new requirements.

To be sold in Japan, most medical devices must undergo thorough safety examinations and demonstrate medical efficacy before they are granted approval, or “shonin.” The Japanese government, through the Ministry of Health, Labour, and Welfare (MHLW), regulates medical devices under the Pharmaceutical Affairs Law (PAL). Oversight for medical devices is conducted with participation by the Pharmaceutical and Medical Devices Agency (PMDA), a quasi-government organization performing many of the review functions for MHLW. Penalties for a company’s noncompliance with PAL could be severe, including revocation or suspension of a company’s business license and criminal sanctions. MHLW and PMDA also assess the quality management systems of the manufacturer and the product conformity to the requirements of the PAL. Medtronic is subject to inspection for compliance by these agencies.

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Our global regulatory environment is becoming increasingly stringent, and unpredictable, which could increase the time, cost and complexity of obtaining regulatory approvals for our products. Several countries that did not have regulatory requirements for medical devices have established such requirements in recent years and other countries have expanded, or plan to expand, on existing regulations. Certain regulators are requiring local clinical data in addition to global clinical data. 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 our ability to obtain future approvals for our products, or could increase the cost and time to obtain such approvals in the future. There may be no assurance that any new medical devices we develop will be approved in a timely or cost-effective manner or approved at all.

*Ongoing U.S. FDA Regulations*

Both before and after a product is commercially released, we have ongoing responsibilities under U.S. FDA regulations. The U.S. FDA reviews design and manufacturing practices, labeling and record keeping, and manufacturers' required reports of adverse experiences and other information to identify potential problems with marketed medical devices. We are also subject to periodic inspection by the U.S. FDA for compliance with the U.S. FDA's quality system regulations, which govern the methods used in, and the facilities and controls used for, the design, manufacture, packaging, and servicing of all finished medical devices intended for human use. In addition, the U.S. FDA and other U.S. regulatory bodies (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 manner in which we promote and advertise our products. Although surgeons are permitted to use their medical judgment to employ medical devices for indications other than those cleared or approved by the U.S. FDA, the U.S. FDA has prohibited manufacturers from promoting products for such "off-label" uses, and has taken the position that manufacturers may only market their products for cleared or approved uses.

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 devices are ineffective or pose an unreasonable health risk, the U.S. FDA could require us to notify health professionals and others that the devices present unreasonable risks of substantial harm to the public health, order a recall, repair, replacement, or refund of such devices, detain or seize adulterated or misbranded medical devices, or ban such medical devices. The U.S. FDA may also impose operating restrictions, enjoin and/or restrain certain conduct resulting in violations of applicable law pertaining to medical devices, including a hold on approving new devices until issues are resolved to its satisfaction, and assess civil or criminal penalties against our officers, employees, or us. The U.S. FDA may also recommend prosecution to the U. S. Department of Justice. Conduct giving rise to civil or criminal penalties may also form the basis for private civil litigation by third-party payers or other persons allegedly harmed by our conduct.

In April 2015, we entered into a consent decree with the U.S. FDA relating to our Pain Therapies division's SynchroMed drug infusion system and the Neuromodulation quality system. The consent decree requires us to complete certain corrections and enhancements to the SynchroMed pump and the Neuromodulation quality system. The consent decree limits our ability to manufacture and distribute the SynchroMed drug infusion system, unless specific conditions are met. The agreement does not require the retrieval of any of our products, but we must retain a third-party expert to inspect the Neuromodulation quality system and to provide a certification that the system complies with the requirements of the consent decree. Once this certification is accepted by the U.S. FDA, and a U.S. FDA inspection is successfully completed, the limitations on manufacturer and distribution of SynchroMed pumps will be lifted. Thereafter, we must submit periodic audit reports to the U.S. FDA to ensure ongoing compliance with the consent decree.

In June 2016, TYRX, Inc. received a Warning Letter from the U.S. FDA following an inspection at the TYRX facility in Monmouth Junction, New Jersey. We are taking action to address the Warning Letter and upon successful reinspection by the U.S. FDA, the Warning Letter will be lifted.

In June 2014, HeartWare Inc. received a Warning Letter from the U.S. FDA following an inspection at the HeartWare facility in Miami Lakes, Florida. Medtronic acquired HeartWare in August 2016, and is implementing actions and process improvements to address the items in the Warning Letter. Upon successful reinspection by FDA, the Warning Letter will be lifted.

### *Governmental Trade Regulations*

The sale and shipment of our products and services across borders, as well as the purchase of components and products from different countries, subject us to extensive governmental 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. Because we are subject to extensive regulations in the countries in which we operate, we are subject to the risk that laws and regulations could change in a way that would expose us to additional costs, penalties, or liabilities. These laws and regulations govern, among other things, our import and export activities.

The U.S. FDA, in cooperation with U.S. Customs and Border Protection (CBP), administers controls over the import of medical devices into the U.S. The CBP imposes its own regulatory requirements on the import of our products, including inspection and possible sanctions for noncompliance. Medtronic is also subject to foreign trade controls administered by several U.S. government agencies, including the Bureau of Industry and Security within the Commerce Department and the Office of Foreign Assets Control within the Treasury Department. We import raw materials, components and finished products into the countries in which we transact business. We act as the importer of record in many instances, but we also sell and ship goods to third parties who are themselves responsible for complying with applicable trade laws and regulations. In our role as importer of record, we are directly responsible for complying with customs laws and regulations concerning the importation of our raw materials, components and finished products. If applicable government agencies were to determine that we or such third parties were not in compliance with applicable U.S. FDA or customs laws and regulations when engaging in cross-border transactions involving our products, we may be subject to civil or criminal enforcement action, and varying degrees of liability, depending on the nature of the violation and the extent of our culpability. In addition, such determinations may cause supply chain disruptions and delays in the distribution of our products that impact our business activities.

Many countries control the export and re-export of goods, technology and services for reasons including public health, national security, regional stability, antiterrorism policies and other reasons. In certain circumstances, approval from governmental authorities may be required before goods, technology or services are exported or re-exported to certain destinations, to certain end-users and for certain end-uses. In addition, sales of our medical devices to customers outside of the U.S. for medical devices that have not received U.S. FDA approval are subject to U.S. FDA export requirements. Some governments may 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 export 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 applicable government agencies were to determine that we, or the third parties through which we export goods, were not in compliance with applicable export control or economic sanctions laws and regulations when engaging in transactions involving our products, we may be subject to civil or criminal enforcement action, and varying degrees of liability, dependent upon the nature of the violation and the extent of our culpability. Similarly, such determinations may cause disruption or delays in the distribution and sales of our products, or result in restrictions being placed upon our distribution and sales of products which may materially impact our business activities.

### *Anti-Boycott Laws*

Under U.S. laws and regulations, U.S. companies and their controlled-in-fact 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. Currently, the U.S. considers the Arab League boycott of Israel to constitute an unsanctioned foreign boycott. We are responsible for ensuring we comply with the requirements of U.S. anti-boycott laws for all transactions in which we are involved. If we, or certain third parties through which we sell or provide goods or services, are determined to have violated U.S. anti-boycott laws and regulations, we may be subject to civil or criminal enforcement action, and varying degrees of liability, dependent upon the nature of the violation and the extent of our culpability. Penalties for any violations of anti-boycott laws and regulations could include criminal penalties and civil sanctions such as fines, imprisonment, debarment from government contracts, loss of export privileges and the denial of certain tax benefits, including foreign tax credits, and outside U.S. subsidiary deferrals.

### *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 (relating to the confidentiality and security of our information technology systems, products such as medical devices, and other services provided by us) may result in increased costs, lower revenue, new complexities in compliance, new challenges for competition, 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.



For example, in the U.S. the collection, maintenance, protection, use, transmission, disclosure and disposal of certain personal information and the security of medical devices are regulated at the U.S. federal and state, international and industry levels. U.S. federal and state laws protect the confidentiality of certain patient health information, including patient medical records, and restrict the use and disclosure of patient health information by health care providers. Privacy and Security Rules under the Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended, and the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH), govern the use, disclosure, and security of protected health information by “Covered Entities,” (which are health care providers that submit electronic claims, health plans, and health care clearinghouses) and by their “Business Associates” (which is anyone that performs a service on behalf of a Covered Entity involving the use or disclosure of protected health information and is not a member of the Covered Entity’s workforce). Rules under HIPAA and HITECH include specific security standards and breach notification requirements. U.S. Department of Health and Human Services (HHS) (through the Office of Civil Rights) has direct enforcement authority against Covered Entities and Business Associates with regard to both the Security and Privacy Rules, including civil and criminal liability. Medtronic is generally not a Covered Entity, with a few exceptions such as our Diabetes business, Medtronic Monitoring, Inc., Beacon IDTF, and our health insurance plans. Medtronic also operates as a Business Associate to Covered Entities in a limited number of instances. In those cases, the patient data that we receive and analyze may include protected health information. There are comparable state level laws governing the use and protection of personal health information by health care providers, and Medtronic may be subject to these laws in certain of its businesses.

The U.S. FDA has issued guidance advising manufacturers to take cybersecurity risks into account in product design for connected medical devices and systems, to assure that appropriate safeguards are in place to reduce the risk of unauthorized access or modification to medical devices that contain software and reduce the risk of introducing threats into hospital systems that are connected to such devices. The U.S. FDA also issued guidance on post market management of cyber security in medical devices.

In addition to the regulation of personal health information, a number of states have also adopted laws and regulations that may affect our privacy and data security practices for other kinds of personally identifiable information, such as state laws that govern the use, disclosure and protection of sensitive personal information such as social security numbers or that are designed to protect credit card account data. State and local authorities increasingly focus on the importance of protecting individuals from identity theft, with 48 U.S. states now enacting laws requiring businesses to notify individuals of security breaches involving personal information. State consumer protection laws may also establish privacy and security standards for use and management of personally identifiable information, including information related to consumers and care providers.

Outside the U.S., we are impacted by the privacy and data security requirements at the international, national and regional level, and on an industry specific basis. We serve customers in approximately 160 countries. Legal requirements in these countries relating to the collection, storage, handling and transfer of personal data and potentially intellectual property continue to evolve with increasingly strict enforcement regimes. More privacy and security laws and regulations are being adopted, and more are being enforced, with potential for significant financial penalties. In the E.U., increasingly stringent data protection and privacy rules that will have substantial impact on the use of patient data across the healthcare industry are scheduled to go into effect in May 2018.

These laws and regulations impact the ways in which we use and manage personal data, protected health information, and our information technology systems. They also impact our ability to move, store, and access data across geographic boundaries. Compliance with these requirements may require changes in business practices, complicate our operations, and add complexity and additional management and oversight needs. They also may complicate our clinical research activities, as well as product offerings that involve transmission or use of clinical data.

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 cost expenditures or changes in products or business that reduce revenue. Noncompliance could result in the imposition of fines, penalties, or orders to stop noncompliant activities.

#### *Cost Containment Initiatives*

Government and private sector initiatives to limit the growth of health care 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 changes are causing the marketplace to put increased emphasis on the delivery of more cost-effective medical devices and therapies. Government programs, including Medicare and Medicaid, private health care 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 designed to constrain utilization and contain costs. Hospitals, which purchase implants, are also seeking to reduce costs through a variety of mechanisms, including, for example, creating centralized purchasing functions that set pricing 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 the physicians' collective change in practice patterns such as standardization of devices where medically appropriate. This has created an increasing level of price sensitivity among customers for our products.

Some third-party payers must also approve coverage and set reimbursement levels for new or innovative devices or therapies before they will reimburse health care providers who use the medical devices or therapies. Even though a new medical device may have been cleared for commercial distribution, we may find limited demand for the device until coverage and sufficient reimbursement levels have been obtained from governmental and private third-party payers. In addition, some private third-party payers require that certain procedures or that the use of certain products be authorized in advance as a condition of reimbursement. Examples of cost containment initiatives and health care reforms in markets significant to Medtronic's business outside of the U.S. include Japan, where the government reviews reimbursement rate benchmarks every two years, which may significantly reduce reimbursement for procedures using our medical devices or deny coverage for those procedures. As a result of our manufacturing efficiencies, cost controls and other cost-savings initiatives, we believe we are well-positioned to respond to changes resulting from the worldwide trend toward cost-containment; however, uncertainty remains as to the nature of any future legislation, new or changed coverage and reimbursement from government or private payers or decisions, or other reforms, making it difficult for us to predict the potential impact of cost-containment trends on future operating results.

#### *Regulations Governing Reimbursement*

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

U.S. federal health care laws apply when we or customers submit claims for items or services that are reimbursed under Medicare, Medicaid, or other federally-funded health care programs. The principal U.S. federal laws include: (1) the Anti-kickback Statute, which prohibits offers to pay or receive remuneration of any kind for the purpose of purchasing, ordering, recommending making referrals to items or services reimbursable by a federal health care program; (2) the False Claims Act which prohibits the submission of false or otherwise improper claims for payment to a federally-funded health care program, including claims resulting from a violation of the Anti-kickback Statute; (3) the Stark law, which prohibits physicians from referring Medicare or Medicaid patients to a provider that bills these programs for the provision of certain designated health services if the physician (or a member of the physician's immediate family) has a financial relationship with that provider; and (4) health care fraud statutes that prohibit false statements and improper claims to any third-party payer. There are often similar state false claims, anti-kickback, and anti-self-referral and insurance laws that apply to state-funded Medicaid and other health care programs and private third-party payers. Insurance companies may also bring a private cause of action for treble damages against a manufacturer for a pattern of causing false claims to be filed under the federal Racketeer Influenced and Corrupt Organizations Act, or RICO. In addition, as a manufacturer the U.S. FDA-approved devices reimbursable by federal healthcare programs, 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. Further, the U.S. Foreign Corrupt Practices Act (FCPA) may be used to prosecute companies in the U.S. for arrangements with physicians, or other parties outside the U.S. if the physician or party is a government official of another country and the arrangement violates the law of that country.

The laws and regulations of health care goods and services that are applicable to us, including those described above, are subject to evolving interpretations and enforcement discretion. If a governmental authority were to conclude that we are not in compliance with applicable laws and regulations, we and our officers and employees could be subject to severe criminal and civil financial penalties, including, for example, exclusion from participation as a supplier of product to beneficiaries covered by Medicare or Medicaid. Any failure to comply with laws and regulations relating to reimbursement and health care goods and services could adversely affect our reputation, business, financial condition and cash flows.

Our profitability and operations are subject to risks relating to changes in legislative, regulatory and reimbursement policies and decisions as well as changes to private payer reimbursement coverage and payment decisions and policies. Implementation of further legislative or administrative 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. Similar to 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. To the best of our knowledge at this time, we do not expect that compliance with environmental protection laws will have a material impact on our consolidated results of operations, financial position, and/or cash flows.

### *Litigation Risks*

**Patent Litigation** 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. While it is not possible to predict the outcome of patent litigation incidents to our business, we believe the outcomes associated with this type of litigation could have a material adverse impact on our consolidated results of operations, financial position, or cash flows. For additional information, see “Item 1A. Risk Factors - We are substantially dependent on patent and other proprietary rights and failing to protect such rights or to be successful in litigation related to our rights or the rights of others may result in our payment of significant monetary damages and/or royalty payments, negatively impact our ability to sell current or future products, or prohibit us from enforcing our patent and other proprietary rights against others.” and Note 20 to the consolidated financial statements in “Item 8. Financial Statements and Supplementary Data” in this Annual Report on Form 10-K.

**Product Liability and Other Claims** We operate in an industry susceptible to significant product liability claims. These claims may be brought by individuals seeking relief on their own behalf or purporting to represent a class. We are also susceptible to other litigation, including private securities litigation, shareholder derivative suits and contract litigation. These claims may be asserted against us in the future based on events we are not aware of at the present time. While it is not possible to predict the outcome of product liability litigation, we believe the outcomes associated with this type of litigation could have a material adverse impact on our consolidated results of operations, financial position, or cash flows. For additional information, see “Item 1A. Risk Factors - Quality problems with, and product liability claims in connection with, our processes, products, and services, could lead to recalls or safety alerts, harm to our reputation, or adverse verdicts or costly settlements, and could have a material adverse effect on our business, results of operations, financial condition and our cash flows” and Note 20 to the consolidated financial statements in “Item 8. Financial Statements and Supplementary Data” in this Annual Report on Form 10-K.

### *Insurance*

We have elected to self-insure most of our insurable risks, and we made this decision based on costs and availability factors in the insurance marketplace. We continue to maintain a directors' and officers' liability insurance policy providing coverage for our directors and officers. We continue to monitor the insurance marketplace to evaluate the value to us of obtaining insurance coverage for other categories of losses in the future. Based on historical loss trends, we believe that our self-insurance program accruals and our existing insurance coverage will be adequate to cover future losses. Historical trends, however, 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 consolidated earnings, financial condition and/or cash flows.

### **Executive Officers of Medtronic**

Set forth below are the names and ages of current Section 16(b) 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.

**Omar Ishrak**, age 61, has been Chairman and Chief Executive Officer of the Company since January 2015 and of Medtronic, Inc. since June 2011. Prior to that, Mr. Ishrak served as President and Chief Executive Officer of GE Healthcare Systems, a division of GE Healthcare, from 2009 to 2011. Prior to that, Mr. Ishrak was President and Chief Executive Officer of GE Healthcare Clinical Systems from 2005 to 2008 and President and Chief Executive Officer of GE Healthcare Ultrasound and BMD from 1995 to 2004.

**Michael J. Coyle**, age 55, has been Executive Vice President and Group President, Cardiac and Vascular Group of the Company since January 2015 and of Medtronic, Inc. since December 2009. Prior to that, he served as President of the Cardiac Rhythm Management division at St. Jude from 2001 to 2007, and prior positions included serving St. Jude as President of the company's Daig Catheter division and numerous leadership positions at Eli Lilly & Company.

**Hooman C. Hakami**, age 47, has been Executive Vice President and Group President, Diabetes Group of the Company since January 2015 and of Medtronic, Inc. since June 2014. Prior to that, he was President and Chief Executive Officer of Detection

and Guidance Solutions at GE Healthcare from April 2012 to May 2014. Prior to that, he served as President and Chief Executive Officer of Interventional Systems from July 2009 to April 2012; Global Business Transformation leader for GE Healthcare from December 2008 to July 2009; and Vice President and General Manager, Global Ultrasound Services from June 2004 to December 2008. Mr. Hakami started his career with GE and has held the following financial roles: Chief Financial Officer for the Global Ultrasound division from 2001 to 2004; Chief Financial Officer for Clinical and Multi-vendor Services from 1999 to 2001; as well as various finance roles at GE Capital from 1994 to 1999; GE's Aerospace Division from 1992 to 1994 and GE Power Systems from 1991 to 1992.

**Bryan C. Hanson**, age 50, has been Executive Vice President and Group President, Minimally Invasive Therapies Group of the Company since February 2015. Prior to that, he was Senior Vice President and Group President, Covidien since October 2014; Senior Vice President and Group President, Medical Devices and United States of Covidien from October 2013 to September 2014; Senior Vice President and Group President of Covidien for the Surgical Solutions business from July 2011 to October 2013; and President of Covidien's Energy-based Devices business from July 2006 to June 2011. Mr. Hanson held several other positions of increasing responsibility in sales, marketing and general management with Covidien from October 1992 to July 2006.

**Richard Kuntz, M.D.**, age 60, has been Senior Vice President and Chief Scientific, Clinical and Regulatory Officer of the Company since January 2015 and of Medtronic, Inc. since August 2009. Prior to that, he was Senior Vice President and President, Neuromodulation from October 2005 to August 2009; and prior to that, he was an interventional cardiologist and Chief of the Division of Clinical Biometrics at Brigham and Women's Hospital and Associate Professor of Medicine and Chief Scientific Officer of the Harvard Clinical Research Institute.

**Bradley E. Lerman**, age 60, has been Senior Vice President, General Counsel and Corporate Secretary of the Company since January 2015 and of Medtronic, Inc. since May 2014. Prior to that, he was Executive Vice President, General Counsel and Corporate Secretary at Federal National Mortgage Association (Fannie Mae) from October 2012 to May 2014; Senior Vice President and Chief Litigation Counsel at Pfizer, Inc. from January 2009 to September 2012; Partner at Winston & Strawn from August 1998 to January 2009; partner at Kirkland & Ellis from March 1996 to July 1998; Associate Independent Counsel from October 1994 to March 1996; and Assistant U.S. Attorney in the Northern District of Illinois from February 1986 to September 1994.

**Geoffrey S. Martha**, age 47, has been Executive Vice President and President, Restorative Therapies Group since June 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.

**Karen L. Parkhill**, age 51, 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 the Methodist Health System in Dallas.

**Carol A. Surface**, age 51, has been Senior 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 56, has been Executive Vice President and President, EMEA of the Company since January 2015 and of Medtronic, Inc. since May 2014. 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.

#### **Item 1A. Risk Factors**

Investing in us 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. Based on the information currently known to us, we believe the following information identifies the most significant risk factors affecting us. However, the risks and uncertainties described below are not the only ones related to our businesses and are not necessarily listed in the order of their importance. Additional risks and uncertainty not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

## Risks Relating to the Company

*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 approximately 160 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 mixture of competitors ranging from large manufacturers with multiple business lines to small 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 products or proposed products less competitive. In addition, we face competition from providers of alternative medical therapies such as pharmaceutical companies.

Competitive factors include:

- product reliability,
- product performance,
- product technology,
- product quality,
- breadth of product lines,
- product services,
- customer support,
- price, and
- reimbursement approval from health care insurance providers.

We also face competition for marketing, distribution, and collaborative development agreements, for establishing relationships with academic and research institutions, and for licenses to intellectual property. In addition, academic institutions, governmental agencies and other public and private research organizations also may conduct research, seek patient 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.

Major shifts in industry market share have occurred in connection with product problems, physician advisories, safety alerts, and publications about our products; reflecting the importance of product quality, product efficacy, and quality systems in our industry. In the current environment of managed care, consolidation among health care providers, increased competition, and declining reimbursement rates, we have been increasingly required to compete on the basis of price. 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 in our industry.

***Reduction or interruption in supply and an inability to develop alternative sources for 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 sufficient amount of quality components and materials and is highly exacting and complex, due in part to strict regulatory requirements. We manufacture most of our products at numerous manufacturing facilities located throughout the world. We purchase many of the components and raw materials used in manufacturing these products from numerous suppliers in various countries. We have generally been able to obtain adequate supplies of such raw materials and components. However, for reasons of quality assurance, cost effectiveness, or availability, we procure certain components and raw materials from a sole supplier. We work closely with our suppliers to try to ensure continuity of supply while maintaining high quality and reliability. However, we cannot guarantee that these efforts will be successful. In addition, due to the stringent regulations and requirements of the U.S. FDA regarding the manufacture of our products, we may not be able to quickly establish additional or replacement sources for certain components or materials. 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 to make our related product sales.

Other problems in the manufacturing process, including equipment malfunction, failure to follow specific protocols and procedures, defective raw materials and environmental factors, could lead to launch delays, product shortage, unanticipated costs, lost revenues and damage to our reputation. A failure to identify and address manufacturing problems prior to the release of products to our customers may also result in quality or safety issues.

In addition, several of our key products are manufactured at a single manufacturing facility, with limited alternate facilities. If an event occurs that results in damage to one or more of such facilities, we may be unable to manufacture the relevant products at

the previous levels or at all. Because of the time required to approve and license a manufacturing facility, a third-party manufacturer may not be available on a timely basis to replace production capacity in the event manufacturing capacity is lost.

Moreover, pursuant to the conflict minerals requirements promulgated by the SEC as a part of Dodd-Frank, we are required to report on the source of any conflict minerals used in our products, as well as the process we use to determine the source of such materials. We will continue to incur expenses as we work with our suppliers to evaluate the source of any conflict minerals in our products, and compliance with these requirements could adversely affect the sourcing, supply, and pricing of our raw materials.

***Our industry is experiencing greater scrutiny and regulation by governmental authorities, which may lead to greater regulation in the future.***

Our medical devices and technologies and our business activities are subject to a complex regime of regulations and an aggressive enforcement environment, 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. These authorities and members of Congress have been increasing their scrutiny of our industry. In addition, certain state governments and the federal government have enacted legislation aimed at increasing transparency of our interactions with health care providers. As a result, we are required by law to disclose payments and other transfers of value to health care providers licensed by certain states and to all U.S. physicians and U.S. teaching hospitals at the federal level. Any failure to comply with these legal and regulatory requirements could impact our business. In addition, we will continue to devote substantial additional time and financial resources to further develop and implement policies, systems, and processes to comply with enhanced legal and regulatory requirements, which may also impact our business. We anticipate that governmental authorities will continue to scrutinize our industry closely, and that additional regulation may increase compliance and legal costs, exposure to litigation, and other adverse effects to our operations.

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

Our medical devices are subject to regulation by numerous government agencies, including the U.S. FDA and comparable agencies 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, and distribution of our products. 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 conditions and cash flows. Even if we are able to obtain such 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
- result in limitations on the proposed uses of our products.

Both before and after a product is commercially released, we have ongoing responsibilities under U.S. FDA regulations. 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 the U.S. FDA's requirements, including primarily the quality system regulations and medical device reporting regulations. The results of these inspections can include inspectional observations on U.S. FDA's Form-483, warning letters, or other forms of enforcement. Since 2009, the U.S. FDA has significantly increased its oversight of companies subject to its regulations, including medical device companies, by hiring new investigators and stepping up inspections of manufacturing facilities. 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 devices are ineffective or pose an unreasonable health risk, the U.S. FDA could ban such medical devices, detain or seize adulterated or misbranded medical devices, order a recall, repair, replacement, or refund of such devices, 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 may also assess civil or criminal penalties against us, our officers or employees and impose operating restrictions on a company-wide basis, or enjoin and/or restrain certain conduct resulting in violations of applicable law. 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.

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. A number of enforcement actions have been taken against manufacturers that promote products for "off-label" uses, including actions alleging that federal health care program reimbursement of products promoted for "off-label" uses constitute false and fraudulent claims to the government. The failure to

comply with “off-label” promotion restrictions can result in significant civil or criminal exposure, administrative obligations and costs, and/or other potential penalties from, and/or agreements with, the federal government.

Pursuant to Dodd-Frank, the SEC promulgated final rules regarding disclosure of the use of certain minerals, known as "conflict minerals" (tantalum, tin, tungsten (or their ores), and gold) which are mined from the Democratic Republic of the Congo and adjoining countries. Under the rules, we are now required to disclose the procedures we employ to determine the sourcing of such minerals and metals produced from those minerals. There are costs associated with complying with these disclosure requirements, including for diligence in regards to the sources of any conflict minerals used in our products, in addition to the cost of remediation and other changes to products, processes, or sources of supply as a consequence of such verification activities. In addition, the implementation of these rules could adversely affect the sourcing, supply, and pricing of materials used in our products. As of the date of our conflict minerals report for the 2016 calendar year, we were unable to obtain the necessary information on conflict minerals from all of our suppliers and were unable to determine that all of our products are conflict free. In addition, we may continue to face difficulties in gathering this information in the future. We may face reputational challenges if we determine that certain of our products contain minerals not determined to be conflict free or if we are unable to sufficiently verify the origins for all conflict minerals used in our products through the procedures we implement.

Governmental regulations outside the U.S. have become increasingly stringent and more common, and we may become subject to more rigorous regulation by governmental authorities in the future. In the European Union, for example, a new Medical Device Regulation was published in 2017 which, when it enters into full force, will impose significant additional premarket and post-market requirements. Penalties for a company’s non-compliance with governmental regulation could be severe, including fines and revocation or suspension of a company’s business license, mandatory price reductions and criminal sanctions. Any governmental law or regulation imposed in the future may have a material adverse effect on us.

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

We are subject to numerous U.S. federal, state, local and non-U.S. environmental, health and safety laws and regulations concerning, among other things, the health and safety of our employees, the generation, storage, use and transportation of hazardous materials, emissions or discharges of substances into the environment, investigation and remediation of hazardous substances or materials at various sites, chemical constituents in medical products and end-of-life disposal and take-back programs for medical devices. Our operations involve the use of substances regulated under such laws and regulations, primarily those used in manufacturing and sterilization processes. If we violate these environmental laws and regulations, we could be fined, criminally charged or otherwise sanctioned by regulators. Furthermore, environmental laws outside of the U.S. are becoming more stringent, resulting in increased costs and compliance burdens.

In addition, certain environmental laws assess liability on current or previous owners or operators of real property for the costs of investigation, removal or remediation of hazardous substances or materials at their properties or at properties which they have disposed of hazardous substances. Liability for investigative, removal and remedial costs under certain U.S. federal and state laws are retroactive, strict and joint and several. In addition to cleanup actions brought by governmental authorities, private parties could bring personal injury or other claims due to the presence of, or exposure to, hazardous substances. The ultimate cost of site cleanup and timing of future cash outflows is difficult to predict, given the uncertainties regarding the extent of the required cleanup, the interpretation of applicable laws and regulations, and alternative cleanup methods.

We may in the future be subject to additional environmental claims for personal injury or cleanup based on our past, present or future business activities (including the past activities of companies we have acquired). The costs of complying with current or future environmental protection and health and safety laws and regulations, or liabilities arising from past or future releases of, or exposures to, hazardous substances, may exceed our estimates, or have a material adverse effect on our business, consolidated earnings, financial condition, and/or cash flow.

***Our failure to comply with laws and regulations relating to reimbursement of health care goods and services may subject us to penalties and adversely impact our reputation, business, 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 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 care goods and services. The principal U.S. federal laws implicated include those that prohibit (i) the filing of false or improper claims for federal payment, known as the false claims laws, (ii) unlawful inducements for the referral of business reimbursable under federally-funded health care programs, known as the anti-kickback laws, and (iii) health care service providers from seeking reimbursement for providing certain services to a patient who

was referred by a physician who has certain types of direct or indirect financial relationships with the service provider, known as the Stark law. 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. Insurance companies can also bring a private cause of action claiming treble damages against a manufacturer for causing a false claim to be filed under the federal Racketeer Influenced and Corrupt Organizations Act, RICO. 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.

Our profitability and international operations are 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 the reimbursement system in the U.S. and outside of the U.S., 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.

The laws and regulations of health care goods and services that are applicable to us, including those described above, are subject to evolving interpretations and enforcement discretion. If a governmental authority were to conclude that we are not in compliance with applicable laws and regulations, we and our officers and employees could be subject to severe criminal and civil penalties, including, for example, exclusion from participation as a supplier of product to beneficiaries covered by CMS. Any failure to comply with laws and regulations relating to reimbursement and health care goods and services could adversely affect our reputation, business, financial condition and cash flows.

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

We are substantially dependent on patent and other proprietary rights and rely on a combination of patents, trade secrets, and non-disclosure and non-competition agreements to protect our proprietary intellectual property. We also operate in an industry characterized by extensive patent litigation. Patent litigation against us 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, we believe the results associated with any such litigation could result in our payment of significant monetary damages and/or royalty payments, negatively impact our ability to sell current or future products, or prohibit us from enforcing our patent and proprietary rights against others, which would generally have a material adverse impact on our consolidated earnings, financial condition, and/or cash flows.

While we intend to defend against any threats to our intellectual property, our patents, trade secrets, or other agreements may not adequately protect our intellectual property. Further, pending patent applications owned by us may not result in patents being issued to us, patents issued to or licensed by us in the past or in the future may be challenged or circumvented by competitors and such patents may be found invalid, unenforceable or insufficiently broad to protect our technology or to provide us with any competitive advantage. Third parties could obtain patents that may require us to negotiate licenses to conduct our business, and the required licenses may not be available on reasonable terms or at all. We also 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 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 in such countries by utilizing technologies that are similar to those developed or licensed by us. Competitors also may harm our sales by designing products that 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, financial condition or results of operations.



***Quality problems with, and product liability claims in connection with, our processes, products, and services, could lead to recalls or safety alerts, harm to our reputation, or adverse verdicts or costly settlements, and could have a material adverse effect on our business, results of operations, financial condition and our cash flows.***

Quality is extremely important to us and our customers due to the serious and costly consequences of product failure and 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 defects, design flaws, off-label use, or inadequate disclosure of product-related risks or product-related information with respect to our products 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 and Covidien brands, a material adverse event involving one of our products could result in reduced market acceptance and demand for all products within that brand, and could harm our reputation and ability to market products in the future.

Strong product quality is critical to the success of our goods and services. If we fail to meet 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 depends generally on our ability to manufacture to exact tolerances 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.

Further, we have elected to self-insure with respect to product liability risks and any product liability claim brought against us, with or without merit, could be costly to defend and resolve. See "Our insurance program may not be adequate to cover future losses." Any of the foregoing problems, including product liability claims or product recalls in the future, 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.

***Health care policy changes, including U.S. health care reform legislation, may have a material adverse effect on us.***

In response to perceived increases in health care costs in recent years, there have been and continue to be proposals by the federal government, state governments, regulators, and third-party payers to control these costs and, more generally, to reform the U.S. health care system. Certain of these proposals could 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. The adoption of some or all of these proposals could have a material adverse effect on our financial condition and results of operations.

The Patient Protection and Affordable Care Act (the "ACA") and the Health Care and Education Affordability Reconciliation Act of 2010 (together "the law" or "the legislation") provide for a number of healthcare policy changes that are or will be applicable to us. However, there are many programs and requirements under the law for which the consequences are not fully understood, and it is unclear what the full impacts will ultimately be from the law. The legislation provides for significant new taxes on medical device makers in the form of a 2.3 percent excise tax on all U.S. medical device sales that commenced in January 2013. Although the excise tax has been suspended by Congress until the end of 2017, its status is unclear for 2018 and subsequent years. Under the legislation, the total cost to the medical device industry is expected to be approximately \$20 billion over 10 years. The law also focuses on a number of Medicare provisions aimed at improving quality and decreasing costs. It is uncertain at this point what negative unintended consequences these provisions will have on patient access to new technologies. The Medicare provisions include value-based payment programs, increased funding of comparative effectiveness research, reduced hospital payments for avoidable readmissions and hospital acquired conditions, and pilot programs to evaluate alternative payment methodologies that promote care coordination (such as bundled physician and hospital payments). Additionally, the law includes a reduction in the annual rate of inflation for Medicare payments to hospitals that began in 2011 and the establishment of an independent payment advisory board to recommend ways of reducing the rate of growth in Medicare spending.

Currently, the U.S. Congress is considering legislation to repeal and replace the ACA. We cannot predict whether the ACA will be repealed, replaced, or modified or how such repeal, replacement or modification may be timed or structured. As a result, we cannot quantify or predict the effect of such repeal, replacement, or modification might have on our business and results of operations. However, any changes that lower reimbursement for our products or reduce medical procedure volumes could adversely affect our business and results of operations.

***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 a third party insurer 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 consolidated earnings, financial condition and/or cash flows.

***If we experience decreasing prices for our goods and services and we are unable to reduce our expenses, our results of operations will suffer.***

We may experience decreasing prices for our goods and services due to pricing pressure experienced by our customers from managed care organizations and other third-party payers, increased market power of our customers as the medical device industry consolidates, and increased competition among medical engineering and manufacturing services providers. If the prices for our goods and services decrease and we are unable to reduce our expenses, our results of operations will be adversely affected.

***We may experience higher costs to produce our products as a result of changes in prices for oil, gas and other commodities.***

We use resins, other petroleum-based materials and pulp as raw materials in some of our products. Prices of oil and gas also significantly affect our costs for freight and utilities. Oil, gas and pulp prices are volatile and may increase, resulting in higher costs to produce and distribute our products. New laws or regulations adopted in response to climate change could also increase energy costs and the costs of certain raw materials and components. Due to the highly competitive nature of the healthcare industry and the cost-containment efforts of our customers and third-party payers, we may be unable to pass along cost increases through higher prices. If we are unable to fully recover these costs through price increases or offset these increases through cost reductions, we could experience lower margins and profitability and our business, results of operations, financial condition and cash flows could be materially and adversely affected.

***Economic and political instability around the world could adversely affect our revenues, financial condition or results of operations.***

There can be no assurance that economic and political instability around the world will not adversely affect our revenues, financial condition or results of operations. Our customers and vendors may experience financial difficulties or be unable to borrow money to fund their operations which may adversely impact their ability to purchase our products or to pay for our products on a timely basis, if at all. As with our customers and vendors, these economic conditions make it more difficult for us to accurately forecast and plan our future business activities. In addition, a significant amount of our trade receivables are with national health care 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 located outside the U.S. Failure to receive payment of all or a significant portion of these receivables could adversely affect our results of operations.

***We are subject to a variety of market and financial risks due to our international operations that could adversely affect those operations or our profitability and operating results.***

Although our stock is traded on the New York Stock Exchange, we are a global company. Operations in countries outside of the U.S., which account for approximately 44 percent of our net sales for fiscal year 2017, are accompanied by certain financial and other risks that would not be faced by a company operating purely within the U.S. We intend to continue to pursue growth opportunities in sales outside the U.S., especially in emerging markets, which could expose us to greater risks associated with international sales and operations. Our profitability and international operations are, and will continue to be, subject to a number of risks and potential costs, including:

- fluctuations in currency exchange rates,
- healthcare reform legislation,
- multiple non-U.S. regulatory requirements 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 instability,
- the potential payment of U.S. income taxes on earnings of certain controlled foreign subsidiaries subject to U.S. taxation upon repatriation,
- 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.

There are recent legislative proposals to tax profits of U.S. affiliates which are earned abroad. While it is impossible for us to predict whether these and other proposals will be implemented, or how they will ultimately impact us, they may materially impact our results of operations if, for example, our profits earned abroad are subject to U.S. income tax, or we are otherwise disallowed deductions as a result of these profits.

On June 23, 2016, the United Kingdom (U.K.) held a referendum in which voters approved an exit from the E.U., commonly referred to as “Brexit”. As a result of the referendum, it is expected that the British government will begin negotiating the terms of the U.K.’s future relationship with the E.U. Although it is unknown what those terms will be, it is possible that there will be greater restrictions on imports and exports between the U.K. and E.U. countries and increased regulatory complexities. Similarly, from time to time proposals are made in the U.S. to significantly change existing trade agreements and relationships between the U.S. and other countries, although we cannot currently predict whether or how these changes will be implemented. Changes to trade policy may adversely affect our operations and financial results.

Finally, changes in currency exchange rates may reduce the reported value of our revenues outside the U.S, net of 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.

***The failure to comply with U.S. Foreign Corrupt Practices Act and similar anti-bribery laws in non-U.S. jurisdiction could materially adversely affect our business and result in civil and/or criminal sanctions.***

The U.S. Foreign Corrupt Practices Act (FCPA) and similar anti-bribery laws in non-U.S. jurisdictions generally prohibit companies and their intermediaries from making improper payments to non-U.S. government officials for the purpose of obtaining or retaining business. Because of the predominance of government-sponsored healthcare systems 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.

Global enforcement of anti-corruption laws has increased substantially in recent years, with more frequent voluntary self-disclosures by companies, aggressive investigations and enforcement proceedings by U.S. and non-U.S. governmental agencies, and assessment of significant fines and penalties against companies and individuals. Our international operations create the risk of unauthorized payments or offers of payments by one of our employees, consultants, sales agents, or distributors, because these parties are not always subject to our control. It is our policy to implement safeguards to educate our employees and agents on these legal requirements and prohibit improper practices. However, our 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 might be held responsible. In addition, the government may seek to hold us liable for successor liability FCPA violations committed by any companies in which we invest or that we acquire. Any alleged or actual violations of these regulations may subject us to government scrutiny, severe criminal or civil sanctions and other liabilities, including exclusion from government contracting, and could disrupt our business, and result in a material adverse effect on our reputation, results of operations, financial condition, and cash flows.

***Laws and regulations governing the export of our products could adversely impact our business.***

The U.S. Department of the Treasury’s Office of Foreign Assets Control (OFAC), and the Bureau of Industry and Security at the U.S. Department of Commerce (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. Due to our international operations, we are subject to such laws and regulations, which are complex, restrict our business dealings with certain countries 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, Sudan, Syria, Cuba and those in the region of Crimea. Certain of our subsidiaries sell medical devices and surgical tools, 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 effectively prevent us from violating these

regulations in every transaction in which we may engage, and such a violation could adversely affect our reputation, business, financial condition, results of operations and cash flows.

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

In response to a variety of actions by legislators, regulators, and third party payers to reduce the perceived rise in healthcare costs, many health care industry companies, including health care systems, are consolidating to create new companies with greater market power. As the health care industry consolidates, competition to provide goods and services to industry participants will become more intense. These industry participants may try to use their market power to negotiate price concessions or reductions for medical devices that incorporate components produced by us. If we are forced to reduce our prices because of consolidation in the health care industry, our revenues would decrease and our consolidated earnings, financial condition, and/or cash flows would suffer.

***Our business is indirectly subject to health care industry cost-containment measures that could result in reduced sales of medical devices and medical devices containing our components.***

Most of our customers, and the health care 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 health care 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 health care 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.

In an effort to reduce costs, many existing and potential customers for our products within the U.S. have become members of GPOs and IDNs. GPOs and IDNs negotiate pricing arrangement with healthcare product manufacturers and distributors and offer the negotiated prices to affiliated hospitals and other members. GPOs and IDNs typically award contracts on a category-by-category basis through a competitive bidding process. Bids are generally solicited from multiple manufacturers with the intention of driving down pricing. Due to the highly competitive nature of the GPO and IDN contracting processes, we may not be able to obtain or maintain contract positions with major GPOs and IDNs across our product portfolio. Furthermore, the increasing leverage of organized buying groups may reduce market prices for our products, thereby reducing our profitability.

While having a contract with a GPO and IDN for a given product category can facilitate sales to members of that GPO or IDN, such contract positions can offer no assurance that sales volumes of those products will be maintained. GPOs and IDNs increasingly are awarding contracts to multiple suppliers for the same product category. Even when we are the sole contracted supplier of a GPO or IDN for a certain product category, members of the GPO or IDN generally are free to purchase from other suppliers. Furthermore, GPO and IDN contracts typically are terminable without cause upon 60 to 90 days' notice. Accordingly, although we have multiple contracts with many major GPOs and IDNs, the members of such groups may choose to purchase from our competitors due to the price or quality offered by such competitors, which could result in a decline in our sales and profitability.

***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 strategy to provide a broad range of therapies to restore patients to fuller, healthier lives 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 consolidated earnings, financial condition, and/or cash flows.

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

If we fail to maintain our working relationships with health care 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 is dependent upon our maintaining working relationships with health care 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. If we are unable to maintain our strong relationships with these professionals and continue to receive their advice and input, the development and marketing of our products could suffer, which could have a material adverse effect on our consolidated earnings, financial condition, and/or cash flows.

***Cyber-attacks or other disruptions to our information technology systems could lead to reduced revenue, increased costs, liability claims, or harm to our competitive position.***

We are increasingly dependent on sophisticated information technology systems to operate our business, and many of our products and services include integrated software and information technology. We rely on information technology systems to collect and process customer orders, manage product manufacturing and shipping, and support regulatory compliance, and we routinely process, store, and transmit large amounts of data, including sensitive personal information, protected health information, and business information. Many of our products and services incorporate software and information technology that allow patients and physicians to be connected and collect data regarding a patient and the therapy he or she is receiving, or that otherwise allow the products or services to operate as intended. We could experience, and in the past have experienced, attempted or actual interference with the integrity of, and interruptions in, our technology systems, as well as data breaches. We could also experience attempted or actual interference with the integrity of our products and data. These incidents could materially harm our business and our reputation.

As is the case with other large enterprises, the size and complexity of our products, services, and information technology systems can make them vulnerable to cyber-attacks, breakdown, interruptions, destruction, loss or compromise of data, obsolescence or incompatibility among systems, or other significant disruptions. Unauthorized persons may attempt to inappropriately access our products or systems in order to disrupt, disable or degrade such products or services, or to obtain proprietary or confidential information. Such unauthorized access or interference with our products or services could create issues with product functionality which could pose a risk to patient safety, and a risk of product recall or field activity.

We have programs, processes and technologies in place to prevent, detect, contain, respond to and mitigate security related threats and potential incidents. We undertake considerable ongoing improvements to our systems, connected devices and information-sharing products in order to minimize vulnerabilities, in accordance with industry and regulatory standards. Because the techniques used to obtain unauthorized access change frequently and can be difficult to detect, anticipating, identifying or preventing these intrusions or mitigating them if and when they occur, may be challenging.

We also rely on third party vendors to supply and/or support certain aspects of our information technology systems. Third party systems may contain defects in design or manufacture or other problems that could result in system disruption or unexpectedly compromise the information security of our own systems, and we are dependent on these third parties to provide reliable systems and software and to deploy appropriate security programs to protect their systems.

In addition, we continue to grow in part through new business acquisitions. As a result of acquisitions, we may face risks due to implementation, modification, or remediation of controls, procedures, and policies relating to data privacy and cybersecurity at the acquired company. We continue to consolidate and integrate the number of systems we operate, and to upgrade and expand our information system capabilities for stable and secure business operations.

If we are unable to maintain reliable information technology systems and prevent disruptions, outages, or data breaches, we may suffer regulatory consequences in addition to business consequences. Our worldwide operations mean that we are subject to laws and regulations, including data protection and cyber security 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 Cybersecurity Laws and Regulations." We have programs to ensure compliance with such laws and regulations. However, there is no guarantee that we will avoid enforcement actions by governmental bodies. Enforcement actions may be costly and interrupt regular operations of our business. In addition, there has been a developing trend of civil lawsuits and class actions relating to breaches of consumer data held by large companies or incidents arising from other cyber attacks. While Medtronic has not been named in any such suits, if a substantial breach or loss of data were to occur, we could become a target of such litigation.

Our information technology systems require an ongoing commitment of significant resources to maintain, protect, and enhance existing systems and develop new systems to keep pace with continuing changes in information processing technology, evolving legal and regulatory standards, the increasing need to protect patient and customer information, and the information technology needs associated with our changing products and services. There can be no assurance that our process of 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. Any significant breakdown, intrusion, interruption, corruption, or destruction of these systems, as well as any data breaches, could have a material adverse effect on our business. If our information technology systems, products or services or sensitive data are compromised, patients or employees could be exposed to financial or medical identity theft or suffer a loss of product functionality, and we could lose existing customers, have difficulty attracting new customers, have difficulty preventing, detecting, and controlling fraud, be exposed to the loss or misuse of confidential information, have disputes with customers, physicians, and other health care professionals, suffer regulatory sanctions or penalties under federal laws, state laws, or the laws of other jurisdictions, experience increases in operating expenses or an impairment in our ability to conduct our operations, incur expenses or lose revenues as a result of a data privacy breach, product failure, information technology outages or disruptions, or suffer other adverse consequences including lawsuits or other legal action and damage to our reputation.

***Negative conditions in global credit markets may impair our ability to issue debt securities and impact the liquidity and/or market value of investments in marketable debt securities, which may cause us losses and liquidity issues.***

We have investments in marketable debt securities that are classified and accounted for as available-for-sale. Our debt securities include government and agency securities, corporate debt securities, certificates of deposit, debt funds, and mortgage-backed and other asset-backed securities. Market conditions over the past several years have included periods of significant economic uncertainty and at times general market distress. During these periods, we may experience reduced liquidity across the fixed-income investment market, including the securities in which we invest. In the event we need to sell these securities, we may not be able to do so in a timely manner or for a value that is equal to the underlying principal. In addition, we may be required to adjust the carrying value of the securities and record an impairment charge. If we determine that the fair value of such securities is temporarily impaired, we would record a temporary impairment as a component of accumulated other comprehensive (loss) income within shareholders' equity. If it is determined that the fair value of these securities is other-than-temporarily impaired, we would record a loss in our consolidated statements of earnings, which could materially adversely impact our results of operations and financial condition.

Negative market conditions may also impair our ability to access the capital markets through the issuance of commercial paper or other debt securities or may negatively impact our ability to borrow from financial institutions.

***Our products are continually the subject of clinical trials conducted by us, our competitors, or other third parties, the results of which may be unfavorable, or perceived as unfavorable, and could have a material adverse effect on our business, financial condition, and results of operations.***

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 or inconsistent clinical data from existing or future clinical trials conducted by us, by our competitors, or by third parties, or the market's or U.S. FDA's perception of this clinical data, may adversely impact our ability to obtain product approvals, our position in, and share of, the markets in which we participate, and our business, financial condition, and results of operations.

***Failure to integrate acquired businesses into our operations successfully could adversely affect our business.***

As part of our strategy to develop and identify new products and technologies, we have made several acquisitions in recent years, including the 2015 acquisition of Covidien, 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 the combined company successfully could also have an adverse impact on our business. 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,
- adverse developments arising out of investigations by governmental entities of the business practices of acquired companies, including potential liability imposed by FCPA,

- 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 of the combined company to achieve synergies among its constituent companies, such as increasing sales of the combined company's products, achieving cost savings, and effectively combining technologies to develop new products.

We also could experience negative effects on our results of operations, cash flows, and financial condition from acquisition-related charges, amortization of intangible assets and asset impairment charges. These effects, individually or in the aggregate, could cause a deterioration of our credit rating and result in increased borrowing costs and interest expense.

***We may not complete the planned disposition of the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses within the Patient Monitoring & Recovery division of our Minimally Invasive Therapies Group on the anticipated timeline or at all, and, even if completed, we may not achieve the benefits we anticipate.***

In April 2017, we announced that we had entered into a definitive agreement to sell the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses within the Patient Monitoring & Recovery division of our Minimally Invasive Therapies Group to Cardinal Health, Inc. for \$6.1 billion in cash, subject to certain adjustments, with total after-tax proceeds estimated to be approximately \$5.5 billion. We expect the transaction to close in the second quarter of our 2018 fiscal year, subject to satisfaction of customary closing conditions. In connection with the transaction, we announced that we anticipate a number of benefits from the disposition, including improvements in our revenue growth rate and operating margin, a lower debt leverage ratio, and an increased ability to fund potential investments in higher growth and higher margin opportunities.

The disposition transaction is complex in nature, subject to various conditions, and may be adversely affected by unanticipated developments and unexpected changes in market or other conditions. If any closing conditions are not met, the closing of the disposition transaction may be delayed or fail to occur, and we may not achieve the intended benefits we anticipate. Moreover, if the disposition is not completed on the anticipated timeline or at all, our ongoing operation of the Patient Monitoring & Recovery division may be harmed.

Even if the disposition transaction is completed, we may not achieve some or all of the anticipated benefits, including the financial and operational benefits described above, and our future investments and other business opportunities that we anticipate will be facilitated by the disposition may not be successful and may prove not to be superior alternatives to the continued operation of our current Patient Monitoring & Recovery division. Further, execution of the proposed disposition will require significant time and attention from management and other employees, including following the closing of the disposition transaction, which may divert the attention of our management and other employees from the execution of our other initiatives and could affect our financial condition, results of operations, or cash flows.

***The expansion of our services and solutions business may not yield the revenue we expect and will expose us to new risks.***

We are increasingly focusing on our services and solutions businesses and the creation of comprehensive value-based healthcare offerings, in which payment is based on measurable patient outcomes over a specific time horizon. These offerings include care management services, cath lab and operating room managed services, and solutions for chronic disease management. We intend to expand our services and solutions model across all of our business groups and across geographic regions. However, we remain in the relatively early stages of developing and implementing this business model. As a result, we will need to invest significant expense and management resources into developing our expertise and executing our strategies, and our efforts may not be profitable.

In addition, the expansion of our services and solutions business model will expose us to, or increase our exposure to, a variety of regulations in the various countries we provide services and solutions, including regulations related to government payments, fraud and abuse, patient privacy, and the corporate practice of medicine. Compliance with these regulations may prove to be more costly than we anticipate, and we may not successfully comply with such regulations. These regulatory costs may slow our expansion into these business areas and may have a negative effect on our results of operations, cash flows, and financial condition.

***The medical device industry is the subject of numerous governmental investigations into marketing and other business practices. These investigations could result in the commencement of civil and/or criminal proceedings, substantial fines, penalties, and/or administrative remedies, divert the attention of our management, and have an adverse effect on our financial condition and results of operations.***

We are subject to rigorous regulation by the U.S. FDA and numerous other federal, state, and non-U.S. governmental authorities. These authorities have been increasing their scrutiny of our industry. We occasionally receive subpoenas or other requests for information from state and federal governmental agencies, including, among others, the U.S. Department of Justice and the Office

of Inspector General of HHS. These investigations typically relate primarily to financial arrangements with health care providers, regulatory compliance, and product promotional practices.

We cooperate with these investigations and respond to such requests. However, when an investigation begins, we cannot predict when it will be resolved, the outcome of the investigation, or its impact on us. An 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, entry into Corporate Integrity Agreements (CIAs) with governmental agencies and amendments to existing CIAs. In addition, resolution of any of these matters could involve the imposition of additional and costly compliance obligations. Finally, if these investigations continue over a long period of time, they could divert the attention of management from the day-to-day operations of our business and impose significant administrative burdens, including cost, on us. These potential consequences, as well as any adverse outcome from these investigations or other investigations initiated by a government at any time, could have a material adverse effect on our financial condition and results of operations.

***Our substantial leverage and debt service obligations could adversely affect our business.***

At April 28, 2017, our total consolidated external debt was approximately \$33.4 billion. We may also incur additional indebtedness in the future. Our substantial indebtedness could have adverse consequences, including:

- making it more difficult for us to satisfy our financial obligations;
- increasing our vulnerability to adverse economic, regulatory and industry conditions, and placing us at a disadvantage compared to our competitors that are less leveraged;
- limiting our ability to compete and our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;
- limiting our ability to borrow additional funds for working capital, capital expenditures, acquisitions and general corporate or other purposes; and
- exposing us to greater interest rate risk since the interest rate on borrowings under our floating rate notes and revolving credit facility is variable.

Our debt service obligations will require us to use a portion of our operating cash flow to pay interest and principal on indebtedness instead of for other corporate purposes, including funding future expansion of our business, acquisitions, and ongoing capital expenditures, which could impede our growth. If our operating cash flow and capital resources are insufficient to service our debt obligations, we may be forced to sell assets, seek additional equity or debt financing or restructure our debt, which could harm our long-term business prospects. Our failure to comply with the terms of our revolving credit facility and other indebtedness could result in an event of default which, if not cured or waived, could result in the acceleration of all of our debt. Our ability to generate cash in the future is subject to general economic, financial, competitive, legislative, regulatory and other factors, many of which are beyond our control.

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

We are subject to income taxes as well as non-income based taxes, in both the U.S. and various jurisdictions outside the U.S. We are subject to ongoing tax audits in various jurisdictions. 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 consolidated earnings and financial condition. Additionally, changes in tax laws or tax rulings could materially impact our effective tax rate. For example, legislation in 2010 imposed a 2.3 percent excise tax on medical device manufacturers for U.S. sales of medical devices beginning in January 2013. Proposals for fundamental U.S. corporate tax reform, if enacted, could have a material impact on our financial condition and results of operations.



***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. On December 23, 2010, the IRS issued a statutory notice of deficiency with respect to the remaining issues. Medtronic, Inc. filed a petition with the U.S. Tax Court on March 21, 2011 objecting to the deficiency. During October and November 2012, Medtronic, Inc. reached a resolution with the IRS on various matters, including the deductibility of a settlement payment. Medtronic, Inc. and the IRS agreed to hold one issue, the calculation of amounts eligible for the one-time repatriation holiday, because that issue was being addressed by other taxpayers in litigation with the IRS. 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 proceeding with respect to this issue began on February 3, 2015 and ended on March 12, 2015. On June 9, 2016, the U.S. Tax court issued its opinion with respect to the allocation of income between Medtronic, Inc. and its wholly-owned subsidiary operating in Puerto Rico for fiscal years 2005 and 2006. The U.S. Tax Court generally rejected the IRS's position, but also made certain modifications to the Medtronic, Inc. tax returns as filed. During November 2016, Medtronic and the IRS entered into a Stipulation of Settled Issues with the Tax Court which resolved the one-time repatriation holiday as an outstanding issue unless either party decided to appeal the Tax Court Opinion and a final decision is inconsistent with the U.S. Tax Court Opinion. The U.S. Tax Court entered their final decision on January 25, 2017. On April 21, 2017 the IRS filed their Notice of Appeal to the U.S. Court of Appeals for the 8th Circuit regarding the Tax Court Opinion. A hearing date for the Appeal has not been set. A decision by the 8<sup>th</sup> Circuit Court of Appeals overturning the Tax Court Opinion could have a material adverse impact on our financial condition.

***Examination and audits by tax authorities could result in additional tax payments, which could have a material adverse effect on our business, results of operations, financial condition and cash flow.***

The Company has provided 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 regulations 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 the Company's estimate of tax liabilities proves to be less than the amount for which it is ultimately liable, we would incur additional charges to expense and such charges could have a material adverse effect on our business, results of operations, financial condition and cash flows.

***If the distribution of Mallinckrodt ordinary shares to Covidien shareholders in 2013, or certain internal transactions undertaken in anticipation of the 2013 separation, are determined to be taxable for U.S. federal income tax purposes, we could incur significant U.S. federal income tax liabilities.***

Covidien received an IRS ruling substantially to the effect that, for U.S. federal income tax purposes, (i) certain transactions effected in connection with its 2013 separation of Mallinckrodt qualify as transactions under Sections 355 and/or 368(a) of the Code, and (ii) the distribution qualifies as a transaction under Sections 355 and 368(a)(1)(D) of the Code. In addition to obtaining the IRS ruling, Covidien received a tax opinion from Skadden, Arps, Slate, Meagher & Flom LLP, in form and substance acceptable to Covidien, which relied on the effectiveness of the IRS ruling, substantially to the effect that, for U.S. federal income tax purposes, the distribution and certain transactions entered into in connection with the distribution qualify as transactions under Sections 355 and/or 368(a) of the Code.

The private letter rulings and the opinions relied on certain facts and assumptions, and certain representations and undertakings in the case of the 2013 separation, from Covidien and Mallinckrodt, regarding the past and future conduct of their respective businesses and other matters. Notwithstanding the private letter rulings and the tax opinions, the IRS could determine on audit that the 2013 distribution or the related internal transactions should be treated as taxable transactions if it determines that any of the respective facts, assumptions, representations or undertakings is not correct or has been violated, or that the distributions should be taxable for other reasons, including as a result of significant changes in stock or asset ownership after the distributions, or if the IRS were to disagree with the conclusions of the tax opinions that are not covered by the IRS rulings.

We could incur significant U.S. federal income tax liabilities or tax indemnification obligations, whether under applicable law or the tax matters agreement that was entered into with Mallinckrodt, if it is ultimately determined that certain related transactions undertaken in anticipation of the 2013 distribution are taxable.

***Our tax position may be adversely affected by changes in tax law relating to multinational corporations.***

Recent legislative proposals have aimed to expand the scope of U.S. corporate tax residence, limit the ability of foreign-owned corporations to deduct interest expense, tax the accumulated unrepatriated earnings of foreign subsidiaries of U.S. corporations, impose a minimum tax on the future offshore earnings of U.S. multinational groups, and to make other changes in the taxation of multinational corporations.

Additionally, the U.S. Congress, government agencies in non-U.S. jurisdictions where we and our affiliates do business, and the Organisation for Economic Co-operation and Development have recently focused on issues related to the taxation of multinational corporations. One example is in the area of “base erosion and profit shifting,” where profits are claimed to be earned for tax purposes in low-tax jurisdictions, or payments are made between affiliates from a jurisdiction with high tax rates to a jurisdiction with lower tax rates. The Organisation for Economic Co-operation and Development has released several components of its comprehensive plan to create an agreed set of international rules for fighting base erosion and profit shifting. As a result, 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.

Moreover, tax authorities may carefully scrutinize companies that result from a cross-border business combination (such as us), which may lead such authorities to assert that we owe additional taxes, which could have a material adverse effect on our business, results of operations, financial condition, and cash flows.

#### **Risks Relating to Our Jurisdiction of Incorporation**

##### ***Irish law differs from the laws in effect in the U.S. and may afford less protection to holders of our securities.***

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 a jurisdiction of 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 up to a maximum amount equal to the authorized but unissued share capital, 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, our articles of association contain, as permitted by Irish company law, provisions authorizing the board to issue new shares, and to disapply statutory preemption rights. The authorization of the directors to issue shares and the disapplication of statutory preemption rights must both be renewed by the shareholders at least every five years, and 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 you hold our shares directly rather than beneficially through DTC, any transfer of your 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 your 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 20%) 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 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 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 have a tax-free threshold which Irish Revenue typically updates annually in respect of taxable gifts or inheritances received from their parents.

#### **Risks Relating to the Covidien Acquisition (the Transaction)**

***We may not realize all of the anticipated benefits of the Transactions or those benefits may take longer to realize than expected. We may also encounter significant unexpected difficulties in integrating Medtronic, Inc. and Covidien.***

Our ability to realize the anticipated benefits of the Transaction will depend, to a large extent, on our ability to integrate the Medtronic, Inc. and Covidien businesses. The combination of two independent businesses is a complex, costly and time-consuming process. As a result, we will be required to devote significant management attention and resources to integrating the business practices and operations of Medtronic, Inc. and Covidien. The integration process may disrupt the businesses and, if implemented ineffectively or if impacted by unforeseen negative economic or market conditions or other factors, we may not realize the full anticipated benefits of the transaction. Our failure to meet the challenges involved in integrating the two businesses to realize the anticipated benefits of the transaction could cause an interruption or a loss of momentum in, our activities and could adversely affect our results of operations.

In addition, the overall integration of the businesses may result in material unanticipated problems, expenses, liabilities, competitive responses, loss of customer relationships, and diversion of management's attention. The difficulties of combining the operations of the companies include, among others:

- the diversion of management's attention to integration matters;
- difficulties in achieving anticipated cost savings, synergies, business opportunities and growth prospects from combining the businesses;
- difficulties in the integration of operations and systems;
- difficulties in the assimilation of employees;
- difficulties in managing the expanded operations of a significantly larger and more complex company;
- challenges in keeping existing customers and obtaining new customers; and
- challenges in attracting and retaining key personnel.

Many of these factors will be outside of our control and any one of them could result in increased costs, decreases in the amount of expected revenues and diversion of management's time and energy, which could materially impact our business, financial condition and results of operations. In addition, even if the operations of the businesses of Medtronic, Inc. and Covidien are integrated successfully, we may not realize the full benefits of the Transaction, including the synergies, cost savings or sales or growth opportunities that we expect. These benefits may not be achieved within the anticipated time frame, or at all. Furthermore, additional unanticipated costs may be incurred in the integration of the businesses of Medtronic, Inc. and Covidien. All of these factors could negatively impact our earnings per share, decrease or delay the expected accretive effect of the transaction, and negatively impact the price of our ordinary shares. As a result, we cannot assure you that the combination of the Medtronic, Inc. and Covidien businesses will result in the realization of the full benefits anticipated from the transaction.

***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 we are an Irish incorporated entity, 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).

Under Section 7874 of the Code, if Medtronic Inc.'s shareholders immediately prior to the Transaction hold 80% or more of the vote or value of our shares by reason of holding stock in Medtronic, Inc. immediately after the Transaction (the ownership test), and our expanded affiliated group after the Transaction does not have substantial business activities in Ireland relative to its worldwide activities (the substantial business activities test), we would be treated as a U.S. corporation for U.S. federal income tax purposes. Based on the rules for determining share ownership under Section 7874 of the Code, Medtronic, Inc.'s shareholders received approximately 70% of our ordinary shares (by both vote and value) by reason of holding stock in Medtronic, Inc. Therefore, under current law, we should not be treated as a U.S. corporation for U.S. federal income tax purposes. However, there is limited guidance regarding the application of Section 7874, including the application of the ownership test.

In addition, changes to Section 7874 or the U.S. Treasury regulations promulgated thereunder could affect our status as a foreign corporation for U.S. federal tax purposes. Any such changes could have prospective or retroactive application.

Since Section 7874 was enacted, there have been various legislative proposals to broaden its scope. Such proposals could, among other things, treat a foreign acquiring corporation as a U.S. corporation under Section 7874 if the former shareholders of the U.S. corporation own more than 50% of the shares of the foreign acquiring corporation after the transaction, or if the foreign corporation's affiliated group has substantial business activities in the U.S. and the foreign corporation is primarily managed and controlled in the U.S. Accordingly, if enacted in their present form and retroactively effective to apply to the Transactions, such proposals could cause us to be treated as a U.S. corporation for U.S. federal tax purposes.

If we were to be treated as a U.S. corporation for federal tax purposes, based on our existing expected cash flows, we could be subject to substantially greater U.S. tax liability than currently contemplated as a non-U.S. corporation.

Specifically, if we were to be treated as a U.S. corporation for federal tax purposes, we would be subject to U.S. corporate income tax on our worldwide income, and the income of our foreign subsidiaries would be subject to U.S. tax when repatriated or when deemed recognized under the U.S. tax rules for controlled foreign corporations (CFC's). Additionally, Covidien's foreign corporations, which are not currently CFC's, would become CFC's making them potentially subject to current or future U.S. taxation, which could have a material adverse effect on our results of operations, financial condition, and cash flows.

***The U.S. Treasury Department and the IRS may promulgate rules that would adversely affect our tax position.***

The U.S. Treasury Department could make changes in the regulatory rules affecting companies that move their tax domicile outside the U.S. In the event the U.S. Treasury Department and the IRS were to change the applicable regulatory rules, we could face potentially substantial tax costs as a result of the Transactions. We cannot assess the potential impact of any such possible changes, if adopted, until they are announced.

On April 4, 2016, the U.S. Treasury Department and the IRS issued proposed and temporary regulations interpreting multiple sections of the Code, including Section 7874, to address inversion transactions and transactions that Treasury and the IRS characterize as "post-inversion tax avoidance transactions." Such regulations generally apply to transactions completed on or after September 22, 2014, although in some cases they have a later effective date of April 4, 2016. The regulations expand the set of circumstances under which Section 7874 applies to cause the foreign acquirer of a U.S. corporation to be treated as a U.S. corporation for U.S. federal income tax purposes. Such regulations also impose additional U.S. taxes on certain transactions involving the acquired U.S. corporation's CFC's. The regulations do not cause us to be treated as a U.S. corporation for U.S. federal tax purposes. However, if ultimately upheld by a reviewing court, the regulations limit our ability to engage in various intercompany transactions involving non-U.S. subsidiaries. In addition, the U.S. Treasury Department and the IRS issued final and temporary regulations on October 1, 2016, which might limit our ability to deduct interest expense on certain intercompany debt for U.S. federal income tax purposes.

***The Transaction may not allow us to maintain competitive global cash management and a competitive effective corporate tax rate.***

While we believe that being incorporated in Ireland should help us maintain a competitive worldwide effective corporate tax rate and provide flexible global cash management, we are unable to give any assurance as to what our effective tax rate nor global cash accessibility will be, however, because of, among other things, uncertainty regarding the tax policies of the jurisdictions where we will operate. Additionally, the tax laws of Ireland and other jurisdictions could change in the future, and such changes could cause a material change in our effective tax rate or global cash accessibility.

***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.

**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 13 million square feet. Approximately 70 percent of the manufacturing or research facilities is owned by Medtronic and the balance is leased. The following is a summary of the Company's largest manufacturing or research facilities by location:

<b>Location Country or State</b>	<b>Square Feet (in thousands)</b>
South Carolina	1,146
Connecticut	1,098
Minnesota	1,024
Mexico	983
Puerto Rico	831
China	821
Florida	649
Ireland	640
Massachusetts	549
Illinois	501
Texas	431
California	364
Switzerland	347
Dominican Republic	304
Arizona	294
Indiana	291
Colorado	287
Nebraska	281
Georgia	236
Japan	223
Canada	206
Italy	200

Medtronic also maintains sales and administrative offices in the U.S. at 12 locations in 10 states and outside the U.S. at 177 locations in 67 countries. Most 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**

A discussion of the Company's legal proceedings is contained in Note 20 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 2017:

<b>Fiscal Period</b>	<b>Total Number of Shares Purchased</b>	<b>Average Price Paid per Share</b>	<b>Total Number of Shares Purchased as a Part of Publicly Announced Program <sup>(1)</sup></b>	<b>Maximum Number of Shares that may yet be Purchased Under the Program <sup>(1)</sup></b>
1/28/2017 - 2/24/2017	393,134	\$ 76.31	393,134	30,494,376
2/25/2017 - 3/31/2017	458,013	81.88	458,013	30,036,363
4/1/2017 - 4/28/2017	839,332	80.42	839,332	29,197,031
<b>Total</b>	<b>1,690,479</b>	<b>\$ 79.86</b>	<b>1,690,479</b>	<b>29,197,031</b>

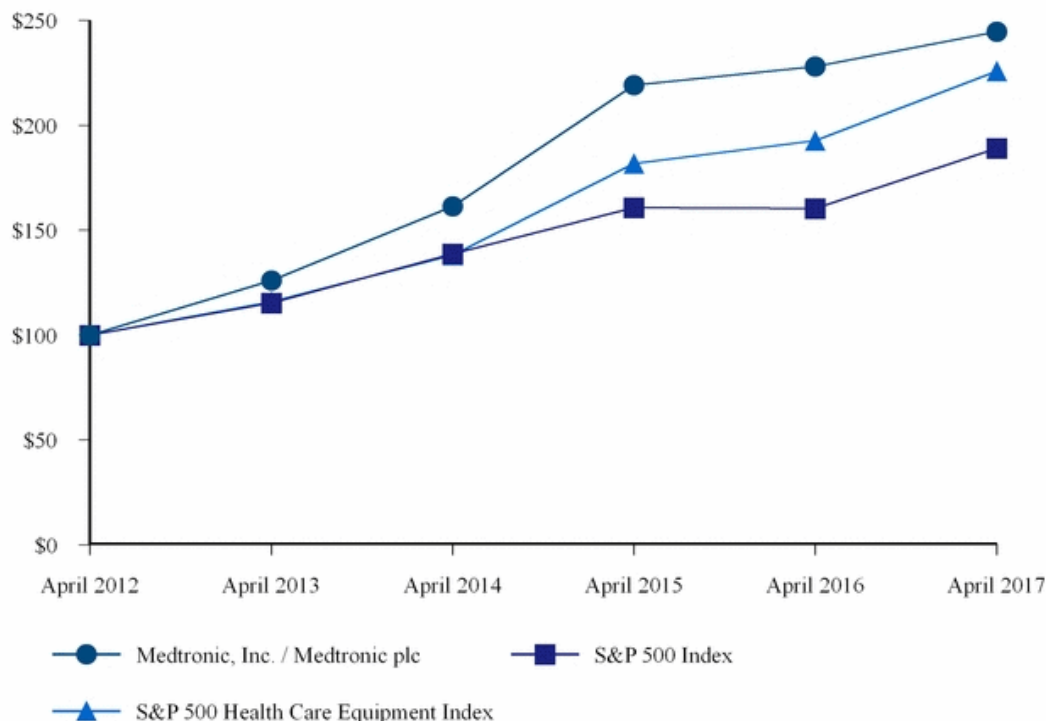
(1) In June 2015, the Company's Board of Directors authorized, subject to the ongoing existence of sufficient distributable reserves, the repurchase of 80 million of the Company's ordinary shares (2015 Repo Authorization). In June 2017, the Company's Board of Directors replaced the existing 2015 Repo Authorization to redeem up to an aggregate number of ordinary shares with an authorization to expend up to an aggregate amount of \$5 billion beginning June 26, 2017 to redeem the Company's ordinary shares.

On June 21, 2017, there were approximately 32,550 shareholders of record of the Company's ordinary shares. Ordinary cash dividends declared and paid totaled 43.0 cents per share for each quarter of fiscal year 2017 and 38.0 cents per share for each quarter of fiscal year 2016. The following prices are the high and low market sales quotations per share of the Company's ordinary shares for the fiscal years and quarters indicated:

<b>Fiscal Year</b>	<b>1st Quarter</b>		<b>2nd Quarter</b>		<b>3rd Quarter</b>		<b>4th Quarter</b>	
2017 High	\$	89.27	\$	88.65	\$	85.09	\$	84.00
2017 Low		78.63		80.71		69.35		74.27
2016 High		79.08		78.91		78.92		80.74
2016 Low		72.20		55.54		72.28		71.03

**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 27, 2012 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 2012	April 2013	April 2014	April 2015	April 2016	April 2017
Medtronic, Inc. / Medtronic plc	\$ 100.00	\$ 126.02	\$ 161.43	\$ 219.09	\$ 228.05	\$ 244.52
S&P 500 Index	100.00	115.32	138.69	160.85	160.35	189.08
S&P 500 Health Care Equipment Index	100.00	115.94	138.08	181.85	192.69	225.75

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 European Communities if they had been made between Member States of the Communities. This Act has been used by the Minister for Finance to implement European Council Directives, which 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, Egypt, Eritrea, Iran, Iraq, Ivory Coast, Lebanon, Liberia, Libya, Republic of Guinea, Somalia, Sudan, and Syria.



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 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 at the standard rate of income tax (currently 20 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. Selected Financial Data**

(in millions, except per share data and additional information)	Fiscal Year				
	2017	2016	2015 <sup>(1)</sup>	2014	2013
<b>Operating Results:</b>					
Net sales	\$ 29,710	\$ 28,833	\$ 20,261	\$ 17,005	\$ 16,590
Cost of products sold	9,291	9,142	6,309	4,333	4,126
Research and development expense	2,193	2,224	1,640	1,477	1,557
Selling, general, and administrative expense	9,711	9,469	6,904	5,847	5,698
Special charge (gain), net	100	70	(38)	40	—
Restructuring charges, net	363	290	237	78	172
Certain litigation charges	300	26	42	770	245
Acquisition-related items	220	283	550	117	(49)
Amortization of intangible assets	1,980	1,931	733	349	331
Other expense, net	222	107	118	181	108
Operating profit	5,330	5,291	3,766	3,813	4,402
Operating profit margin percent	17.9%	18.4%	18.6%	22.4%	26.5%
Interest expense, net	728	955	280	108	151
Income before provision for income taxes	4,602	4,336	3,486	3,705	4,251
Provision for income taxes	578	798	811	640	784
Net income	4,024	3,538	2,675	3,065	3,467
Net loss attributable to noncontrolling interests	4	—	—	—	—
Net income attributable to Medtronic	<u>\$ 4,028</u>	<u>\$ 3,538</u>	<u>\$ 2,675</u>	<u>\$ 3,065</u>	<u>\$ 3,467</u>
<b>Per Ordinary Share:</b>					
Basic - Net income attributable to Medtronic	\$ 2.92	\$ 2.51	\$ 2.44	\$ 3.06	\$ 3.40
Diluted - Net income attributable to Medtronic	2.89	2.48	2.41	3.02	3.37
Cash dividends declared per ordinary share	1.72	1.52	1.22	1.12	1.04
<b>Financial Position at Fiscal Year-end:</b>					
Working capital	\$ 10,316	\$ 16,435	\$ 21,671	\$ 15,651	\$ 13,902
Current ratio <sup>(2)</sup>	1.7:1.0	3.3:1.0	3.4:1.0	3.8:1.0	4.5:1.0
Total assets	99,816	99,644	106,685	37,943	34,900
Long-term debt	25,921	30,109	33,752	10,315	9,741
Shareholders' equity	50,294	52,063	53,230	19,443	18,671
<b>Additional Information:</b>					
Full-time employees at year-end	91,267	88,063	85,573	43,305	42,466
Full-time equivalent employees at year-end	102,688	98,017	92,500	49,247	46,659

(1) Covidien was acquired on January 26, 2015. As such, for the fiscal year ended April 24, 2015, the results of operations of Covidien are reflected in Medtronic's results of operations for only the fourth quarter due to the timing of the acquisition, which affects comparability.

(2) The ratio of current assets to current liabilities, excluding current assets and current liabilities held for sale at April 28, 2017.

## **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. You should read this discussion and analysis along with our consolidated financial statements and related notes thereto at April 28, 2017 and April 29, 2016 and for each of the three fiscal years ended April 28, 2017 (fiscal year 2017), April 29, 2016 (fiscal year 2016), and April 24, 2015 (fiscal year 2015). Our fiscal year-end is the last Friday in April, and therefore, the total weeks in a fiscal year may fluctuate between 52 and 53 weeks. Fiscal years 2017 and 2015 were 52-week years. Fiscal year 2016 was a 53-week year, with the additional week occurring in the first quarter.

Early in the week of June 19, 2017, we experienced a global information technology systems interruption that affected our ability to manufacture devices and fulfill orders from customers in a large portion of our business. Our systems have now been fully restored. At this time, we do not believe our fiscal year 2018 results of operations or financial condition will be materially affected by this incident.

On January 26, 2015, the Company acquired Covidien and Medtronic, Inc. (collectively, the Transactions). Following the consummation of the Transactions, Medtronic, Inc. and Covidien became subsidiaries of the Company. In connection with the Transactions, the Company became the successor registrant to Medtronic, Inc. and re-registered as a public limited company organized under the laws of Ireland. For fiscal year 2015, the results of operations of Covidien are reflected in the Company's results of operations for only the fourth quarter due to the timing of the acquisition of Covidien, which affects comparability throughout this Annual Report on Form 10-K.

#### **Organization of Financial Information**

Management's Discussion and Analysis provides material historical and prospective disclosures designed to enable investors and other users to assess our financial condition and results of operations.

Statements that are forward-looking and not historical in nature are subject to risks and uncertainties. See "Item 1A. Risk Factors" in this Annual Report on Form 10-K and "Cautionary Factors That May Affect Future Results" in this Management's Discussion and Analysis for more information.

The consolidated financial statements are presented within "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K and include the consolidated statements of income, consolidated statements of comprehensive income, consolidated balance sheets, consolidated statements of equity, consolidated statements of cash flows, and the related notes, which are an integral part of the consolidated financial statements.

#### **Financial Trends**

Throughout this Management's Discussion and Analysis, we present certain financial measures that management uses to evaluate 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 generally accepted accounting principles in the United States (U.S.) (U.S. GAAP). These financial measures are considered "non-GAAP financial measures."

Management uses non-GAAP financial measures to facilitate management's review of the operational performance of the Company and as a basis for strategic planning. Management believes that non-GAAP financial measures provide useful information to investors regarding the underlying business trends and performance of the Company's ongoing operations and are useful for period over period comparisons of such operations. The non-GAAP financial measures reflect an additional way of viewing aspects of the Company's operations. Investors should not consider results reflecting non-GAAP financial measures in isolation from, or as a substitute for, financial information prepared in accordance with U.S. GAAP and are cautioned that Medtronic may calculate results reflecting non-GAAP financial measures in a manner that is different from other companies.

The GAAP to Non-GAAP Reconciliation presents non-GAAP financial measures that exclude the impact of charges or gains that contribute to or reduce earnings and that may affect financial trends, but which include charges or benefits that result from transactions or events that management believes 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. Because the effective rate may be significantly affected 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 provision for income taxes, adjusted for the impact of Non-GAAP Adjustments, as a percentage of income from operations before income taxes, excluding Non-GAAP Adjustments.

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

Refer to the "GAAP to Non-GAAP Reconciliation," "Income Taxes," and "Summary of Cash Flows" sections for reconciliations of our results of operations prepared in accordance with U.S. GAAP to the adjusted non-GAAP financial measures considered by management.

## EXECUTIVE LEVEL OVERVIEW

Medtronic is among the world's largest medical technology, services, and solutions companies - alleviating pain, restoring health, and extending life for millions of people around the world. We employ more than 91,000 full-time employees worldwide, serving physicians, hospitals, and patients in approximately 160 countries. Our primary products include those for cardiac rhythm disorders, cardiovascular disease, advanced and general surgical care, respiratory and monitoring solutions, neurological disorders, spinal conditions and musculoskeletal trauma, urological and digestive disorders, and ear, nose, and throat and diabetes conditions.

Net income attributable to Medtronic for fiscal year 2017 was \$4.0 billion, \$2.89 per diluted share, as compared to net income attributable to Medtronic of \$3.5 billion, \$2.48 per diluted share, for fiscal year 2016, representing an increase of 14 percent and 17 percent, respectively.

The table below illustrates net sales by operating segment for fiscal years 2017, 2016, and 2015:

(in millions)	Net Sales			Net Sales		
	Fiscal Year		% Change	Fiscal Year		% Change
	2017	2016		2016	2015	
Cardiac and Vascular Group	\$ 10,498	\$ 10,196	3%	\$ 10,196	\$ 9,361	9%
Minimally Invasive Therapies Group <sup>(1)</sup>	9,919	9,563	4	9,563	2,387	301
Restorative Therapies Group	7,366	7,210	2	7,210	6,751	7
Diabetes Group	1,927	1,864	3	1,864	1,762	6
Total Net Sales	\$ 29,710	\$ 28,833	3%	\$ 28,833	\$ 20,261	42%

(1) The Minimally Invasive Therapies Group was a new group in the fourth quarter of fiscal year 2015 that contains the majority of Covidien's former operations. Revenue growth is compared to a full year of operations in fiscal year 2016.

Currency translation had an unfavorable impact of \$34 million on net sales for fiscal year 2017, as compared to fiscal year 2016 when using the average exchange rates in effect during fiscal year 2016. Net sales growth for fiscal year 2017 was also unfavorably affected by an additional selling week during the first quarter of fiscal year 2016, resulting from our 52/53 week fiscal year calendar. In addition, the fiscal year 2017 acquisitions of HeartWare and Smith & Nephew's gynecology business contributed \$200 million to our total net sales growth.

Our performance continues to be fueled by our three growth strategies: therapy innovation, globalization, and economic value. We are creating competitive advantages and capitalizing on the long-term trends in healthcare: namely, the desire to improve clinical outcomes; the growing demand for expanded access to care; and the optimization of cost and efficiency within healthcare systems. In our therapy innovation growth strategy, we continue to see strong adoption of our products across all our operating segments. Further discussion about our products is included within the operating segment sections below. In globalization, net sales in emerging markets and non-U.S. developed markets grew 7 percent and 4 percent, respectively, in fiscal year 2017 compared to fiscal year 2016. In our third growth strategy, economic value, we continue to execute our value-based healthcare signature programs and remain focused on leading the shift to healthcare payment systems that reward value and improved patient outcomes over volume. See our discussion in the "Net Sales" section of this Management's Discussion and Analysis for more information on the results of our operating segments.

**GAAP to Non-GAAP Reconciliation** We have provided non-GAAP financial measures, because we believe they provide meaningful information regarding our results on a consistent and comparable basis for the periods presented. Management uses these non-GAAP financial measures to facilitate its review of our operational performance and as a basis for strategic planning. Management believes that non-GAAP financial measures provide useful information to investors regarding the underlying business trends and performance of our ongoing operations and are useful for period over period comparisons of such operations. Refer to our discussion in the "Costs and Expenses" and "Income Taxes" sections of this Management's Discussion and Analysis for more information on the Non-GAAP Adjustments. Investors should not consider results reflecting non-GAAP financial measures in isolation from, or as a substitute for, financial information prepared in accordance with U.S. GAAP, and should be cautioned that we may calculate results reflecting non-GAAP financial measures in a manner that is different from other companies.

Fiscal year ended April 28, 2017					
(in millions)	Income Before Provision for Income Taxes	Diluted EPS <sup>(2)</sup>	Provision for Income Taxes <sup>(1)</sup>	Effective Tax Rate	
GAAP	\$ 4,602	\$ 2.89	\$ 578	12.6%	
<b>Non-GAAP Adjustments:</b>					
Impact of inventory step-up	38	0.02	14	36.8	
Special charge	100	0.05	37	37.0	
Restructuring charges, net	373	0.20	101	27.1	
Certain litigation charges	300	0.14	110	36.7	
Acquisition-related items	230	0.11	74	32.2	
Amortization of intangible assets	1,980	1.05	520	26.3	
Certain tax adjustments, net	—	0.15	(202)	—	
Non-GAAP	<u>\$ 7,623</u>	<u>\$ 4.60</u>	<u>\$ 1,232</u>	<u>16.2%</u>	

(1) The tax effect of each Non-GAAP Adjustment is based on the jurisdictions in which the expense (income) is incurred and the tax laws in effect for each such jurisdiction.

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

Fiscal year ended April 29, 2016					
(in millions)	Income Before Provision for Income Taxes	Diluted EPS <sup>(2)</sup>	Provision for Income Taxes <sup>(1)</sup>	Effective Tax Rate	
GAAP	\$ 4,336	\$ 2.48	\$ 798	18.4%	
<b>Non-GAAP Adjustments:</b>					
Impact of inventory step-up	226	0.12	61	27.0	
Special charge	70	0.03	26	37.1	
Restructuring charges, net	299	0.15	78	26.1	
Certain litigation charges	26	0.01	9	34.6	
Acquisition-related items	283	0.15	71	25.1	
Amortization of intangible assets	1,931	1.03	464	24.0	
Loss on previously held forward starting interest rate swaps	45	0.02	16	35.6	
Debt tender premium	183	0.08	65	35.5	
Certain tax adjustments, net	—	0.29	(417)	—	
Non-GAAP	<u>\$ 7,399</u>	<u>\$ 4.37</u>	<u>\$ 1,171</u>	<u>15.8%</u>	

(1) The tax effect of each Non-GAAP Adjustment is based on the jurisdictions in which the expense (income) is incurred and the tax laws in effect for each such jurisdiction.

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

(in millions)	Fiscal year ended April 24, 2015			
	Income Before Provision for Income Taxes	Diluted EPS <sup>(2)</sup>	Provision for Income Taxes <sup>(1)</sup>	Effective Tax Rate
GAAP	\$ 3,486	\$ 2.41	\$ 811	23.3%
<b>Non-GAAP Adjustments:</b>				
Impact of inventory step-up	623	0.41	168	27.0
Impact of product technology upgrade commitment	74	0.06	13	17.6
Special gain, net	(38)	(0.02)	(15)	39.5
Restructuring charges, net	252	0.16	72	28.6
Certain litigation charges	42	0.02	15	35.7
Acquisition-related items	550	0.39	117	21.3
Amortization of intangible assets	733	0.49	195	26.6
Impact of acquisition on interest expense	77	0.04	28	36.4
Certain tax adjustments	—	0.31	(349)	—
Non-GAAP	\$ 5,799	\$ 4.28	\$ 1,055	18.2%

(1) The tax effect of each Non-GAAP Adjustment is based on the jurisdictions in which the expense (income) is incurred and the tax laws in effect for each such jurisdiction.

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

GAAP diluted EPS and Non-GAAP diluted EPS for fiscal year 2017 were \$2.89 and \$4.60 per diluted share, respectively, as compared to \$2.48 and \$4.37 per diluted share, respectively, for fiscal year 2016, representing an increase of 17% and 5%, respectively. GAAP diluted EPS and Non-GAAP diluted EPS growth key contributors included realization of over \$600 million in synergy savings since the acquisition of Covidien, coupled with our revenue growth.

#### CRITICAL ACCOUNTING ESTIMATES

We have used various accounting policies to prepare the consolidated financial statements in accordance with U.S. GAAP. Our most 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 management to use judgment in making estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses. These estimates reflect management's 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:

**Revenue Recognition** Rebates are estimated based on sales terms, historical experience, and trend analysis. In estimating rebates, we consider the lag time between the point of sale and the payment of the rebate claim, contractual commitments, including stated rebate rates, and other relevant information. We adjust reserves to reflect differences between estimated and actual experience and recognize such adjustment as a reduction of sales in the period of adjustment. Adjustments to recorded reserves have not been significant. Price adjustment rebates charged against gross sales were \$3.0 billion and \$2.9 billion in fiscal years 2017 and 2016, respectively, and \$679 million for the fourth quarter of fiscal year 2015.

**Litigation Contingencies** We are involved in a number of legal actions involving product liability, intellectual property disputes, shareholder related matters, environmental proceedings, income tax disputes, and governmental proceedings and investigations in the U.S. and around the world. The outcomes of these legal actions are not within our 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 or result in lost revenues or limit our ability to conduct business in the applicable jurisdictions. Estimates of probable losses resulting from litigation and governmental proceedings involving us 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. Our significant legal proceedings are discussed in Note 20 to the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K and while it is not possible to predict the outcome for

most of the matters discussed, we believe it is possible that costs associated with these matters could have a material adverse impact on our consolidated earnings, financial position, and/or cash flows.

**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) an expiration of the 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 consideration over the estimated fair value of net assets of acquired businesses. Intangible assets include patents, trademarks, tradenames, customer relationships, purchased technology, and IPR&D. 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, the assessment of the asset's life cycle, and the consideration of legal, technical, regulatory, economic, and competitive risks.

The test for goodwill impairment requires us to make several estimates about fair value, most of which are based on projected future cash flows. 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, including projected future cash flows. We assess the impairment of goodwill at the reporting unit level annually in the third quarter and whenever an event occurs or circumstances change that would indicate that the carrying amount may be impaired. Goodwill was \$38.5 billion and \$41.5 billion at April 28, 2017 and April 29, 2016, respectively.

We 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. Our tests 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 our business plans and a market participant 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. Definite-lived intangible assets, net of accumulated amortization, were \$22.8 billion and \$26.2 billion at April 28, 2017 and April 29, 2016, respectively.

We assess the impairment of indefinite-lived intangibles annually in the third quarter and whenever an event occurs or circumstances change that would indicate that the carrying amount may be impaired. Our impairment tests of indefinite-lived intangibles require us to make several estimates about fair value, including projected future cash flows and the appropriate discount rates. Indefinite-lived intangible assets were \$594 million and \$721 million at April 28, 2017 and April 29, 2016, respectively.

**Contingent Consideration** Contingent consideration is recorded at the acquisition date at estimated fair value and is remeasured each reporting period with the change in fair value recognized within *acquisition-related items* in our consolidated statements of income. Changes to the fair value of contingent consideration may result from changes in the estimated timing and amount of revenue, in the timing or probability of achieving the milestones which trigger payment, or in discount rates. The fair value of contingent consideration was \$246 million and \$377 million at April 28, 2017 and April 29, 2016, respectively.

## NET SALES

In the fourth quarter of fiscal year 2015, we amended the way in which we evaluate performance and allocate resources with the acquisition of Covidien. As a result, we began to operate under four reportable segments and four operating segments, the Cardiac and Vascular Group (composed of Cardiac Rhythm & Heart Failure, Coronary & Structural Heart, and Aortic & Peripheral Vascular divisions), the Minimally Invasive Therapies Group (composed of Surgical Solutions and Patient Monitoring & Recovery divisions), the Restorative Therapies Group, and the Diabetes Group.

In the first quarter of fiscal year 2017, we realigned the divisions within the Restorative Therapies Group. The Restorative Therapies Group consists of the following divisions: Spine, Brain Therapies, Pain Therapies, and Specialty Therapies. See Note 22 to the consolidated financial statements in “Item 8. Financial Statements and Supplementary Data” in this Annual Report on Form 10-K for additional discussion related to our segment reporting.

The table below illustrates net sales by operating segment and division for fiscal years 2017, 2016, and 2015:

(dollars in millions)	Net Sales			Net Sales		
	Fiscal Year		% Change	Fiscal Year		% Change
	2017	2016		2016	2015	
Cardiac Rhythm & Heart Failure	\$ 5,649	\$ 5,465	3 %	\$ 5,465	\$ 5,245	4 %
Coronary & Structural Heart	3,113	3,093	1	3,093	3,038	2
Aortic & Peripheral Vascular <sup>(1)</sup>	1,736	1,638	6	1,638	1,078	52
Cardiac and Vascular Group	10,498	10,196	3	10,196	9,361	9
Surgical Solutions <sup>(1)</sup>	5,511	5,265	5	5,265	1,293	307
Patient Monitoring & Recovery <sup>(1)</sup>	4,408	4,298	3	4,298	1,094	293
Minimally Invasive Therapies Group <sup>(1)</sup>	9,919	9,563	4	9,563	2,387	301
Spine	2,641	2,629	—	2,629	2,663	(1)
Brain Therapies <sup>(1)</sup>	2,098	1,980	6	1,980	1,483	34
Specialty Therapies	1,491	1,419	5	1,419	1,342	6
Pain Therapies	1,136	1,182	(4)	1,182	1,263	(6)
Restorative Therapies Group	7,366	7,210	2	7,210	6,751	7
Diabetes Group	1,927	1,864	3	1,864	1,762	6
Total <sup>(1)</sup>	\$ 29,710	\$ 28,833	3 %	\$ 28,833	\$ 20,261	42 %

(1) Growth rates are affected by the acquisition of Covidien in the fourth quarter of fiscal year 2015. Revenue growth is compared to a full year of operations in fiscal year 2016.

### Cardiac and Vascular Group

The Cardiac and Vascular Group’s products include pacemakers, insertable and external cardiac monitors, cardiac resynchronization therapy devices (CRT-D), implantable cardioverter defibrillators (ICD), leads and delivery systems, ventricular assist systems, ablation products, 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, 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. The Cardiac and Vascular Group also includes Care Management Services and Cath Lab Managed Services (CLMS) within the Cardiac Rhythm & Heart Failure division. The Cardiac and Vascular Group’s net sales for fiscal year 2017 were \$10.5 billion, an increase of 3 percent compared to fiscal year 2016. Currency translation had an unfavorable impact on net sales of \$37 million as a result of the change in exchange rates from the prior year. The Cardiac and Vascular Group’s net sales for fiscal year 2017 were unfavorably affected by an additional selling week during the first quarter of fiscal year 2016. The Cardiac and Vascular Group’s net sales for fiscal year 2017, as compared to the same period in fiscal year 2016, benefited from strong net sales in Arrhythmia Management within Cardiac Rhythm & Heart Failure, largely due to growth in AF Solutions and Diagnostics, Coronary & Structural Heart, largely due to transcatheter aortic heart valve in the U.S. and Europe, and in Aortic & Peripheral Vascular, as well as the acquisition of HeartWare in the second quarter of fiscal year 2017. See the more detailed discussion of each division’s performance below.

Cardiac Rhythm & Heart Failure net sales for fiscal year 2017 were \$5.6 billion, an increase of 3 percent compared to fiscal year 2016. Cardiac Rhythm & Heart Failure net sales growth for fiscal year 2017 was driven by strong growth in Arrhythmia Management, largely due to growth in AF Solutions and Diagnostics. The strong growth in AF Solutions was driven by the continued global acceptance of our Arctic Front Advance Cardiac CryoAblation Catheter (Arctic Front) system, including strong growth in Japan. The strong growth in Diagnostics was driven by the continued adoption of the Reveal LINQ insertable cardiac monitor. Cardiac Rhythm & Heart Failure also benefited from the acquisition of HeartWare, which was acquired during the second quarter of fiscal year 2017.

Coronary & Structural Heart net sales for fiscal year 2017 were \$3.1 billion, an increase of 1 percent compared to fiscal year 2016. Coronary & Structural Heart net sales growth for fiscal year 2017 was largely driven by the continued launch of the Evolut R



34mm transcatheter aortic heart valve in the U.S. and Europe. Net sales growth was partially offset by challenges with drug-eluting stents in both the U.S. and Japan due to competitive pressures related to the anticipated approval of the Resolute Onyx drug-eluting stents in these countries, which received U.S. FDA approval during the first quarter of fiscal year 2018 and is expected to receive approval in Japan during the summer of fiscal year 2018. Net sales growth was also partially offset by continued pricing pressures and competition worldwide in our Coronary business.

Aortic & Peripheral Vascular net sales for fiscal year 2017 were \$1.7 billion, an increase of 6 percent compared to fiscal year 2016. Aortic & Peripheral Vascular net sales growth for fiscal year 2017 was driven by the continued strong worldwide growth of the IN.PACT Admiral drug-coated balloon as well as success of the Heli-FX EndoAnchor System and the Endurant IIs aortic stent graft. Net sales growth as compared to fiscal year 2016 was also driven by the launch of the HawkOne 6 French directional atherectomy system in the third quarter of fiscal year 2017.

The Cardiac and Vascular Group's net sales for fiscal year 2016 were \$10.2 billion, an increase of 9 percent compared to fiscal year 2015. The Cardiac and Vascular Group's fiscal year 2016 performance was favorably affected by an additional selling week during the first quarter of fiscal year 2016. The Cardiac and Vascular Group's performance for fiscal year 2016 also benefited from the addition of the Covidien Peripheral business into the Aortic & Peripheral Vascular division in the fourth quarter of fiscal year 2015 and strong net sales across all three divisions.

Cardiac Rhythm & Heart Failure net sales for fiscal year 2016 were \$5.5 billion, an increase of 4 percent compared to fiscal year 2015. The increase in Cardiac Rhythm & Heart Failure net sales was driven by strong growth in AF Solutions, with the continued global acceptance of our Arctic Front system. Additionally, net sales were driven by the continued adoption of the Reveal LINQ insertable cardiac monitor, and the launch of the Evera MRI SureScan ICD in the U.S. during the second quarter of fiscal year 2016, with continued strong adoption through the fourth quarter of fiscal year 2016. Net sales for the Cardiac Rhythm & Heart Failure division were also affected by continued pricing pressures.

Coronary & Structural Heart net sales for fiscal year 2016 were \$3.1 billion, an increase of 2 percent compared to fiscal year 2015. Net sales were driven by the CoreValve Evolut R recapturable system in the U.S., which was launched late in the first quarter of fiscal year 2016, and a strong CoreValve launch in Japan in the fourth quarter of fiscal year 2016. In addition, net sales of Coronary & Structural Heart division were driven by drug-eluting stents, including the Resolute Onyx drug-eluting stent in Europe and the Resolute Integrity drug-eluting stent in the U.S., and the recent launches of the NC Euphora and SC Euphora balloon dilatation catheters. Net sales were partially offset by continued pricing pressures in our Coronary business.

Aortic & Peripheral Vascular net sales for fiscal year 2016 were \$1.6 billion, an increase of 52 percent compared to fiscal year 2015. The Aortic & Peripheral Vascular division net sales performance benefited from the addition of the Covidien Peripheral business in the fourth quarter of fiscal year 2015. The increase in Aortic & Peripheral Vascular net sales was driven by strong growth of the IN.PACT Admiral drug-coated balloon in the U.S. and globally, continued strength in Valiant Captiva TAA stent graft sales, continued solid adoption of our Aptus Heli-FX endoanchor, and continued adoption of the Endurant IIs Abdominal Aortic Aneurysm (AAA) 3-piece system in the U.S. Net sales for the Aortic & Peripheral Vascular division were affected by increased competition in international markets and reimbursement cuts in Japan.

Looking ahead, we expect our Cardiac and Vascular Group could be affected by the following:

- Changes in procedural volumes, competitive and pricing pressure, geographic macro-economic risks, reimbursement challenges, impacts from changes in the mix of our product offerings, the timing of product registration approvals, replacement cycle challenges, and fluctuations in currency exchange rates.
- Integration of our acquisition of HeartWare, a leading innovator of the HeartWare Ventricular Assist System (HVAD System), to treat patients around the world suffering from advanced heart failure. The acquisition of HeartWare in August 2016 broadened the Medtronic portfolio of therapies, diagnostic tools and services for patients suffering from heart failure and is part of our therapy innovation strategy to surround the physician with innovative products while focusing on patients and disease states.
- Acceptance and future growth of the CRT-P quadripolar pacing system, which received CE Mark approval in February 2017 and launched in Europe during the fourth quarter of fiscal year 2017. In the U.S., we received FDA approval in May 2017, and launched in the first quarter of fiscal year 2018.
- Acceptance and future growth of the Claria MRI CRT-D system with EffectivCRT Diagnostic and Effective CRT during AF algorithm, which launched in the U.S. late in the third quarter of fiscal year 2017 and is expected to launch in Japan in fiscal year 2018.

- Continued future growth from the Reveal LINQ insertable cardiac monitor, which launched in Japan in the second quarter of fiscal year 2017.
- Continued future growth of our Micra transcatheter pacing system, which we started shipping and physician training in the U.S. in the first quarter of fiscal year 2017. Micra is a miniaturized single chamber pacemaker system that is delivered through the femoral vein and is implanted in the right ventricle of the heart. The system does not use a lead and does not have a subcutaneous device pocket underneath the skin as with conventional pacemaker systems. During the fourth quarter of fiscal year 2017, we received final approval for reimbursement in the U.S. from the Centers for Medicare & Medicaid Services for this transformative therapy, which we expect will accelerate sales in the U.S.
- Continued acceptance and future growth from Care Management Services as post-acute care services become even more critical in bundled payment models for different interventions or therapies.
- Continued acceptance and future growth from Evolut R 34mm transcatheter aortic heart valve, our next-generation recapturable system with differentiated 16 French equivalent delivery system, which was launched in the U.S. in the third quarter of fiscal year 2017.
- Acceptance and future growth from Evolut PRO Transcatheter Aortic Valve system (Evolut PRO), which provides control during deployment to assist with accurate positioning with the ability to recapture and reposition the valve. Evolut PRO received U.S. FDA approval and launched in the fourth quarter of fiscal year 2017. Evolut PRO is expected to receive CE Mark approval and launch in Europe late summer 2017.
- Acceptance and future growth from the market release of Resolute Onyx, which received U.S. FDA approval early in the first quarter of fiscal year 2018 and is expected to receive approval in Japan during the summer of fiscal year 2018. Resolute Onyx builds on the Resolute Integrity drug-eluting coronary stent with thinner struts to improve deliverability and is the first stent to feature our CoreWire technology, allowing greater visibility during procedures.
- Continued acceptance and future growth of the IN.PACT Admiral drug-coated balloon, including the longer length 150mm sizes, for the treatment of peripheral artery disease in the upper leg.
- Continued acceptance and future growth from the HawkOne 6 French (6F) for treating patients with peripheral artery disease (PAD), which launched in the U.S. in the third quarter of fiscal year 2017. The HawkOne system is designed to remove plaque from the vessel wall and restore blood flow. The new HawkOne 6F provides an effective and easy-to-use treatment option for patients with PAD both above and below the knee with a single device at a lower profile.

#### **Minimally Invasive Therapies Group**

The Minimally Invasive Therapies Group's products span the entire continuum of care 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 care, wound closure, electrosurgery products, hernia mechanical devices, mesh implants, advanced ablation, interventional lung, ventilators, capnography, airway products, sensors, monitors, compression, dialysis, enteral feeding, wound care, and medical surgical products. The Minimally Invasive Therapies Group's net sales for fiscal year 2017 were \$9.9 billion, an increase of 4 percent compared to fiscal year 2016. Currency translation had a favorable impact on net sales of \$17 million as a result of the change in exchange rates from the prior year. The Minimally Invasive Therapies Group's net sales growth in fiscal year 2017 was unfavorably affected by an additional selling week during the first quarter of fiscal year 2016. The Minimally Invasive Therapies Group's net sales for fiscal year 2017, as compared to the same period in fiscal year 2016, benefited from strong net sales in Surgical Solutions, largely due to growth in Advanced Stapling and Advanced Energy, and Patient Monitoring & Recovery, largely due to Airways and Ventilation Management, as well as the acquisition of Smith & Nephew's gynecology business in the second quarter of fiscal year 2017 and Bellco in the fourth quarter of fiscal year 2016. See the more detailed discussion of each division's performance below.

Surgical Solutions net sales for fiscal year 2017 were \$5.5 billion, an increase of 5 percent compared to fiscal year 2016. Surgical Solutions net sales growth was driven by Advanced Stapling and Advanced Energy. Advanced Stapling growth resulted from strong adoption of endo stapling specialty reloads with Tri-Staple technology, growth in emerging markets and the release of the Signia power stapling system. Advanced Energy growth resulted from the launch of the LigaSure vessel sealing instruments and continued adoption of the Valleylab FT10 energy platform. The launch of new LigaSure vessel sealing instruments along with the

Valleylab FT10 energy platform helped mitigate the negative impact of reprocessing. Surgical Solutions also benefited from the acquisition of Smith & Nephew's gynecology business, which was acquired during the second quarter of fiscal year 2017.

Patient Monitoring & Recovery net sales for fiscal year 2017 were \$4.4 billion, an increase of 3 percent compared to fiscal year 2016. Patient Monitoring & Recovery net sales growth was driven by strong Airways and Ventilation Management sales of the Puritan Bennett 980, strength in Patient Monitoring Nellcor pulse oximetry products, and growth in emerging markets. Patient Monitoring & Recovery also benefited from the acquisition of Bellco, which was acquired during the fourth quarter of fiscal year 2016.

Surgical Solutions net sales for fiscal year 2016 were \$5.3 billion. The net sales performance in Surgical Solutions was mainly attributable to Advanced Stapling and Advanced Energy. Advanced Stapling products benefited from continued worldwide market adoption of the Endo GIA Reinforced Reload. Advanced Energy products benefited from continued strong adoption of the LigaSure Maryland Jaw and Valleylab FT10 energy platform. Further, Early Technologies product performance was driven primarily by our gastrointestinal product line.

Patient Monitoring & Recovery net sales for fiscal year 2016 were \$4.3 billion. Net sales contributions in Patient Monitoring & Recovery were driven mainly by U.S. sales within Airways and Ventilation Management, Patient Monitoring, Patient Care, Nutritional Insufficiency, Deep Vein Thrombosis, and Renal Care Solutions. Airways and Ventilation Management and Patient Monitoring performance was attributable to airway products, acute ventilator sales, and sensors. Patient Care net sales results were primarily due to sales of incontinence, wound care and SharpSafety product lines and sales within our electrode products. The Nutritional Insufficiency and Deep Vein Thrombosis net sales were largely driven by sales of enteral feeding, and compression product lines. Renal Care Solutions results were primarily due to sales of dialysis products.

Looking ahead, we expect our Minimally Invasive Therapies Group could be affected by the following:

- The planned divestiture of the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses within the Patient Monitoring & Recovery division. The transaction is expected to close in the second quarter of fiscal year 2018, subject to receipt of customary regulatory approvals and satisfaction of other customary closing conditions. Clearance from the U.S. Federal Trade Commission was obtained in May 2017. Net sales of the businesses included in the planned divestiture were \$2.4 billion in fiscal years 2017 and 2016.
- Changes in procedural volumes, competitive and pricing pressure, geographic macro-economic risks, reprocessing of our products, reimbursement challenges, impacts from changes in the mix of our product offerings, the timing of product registration approvals, and fluctuations in currency exchange rates.
- Continued acceptance and future growth of Open-to-Minimally Invasive Surgery (MIS) techniques and tools supported by our efforts to transition open surgery to MIS. The Open to MIS initiative focuses on establishing 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. To achieve this transition, we are focused on product training, surgical skill training and continued therapy innovation to advance MIS.
- Continued acceptance and future growth of the 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 in the U.S.
- Our ability to create markets and drive product 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 acceptance and future growth within the end stage renal disease market. The population of patients treated for end stage renal disease globally is expected to double over the next decade. We will grow our therapy innovation with scalable and affordable dialysis delivery while investing in vascular creation and maintenance technologies. Our efforts around end stage renal disease benefited from the fiscal year 2016 acquisition of Bellco, a pioneer in hemodialysis treatment solutions. In addition, the HD multi-pass system, expected to launch in fiscal year 2019, reduces infrastructure by requiring less water, less start-up costs, and offers high quality ultrapure dialysate treatment.
- Continued elevation of the standard of care for respiratory compromise, a progressive condition impacting a patient's ability to breathe effectively.

- Continued acceptance and growth in Respiratory Care, Airway and Ventilation Management, Patient Monitoring, and Homecare. Key products in this area include the Puritan Bennett 980 ventilator, Microstream Capnography bedside capnography monitor, portable monitor with Nellcor pulse oximetry system with OxiMax technology and the Nellcor Respiratory Compromise monitor with vital signs of SpO<sub>2</sub>, pulse rate, End-Tidal CO<sub>2</sub>, and Respiratory Rate.
- Continued and future acceptance of Early Technologies and creation of less invasive standards of care, including the areas of GI solutions, advanced ablation, and interventional lung solutions. Recently launched products include the PillCam COLON capsule endoscopy, the Barrx platform through ablation with the Barrx 360 Express catheter, the Emprint ablation system with Thermosphere Technology which maintains predictable spherical ablation zones throughout procedures reducing procedure time and cost, the superDimension GenCut core biopsy system and the Triple Needle Cytology Brush, a lung tissue biopsy tool for use with the superDimension navigation system. The superDimension system enables 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 with our fiscal year 2017 acquisition of Smith and Nephew's gynecology business. The addition expands and strengthens the surgical offerings and complements the existing global gynecology business.

### **Restorative Therapies Group**

The Restorative Therapies Group's products focus on various areas of the spine, bone graft substitutes, biologic products, trauma, implantable neurostimulation therapies and drug delivery systems for the treatment of chronic pain, movement disorders, obsessive-compulsive disorder (OCD), overactive bladder, urinary retention, fecal incontinence and gastroparesis, as well as products to treat conditions of the ear, nose, and throat, and systems that incorporate advanced energy surgical instruments. The Restorative Therapies Group also manufactures and sells image-guided surgery and intra-operative imaging systems and therapies to treat diseases of the vasculature in and around the brain including coils, neurovascular stents and flow diversion products. The Restorative Therapies Group's net sales for fiscal year 2017 were \$7.4 billion, an increase of 2 percent as compared to fiscal year 2016. Currency translation had an unfavorable impact on net sales of approximately \$1 million as a result of the change in exchange rates from the prior year. The Restorative Therapies Group's net sales were unfavorably affected by an additional selling week during the first quarter of fiscal year 2016. The Restorative Therapies Group's performance for fiscal year 2017 was driven by solid growth in Brain and Specialty Therapies, partially offset by declines in Pain Therapies. See the more detailed discussion of each division's performance below.

Spine net sales for fiscal year 2017 were \$2.6 billion, flat compared to fiscal year 2016. Spine net sales were driven by growth in BMP due to strong U.S. sales, offset by declines in Europe due to the InductOs stop shipment due to suspension in the E.U. Core Spine had net sales growth in the U.S. due to new product launches including the Solera Voyager and Elevate expandable cage in conjunction with the "Speed to Scale" initiative, which involves faster innovation cycles and launching a steady cadence of new products at scale with sets immediately available for the entire market, and growth in implants due to the success of our Surgical Synergy strategy, offset by market softness in Europe and the Middle East driven by the macro-economic conditions. InductOs returned to the European market in the first quarter of fiscal year 2018.

Brain Therapies net sales for fiscal year 2017 were \$2.1 billion, an increase of 6 percent as compared to fiscal year 2016. The increase in net sales was driven by strong growth in both Neurovascular and Neurosurgery. Neurovascular net sales growth was driven by growth in coils from the Axiom Prime Extra Soft detachable coil, growth in flow diversion from the Pipeline Flex embolization device, and growth in stents due to the Solitaire revascularization device, partially offset by declines due to a voluntary recall of certain product lines in the second quarter. Neurosurgery net sales growth was driven by strong sales of navigation capital equipment, disposables, and the O-arm O2 surgical imaging system. Despite competitive pressure, Brain Modulation drove net sales growth with U.S. sales of the MR Conditional Activa DBS portfolio and through updated Parkinson's Disease labeling for patients with Recent Onset of Motor Complications.

Specialty Therapies net sales for fiscal year 2017 were \$1.5 billion, an increase of 5 percent as compared to fiscal year 2016. The increase in net sales was driven by strong growth in Advanced Energy and Pelvic Health and growth in ENT. Net sales growth in Advanced Energy was driven by the sales of the Aquamantys Transcollation and PEAK PlasmaBlade products. Net sales growth in Pelvic Health was driven by strong InterStim implant growth in the U.S. Net sales growth in ENT continues to benefit from strong adoption of new products, including NuVent balloons and Fusion Compact navigation.

Pain Therapies net sales for fiscal year 2017 were \$1.1 billion, a decrease of 4 percent as compared to fiscal year 2016. The decrease in net sales was driven by declines in sales of spinal cord stimulation products due to competitive pressures in the U.S., partially offset by growth in Interventional from the OsteoCool RF Spinal Tumor ablation system.

Spine net sales for fiscal year 2016 were \$2.6 billion, a decrease of 1 percent compared to fiscal year 2015. The decrease in Spine net sales was driven by declines in Core Spine partially offset by growth in BMP (composed of INFUSE bone graft (InductOs in the E.U.)) in the U.S. The U.S. Core Spine market grew in the low-single digits, with modest procedural growth offset by continued pricing pressures. During fiscal year 2016, new product introductions across several procedures resulted in a sequential improvement in the Core Spine growth rate. We saw incremental revenue from our differentiated OLIF procedures, as well as from the recent Solera, Voyager, Elevate, and PTC Interbody launches for TLIF and MIDLF procedures. In Core Spine, we are realizing some early benefits from our "Speed to Scale" initiative, which accelerates innovation and enables rapid deployment of these products and procedures to the market. In BMP, strong growth in the U.S. was offset by declines in international BMP due to the InductOs stop shipment in Europe.

Brain Therapies net sales for fiscal year 2016 were \$2.0 billion, an increase of 34 percent compared to fiscal year 2015. The growth rate reflected the addition of the Neurovascular division as a result of the Covidien acquisition in the fourth quarter of fiscal year 2015. Neurovascular contributed revenue from the strength of its coils, stents, flow diversion, and access product lines and the Solitaire FR mechanical thrombectomy device delivered strong results, solidifying our leadership position in the rapidly expanding ischemic stroke market. Additionally, our flow diversion products for the treatment of intracranial aneurysms, Pipeline Flex in the U.S. and Japan and Pipeline Shield in Europe, continued to lead the market. Neurosurgery contributed revenue from growth of the O-arm imaging systems. Growth in Neurovascular and Neurosurgery was partially offset by declines in DBS due to competitive headwinds.

Specialty Therapies net sales for fiscal year 2016 were \$1.4 billion, an increase of 6 percent compared to fiscal year 2015. The increase in net sales was driven by continued worldwide net sales growth across the portfolio of Advanced Energy, Pelvic Health, and ENT. Performance was driven by strong growth of power systems, Aquamantys Transcollation, and PEAK PlasmaBlade technologies, as well as solid implant growth of our InterStim therapy for overactive bladder, urinary retention, and bowel incontinence.

Pain Therapies net sales for fiscal year 2016 were \$1.2 billion, a decrease of 6 percent compared to fiscal year 2015. Net sales declined for Drug Pumps and Pain Stimulation. In Drug Pumps, the business was negatively affected by challenges related to its April 2015 U.S. FDA consent decree, as well as the January divestiture of its intrathecal baclofen drug. In Pain Stimulation, declines were driven by increased competition in the market. Interventional spine net sales also declined driven by continued pricing pressures.

Looking ahead, we expect our Restorative Therapies Group could be affected by the following:

- Changes in procedural volumes, competitive and pricing pressure, geographic macro-economic risks, reimbursement challenges, impacts from changes in the mix of our product offerings, the timing of product registration approvals, and fluctuations in currency exchange rates.
- Continued market acceptance of our new integrated solutions through the Surgical Synergy program, which integrates our spinal implants and imaging and navigation equipment.
- Continued success of "Speed to Scale" program product launches, which involves faster innovation cycles and launching a steady cadence of new products at scale with sets immediately available for the entire market.
- Market acceptance and continued global adoption of innovative new Spine products, such as our CD Horizon Solera Voyager system, our ELEVATE expandable interbody cages, and our OLIF25 and OLIF51 procedural solutions and the return of the InductOs products to European markets in the first quarter of fiscal year 2018.
- 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.
- Acceptance of Kanghui's broad portfolio of trauma, spine, and large-joint reconstruction products focused on the growing global value segment.
- Continued acceptance and adoption rates of stimulators and leads approved to treat chronic pain in major markets around the world.
- 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.
- Continued and future acceptance of our current indications for Medtronic DBS Therapy for the treatment of movement disorders, epilepsy (approved in Europe), and OCD. The DBS Therapy portfolio includes Activa

PC, our small and advanced primary cell battery, and Activa RC, a rechargeable DBS device. We anticipate continued competitive pressures in Europe and the U.S.

- Continued acceptance and growth of our Specialty Therapies, including InterStim therapy for the treatment of the symptoms of overactive bladder, urinary retention, and bowel incontinence, and Advanced Energy products and strategies to focus on its four core markets of orthopedic, spine, breast surgery, and Cardiac Rhythm Disease Management device replacements.
- Continued growth from Neurosurgery StealthStation and O-Arm Imaging Systems, Midas and ENT power systems, and intraoperative nerve monitoring during surgical procedures utilizing the NIM-Response 3.0 during head and neck surgical procedures, including launch of the StealthStation S8 surgical navigation system. Additionally, continued growth in nerve monitoring utilizing the NIM Eclipse system during spinal surgical procedures.
- Continued acceptance and growth of the Solitare FR revascularization device for treatment of acute ischemic stroke and the Pipeline Flex Embolization Devices, endovascular treatments for large or giant wide-necked brain aneurysms.
- Continued successful placement of robotic units and associated market adoption of robot-assisted spine procedures, under a co-promotion agreement with Mazor Robotics.

## Diabetes Group

The Diabetes Group's products include insulin pumps, continuous glucose monitoring (CGM) systems, insulin pump consumables, and therapy management software. The Diabetes Group's net sales for fiscal year 2017 were \$1.9 billion, an increase of 3 percent as compared to fiscal year 2016, and were unfavorably affected by an additional selling week during the first quarter of fiscal year 2016. Currency translation had an unfavorable impact on net sales for fiscal year 2017 of \$13 million as a result of the change in exchange rates from the prior year. The Diabetes Group's net sales for fiscal year 2017 benefited from growth in both the U.S. and international markets due to strong U.S. sales of the MiniMed 630G system and interest in the Priority Access Program for the MiniMed 670G hybrid closed loop system, as well as strong international sales in Europe, Latin America, and Asia Pacific of the MiniMed 640G system with the Enhanced Enlite sensor.

The Diabetes Group's net sales for fiscal year 2016 were \$1.9 billion, an increase of 6 percent over fiscal year 2015, and were favorably affected by the additional selling week during the first quarter of fiscal year 2016. The increase in net sales was primarily driven by the MiniMed 530G system with Enlite sensor, along with strong performance in international markets by the MiniMed 640G.

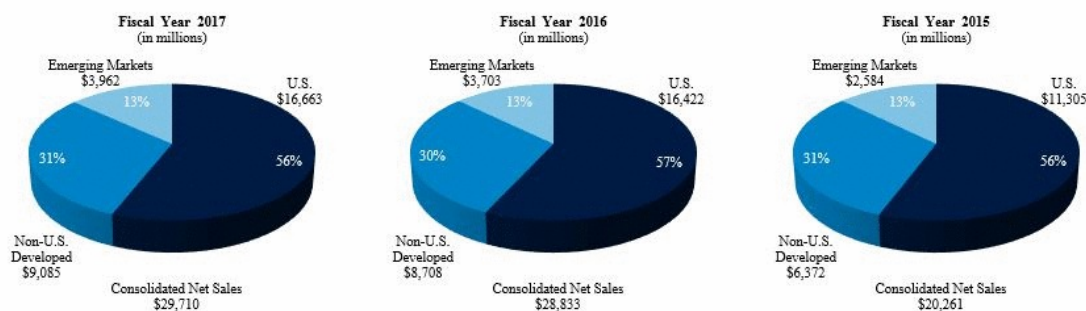
Looking ahead, we expect our Diabetes Group could be affected by the following:

- Competitive and pricing pressure, reimbursement challenges, impacts from changes in the mix of our product offerings, the timing of product registration approvals, and fluctuations in currency exchange rates.
- Continued acceptance and growth in international markets of the MiniMed 630G system, which includes the insulin pump and Enlite CGM sensor. This system launched in the U.S. in August 2016 and combines proprietary SmartGuard technology featured in the MiniMed 530G system with a brand new hardware platform and user-friendly design.
- Acceptance and future growth of the MiniMed 670G system, the first hybrid closed loop system in the world. The system features our most advanced SmartGuard HCL algorithm, which enables improved glucose control with reduced user input. The MiniMed 670G system received U.S. FDA approval during the second quarter of fiscal year 2017 and launched in the U.S. in June 2017.
- Changes in medical reimbursement policies and programs, along with payor coverage of the MiniMed 670G system.
- Continued acceptance and future growth of the MiniMed 640G with SmartGuard predictive low-glucose management, which has launched in Europe, Australia, and select Latin America countries, and the MiniMed 620G, the first integrated system customized for the Japanese market.
- Continued acceptance and future growth of Guardian Connect continuous glucose monitoring (CGM) system which displays information directly to a smartphone, and received CE mark in 2016 and has launched internationally, with an expected U.S. launch in the second half of fiscal year 2018.

- Continued partnership with UnitedHealthcare as the preferred in-network provider of insulin pumps, giving their members access to our advanced diabetes technology and comprehensive support services.

## OPERATIONS BY MARKET GEOGRAPHY

The charts below illustrate net sales by market geography for fiscal years 2017, 2016, and 2015:



The table below illustrates net sales by market geography for each of our operating segments for fiscal years 2017, 2016, and 2015:

(in millions)	Fiscal Year 2017			Fiscal Year 2016			Fiscal Year 2015		
	U.S. <sup>(1)</sup>	Non-U.S. Developed Markets <sup>(2)</sup>	Emerging Markets <sup>(3)</sup>	U.S. <sup>(1)</sup>	Non-U.S. Developed Markets <sup>(2)</sup>	Emerging Markets <sup>(3)</sup>	U.S. <sup>(1)</sup>	Non-U.S. Developed Markets <sup>(2)</sup>	Emerging Markets <sup>(3)</sup>
Cardiac and Vascular Group	\$ 5,454	\$ 3,393	\$ 1,651	\$ 5,347	\$ 3,283	\$ 1,566	\$ 4,435	\$ 3,412	\$ 1,514
Minimally Invasive Therapies Group	5,049	3,479	1,391	5,014	3,299	1,250	1,230	856	301
Restorative Therapies Group	5,012	1,588	766	4,921	1,542	747	4,569	1,556	626
Diabetes Group	1,148	625	154	1,140	584	140	1,071	548	143
<b>Total</b>	<b>\$ 16,663</b>	<b>\$ 9,085</b>	<b>\$ 3,962</b>	<b>\$ 16,422</b>	<b>\$ 8,708</b>	<b>\$ 3,703</b>	<b>\$ 11,305</b>	<b>\$ 6,372</b>	<b>\$ 2,584</b>

(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

For fiscal year 2017, net sales for the U.S. increased 1 percent, developed markets outside the U.S. increased 4 percent, and emerging markets increased 7 percent compared to fiscal year 2016. Net sales growth across all markets was driven by meaningful product launches and introduction of groundbreaking new technologies, partially offset by an unfavorable impact of an additional selling week during the first quarter of fiscal year 2016. Net sales growth in the U.S. was led by strong growth in the Cardiac and Vascular Group and Minimally Invasive Therapies Group and solid growth in the Restorative Therapies Group and Diabetes. In Emerging Markets, net sales growth was also attributable to the expansion of access to our therapies.

For fiscal year 2016, net sales for the U.S. increased 45 percent, non-U.S. developed markets increased 37 percent, and emerging markets increased 43 percent over fiscal year 2015. The growth in all markets was primarily driven by the addition of Minimally Invasive Therapies Group net sales totaling \$9.6 billion for fiscal year 2016 and was also favorably affected by an additional selling week during the first quarter of fiscal year 2016. Net sales growth in the U.S. was led by strong growth in the Cardiac and Vascular Group and solid growth in the Restorative Therapies Group and Diabetes.

Net sales in non-U.S. developed and emerging markets are accompanied by certain financial risks, such as changes in currency exchange rates and collection of receivables, which typically have longer payment terms. We monitor the creditworthiness of our customers to which we grant credit terms in the normal course of business. However, a significant amount of our outstanding

accounts receivable are with international customers. We continue to monitor the economic conditions and the average length of time it takes to collect our outstanding accounts receivable from our international customers. Although we do not currently foresee a significant credit risk associated with a material portion of these receivables, repayment is dependent upon the financial stability of the economies of the countries we serve.

## COSTS AND EXPENSES

### Cost of Products Sold

(in millions)	Fiscal Year		
	2017	2016	2015
Net sales	\$ 29,710	\$ 28,833	\$ 20,261
Cost of products sold	9,291	9,142	6,309
Gross profit	\$ 20,419	\$ 19,691	\$ 13,952
Gross margin percent	68.7%	68.3%	68.9%

We continue to focus on reducing our costs of products sold, thus increasing gross profit, through supply chain management and changes to our manufacturing network. Gross margin percent was 68.7 percent, 68.3 percent, and 68.9 percent in fiscal years 2017, 2016, and 2015, respectively. Gross margin percent in fiscal years 2017 and 2016 decreased as compared to the same period in fiscal year 2015 largely due to the change in product mix as a result of the Covidien acquisition in the fourth quarter of fiscal year 2015. Gross margin percent changes in fiscal years 2017 and 2016 as compared to the same periods in the respective prior fiscal year were also affected by a \$38 million charge during fiscal year 2017 related to the recognition of the fair value step-up of acquired Heartware inventory, as compared to a \$226 million charge and \$623 million charge during fiscal years 2016 and 2015, respectively, related to the recognition of the fair value step-up of acquired Covidien inventory.

### Research and Development & Selling, General, and Administrative Expense

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

	Fiscal Year		
	2017	2016	2015
Research and development expense	7.4%	7.7%	8.1%
Selling, general, and administrative expense	32.7%	32.8%	34.1%

**Research and Development** We remain committed to accelerating the development of meaningful innovations to deliver better patient outcomes at appropriate costs, that lead to enhanced quality of life, and may be validated by clinical and economic evidence. We are also focused on expanding access to quality healthcare.

Research and development expense for both fiscal years 2017 and 2016 was \$2.2 billion, as compared to \$1.6 billion in fiscal year 2015. Research and development expense decreased slightly as a percentage of net sales over the three-year period due, in part, to the timing of clinical trials and product approvals. During fiscal year 2017, we continued to invest in new technologies to support our mission through continued product growth.

**Selling, General, and Administrative** Our goal is to continue to leverage selling, general, and administrative expense initiatives and to continue to realize cost synergies expected from our acquisitions. Selling, general, and administrative expense primarily consist of salaries and wages, as well as other administrative costs such as professional fees and marketing expenses.

Selling, general, and administrative expense was \$9.7 billion, \$9.5 billion, and \$6.9 billion during fiscal years 2017, 2016, and 2015, respectively. Selling, general, and administrative expense remained fairly flat as a percentage of net sales from fiscal year 2016 to 2017, with a slight decrease due to cost savings associated with selling, general, and administrative expense initiatives. We continue to execute on our cost synergies from the Covidien acquisition and transition to centers of excellence in our enabling functions.



**Other Costs and Expenses**

(in millions)	Fiscal Year		
	2017	2016	2015
Special charge (gain), net	\$ 100	\$ 70	\$ (38)
Restructuring charges, net	363	290	237
Certain litigation charges	300	26	42
Acquisition-related items	220	283	550
Amortization of intangible assets	1,980	1,931	733
Other expense, net	222	107	118
Interest expense, net	728	955	280

**Special Charge** During fiscal year 2017, in continuing our commitment to improve the health of people and communities throughout the world, we made a \$100 million charitable cash contribution to meet the multi-year funding needs of the Medtronic Foundation, a related party non-profit organization.

During fiscal year 2016, we recognized special charges of \$70 million in connection with the impairment of a debt investment.

During fiscal year 2015, we recognized special gains of \$138 million, which consisted of a \$41 million gain on the sale of a product line in the ENT division and a \$97 million gain on the sale of an equity method investment. These special gains were partially offset by a \$100 million charitable contribution that we made to the Medtronic Foundation.

**Restructuring Charges** We incur restructuring charges in connection with our cost-reduction and productivity initiatives or with acquisitions when we implement plans to restructure and integrate the acquired operations. Amounts recognized as restructuring charges result from a series of judgments and estimates about future events and uncertainties and rely heavily on assumptions upon implementation of the initiative programs.

We began our restructuring program related to the acquisition of Covidien, the cost synergies initiative, in the fourth quarter of fiscal year 2015. We anticipate approximately \$850 million in cost synergies to be achieved as a result of the Covidien acquisition through fiscal year 2018, including administrative office optimization, manufacturing and supply chain infrastructure, and certain general and administrative savings. Restructuring charges are expected to be incurred in future fiscal years as cost synergy initiatives are finalized. Restructuring charges are expected to be primarily related to employee termination costs and costs related to manufacturing and facility closures.

Our restructuring reserve balances at April 28, 2017, April 29, 2016, and April 24, 2015 were \$291 million, \$250 million, and \$143 million, respectively. During fiscal years 2017, 2016, and 2015, we recognized restructuring charges of \$441 million, \$332 million, and \$248 million, respectively. For fiscal year 2017, the restructuring charges included \$73 million of incremental defined benefit pension and post-retirement related expenses for employees that accepted voluntary early retirement packages. For further discussion on the incremental defined benefit pension and post-retirement related expenses, see Note 17 to the consolidated financial statements in “Item 8. Financial Statements and Supplementary Data” in this Annual Report on Form 10-K.

The restructuring charges during fiscal years 2017 and 2016 were partially offset by reversals of excess restructuring reserves of \$68 million and \$18 million, respectively. Reversals of restructuring reserves relate to certain employees identified for termination finding other positions within the Company, cancellations of employee terminations, and employee termination costs being less than initially estimated. For fiscal years 2017, 2016, and 2015, restructuring charges of \$10 million, \$9 million, and \$15 million, respectively, were recognized within *cost of products sold* in the consolidated statements of income.

For additional information, see Note 4 to the consolidated financial statements in “Item 8. Financial Statements and Supplementary Data” in this Annual Report on Form 10-K.

**Certain Litigation Charges** We classify litigation charges and gains related to significant legal proceedings as certain litigation charges. During the fiscal years 2017, 2016, and 2015, we recognized \$300 million, \$26 million, and \$42 million, respectively, of certain litigation charges related to probable and estimable damages.

For additional information, see Note 20 to the consolidated financial statements in “Item 8. Financial Statements and Supplementary Data” in this Annual Report on Form 10-K for additional information.

**Acquisition-Related Items** During fiscal year 2017, we recognized acquisition-related items expense of \$230 million, including \$10 million recognized within *cost of products sold* in the consolidated statements of income. Acquisition-related items expenses

primarily include integration-related expenses incurred in connection with the Covidien acquisition. The expenses incurred in connection with the Covidien acquisition include \$225 million of professional services and integration expenses and \$23 million of accelerated or incremental stock compensation expense. Acquisition-related items expense also includes expenses incurred in connection with the HeartWare acquisition and planned divestiture of a portion of the Patient Monitoring and Recovery business, partially offset by the change in fair value of contingent consideration as a result of revised revenue forecasts and the timing of anticipated regulatory milestones.

During fiscal year 2016, we recognized acquisition-related items expense of \$283 million, primarily related to expenses incurred in connection with the Covidien acquisition. The expenses incurred in connection with the Covidien acquisition include \$219 million of professional services and integration expenses and \$58 million of accelerated or incremental stock compensation expense.

During fiscal year 2015, we recognized charges from acquisition-related items of \$550 million, primarily related to expenses incurred in connection with the Covidien acquisition. The expenses incurred in connection with the Covidien acquisition include \$275 million of professional services and integration expenses, \$189 million of accelerated or incremental stock compensation expense, and \$69 million of incremental officer and director excise tax.

**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, and purchased technology. Amortization expense was \$2.0 billion, \$1.9 billion, and \$733 million in fiscal years 2017, 2016, and 2015, respectively. The increase in amortization expense from fiscal year 2016 to fiscal year 2017 is primarily due to the acquisition of amortizable intangible assets as a result of the acquisition of HeartWare. The increase in amortization expense from fiscal year 2015 to fiscal year 2016 is primarily due to recognizing a full year of amortization of the intangible assets acquired with Covidien in the fourth quarter of fiscal year 2015.

**Other Expense, Net** Other expense, net includes royalty income and expense, realized equity security gains and losses, currency transaction and derivative gains and losses, impairment charges on equity securities, Puerto Rico excise tax, and U.S. medical device excise tax. In fiscal year 2017, other expense, net was \$222 million as compared to \$107 million in fiscal year 2016. The largest contributor to the change in other expense, net was a decrease in net currency gains, partially offset by the decrease in U.S. medical device tax due to the suspension of the U.S. medical device tax beginning January 1, 2016. Total net currency gains recognized in *other expense, net* were \$81 million in fiscal year 2017 compared to gains of \$314 million in fiscal year 2016.

In fiscal year 2016, other expense, net was \$107 million, a decrease of \$11 million from \$118 million in fiscal year 2015. The largest contributor to the change in other expense, net was an increase in net currency gains, partially offset by increased royalty expense within Minimally Invasive Therapies Group. Total net currency gains recognized in *other expense, net* were \$314 million in fiscal year 2016 compared to gains of \$196 million in fiscal year 2015.

**Interest Expense, Net** Interest expense, net includes interest earned on our cash, cash equivalents and investments, interest incurred on our outstanding borrowings, amortization of debt issuance costs and debt discounts, and ineffectiveness on interest rate derivative instruments. In fiscal year 2017, interest expense, net was \$728 million compared to \$955 million in fiscal year 2016. The decrease in interest expense, net for fiscal year 2017 was the result of a \$183 million charge recorded in connection with the cash tender offer and redemption of certain debt securities in fiscal year 2016 and a \$45 million loss on interest rate swaps which were entered into in advance of a planned debt issuance that was no longer anticipated in fiscal year 2016.

In fiscal year 2016, interest expense, net was \$955 million compared to \$280 million in fiscal year 2015. The increase in interest expense, net for fiscal year 2016 was driven by an increase in total debt, primarily resulting from the Covidien acquisition, a \$183 million charge recorded in connection with the cash tender offer and redemption of certain debt securities, and a \$45 million loss on interest rate swaps which were entered into in advance of a planned debt issuance that was no longer anticipated in fiscal year 2016.

**INCOME TAXES**

(in millions)	Fiscal Year		
	2017	2016	2015
Provision for income taxes	\$ 578	\$ 798	\$ 811
Income from operations before taxes	4,602	4,336	3,486
Effective tax rate	12.6%	18.4%	23.3%
Non-GAAP provision for income taxes	\$ 1,232	\$ 1,171	\$ 1,055
Non-GAAP income from operations before taxes	7,623	7,399	5,799
Non-GAAP Nominal Tax Rate	16.2%	15.8%	18.2%
Difference between the effective tax rate and Non-GAAP Nominal Tax Rate	3.6%	(2.6)%	(5.1)%

Our effective tax rate for fiscal year 2017 was 12.6 percent compared to 18.4 percent in fiscal year 2016. The decrease in our effective tax rate for fiscal year 2017 as compared to fiscal year 2016 was due to the net tax impact of inventory step-up, debt tender premium, certain litigation payments, certain tax adjustments, operational tax benefits described below, and year-over-year changes in operational results by jurisdiction.

Our Non-GAAP Nominal Tax Rate for fiscal year 2017 was 16.2 percent compared to 15.8 percent in fiscal year 2016. The increase in our Non-GAAP Nominal Tax Rate for fiscal year 2017 as compared to fiscal year 2016 was primarily due to operational tax benefits and year-over-year changes in operational results by jurisdiction.

During fiscal year 2017, we recognized \$95 million of operational tax benefits. The operational tax benefits included a \$44 million benefit from the reversal of a valuation allowance associated with foreign net operating losses and a \$51 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.

Our effective tax rate for fiscal year 2016 was 18.4 percent compared to 23.3 percent in fiscal year 2015. The decrease in our effective tax rate was due to the net tax impact of inventory step-up, debt tender premium, acquisition-related items, certain tax adjustments, amortization of intangible assets, the impact from the acquisition of Covidien, operational tax benefits described below, and year-over-year changes in operational results by jurisdiction.

Our Non-GAAP Nominal Tax Rate for fiscal year 2016 was 15.8 percent compared to 18.2 percent in fiscal year 2015. The decrease in our Non-GAAP Nominal Tax Rate for fiscal year 2016 as compared to fiscal year 2015 was primarily due to the impact of the Covidien acquisition, operational tax benefits, and year-over-year changes in operational results by jurisdiction.

During fiscal year 2016, we recognized \$97 million of operational tax benefits. The retroactive renewal and extension of the U.S. federal research and development tax credit resulted in a \$16 million operational tax benefit for fiscal year 2016. In addition, we recognized a \$40 million benefit from the reversal of a valuation allowance associated with foreign net operating losses and a \$41 million net benefit associated with the resolution of certain income tax audits, finalization of certain tax returns, and changes to uncertain tax position reserves.

An increase in our Non-GAAP Nominal Tax Rate of 1 percent would result in an additional income tax provision for fiscal years 2017, 2016, and 2015 of approximately \$76 million, \$74 million, and \$58 million, respectively.

**Certain Tax Adjustments**

During fiscal year 2017, we recognized certain tax adjustments of \$202 million, which included the following:

- A charge of \$404 million associated with the IRS resolution for the Ardian, CoreValve, Inc., Ablation Frontiers, Inc., PEAK Surgical, Inc. and Salient Surgical Technologies, Inc. acquisition-related issues and the allocation of income between Medtronic, Inc. and its wholly owned subsidiary operating in Puerto Rico for certain businesses. This resolution does not include the businesses that are the subject of the Medtronic, Inc. U.S. Tax Court case for fiscal years 2005 and 2006.
- A net charge of \$125 million associated with the expected divestiture of a portion of our Patient Monitoring & Recovery division to Cardinal Health. The net charge primarily relates to the tax effect from the recognition of the outside basis difference of certain subsidiaries which are included in the expected divestiture.

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- A charge of \$86 million associated with the IRS's disallowance of the utilization of certain net operating losses, along with the recognition of a valuation allowance against the net operating loss deferred tax asset, was recognized during the year.
- A charge of \$18 million as a result of the redemption of an intercompany minority interest during the year.
- A benefit of \$431 million as the result of the resolution of Covidien's previously disclosed Tyco International plc intercompany debt issues with the U.S. Tax Court and the Appeals Division of the IRS.

The \$202 million net certain tax adjustment was recognized in *provision for income taxes* in the consolidated statement of income for fiscal year 2017.

During fiscal year 2016, we recognized certain tax adjustments of \$417 million, which included the following:

- A charge of \$442 million primarily related to the U.S. income tax expense resulting from our completion of an internal reorganization of the ownership of certain legacy Covidien businesses that reduced the cash and investments held by our U.S.-controlled non-U.S. subsidiaries (the Internal Reorganization). As a result of the Internal Reorganization, approximately \$9.7 billion of cash, cash equivalents and investments in marketable debt and equity securities previously held by U.S.-controlled non-U.S. subsidiaries became available for general corporate purposes.
- A \$25 million tax benefit associated with the disposition of a wholly owned U.S. subsidiary.

The \$417 million net certain tax adjustment was recognized in *provision for income taxes* in the consolidated statement of income for fiscal year 2016.

During fiscal year 2015, we recognized certain tax adjustments of \$349 million, which included the following:

- A charge of \$329 million related to the resolution of the Kyphon Inc. (Kyphon) acquisition-related issues with the U.S. Internal Revenue Service (IRS).
- A charge of \$20 million related to a taxable gain associated with the Covidien acquisition.

The \$349 million certain tax adjustment was recognized in *provision for income taxes* in the consolidated statement of income for fiscal year 2015.

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 analysis related to these adjustments.

## LIQUIDITY AND CAPITAL RESOURCES

(in millions)	April 28, 2017	April 29, 2016
Working capital	\$ 10,316	\$ 16,435
Current ratio <sup>(1)</sup>	1.7:1.0	3.3:1.0
Cash, cash equivalents, and current investments	\$ 13,708	\$ 12,634
Current debt obligations and long-term debt	33,441	31,102

(1) The ratio of current assets to current liabilities, excluding current assets and current liabilities held for sale at April 28, 2017.

We believe our balance sheet and liquidity provide us with flexibility in the future. Approximately \$6 billion of our cash, cash equivalents, and investments held by certain U.S.-controlled non-U.S. subsidiaries may not represent available liquidity for general corporate purposes. However, we believe our other existing cash, cash equivalents and investments, as well as our \$3.5 billion revolving credit facility and related commercial paper program (\$901 million outstanding at April 28, 2017), will satisfy our foreseeable operating needs for at least the next 12 months, including repayment of current debt obligations. We regularly review our capital needs and consider various investing and financing alternatives to support our requirements.

In March 2017, Medtronic Luxco issued two tranches of Senior Notes with an aggregate face value of \$1.850 billion, resulting in cash proceeds of approximately \$1.850 billion, net of premiums, discounts, and issuance costs. The first tranche consisted of \$1.0 billion of 1.700 percent Senior Notes due 2019. The second tranche consisted of \$850 million of 3.350 percent Senior Notes due 2027. Concurrent with the offering by Medtronic Luxco, Medtronic, Inc. issued \$150 million in principal amount of its 4.625 percent Senior Notes due 2045 (the Reopening Notes). The Reopening Notes are a further issuance of, and form a single series

with, the \$4.0 billion principal amount of the previously outstanding 4.625 percent Senior Notes due 2045. We intend to use the net proceeds for general corporate purposes.

In April 2016, we completed a cash tender offer and redemption of \$2.7 billion of senior notes for \$3.0 billion of total consideration. We recognized a loss on debt extinguishment of \$163 million, which included cash premiums and accelerated amortization of deferred financing costs and debt discounts and premiums. The loss on debt extinguishment was recognized in *interest expense* in the consolidated statement of income. In addition to the loss on debt extinguishment, we recognized \$20 million of interest expense due to the acceleration of net losses on forward starting interest rate derivatives, which were terminated at the time of original debt issuances, relating to the portion of debt extinguished in the tender offer.

	Agency Rating <sup>(1)</sup>	
	April 28, 2017	April 29, 2016
<b>Standard &amp; Poor's Ratings Services</b>		
Long-term debt	A	A
Short-term debt	A-1	A-1
<b>Moody's Investors Service</b>		
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.

Standard & Poor's Ratings Services (S&P) and Moody's Investors Service (Moody's) long-term debt ratings and short-term debt ratings at April 28, 2017 were unchanged as compared to the ratings at April 29, 2016. 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 and our \$3.5 billion revolving credit facility and related commercial paper program, discussed above and within the "Debt and Capital" section of this Management's Discussion and Analysis.

We have future contractual obligations and other minimum commercial commitments that are entered into in the normal course of business. 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.

Note 20 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 significant legal proceedings. 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 may be reasonably estimated. Actual settlements may be different than estimated and could have a material impact 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 that we consider to be permanently reinvested. Our current plans do not foresee a need to repatriate funds that are designated as permanently reinvested in order to fund our operations or meet currently anticipated liquidity and capital investment needs. However, we 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.

We have investments in marketable debt securities that are classified and accounted for as available-for-sale. Our debt securities include U.S. government and agency securities, corporate debt securities, mortgage-backed securities, other asset-backed securities, debt funds, and auction rate securities. Some of our investments may experience reduced liquidity due to changes in market conditions and investor demand. Our auction rate security holdings continue to experience reduced liquidity due to low investor demand. Although our auction rate securities are currently illiquid and other securities could become illiquid, we believe we could liquidate a substantial amount of our portfolio without incurring a material impairment loss.

For fiscal year 2017, the total other-than-temporary impairment losses on available-for-sale debt securities were not significant. Based on our assessment of the credit quality of the underlying collateral and credit support available to each of the remaining securities in which we are invested, we believe we have recognized all necessary other-than-temporary impairments as we do not have the intent to sell, nor is it more likely than not that we will be required to sell, before recovery of the amortized cost. However, at April 28, 2017, we have \$242 million of gross unrealized losses on our aggregate current and non-current available-for-sale debt securities of \$8.7 billion. If market conditions deteriorate, some of these holdings may experience other-than-temporary

impairment in the future which could adversely impact our financial results. Management is required to use estimates and assumptions in its valuation of our investments, which requires a high degree of judgment, and therefore, actual results could differ materially from those estimates. 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 regarding fair value measurements.

### Summary of Cash Flows

(in millions)	Fiscal Year		
	2017	2016	2015
<b>Cash provided by (used in):</b>			
Operating activities	\$ 6,880	\$ 5,218	\$ 4,902
Investing activities	(1,571)	2,245	(17,058)
Financing activities	(3,283)	(9,543)	15,949
Effect of exchange rate changes on cash and cash equivalents	65	113	(353)
Net change in cash and cash equivalents	\$ 2,091	\$ (1,967)	\$ 3,440

**Operating Activities** The \$1.7 billion increase in net cash provided by operating activities in fiscal year 2017 as compared to fiscal year 2016 was primarily attributable to an increase in accounts receivable collections, as well as a decrease in cash paid for income taxes and interest of \$350 million and \$132 million, respectively, and a \$191 million payment in fiscal year 2016 related to the Covidien tax sharing agreement. The increase in cash from accounts receivable was primarily attributable to an increase in revenue. The decrease in cash paid for income taxes was primarily a result of payments made for the resolution of the Kyphon acquisition-related matters, as well as Covidien income tax extension payments in fiscal year 2016. We did not make any significant tax audit settlement payments or significant extension payments in fiscal year 2017. The decrease in cash paid for interest was the result of less debt, on average, in fiscal year 2017 as compared to fiscal year 2016.

The \$316 million increase in net cash provided by operating activities in fiscal year 2016 as compared to fiscal year 2015 was primarily attributable to an increase in net income before depreciation and amortization, loss on debt extinguishment, and acquisition-related items of \$2.1 billion and a decrease in certain litigation payments of \$469 million, partially offset by an increase in cash paid for incomes taxes and interest of \$747 million and \$688 million, respectively. The increase in cash paid for income taxes was primarily a result of the settlement payments made for the resolution of the Kyphon acquisition-related matters, Covidien income tax extension payments, and the impacts from the full year of Covidien results. The increase in cash paid for interest was primarily the result of a full year of interest payments on the Senior Notes and Term Loan issued in fiscal year 2015 primarily to fund the Covidien acquisition as well as the interest payments on the outstanding debt assumed as part of the Covidien acquisition. The increase in net cash provided by operating activities was also higher due to the impact of a full year of operations post-Covidien acquisition.

**Investing Activities** The \$3.8 billion increase in net cash used in investing activities in fiscal year 2017 as compared to fiscal year 2016 was primarily attributable to a decrease in net proceeds from purchases and sales and maturities of investments in fiscal year 2017.

The \$19.3 billion increase in net cash provided by investing activities in fiscal year 2016 as compared to fiscal year 2015 was primarily attributable to the Covidien acquisition in fiscal year 2015, as well as an increase in the net proceeds from purchases and sales of investments in fiscal year 2016.

**Financing Activities** The \$6.3 billion decrease in net cash used in financing activities in fiscal year 2017 as compared to fiscal year 2016 was primarily attributable to the issuance of \$2.0 billion of Senior Notes, an increase in commercial paper borrowings, and lower payments on maturing and extinguished debt, partially offset by increases in dividends to shareholders and repurchases of ordinary shares.

The \$25.4 billion increase in net cash used in financing activities in fiscal year 2016 as compared to fiscal year 2015 was primarily attributable to higher issuances of debt in fiscal year 2015, primarily related to the Covidien acquisition. Further contributing to the increase in net cash used in financing activities in fiscal year 2016 were higher payments on maturing and extinguished debt, increased dividends to shareholders, and increased repurchases of ordinary shares.

### Free Cash Flow

Free cash flow is a non-GAAP financial measure 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

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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		
	2017	2016	2015
Net cash provided by operating activities	\$ 6,880	\$ 5,218	\$ 4,902
Net cash (used in) provided by investing activities	(1,571)	2,245	(17,058)
Net cash (used in) provided by financing activities	(3,283)	(9,543)	15,949
Net cash provided by operating activities	6,880	5,218	4,902
Additions to property, plant, and equipment	(1,254)	(1,046)	(571)
Free cash flow	\$ 5,626	\$ 4,172	\$ 4,331
Dividends to shareholders	\$ 2,376	\$ 2,139	\$ 1,337
Repurchase of ordinary shares	3,544	2,830	1,920
Issuances of ordinary shares	(428)	(491)	(649)
Return to shareholders	\$ 5,492	\$ 4,478	\$ 2,608
Return of operating cash flow percentage	80%	86%	53%
Return of free cash flow percentage	98%	107%	60%

#### Debt and Capital

Our capital structure consists of equity and interest-bearing debt. We use a combination of bank borrowings and commercial paper issuances to fund our short-term financing needs. Current debt, including the current portion of our long-term debt and capital lease obligations, at April 28, 2017 was \$7.5 billion compared to \$993 million at April 29, 2016. We utilize Senior Notes to meet our long-term financing needs. Long-term debt at April 28, 2017 was \$25.9 billion compared to \$30.1 billion at April 29, 2016.

Total debt at April 28, 2017 was \$33.4 billion, compared to \$31.1 billion at April 29, 2016. The increase in total debt was primarily driven by the issuance of three tranches of the 2017 Senior Notes with an aggregate face value of \$2.0 billion in March 2017. We will use these funds for general corporate purposes.

We maintain a commercial paper program for short-term financing, which allows 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 April 28, 2017, we had \$901 million of commercial paper outstanding. No amount of commercial paper was outstanding under this program at April 29, 2016. During fiscal years 2017 and 2016, the weighted average original maturity of the commercial paper outstanding was approximately 39 and 49 days, respectively, and the weighted average interest rate was 0.89 percent and 0.57 percent, respectively. 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 syndicated line of credit facility (\$3.5 Billion Revolving Credit Facility) which expires in January 2020. The \$3.5 Billion Revolving Credit Facility provides backup funding for the commercial paper program and may also be used for general corporate purposes. The \$3.5 Billion Revolving Credit Facility provides us with the ability to increase our borrowing capacity by an additional \$500 million at any time during the term of the agreement. At each anniversary date of the \$3.5 Billion Revolving Credit Facility, but not more than twice prior to the maturity date, we could also request a one-year extension of the maturity date. At April 28, 2017 and April 29, 2016, no amounts were outstanding on the committed line of credit.

Interest rates on advances on our \$3.5 Billion Revolving Credit Facility are determined by a pricing matrix, based on our long-term debt ratings assigned by S&P and Moody's. For additional information on our credit ratings status by S&P and Moody's refer to "Liquidity and Capital Resources" section of this Management's Discussion and Analysis. Facility fees are payable on the credit facility and are determined in the same manner as the interest rates. The agreements also contain customary covenants, all of which we remain in compliance with at April 28, 2017.

Interest-bearing debt as a percentage of total interest-bearing debt and equity was 40 percent at April 28, 2017 and 37 percent at April 29, 2016. For further discussion on debt, see the "Liquidity and Capital Resources" section of this Management's Discussion and Analysis. The indentures under which the Senior Notes have been issued contain customary covenants, all of which we remain in compliance with at April 28, 2017.

We repurchase shares from time to time as part of our focus on returning value to our shareholders. In January 2015, our Board of Directors authorized, subject to the ongoing existence of sufficient distributable reserves, the adoption of the existing Medtronic Inc. share redemption program. At April 29, 2016, we had used all of the 80 million shares authorized under the January 2015 share redemption program. In June 2015, our Board of Directors authorized, subject to the ongoing existence of sufficient distributable reserves, the redemption of an additional 80 million of our ordinary shares. At April 29, 2016, we had used 8 million of the 80 million shares authorized under the June 2015 share redemption program. During fiscal years 2017 and 2016, we repurchased a total of 43 million and 38 million shares, respectively, under these programs at an average price of \$83.03 and \$74.92, respectively. At April 28, 2017, we had approximately 29 million shares remaining under share repurchase programs authorized by our Board of Directors. In June 2017, our Board of Directors replaced the existing June 2015 authorization to redeem up to an aggregate number of ordinary shares with an authorization to expend up to an aggregate amount of \$5 billion beginning June 26, 2017 to redeem ordinary shares.

For more information on credit arrangements, see the "Liquidity and Capital Resources" section of this Management's Discussion and Analysis and Note 8 of the consolidated financial statements in "Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

#### **OFF-BALANCE SHEET ARRANGEMENTS AND LONG-TERM CONTRACTUAL OBLIGATIONS**

Presented below is a summary of our off-balance sheet contractual obligations and other minimum commercial commitments at April 28, 2017, as well as long-term contractual obligations reflected in the balance sheet at April 28, 2017.

We acquire assets still in development, enter into research and development arrangements, and sponsor certain clinical trials that often require milestone and/or royalty payments to a third-party, contingent upon the occurrence of certain future events. In situations where we have no ability to influence the achievement of the milestone or otherwise avoid the payment, we have included the milestone or minimum royalty payments in the table below. The majority of the arrangements give us the discretion to unilaterally make the decision to stop development of a product or cease progress of a clinical trial, which would allow us to avoid making the contingent payments. Due to the contingent nature of these payments, they are not included in the table of contractual obligations.

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 out 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 are unable to be estimated, and we have not accrued any liabilities within our consolidated financial statements or included any indemnification provisions in the table below. Historically, we have not experienced significant losses on these types of indemnification agreements.



See Notes 8 and 18 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 long-term debt and lease obligations, respectively. Additionally, see Notes 15 and 17 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 accrued income tax and defined benefit plan obligations, which are not reflected in the table below.

(in millions)	Maturity by Fiscal Year						
	Total	2018	2019	2020	2021	2022	Thereafter
<b>Contractual obligations related to off-balance sheet arrangements:</b>							
Operating leases	\$ 646	\$ 215	\$ 158	\$ 110	\$ 70	\$ 41	\$ 52
Commitments to fund minority investments/royalty payments <sup>(1)</sup>	308	125	50	47	42	42	2
Interest payments <sup>(2)</sup>	13,488	1,077	967	929	806	772	8,937
Other <sup>(3)</sup>	513	304	89	50	27	4	39
Contractual obligations related to off-balance sheet arrangements subtotal	\$ 14,955	\$ 1,721	\$ 1,264	\$ 1,136	\$ 945	\$ 859	\$ 9,030
<b>Contractual obligations reflected in the balance sheet:</b>							
Long-term debt, including current portion <sup>(4)</sup>	\$ 32,438	\$ 6,588	\$ 1,402	\$ 3,779	\$ 1,126	\$ 3,273	\$ 16,270
Capital leases	23	5	4	2	2	2	8
Contractual obligations reflected in the balance sheet subtotal	\$ 32,461	\$ 6,593	\$ 1,406	\$ 3,781	\$ 1,128	\$ 3,275	\$ 16,278
<b>Total contractual obligations</b>	<b>\$ 47,416</b>	<b>\$ 8,314</b>	<b>\$ 2,670</b>	<b>\$ 4,917</b>	<b>\$ 2,073</b>	<b>\$ 4,134</b>	<b>\$ 25,308</b>

- (1) We have included commitments related to the funding of cost or equity method investments, estimated milestone payments and royalty obligations in the table above. While it is not certain if and/or when these payments will be made, the maturity dates included in this table reflect our best estimates.
- (2) Interest payments in the table above reflect the contractual interest payments on our outstanding debt, and exclude the impact of the debt premium and discount amortization and impact of interest rate swap agreements. See Note 8 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 our debt agreements.
- (3) We have included inventory purchase commitments which are legally binding and specify minimum purchase quantities or amounts. These purchase commitments do not exceed our projected requirements and are in the normal course of business. These commitments do not include open purchase orders with a remaining term of less than one year. These obligations also include certain research and development arrangements.
- (4) Long-term debt in the table above includes the \$3.0 billion Term Loan Credit Agreement, \$3.1 billion of CIFSA Senior Notes, \$1.8 billion of 2017 Senior Notes, \$17.0 billion of 2015 Senior Notes, \$1.5 billion of 2014 Senior Notes, \$1.9 billion of 2013 Senior Notes, \$1.1 billion of 2012 Senior Notes, \$500 million of 2011 Senior Notes, \$1.3 billion of 2010 Senior Notes, \$700 million of 2009 Senior Notes, \$42 million of Heartware Senior Notes, and \$535 million of bank borrowings. The table above excludes the debt premium and discount, the fair value impact of outstanding interest rate swap agreements, and the unamortized gains from terminated interest rate swap agreements. See Notes 8 and 9 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 the interest rate swap agreements.

## ACQUISITIONS

Information regarding acquisitions is included in Note 2 to the consolidated financial statements in “Item 8. Financial Statements and Supplementary Data” in this Annual Report on Form 10-K.

## 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.

## CAUTIONARY FACTORS THAT MAY AFFECT FUTURE RESULTS

This Annual Report, and other written reports 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. Forward-looking statements broadly include our current expectations or forecasts of future results. Our forward-looking statements generally relate 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, restructuring and cost-saving initiatives, intellectual property rights, litigation and tax matters, government 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. 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 operating 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 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, 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 health care 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 government 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. One must carefully consider forward-looking statements and understand that such statements may be affected by inaccurate assumptions and may involve a variety of risks and uncertainties, known and unknown, including, among others, those discussed in the sections entitled "Government Regulation and Other Considerations" 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, reduction or interruption in our supply, quality problems, liquidity shortfalls, decreasing prices and pricing pressure, fluctuations in currency exchange rates, changes in applicable tax rates, positions taken by taxing authorities, adverse regulatory action, delays in regulatory approvals, litigation results, self-insurance, commercial insurance, health care policy changes, international operations, failure to complete or achieve the intended benefits of acquisitions or divestitures, or disruption of our current plans and operations.

Consequently, no forward-looking statement may be guaranteed and actual results may vary materially. 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.

We undertake no obligation to update any statement we make, but investors are advised to consult all other disclosures by us in our filings with the Securities and Exchange Commission, especially on Forms 10-K, 10-Q, and 8-K, in which we discuss in more detail various important factors that could cause actual results to differ from expected or historical results. In addition, actual results may differ materially from those anticipated due to a number of factors, including, among others, those discussed in the section entitled "Item 1A. Risk Factors" in this Annual Report on Form 10-K. It is not possible to foresee or identify all such factors. As such, investors should not consider any list of such factors to be an exhaustive statement of all risks, uncertainties, or potentially inaccurate assumptions.

**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. In periods in which the U.S. dollar, our functional currency, is strengthening/weakening as compared to other currencies, our revenues, expenses, assets, and liabilities denominated in other currencies may be translated into U.S. dollars at a lower/higher value than they would be in an otherwise constant currency exchange rate environment.

We use operational and economic hedges, as well as currency exchange rate derivative instruments, to manage the impact of currency exchange rate fluctuations on earnings and cash flows. In order to minimize earnings and cash flow volatility resulting from currency exchange rate fluctuations, we enter into derivative instruments, principally forward currency exchange rate contracts. These contracts are designed to hedge anticipated transactions in other currencies and changes in the value of specific assets and liabilities. At inception of the contract, the derivative instrument is designated as either a freestanding derivative or a cash flow hedge. The primary currencies of our derivative instruments are the Euro and Japanese Yen. 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. We do not enter into currency exchange rate derivative instruments for speculative purposes.

The gross notional amount of all currency exchange rate derivative instruments outstanding at April 28, 2017 and April 29, 2016 was \$10.8 billion. At April 28, 2017, these contracts were in a net unrealized gain position of \$118 million. A sensitivity analysis of changes in the fair value of all currency exchange rate derivative contracts at April 28, 2017 indicates that, if the U.S. dollar uniformly strengthened/weakened by 10 percent against all currencies, the fair value of these contracts would increase/decrease by approximately \$836 million. 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 28, 2017 was comprised of debt predominately denominated in U.S. dollars, of which approximately 85% is fixed rate debt and approximately 15% is floating-rate debt. We are also exposed to interest rate changes affecting our investments in interest rate sensitive instruments, which include our marketable debt securities, fixed-to-floating interest rate swap agreements, and forward starting interest rate swap agreements.

A sensitivity analysis of the impact on our investments in interest rate sensitive financial instruments of a hypothetical 10 basis point change in interest rates, compared to interest rates at April 28, 2017, indicates that the fair value of these instruments would correspondingly change by \$67 million.

For a discussion of current market conditions and the impact on our financial condition and results of operations, please see the "Liquidity and Capital Resources" 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 6 and 9 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:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, comprehensive income, equity and cash flows present fairly, in all material respects, the financial position of Medtronic plc and its subsidiaries (the Company) at April 28, 2017 and April 29, 2016, and the results of their operations and their cash flows for each of the three years in the period ended April 28, 2017 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(1) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of April 28, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. 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.

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.

/s/ PricewaterhouseCoopers LLP

Minneapolis, Minnesota

June 27, 2017

**Medtronic plc**  
**Consolidated Statements of Income**

(in millions, except per share data)	Fiscal Year		
	2017	2016	2015
<b>Net sales</b>	\$ 29,710	\$ 28,833	\$ 20,261
<b>Costs and expenses:</b>			
Cost of products sold	9,291	9,142	6,309
Research and development expense	2,193	2,224	1,640
Selling, general, and administrative expense	9,711	9,469	6,904
Special charge (gain), net	100	70	(38)
Restructuring charges, net	363	290	237
Certain litigation charges	300	26	42
Acquisition-related items	220	283	550
Amortization of intangible assets	1,980	1,931	733
Other expense, net	222	107	118
<b>Operating profit</b>	<b>5,330</b>	<b>5,291</b>	<b>3,766</b>
Interest income	(366)	(431)	(386)
Interest expense	1,094	1,386	666
<b>Interest expense, net</b>	<b>728</b>	<b>955</b>	<b>280</b>
<b>Income before provision for income taxes</b>	<b>4,602</b>	<b>4,336</b>	<b>3,486</b>
<b>Provision for income taxes</b>	<b>578</b>	<b>798</b>	<b>811</b>
<b>Net income</b>	<b>4,024</b>	<b>3,538</b>	<b>2,675</b>
<b>Net loss attributable to noncontrolling interests</b>	<b>4</b>	<b>—</b>	<b>—</b>
<b>Net income attributable to Medtronic</b>	<b>\$ 4,028</b>	<b>\$ 3,538</b>	<b>\$ 2,675</b>
<b>Basic earnings per share</b>	<b>\$ 2.92</b>	<b>\$ 2.51</b>	<b>\$ 2.44</b>
<b>Diluted earnings per share</b>	<b>\$ 2.89</b>	<b>\$ 2.48</b>	<b>\$ 2.41</b>
<b>Basic weighted average shares outstanding</b>	<b>1,378.9</b>	<b>1,409.6</b>	<b>1,095.5</b>
<b>Diluted weighted average shares outstanding</b>	<b>1,391.4</b>	<b>1,425.9</b>	<b>1,109.0</b>
Cash dividends declared per ordinary share	\$ 1.72	\$ 1.52	\$ 1.22

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

**Medtronic plc**  
**Consolidated Statements of Comprehensive Income**

(in millions)	Fiscal Year		
	2017	2016	2015
<b>Net income</b>	\$ 4,024	\$ 3,538	\$ 2,675
<b>Other comprehensive loss, net of tax:</b>			
Unrealized gain (loss) on available-for-sale securities	38	(121)	20
Translation adjustment	(977)	(197)	(495)
Net change in retirement obligations	68	(66)	(366)
Unrealized gain (loss) on derivatives	127	(300)	254
<b>Other comprehensive loss</b>	<b>(744)</b>	<b>(684)</b>	<b>(587)</b>
<b>Comprehensive income including noncontrolling interests</b>	<b>3,280</b>	<b>2,854</b>	<b>2,088</b>
Comprehensive loss attributable to noncontrolling interests	3	—	—
<b>Comprehensive income attributable to Medtronic</b>	<b>\$ 3,283</b>	<b>\$ 2,854</b>	<b>\$ 2,088</b>

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

**Medtronic plc**  
**Consolidated Balance Sheets**

(in millions)	April 28, 2017	April 29, 2016
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 4,967	\$ 2,876
Investments	8,741	9,758
Accounts receivable, less allowances of \$155 and \$161, respectively	5,591	5,562
Inventories, net	3,338	3,473
Prepaid expenses and other current assets	1,865	1,931
Current assets held for sale	371	—
<b>Total current assets</b>	<b>24,873</b>	<b>23,600</b>
<b>Property, plant, and equipment, net</b>	<b>4,361</b>	<b>4,841</b>
<b>Goodwill</b>	<b>38,515</b>	<b>41,500</b>
<b>Other intangible assets, net</b>	<b>23,407</b>	<b>26,899</b>
<b>Tax assets</b>	<b>1,509</b>	<b>1,383</b>
<b>Other assets</b>	<b>1,232</b>	<b>1,421</b>
<b>Noncurrent assets held for sale</b>	<b>5,919</b>	<b>—</b>
<b>Total assets</b>	<b>\$ 99,816</b>	<b>\$ 99,644</b>
<b>LIABILITIES AND EQUITY</b>		
<b>Current liabilities:</b>		
Current debt obligations	\$ 7,520	\$ 993
Accounts payable	1,731	1,709
Accrued compensation	1,860	1,712
Accrued income taxes	633	566
Other accrued expenses	2,442	2,185
Current liabilities held for sale	34	—
<b>Total current liabilities</b>	<b>14,220</b>	<b>7,165</b>
<b>Long-term debt</b>	<b>25,921</b>	<b>30,109</b>
<b>Accrued compensation and retirement benefits</b>	<b>1,641</b>	<b>1,759</b>
<b>Accrued income taxes</b>	<b>2,405</b>	<b>2,903</b>
<b>Deferred tax liabilities</b>	<b>2,978</b>	<b>3,729</b>
<b>Other liabilities</b>	<b>1,515</b>	<b>1,916</b>
<b>Noncurrent liabilities held for sale</b>	<b>720</b>	<b>—</b>
<b>Total liabilities</b>	<b>49,400</b>	<b>47,581</b>
<b>Commitments and contingencies (Notes 2, 18, and 20)</b>		
<b>Shareholders' equity:</b>		
Ordinary shares— par value \$0.0001, 2.6 billion shares authorized, 1,369,424,818 and 1,399,018,022 shares issued and outstanding, respectively	—	—
Additional paid-in capital	29,551	32,227
Retained earnings	23,356	21,704
Accumulated other comprehensive loss	(2,613)	(1,868)
<b>Total shareholders' equity</b>	<b>50,294</b>	<b>52,063</b>
<b>Noncontrolling interests</b>	<b>122</b>	<b>—</b>
<b>Total equity</b>	<b>50,416</b>	<b>52,063</b>
<b>Total liabilities and equity</b>	<b>\$ 99,816</b>	<b>\$ 99,644</b>

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

**Medtronic plc**  
**Consolidated Statements of Equity**

(in millions)	Ordinary Shares		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity	Noncontrolling Interests	Total Equity
	Number	Par Value						
<b>April 25, 2014</b>	999	\$ 100	\$ —	\$ 19,940	\$ (597)	\$ 19,443	\$ —	\$ 19,443
Net income	—	—	—	2,675	—	2,675	—	2,675
Other comprehensive loss	—	—	—	—	(587)	(587)	—	(587)
Ordinary shares issued in connection with the Covidien plc acquisition, net of taxes	436	—	33,787	—	—	33,787	—	33,787
Result of contribution of Medtronic, Inc. to Medtronic plc	—	(99)	99	—	—	—	—	—
Dividends to shareholders	—	—	—	(1,337)	—	(1,337)	—	(1,337)
Issuance of shares under stock purchase and award plans	17	2	647	—	—	649	—	649
Repurchase of ordinary shares	(30)	(3)	(944)	(973)	—	(1,920)	—	(1,920)
Tax benefit from exercise of stock-based awards	—	—	81	—	—	81	—	81
Stock-based compensation	—	—	439	—	—	439	—	439
<b>April 24, 2015</b>	1,422	\$ —	\$ 34,109	\$ 20,305	\$ (1,184)	\$ 53,230	\$ —	\$ 53,230
Net income	—	—	—	3,538	—	3,538	—	3,538
Other comprehensive loss	—	—	—	—	(684)	(684)	—	(684)
Dividends to shareholders	—	—	—	(2,139)	—	(2,139)	—	(2,139)
Issuance of shares under stock purchase and award plans	15	—	491	—	—	491	—	491
Repurchase of ordinary shares	(38)	—	(2,830)	—	—	(2,830)	—	(2,830)
Tax benefit from exercise of stock-based awards	—	—	82	—	—	82	—	82
Stock-based compensation	—	—	375	—	—	375	—	375
<b>April 29, 2016</b>	1,399	\$ —	\$ 32,227	\$ 21,704	\$ (1,868)	\$ 52,063	\$ —	\$ 52,063
Net income (loss)	—	—	—	4,028	—	4,028	(4)	4,024
Other comprehensive (loss) income	—	—	—	—	(745)	(745)	1	(744)
Dividends to shareholders	—	—	—	(2,376)	—	(2,376)	—	(2,376)
Issuance of shares under stock purchase and award plans	13	—	428	—	—	428	—	428
Repurchase of ordinary shares	(43)	—	(3,544)	—	—	(3,544)	—	(3,544)
Tax benefit from exercise of stock-based awards	—	—	92	—	—	92	—	92
Stock-based compensation	—	—	348	—	—	348	—	348
Additions of noncontrolling ownership interests	—	—	—	—	—	—	125	125
<b>April 28, 2017</b>	1,369	\$ —	\$ 29,551	\$ 23,356	\$ (2,613)	\$ 50,294	\$ 122	\$ 50,416

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



**Medtronic plc**  
**Consolidated Statements of Cash Flows**

(in millions)	Fiscal Year		
	2017	2016	2015
<b>Operating Activities:</b>			
Net income	\$ 4,024	\$ 3,538	\$ 2,675
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	2,917	2,820	1,306
Amortization of debt discount and issuance costs	11	29	76
Acquisition-related items	(46)	218	634
Provision for doubtful accounts	39	49	35
Deferred income taxes	(459)	(460)	(926)
Stock-based compensation	348	375	439
Loss on debt extinguishment	—	163	—
Other, net	(93)	(111)	(134)
Change in operating assets and liabilities, net of acquisitions:			
Accounts receivable, net	(75)	(435)	(413)
Inventories, net	(227)	(186)	(282)
Accounts payable and accrued liabilities	356	(379)	849
Other operating assets and liabilities	85	(403)	643
<b>Net cash provided by operating activities</b>	<b>6,880</b>	<b>5,218</b>	<b>4,902</b>
<b>Investing Activities:</b>			
Acquisitions, net of cash acquired	(1,324)	(1,213)	(14,884)
Additions to property, plant, and equipment	(1,254)	(1,046)	(571)
Purchases of investments	(4,371)	(5,406)	(7,582)
Sales and maturities of investments	5,356	9,924	5,890
Other investing activities, net	22	(14)	89
<b>Net cash (used in) provided by investing activities</b>	<b>(1,571)</b>	<b>2,245</b>	<b>(17,058)</b>
<b>Financing Activities:</b>			
Acquisition-related contingent consideration	(69)	(22)	(85)
Change in current debt obligations, net	906	7	(1)
Repayment of short-term borrowings (maturities greater than 90 days)	(2)	(139)	(150)
Proceeds from short-term borrowings (maturities greater than 90 days)	12	139	150
Issuance of long-term debt	2,140	—	19,942
Payments on long-term debt	(863)	(5,132)	(1,268)
Dividends to shareholders	(2,376)	(2,139)	(1,337)
Issuance of ordinary shares	428	491	649
Repurchase of ordinary shares	(3,544)	(2,830)	(1,920)
Other financing activities	85	82	(31)
<b>Net cash (used in) provided by financing activities</b>	<b>(3,283)</b>	<b>(9,543)</b>	<b>15,949</b>
Effect of exchange rate changes on cash and cash equivalents	65	113	(353)
<b>Net change in cash and cash equivalents</b>	<b>2,091</b>	<b>(1,967)</b>	<b>3,440</b>
Cash and cash equivalents at beginning of period	2,876	4,843	1,403
<b>Cash and cash equivalents at end of period</b>	<b>\$ 4,967</b>	<b>\$ 2,876</b>	<b>\$ 4,843</b>
<b>Supplemental Cash Flow Information</b>			
Cash paid for:			
Income taxes	\$ 1,029	\$ 1,379	\$ 632
Interest	1,134	1,266	578

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

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**1. Summary of Significant Accounting Policies**

**Nature of Operations** Medtronic plc (Medtronic or the Company) is a global leader in medical technology – alleviating pain, restoring health, and extending life for millions of people around the world. The Company provides innovative products and therapies to serve hospitals, 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.

In connection with the preparation of the Form 10-K for the year ended April 28, 2017, the Company revised its consolidated balance sheet and consolidated statements of equity to properly present additional paid-in capital separate from retained earnings for the prior periods. The revision, which the Company determined is not material, had no impact on total equity, results of operations, or cash flows.

**Use of Estimates** The preparation of the consolidated financial statements in conformity with generally accepted accounting principles in the United States (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, and intangible asset and liability valuations. Actual results may or may not differ from those estimates.

**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 28, 2017 and April 29, 2016 and for each of the three fiscal years ended April 28, 2017 (fiscal year 2017), April 29, 2016 (fiscal year 2016), and April 24, 2015 (fiscal year 2015). Fiscal years 2017 and 2015 were 52-week years. Fiscal year 2016 was a 53-week year, with the additional week occurring in 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** Investments in marketable equity securities and certain debt securities, which include corporate debt securities, government and agency securities, mortgage-backed securities, other asset-backed securities, debt funds, and auction rate 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. Management determines the appropriate classification of its investments in debt and equity securities at the time of purchase and reevaluates such determinations at each balance sheet date. The classification of marketable securities as current or long-term is based on the nature of the securities and their availability for use in current operations consistent with how the Company manages its capital structure and liquidity.

Investments in securities that are classified and accounted for as trading securities primarily include exchange-traded funds and are recorded at fair value on the consolidated balance sheets. Management has used trading securities when seeking to offset changes in liabilities related to equity and other market risks of certain deferred compensation arrangements.

Certain of the Company's investments in equity and other securities are long-term, strategic investments in companies that are in varied stages of development. These investments are included in *other assets* on the consolidated balance sheets. If an investment has no quoted market price, the Company accounts for these investments under the cost or the equity method of accounting, as appropriate. Certain of these investments are publicly traded companies and are therefore accounted for as available-for-sale. The valuation of equity and other securities accounted for under the cost method considers all available financial information related to the investee, including valuations based on recent third-party equity investments in the investee. If an unrealized loss for any investment is considered to be other-than-temporary, the loss is recognized in the consolidated statements of income in the period the determination is made. 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. Equity securities accounted for under both the cost and equity methods are reviewed quarterly for changes in circumstance or the occurrence of events that suggest the Company's investment may not be recoverable. See Note 6 for discussion of the gains and losses recognized on equity and other securities.

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

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Property, Plant, and Equipment** Property, plant, and equipment is stated at cost. 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 company utilizes the straight-line method of depreciation over the estimated useful lives of the various assets. The cost of interest that is incurred in connection with 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.

**Goodwill and Intangible Assets** Goodwill is the excess of the purchase price over the estimated fair value of net assets of acquired businesses. In accordance with U.S. GAAP, goodwill is not amortized. The Company assesses the impairment of goodwill annually in the third quarter and whenever an event occurs or circumstances change that would indicate the carrying amount may be impaired. Impairment testing for goodwill is done at a reporting unit level. An impairment loss is recognized when the carrying amount of the reporting unit's net assets exceeds the estimated fair value of the reporting unit. The estimated fair value is determined using a discounted future cash flow analysis.

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 ranging from three to 20 years. 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. Indefinite-lived intangible assets are tested for impairment annually in the third quarter 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.

Acquired IPR&D represents the fair value assigned to those research and development (R&D) projects in development 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 R&D project or technology and discounting the net cash flows back to their present values. Upon achieving regulatory approval or commercial viability for the related technology or 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 of the related technology or product. If the R&D project is not completed or the related R&D project is terminated or abandoned, the Company may have an impairment related to the IPR&D which is charged to expense.

**Contingent Consideration** The Company recognizes 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 discount rate used is determined at the time of measurement in accordance with accepted valuation methodologies. Contingent consideration is remeasured each reporting period with the change in fair value, including accretion for the passage of time, recognized as income or expense within *acquisition-related items* in the consolidated statements of income.

**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 its derivative financial instruments on a gross basis in the consolidated financial statements. For those derivative instruments that are designated and qualify as hedging instruments, the hedging instrument must be designated, based upon the exposure being hedged, as a fair value hedge, a cash flow hedge, or a hedge of a net investment in a foreign operation. See Note 9 for more information on the Company's derivative instruments and hedging programs.

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**Notes to Consolidated Financial Statements (Continued)**

**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, 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, interest rate 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 financial assets include certain investment securities for which there is limited market activity such that the determination of fair value requires significant judgment or estimation, certain corporate debt securities 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. Significant increases (decreases) in any of those inputs in isolation could result in a significantly lower (higher) fair value of the securities.

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.

**Warranty Obligation** The Company offers a warranty on various products. The Company estimates the costs that may be incurred under its warranties and records a liability in the amount of such costs at the time the product is sold. The amount of the reserve recorded is equal to the net costs to repair or otherwise satisfy the obligation. The Company includes the warranty obligation in *other accrued expenses* and *other long-term liabilities* on the consolidated balance sheets.

**Self-Insurance** It is the Company's policy to self-insure 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 those 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. Based on historical loss trends, the Company believes that its self-insurance program accruals and its existing insurance coverage

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**Notes to Consolidated Financial Statements (Continued)**

are adequate to cover future losses. Historical trends, however, may not be indicative of future losses. These losses could have a material adverse impact on the Company's consolidated financial statements.

**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 17 for assumptions used in determining pension and post-retirement benefit costs.

The Company changed the methodology used 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, effective April 30, 2016. Prior to April 30, 2016, the Company estimated such cost components utilizing a single weighted-average discount rate derived from the market-observed yield curves of high-quality fixed income securities used to measure the pension benefit obligation and accumulated post-retirement benefit obligation. The current methodology utilizes a full yield curve approach in the estimation of these cost components by applying the specific spot rates along the yield curve to their underlying projected cash flows and provides a more precise measurement of service and interest costs by improving the correlation between projected cash flows and their corresponding spot rates. The change does not affect the measurement of the Company's pension obligation or accumulated post-retirement benefit obligation. The Company accounted for this change prospectively as a change in accounting estimate.

**Revenue Recognition** The Company sells its products through direct sales representatives and independent distributors. The Company recognizes revenue when title to the goods and risk of loss transfers to customers, which may be upon shipment or upon delivery to the customer site, based on the contract terms or legal requirements, provided there are no material remaining performance obligations required of the Company or any matters requiring customer acceptance. In cases where the Company utilizes distributors or ships product directly to the end user, revenue is recognized upon shipment provided all revenue recognition criteria have been met. A portion of the Company's revenue is generated from inventory maintained at hospitals or with field representatives. For these products, revenue is recognized at the time the product has been used or implanted.

The Company recognizes estimated sales returns, discounts, and rebates as a reduction of sales in the same period revenue is recognized. Rebates 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, contractual commitments, including stated rebate rates, and other relevant information. The Company adjusts reserves to reflect differences between estimated and actual experience, and records such adjustment as a reduction of sales in the period of adjustment.

In certain circumstances, the Company enters into arrangements in which multiple deliverables are provided to customers. Under multiple deliverable arrangements, the Company recognizes revenue in accordance with the principles described above and allocates the revenue based on the relative selling price of each deliverable, which is based on vendor specific objective evidence.

**Shipping and Handling** Shipping and handling costs not included in *cost of products sold* are included in *selling, general, and administrative expense* in the consolidated statements of income and were \$370 million, \$316 million, and \$284 million in fiscal years 2017, 2016, and 2015, respectively.

**Research and Development** Research and development costs are expensed when incurred. Research and development costs include costs of all basic research activities as well as other research, engineering, and technical effort required 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. Insurance recoveries related to potential claims are recognized up to the amount of the recorded liability when coverage is confirmed and the estimated recoveries are probable of payment. These recoveries are not netted against the related liabilities for financial statement presentation.

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**Notes to Consolidated Financial Statements (Continued)**

**Income Taxes** The Company has deferred taxes that arise because of the different treatment of transactions for financial statement accounting 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 recorded 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 recognized in the consolidated financial statements 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.

**Other Expense, Net** *Other expense, net* includes royalty income and expense, realized equity security gains and losses, currency transaction and derivative gains and losses, impairment charges on equity securities, Puerto Rico excise tax, and U.S. medical device excise tax.

**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 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 ultimately expected to vest. The Company estimates pre-vesting forfeitures at the time of grant and revises those estimates in subsequent periods. The total expense recognized over the vesting period equals the fair value of awards that vest.

**New Accounting Standards**

*Recently Adopted*

In April 2015, the Financial Accounting Standards Board (FASB) issued accounting guidance that requires debt issuance costs to be presented in the balance sheet as a direct deduction from the related debt liability. Prior to this amendment, debt issuance costs were recognized as an asset in the balance sheet and did not offset the related debt liability. The Company retrospectively adopted this guidance in the first quarter of fiscal year 2017. Its adoption resulted in a reduction of both assets and liabilities of \$138 million on the Company's consolidated balance sheet at April 29, 2016 as previously filed in the Company's Annual Report on Form 10-K for the year ended April 29, 2016.

*Not Yet Adopted*

In May 2014, the FASB issued amended revenue recognition guidance to clarify the principles for recognizing revenue from contracts with customers. The guidance requires an entity to recognize revenue in an amount that reflects the consideration to which an entity expects to be entitled in exchange for the transfer of goods or services. The guidance also requires expanded disclosures relating to the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Additionally, qualitative and quantitative disclosures are required about customer contracts, significant judgments and changes in judgments, and assets recognized from the costs to obtain or fulfill a contract. This accounting guidance is effective for the Company beginning in the first quarter of fiscal year 2019, and may be applied either retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of the change recognized at the date of initial application (modified retrospective method). Early adoption is permitted. The Company intends to adopt this guidance under the modified retrospective method. The Company is continuing to evaluate the impact of the guidance and will continue to monitor any modifications, clarifications, and interpretations communicated by the FASB.

In January 2016, the FASB issued guidance which requires equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income. The guidance also includes a simplified impairment assessment of equity investments without readily determinable fair values and presentation and disclosure changes. This accounting guidance is required for the Company to adopt beginning in the first quarter of fiscal year 2019. The Company is unable to estimate the impact of the future adoption of this standard on its financial statements as it will depend on the equity investments at the adoption date.

In February 2016, the FASB issued guidance which requires lessees to recognize right-of-use assets and lease liabilities on the balance sheet. The guidance is to be applied using a modified retrospective approach at the beginning of the earliest comparative

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**Notes to Consolidated Financial Statements (Continued)**

period in the financial statements and is effective for the Company beginning in the first quarter of fiscal year 2020. Early adoption is permitted. The Company is evaluating the impact of the lease guidance on the Company's consolidated financial statements and anticipates recording additional assets and corresponding liabilities on its consolidated balance sheet related to operating leases within its lease portfolio upon adoption of the guidance.

In March 2016, the FASB issued guidance to simplify the accounting for share based payment transactions by requiring all excess tax benefits and deficiencies to be recognized in income tax expense or benefit in earnings; eliminating the requirement to classify the excess tax benefits and deficiencies as additional paid-in capital. Under the new guidance, an entity makes an accounting policy election to either estimate the expected forfeiture awards or account for forfeitures as they occur. This accounting guidance is effective for the Company beginning in the first quarter of fiscal year 2018. The Company recognized excess tax benefits of \$92 million, \$82 million and \$81 million in excess tax benefits in additional paid-in capital in fiscal years 2017, 2016, and 2015, respectively.

In October 2016, the FASB issued guidance that requires the tax effect of inter-entity transactions, other than sales of inventory, to be recognized when the transaction occurs. This would eliminate the exception under the current guidance in which the tax effects of inter-entity asset transactions are deferred until the transferred asset is sold to a third party or otherwise recovered through use. This accounting guidance is required for the Company to adopt beginning in the first quarter of fiscal year 2019. Early adoption is permitted. The Company is currently evaluating the impact of the guidance on the Company's consolidated financial statements.

**2. Acquisitions and Acquisition-Related Items**

The Company had various acquisitions and other acquisition-related activity during fiscal year 2017. The Company accounted for the acquisitions noted below as business combinations using the acquisition method of accounting. In accordance with authoritative guidance on business combination accounting, the assets and liabilities of the 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 these acquisitions was not significant, either individually or in the aggregate, to the results of the Company for fiscal year 2017. 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.

The fair values of the assets acquired and liabilities assumed from acquisitions during fiscal year 2017 are as follows:

(in millions)	HeartWare International, Inc.	Smith & Nephew's Gynecology Business	All Other	Total
Other current assets	\$ 351	\$ —	\$ 23	\$ 374
Property, plant, and equipment	14	3	4	21
Other intangible assets	625	167	65	857
Goodwill	427	180	125	732
Other assets	55	—	16	71
Total assets acquired	<u>1,472</u>	<u>350</u>	<u>233</u>	<u>2,055</u>
Current liabilities	143	—	10	153
Deferred tax liabilities	6	—	7	13
Long-term debt	245	—	—	245
Other liabilities	6	—	4	10
Total liabilities assumed	<u>400</u>	<u>—</u>	<u>21</u>	<u>421</u>
Net assets acquired	<u>\$ 1,072</u>	<u>\$ 350</u>	<u>\$ 212</u>	<u>\$ 1,634</u>

*HeartWare International, Inc.*

On August 23, 2016, the Company's Cardiac and Vascular Group acquired HeartWare International, Inc. (HeartWare), a medical device company that develops and manufactures miniaturized implantable heart pumps, or ventricular assist devices, to treat patients around the world suffering from advanced heart failure. Total consideration for the transaction was approximately \$1.1 billion. Based upon a preliminary acquisition valuation, the Company acquired \$602 million of technology-based and customer-related intangible assets and \$23 million of tradenames, with estimated useful lives of 15 and 5 years, respectively, and \$427

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**Notes to Consolidated Financial Statements (Continued)**

million of goodwill. The acquired goodwill is not deductible for tax purposes. In addition, the Company acquired \$245 million of debt through the acquisition, of which the Company redeemed \$203 million as part of a cash tender offer in August 2016. The remaining \$42 million of debt acquired is due December 2017 and is recorded within *current debt obligations* on the consolidated balance sheets. The allocation of consideration is considered preliminary, primarily with respect to certain contingencies. The Company expects to finalize the allocation of purchase price within the one-year measurement period. Sales attributable to HeartWare were \$155 million for fiscal year 2017.

*Smith & Nephew's Gynecology Business*

On August 5, 2016, the Company's Minimally Invasive Therapies Group acquired Smith & Nephew's gynecology business, which expands and strengthens Medtronic's minimally invasive surgical offerings and further complements its existing global gynecology business. Total consideration for the transaction was approximately \$350 million. The Company acquired \$167 million of customer-related and technology-related intangible assets with useful lives of 13 years and \$180 million of goodwill. The acquired goodwill is deductible for tax purposes. Sales attributable to Smith & Nephew's gynecology business were \$45 million for fiscal year 2017.

For information on the Company's fiscal year 2016 acquisitions, refer to Note 2 to the consolidated financial statements included in the Company's Annual report on Form 10-K for the fiscal year ended April 29, 2016.

**Acquisition-Related Items**

During fiscal year 2017, the Company recognized acquisition-related items expense of \$230 million, including \$10 million recognized within *cost of products sold* in the consolidated statements of income, primarily related to integration-related expenses incurred in connection with the Covidien acquisition. The expenses incurred in connection with the Covidien acquisition include \$225 million of professional services and integration expenses and \$23 million of accelerated or incremental stock compensation expense. Acquisition-related items expense also includes expenses incurred in connection with the HeartWare acquisition and planned divestiture of a portion of the Patient Monitoring and Recovery business, partially offset by the change in fair value of contingent consideration as a result of revised revenue forecasts and the timing of anticipated regulatory milestones.

During fiscal year 2016, the Company recognized acquisition-related items expense of \$283 million, primarily related to expenses incurred in connection with the Covidien acquisition. The expenses incurred in connection with the Covidien acquisition include \$219 million of professional services and integration expenses and \$58 million of accelerated or incremental stock compensation expense.

During fiscal year 2015, the Company recognized acquisition-related items expense of \$550 million, primarily related to expenses incurred in connection with the Covidien acquisition. The expenses incurred in connection with the Covidien acquisition include \$275 million of professional services and integration expenses, \$189 million of accelerated or incremental stock compensation expense, and \$69 million of incremental officer and director excise tax.

**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 using Level 3 inputs, and the change in fair value is recognized within *acquisition-related items* in the consolidated statements of income. Contingent consideration payments related to the acquisition date fair value are reported as financing activities in the consolidated statements of cash flows. Amounts paid in excess of the original acquisition date fair value are reported as operating activities in the consolidated statements of cash flows.

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. Changes in projected revenues, probabilities of payment, discount rates, and projected payment dates may result in adjustments to the fair value measurements. The recurring Level 3 fair value measurements of contingent consideration include the following significant unobservable inputs:



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**Notes to Consolidated Financial Statements (Continued)**

(in millions)	Fair Value at April 28, 2017	Valuation Technique	Unobservable Input	Range
			Discount rate	11% - 32.5%
Revenue-based payments	\$ 106	Discounted cash flow	Probability of payment	30% - 100%
			Projected fiscal year of payment	2018 - 2026
			Discount rate	0.3% - 5.5%
Product development-based payments	\$ 140	Discounted cash flow	Probability of payment	75% - 100%
			Projected fiscal year of payment	2018 - 2025

The fair value of contingent consideration at April 28, 2017 and April 29, 2016 was \$246 million and \$377 million, respectively. At April 28, 2017, \$180 million was reflected in *other liabilities* and \$66 million was reflected in *other accrued expenses* in the consolidated balance sheets. At April 29, 2016, \$311 million was reflected in *other liabilities* and \$66 million was reflected in *other accrued expenses* in the consolidated balance sheets.

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

(in millions)	Fiscal Year	
	2017	2016
Beginning Balance	\$ 377	\$ 264
Purchase price contingent consideration	28	149
Contingent consideration payments	(76)	(22)
Change in fair value of contingent consideration	(83)	(14)
Ending Balance	\$ 246	\$ 377

**3. Assets and Liabilities Held for Sale**

In April 2017, the Company entered into a definitive agreement for the sale of the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses within the Minimally Invasive Therapies Group segment. The transaction is expected to close in the second quarter of fiscal year 2018, subject to the receipt of regulatory approvals and satisfaction of other customary closing conditions. As a result, the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses met the criteria to be classified as held for sale at April 28, 2017, which requires the Company to present the related assets and liabilities as separate line items in our consolidated balance sheet.

The following table presents information related to the assets and liabilities that were classified as held for sale in our consolidated balance sheet:

(in millions)	April 28, 2017
Inventories, net	\$ 371
Property, plant, and equipment, net	689
Goodwill	2,910
Other intangible assets, net	2,320
<b>Total assets held for sale</b>	<b>\$ 6,290</b>
Other accrued expenses	\$ 34
Accrued compensation and retirement benefits	12
Deferred tax liabilities	707
Other liabilities	1
<b>Total liabilities held for sale</b>	<b>\$ 754</b>

There were no assets or liabilities classified as held for sale at April 29, 2016. The Company determined that the divestiture of the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses does not meet the criteria to be classified as discontinued operations.

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**Notes to Consolidated Financial Statements (Continued)**

**4. Restructuring Charges**

*Cost Synergies Initiative*

The cost synergies initiative is the Company's restructuring program primarily related to the integration of Covidien. This initiative is expected to contribute to the approximately \$850 million in cost synergies expected to be achieved as a result of the integration of the Covidien acquisition through fiscal year 2018, including administrative office optimization, manufacturing and supply chain infrastructure, certain program cancellations, and reduction of general and administrative redundancies. Restructuring charges are primarily related to employee termination costs and costs related to manufacturing and facility closures and affect all reportable segments. Cash outlays for the cost synergies initiative restructuring program are scheduled to be substantially complete by the end of fiscal year 2019.

A summary of the restructuring accrual, recorded within *other accrued expenses* and *other liabilities* in the consolidated balance sheets, and related activity is presented below:

(in millions)	Employee Termination Costs	Asset Write-downs	Other Costs	Total
April 24, 2015	\$ 136	\$ —	\$ 7	\$ 143
Charges	248	23	61	332
Cash payments	(153)	—	(31)	(184)
Settled non cash	—	(23)	—	(23)
Reversal of excess reserves	(18)	—	—	(18)
April 29, 2016	\$ 213	\$ —	\$ 37	\$ 250
Charges	287	27	54	368
Cash payments	(179)	—	(53)	(232)
Settled non cash	—	(27)	—	(27)
Reversal of excess reserves	(60)	—	(8)	(68)
April 28, 2017	<u>\$ 261</u>	<u>\$ —</u>	<u>\$ 30</u>	<u>\$ 291</u>

As part of the cost synergies initiative, for fiscal year 2017, the Company recognized \$441 million in charges, which included \$73 million of incremental defined benefit pension and post-retirement related expenses for employees that accepted voluntary early retirement packages. These costs are not included in the table summarizing the restructuring costs above, because they are associated with costs that are accounted for under the pension and post-retirement rules. See Note 17 for further discussion on the incremental defined benefit pension and post-retirement related expenses. The charges recognized during fiscal year 2017 were partially offset by reversals of excess restructuring reserves of \$68 million. Reversals of restructuring reserves relate to certain employees identified for termination finding other positions within the Company, cancellations of employee terminations, and employee termination costs being less than initially estimated. Fiscal year 2017 asset write-downs included \$17 million of property, plant, and equipment impairments. Fiscal year 2017 asset write-downs also included \$10 million of inventory write-offs of discontinued product lines recognized within *cost of products sold* in the consolidated statements of income.

As part of the cost synergies initiative, for fiscal year 2016, the Company recognized \$332 million in charges, which were partially offset by reversals of excess restructuring reserves of \$18 million. Reversals of restructuring reserves relate to certain employees identified for termination finding other positions within the Company and revisions to severance provisions. Fiscal year 2016 asset write-downs included \$14 million related to property, plant, and equipment impairments. Fiscal year 2016 asset write-downs also included \$9 million of inventory write-offs of discontinued product lines recognized within *cost of products sold* in the consolidated statements of income.

**5. Special Charge**

During fiscal year 2017, in continuing the Company's commitment to improve the health of people and communities throughout the world, the Company recognized a special charge of \$100 million for a charitable contribution to meet the multi-year funding needs of the Medtronic Foundation, a related party non-profit organization.

During fiscal year 2016, the Company recognized a special charge of \$70 million in connection with the impairment of a debt investment.

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**Notes to Consolidated Financial Statements (Continued)**

During fiscal year 2015, the Company recognized special gains of \$138 million, which consisted of a \$41 million gain on the sale of a product line in the ENT division, and a \$97 million gain on the sale of an equity method investment. These special gains were partially offset by a \$100 million charitable contribution that the Company made to the Medtronic Foundation.

**6. Financial Instruments**

The Company holds investments such as marketable debt and equity securities that are classified and accounted for as trading and available-for-sale and are remeasured on a recurring basis. The Company also holds cost method, equity method, and other investments which are measured at fair value on a nonrecurring basis. Refer to Note 1 for information regarding valuation techniques and inputs used in the fair value measurements.

In accordance with authoritative guidance adopted in fiscal year 2017, 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 consolidated balance sheets. The revised presentation has been applied retrospectively and fiscal year 2016 values have been reclassified to conform to classifications used in the current year.

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**Notes to Consolidated Financial Statements (Continued)**

The following table summarizes the Company's investments by significant investment category and the consolidated balance sheet classification at April 28, 2017:

(in millions)	Valuation			Fair Value	Balance Sheet Classification	
	Cost	Unrealized Gains	Unrealized Losses		Investments	Other Assets
<b>Available-for-sale securities</b>						
<b>Level 1:</b>						
U.S. government and agency securities	\$ 613	\$ 2	\$ (5)	\$ 610	\$ 610	\$ —
Marketable equity securities	58	49	(4)	103	—	103
Total Level 1	671	51	(9)	713	610	103
<b>Level 2:</b>						
Corporate debt securities	4,643	62	(23)	4,682	4,682	—
U.S. government and agency securities	860	—	(10)	850	850	—
Mortgage-backed securities	766	9	(16)	759	759	—
Foreign government and agency securities	49	—	—	49	49	—
Other asset-backed securities	228	1	(1)	228	228	—
Debt funds	1,246	4	(178)	1,072	1,072	—
Total Level 2	7,792	76	(228)	7,640	7,640	—
<b>Level 3:</b>						
Corporate debt securities	1	—	—	1	—	1
Auction rate securities	47	—	(3)	44	—	44
Total Level 3	48	—	(3)	45	—	45
<b>Investments measured at net asset value<sup>(1)</sup>:</b>						
Debt funds	497	—	(6)	491	491	—
Total available-for-sale securities	9,008	127	(246)	8,889	8,741	148
<b>Cost method, equity method, and other investments:</b>						
<b>Level 3:</b>						
Cost method, equity method, and other investments	589	—	—	N/A	—	589
Total Level 3:	589	—	—	N/A	—	589
Total cost method, equity method, and other investments	589	—	—	N/A	—	589
Total investments	\$ 9,597	\$ 127	\$ (246)	\$ 8,889	\$ 8,741	\$ 737

(1) Certain investments that are measured at the net asset value per share (or its equivalent) as a practical expedient are excluded from the fair value hierarchy. The fair value amounts presented herein are intended to permit reconciliation to the consolidated balance sheets.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

The following table summarizes the Company's investments by significant investment categories and the related consolidated balance sheet classification at April 29, 2016:

(in millions)	Valuation				Balance Sheet Classification	
	Cost	Unrealized Gains	Unrealized Losses	Fair Value	Investments	Other Assets
<b>Available-for-sale securities:</b>						
<b>Level 1:</b>						
U.S. government and agency securities	\$ 792	\$ 14	\$ (1)	\$ 805	\$ 805	\$ —
Marketable equity securities	75	21	(11)	85	—	85
Total Level 1	867	35	(12)	890	805	85
<b>Level 2:</b>						
Corporate debt securities	3,935	85	(24)	3,996	3,996	—
U.S. government and agency securities	902	2	—	904	904	—
Mortgage-backed securities	1,016	17	(18)	1,015	1,015	—
Other asset-backed securities	192	3	—	195	195	—
Debt funds	2,306	5	(247)	2,064	2,064	—
Total Level 2	8,351	112	(289)	8,174	8,174	—
<b>Level 3:</b>						
Corporate debt securities	1	—	—	1	—	1
Auction rate securities	47	—	(3)	44	—	44
Total Level 3	48	—	(3)	45	—	45
<b>Investments measured at net asset value<sup>(1)</sup>:</b>						
Debt funds	734	—	(34)	700	700	—
Total available-for-sale securities	10,000	147	(338)	9,809	9,679	130
<b>Trading securities:</b>						
<b>Level 1:</b>						
Exchange-traded funds	65	15	(1)	79	79	—
Total Level 1	65	15	(1)	79	79	—
Total trading securities	65	15	(1)	79	79	—
<b>Cost method, equity method, and other investments:</b>						
<b>Level 3:</b>						
Cost method, equity method, and other investments	506	—	—	N/A	—	506
Total Level 3	506	—	—	N/A	—	506
Total cost method, equity method, and other investments	506	—	—	N/A	—	506
Total investments	<u>\$ 10,571</u>	<u>\$ 162</u>	<u>\$ (339)</u>	<u>\$ 9,888</u>	<u>\$ 9,758</u>	<u>\$ 636</u>

(1) Certain investments that are measured at the net asset value per share (or its equivalent) as a practical expedient are excluded from the fair value hierarchy. The fair value amounts presented herein are intended to permit reconciliation to the consolidated balance sheets.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

*Marketable Debt and Equity Securities:*

The following tables present the gross unrealized losses and fair values of the Company's available-for-sale securities that have been in a continuous unrealized loss position deemed to be temporary, aggregated by investment category at April 28, 2017 and April 29, 2016:

(in millions)	April 28, 2017			
	Less than 12 months		More than 12 months	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate debt securities	\$ 1,263	\$ (19)	\$ 46	\$ (4)
Auction rate securities	—	—	44	(3)
Mortgage-backed securities	276	(4)	95	(12)
U.S. government and agency securities	896	(15)	—	—
Other asset-backed securities	127	(1)	—	—
Debt funds	173	(1)	1,125	(183)
Marketable equity securities	14	(3)	2	(1)
Total	\$ 2,749	\$ (43)	\$ 1,312	\$ (203)

(in millions)	April 29, 2016			
	Less than 12 months		More than 12 months	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate debt securities	\$ 756	\$ (18)	\$ 136	\$ (6)
Auction rate securities	—	—	44	(3)
Mortgage-backed securities	196	(5)	92	(5)
U.S. government and agency securities	308	(4)	67	(5)
Debt funds	670	(26)	1,601	(256)
Marketable equity securities	45	(11)	—	—
Total	\$ 1,975	\$ (64)	\$ 1,940	\$ (275)

The following table presents the unobservable inputs utilized in the fair value measurement of the auction rate securities classified as Level 3 at April 28, 2017:

	Valuation Technique	Unobservable Input	Range (Weighted Average)
Auction rate securities	Discounted cash flow	Years to principal recovery Illiquidity premium	2 yrs. - 12 yrs. (3 yrs.) 6%

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. The Company's policy is to recognize transfers into and out of levels within the fair value hierarchy at the end of the fiscal quarter in which the actual event or change in circumstances that caused the transfer occurs. There were no transfers between Level 1, Level 2, or Level 3 during fiscal years 2017 or 2016. 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.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

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

(in millions)	Total Level 3 Investments	Corporate debt securities	Auction rate securities
April 29, 2016	\$ 45	\$ 1	\$ 44
Unrealized gains/(losses) included in other comprehensive income	—	—	—
Settlements	—	—	—
April 28, 2017	\$ 45	\$ 1	\$ 44

(in millions)	Total Level 3 Investments	Corporate debt securities	Auction rate securities
April 24, 2015	\$ 106	\$ 1	\$ 105
Unrealized gains/(losses) included in other comprehensive income	(3)	—	(3)
Settlements	(58)	—	(58)
April 29, 2016	\$ 45	\$ 1	\$ 44

Activity related to the Company's investment portfolio is as follows:

(in millions)	Fiscal Year					
	2017		2016		2015	
	Debt <sup>(1)</sup>	Equity <sup>(2)(3)</sup>	Debt <sup>(1)</sup>	Equity <sup>(2)(4)</sup>	Debt <sup>(1)</sup>	Equity <sup>(2)(5)</sup>
Proceeds from sales	\$ 5,224	\$ 132	\$ 9,881	\$ 42	\$ 5,640	\$ 250
Gross realized gains	75	49	36	38	33	164
Gross realized losses	(56)	—	(53)	—	(19)	—
Impairment losses recognized	—	(30)	—	(114)	—	(29)

(1) Includes available-for-sale debt securities.

(2) Includes marketable equity securities, cost method, equity method, exchange-traded funds, and other investments.

(3) As a result of certain acquisitions that occurred during fiscal year 2017, the Company recognized a non-cash realized gain of \$20 million on its previously-held minority investment included in *other expense, net* in the consolidated statement of income.

(4) As a result of certain acquisitions that occurred during fiscal year 2016, the Company recognized a non-cash realized gain of \$9 million on its previously-held minority investment included in *other expense, net* in the consolidated statement of income.

(5) As a result of certain acquisitions that occurred during fiscal year 2015, the Company recognized a non-cash realized gain of \$41 million on its previously-held minority investments included in *other expense, net* in the consolidated statement of income. Also, a realized gain on an equity method investment totaling \$97 million is included in *special charge (gain), net* in the consolidated statement of income.

Credit losses represent the difference between the present value of cash flows expected to be collected on certain mortgage-backed securities and auction rate securities and the amortized cost of these securities. Based on the Company's assessment of the credit quality of the underlying collateral and credit support available to each of the remaining securities in which the Company is invested, the Company believes it has recognized all necessary other-than-temporary impairments as the Company does not have the intent to sell, nor is it more likely than not that the Company will be required to sell, before recovery of the amortized cost.

At April 28, 2017 and April 29, 2016, the credit loss portion of other-than temporary impairments on debt securities was not significant. The total reductions for available-for-sale debt securities sold during fiscal years 2017 and 2016 were not significant.

The April 28, 2017 balance of available-for-sale debt securities, excluding debt funds which have no single maturity date, 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.

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**Notes to Consolidated Financial Statements (Continued)**

(in millions)	April 28, 2017
Due in one year or less	\$ 1,110
Due after one year through five years	2,855
Due after five years through ten years	3,177
Due after ten years	81
Total debt securities	<u>\$ 7,223</u>

The Company holds investments in marketable equity securities, which are classified as *other assets* in the consolidated balance sheets. The aggregate carrying amount of these investments was \$103 million and \$85 million at April 28, 2017 and April 29, 2016, respectively. The Company did not recognize any significant impairment charges related to marketable equity securities during fiscal year 2017. During the fiscal years 2016 and 2015 the Company determined that the fair value of certain marketable equity securities were below their carrying values and that the carrying values of these investments were not expected to be recoverable within a reasonable period of time. As a result, the Company recognized \$20 million and \$7 million in impairment charges for fiscal years 2016 and 2015 respectively, which were recognized within *other expense, net* in the consolidated statements of income.

*Cost method, equity method, and other investments*

The Company holds investments in equity and other securities that are accounted for using the cost or equity method, which are classified as *other assets* in the consolidated balance sheets. At April 28, 2017 and April 29, 2016, the aggregate carrying amount of equity and other securities without a quoted market price and accounted for using the cost or equity method was \$589 million and \$506 million, respectively. Cost and equity method investments are measured at fair value on a nonrecurring basis. Changes in circumstance or the occurrence of events that suggest the Company's investment may not be recoverable are assessed quarterly. If there are identified events or changes in circumstances that may have a material adverse effect on the fair value of the investment, the investment is assessed for impairment.

Cost and equity method investments fall within Level 3 of the fair value hierarchy due to the use of significant unobservable inputs to determine fair value, as the investments are in privately-held entities without quoted market prices. To determine the fair value of these investments, the Company uses all pertinent financial information available related to the entities, including financial statements and market participant valuations from recent and proposed equity offerings. During the fiscal years 2017, 2016, and 2015 the Company determined that the fair values of certain cost and/or equity method investments were below their carrying values and that the carrying values of these investments were not expected to be recoverable within a reasonable period of time. As a result, the Company recognized \$30 million of impairment charges during fiscal year 2017, which were recognized in *other expense, net* in the consolidated statements of income. During fiscal year 2016, the Company recognized \$23 million of impairment charges, which were recognized in *other expense, net* and \$70 million of impairment charges which were recognized in *special charge (gain), net* in the consolidated statements of income. During fiscal year 2015 the Company recognized \$7 million of impairment charges, which were recognized in *other expense, net* in the consolidated statements of income.



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**Notes to Consolidated Financial Statements (Continued)**

**7. Goodwill and Other Intangible Assets**

*Goodwill*

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

(in millions)	Cardiac and Vascular Group	Minimally Invasive Therapies Group	Restorative Therapies Group	Diabetes Group	Total
April 24, 2015	\$ 5,855	\$ 23,399	\$ 9,424	\$ 1,852	\$ 40,530
Goodwill as a result of acquisitions	393	264	199	—	856
Measurement period adjustments related to Covidien	21	346	26	—	393
Other adjustments, net	—	(34)	3	—	(31)
Currency adjustment, net	(26)	(191)	(32)	1	(248)
April 29, 2016	6,243	23,784	9,620	\$ 1,853	41,500
Goodwill as a result of acquisitions	457	242	33	—	732
Currency adjustment, net	(49)	(705)	(53)	—	(807)
Goodwill reclassified to noncurrent assets held for sale	—	(2,910)	—	—	(2,910)
April 28, 2017	<u>\$ 6,651</u>	<u>\$ 20,411</u>	<u>\$ 9,600</u>	<u>\$ 1,853</u>	<u>\$ 38,515</u>

The Company assesses goodwill for impairment annually in the third quarter and whenever an event occurs or circumstances change that would indicate that the carrying amount may be impaired. Impairment testing for goodwill is performed at the reporting unit level. There were no changes in reporting units during fiscal year 2017. The test for impairment of goodwill requires the Company to make several estimates about fair value, most of which are based on projected future cash flows. The Company calculated the excess of each reporting unit's fair value over its carrying amount, including goodwill, utilizing a discounted cash flow analysis. The Company did not recognize any goodwill impairments during fiscal years 2017, 2016, and 2015.

*Intangible Assets*

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

(in millions)	April 28, 2017		April 29, 2016	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
<b>Definite-lived:</b>				
Customer-related	\$ 16,862	\$ (2,166)	\$ 18,596	\$ (1,331)
Purchased technology and patents	11,461	(3,690)	11,397	(2,976)
Trademarks and tradenames	772	(461)	854	(403)
Other	77	(42)	72	(31)
Total	<u>\$ 29,172</u>	<u>\$ (6,359)</u>	<u>\$ 30,919</u>	<u>\$ (4,741)</u>
<b>Indefinite-lived:</b>				
IPR&D	\$ 594		\$ 721	

The Company assesses definite-lived intangible assets 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 loss is recognized based on the amount by which the carrying value exceeds the fair value. The 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. The Company did not recognize any definite-lived intangible asset impairments during fiscal years 2017, 2016 and 2015.

The Company assesses indefinite-lived intangibles for impairment annually in the third quarter and whenever an event occurs or circumstances change that would indicate that the carrying amount may be impaired. The Company calculates the excess of

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**Notes to Consolidated Financial Statements (Continued)**

indefinite-lived intangible assets fair values over their carrying values utilizing a discounted future cash flow analysis. The Company did not recognize any significant indefinite-lived asset impairments during fiscal years 2017 and 2016. As a result of the analysis performed during fiscal year 2015, the fair value of certain IPR&D indefinite-lived assets were deemed to be less than their carrying value, resulting in an impairment loss of \$5 million, which was recognized in *acquisition-related items* 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 or other failures to achieve a commercially viable product, and as a result, may recognize impairment losses in the future.

*Amortization*

Intangible asset amortization expense for fiscal years 2017, 2016, and 2015 was \$2.0 billion, \$1.9 billion, and \$733 million, respectively. Estimated aggregate amortization expense by fiscal year based on the current carrying value of definite-lived intangible assets at April 28, 2017, excluding any possible future amortization associated with acquired IPR&D which has not met technological feasibility and amortization associated with definite-lived intangible assets classified as held for sale at April 28, 2017, is as follows:

(in millions)	Amortization Expense
2018	\$ 1,809
2019	1,725
2020	1,680
2021	1,666
2022	1,624

**8. Financing Arrangements**

Current debt obligations consisted of the following:

(in millions)	April 28, 2017	April 29, 2016
Bank borrowings	\$ 396	\$ 387
Capital lease obligations	5	106
Commercial paper	901	—
Three-year term loan	3,000	—
6.000 percent ten-year 2008 CIFSA senior notes	1,150	—
1.500 percent three-year 2015 senior notes	1,000	—
1.375 percent five-year 2013 senior notes	1,000	—
3.500 percent seven-year 2010 HTWR senior notes	42	—
Floating rate three-year 2014 senior notes	—	250
0.875 percent three-year 2014 senior notes	—	250
Debt premium, net	26	—
Current debt obligations	<u>\$ 7,520</u>	<u>\$ 993</u>

**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 unsecured commercial paper notes (the 2015 Commercial Paper Program) on a private placement basis up to a maximum aggregate amount outstanding at any time of \$3.5 billion. The Company and Medtronic, Inc. have guaranteed the obligations of Medtronic Luxco under the 2015 Commercial Paper Program. At April 28, 2017, the Company had \$901 million of commercial paper outstanding. No amount of commercial paper was outstanding at April 29, 2016.

During fiscal years 2017 and 2016, the weighted average original maturity of the commercial paper outstanding was approximately 39 days and 49 days, respectively, and the weighted average interest rate was 0.89 percent and 0.57 percent, respectively. The issuance of commercial paper reduces the amount of credit available under the Company's existing line of credit.

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**Notes to Consolidated Financial Statements (Continued)**

**Bank Borrowings** Outstanding bank borrowings at April 28, 2017 were short-term advances to certain non-U.S. subsidiaries under credit agreements with various banks. Bank borrowings consist primarily of borrowings in Japanese Yen at interest rates ranging from 0.17% to 0.18%, and the borrowing is a natural hedge of currency and exchange rate risk.

**Line of Credit** The Company has a \$3.5 billion five year revolving syndicated line of credit facility (\$3.5 Billion Revolving 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, which expires in January 2020. The \$3.5 Billion Revolving Credit Facility provides the Company with the ability to increase its borrowing capacity by an additional \$500 million at any time during the term of the agreement. At each anniversary date of the \$3.5 Billion Revolving Credit Facility, but not more than twice prior to the maturity date, the Company could also request a one-year extension of the maturity date. The Company, Medtronic Luxco, and Medtronic, Inc. guarantee the obligations under the Amended and Restated Revolving Credit Agreement. At April 28, 2017 and April 29, 2016, no amounts were outstanding on the committed line of credit.

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 agreements also contain customary covenants, all of which the Company remained in compliance with at April 28, 2017.

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**Notes to Consolidated Financial Statements (Continued)**

Long-term debt consisted of the following:

(in millions, except interest rates)	Maturity by Fiscal Year	April 28, 2017		April 29, 2016	
		Payable	Effective Interest Rate	Payable	Effective Interest Rate
6.000 percent ten-year 2008 CIFSA senior notes	2018	\$ —	1.41%	\$ 1,150	1.41%
1.375 percent five-year 2013 senior notes	2018	—	1.41	1,000	1.41
1.500 percent three-year 2015 senior notes	2018	—	1.59	1,000	1.59
5.600 percent ten-year 2009 senior notes	2019	400	5.61	400	5.61
1.700 percent two-year 2017 senior notes	2019	1,000	1.74	—	—
4.450 percent ten-year 2010 senior notes	2020	766	4.47	766	4.47
2.500 percent five-year 2015 senior notes	2020	2,500	2.52	2,500	2.52
Floating rate five-year 2015 senior notes	2020	500	1.98	500	1.04
4.200 percent ten-year 2010 CIFSA senior notes	2021	600	2.22	600	2.22
4.125 percent ten-year 2011 senior notes	2021	500	4.19	500	4.19
3.125 percent ten-year 2012 senior notes	2022	675	3.16	675	3.16
3.150 percent seven-year 2015 senior notes	2022	2,500	3.18	2,500	3.18
3.200 percent ten-year 2012 CIFSA senior notes	2023	650	2.66	650	2.66
2.750 percent ten-year 2013 senior notes	2023	530	2.78	530	2.78
2.950 percent ten-year 2013 CIFSA senior notes	2024	310	2.67	310	2.67
3.625 percent ten-year 2014 senior notes	2024	850	3.65	850	3.65
3.500 percent ten-year 2015 senior notes	2025	4,000	3.61	4,000	3.61
3.350 percent ten-year 2017 senior notes	2027	850	3.35	—	—
4.375 percent twenty-year 2015 senior notes	2035	2,382	4.44	2,382	4.44
6.550 percent thirty-year 2007 CIFSA senior notes	2038	374	3.75	374	3.75
6.500 percent thirty-year 2009 senior notes	2039	300	6.52	300	6.52
5.550 percent thirty-year 2010 senior notes	2040	500	5.56	500	5.56
4.500 percent thirty-year 2012 senior notes	2042	400	4.51	400	4.51
4.000 percent thirty-year 2013 senior notes	2043	325	4.12	325	4.12
4.625 percent thirty-year 2014 senior notes	2044	650	4.67	650	4.67
4.625 percent thirty-year 2015 senior notes	2045	4,150	4.62	4,000	4.64
Three-year term loan	2018	—	—	3,000	1.12
Interest rate swaps	2021-2022	40	—	89	—
Capital lease obligations	2019-2025	23	4.81	26	4.66
Bank borrowings	2019-2022	139	1.28	56	6.46
Debt premium, net	2019-2045	135	—	214	—
Deferred financing costs	2019-2045	(128)	—	(138)	—
Long-term debt		<u>\$ 25,921</u>		<u>\$ 30,109</u>	

**Senior Notes** The Company had outstanding unsecured senior obligations, including those described as senior notes in the long-term debt table above (collectively, the Senior Notes). The Senior Notes rank equally with all other unsecured and unsubordinated indebtedness of the Company. The indentures under which the Senior Notes were issued contain customary covenants, all of which the Company remained in compliance with at April 28, 2017. The Company used the net proceeds from the sale of the Senior Notes primarily for general corporate purposes, which includes the repayment of other indebtedness of the Company.

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**Notes to Consolidated Financial Statements (Continued)**

In March 2017, Medtronic Luxco issued two tranches of Senior Notes with an aggregate face value of \$1.850 billion (collectively, the 2017 Senior Notes). The first tranche consisted of \$1.0 billion of 1.700 percent Senior Notes due 2019. The second tranche consisted of \$850 million of 3.350 percent Senior Notes due 2027. Concurrent with the offering by Medtronic Luxco, Medtronic, Inc. issued \$150 million in principal amount of its 4.625 percent Senior Notes due 2045 (the Reopening Notes). The Reopening Notes are a further issuance of, and form a single series with, the \$4.0 billion principal amount of Medtronic, Inc.'s previously outstanding 4.625 percent Senior Notes due 2045. Interest on the 2017 Senior Notes and the Reopening Notes is payable semi-annually. The Company used the net proceeds from the sale of the 2017 Senior Notes and the Reopening Notes for general corporate purposes.

In April 2016, the Company completed a cash tender offer and redemption of \$2.7 billion of senior notes for \$3.0 billion of total consideration. We recognized a loss on debt extinguishment of \$163 million, which included cash premiums and accelerated amortization of deferred financing costs and debt discounts and premiums. The loss on debt extinguishment was recognized in *interest expense, net* in the consolidated statements of income. In addition to the loss on debt extinguishment, we recognized \$20 million of interest expense due to the acceleration of net losses on forward starting interest rate derivatives, which were terminated at the time of original debt issuances relating to the portion of debt extinguished in the tender offer.

At April 28, 2017 and April 29, 2016, the Company had interest rate swap agreements designated as fair value hedges of certain underlying fixed-rate obligations, including the Company's \$500 million 4.125 percent 2011 Senior Notes and \$675 million 3.125 percent 2012 Senior Notes. Refer to Note 9 for additional information regarding the interest rate swap agreements.

**Term Loan** On January 26, 2015, Medtronic, Inc. borrowed \$3.0 billion for a term of three years under a senior unsecured term loan credit agreement (the "Term Loan Credit Agreement"), among Medtronic, Inc., Medtronic, Medtronic Luxco, the lenders from time to time party thereto and Bank of America, N.A., as administrative agent. The Term Loan Credit Agreement was entered into to finance, in part, the cash component of the acquisition of Covidien and certain transaction expenses. Medtronic and Medtronic Luxco have guaranteed the obligations of Medtronic, Inc. under the Term Loan Credit Agreement.

Contractual maturities of debt for the next five fiscal years and thereafter, excluding deferred financing costs, debt premium, net, and the fair value of outstanding interest rate swap agreements are as follows:

<b>(in millions)</b>	
2018	\$ 7,494
2019	1,403
2020	3,778
2021	1,127
2022	3,276
Thereafter	16,290
Total debt	33,368
Less: Current portion of debt	7,494
Long-term portion of debt	\$ 25,874

**Financial Instruments Not Measured at Fair Value**

At April 28, 2017, the estimated fair value of the Company's Senior Notes, including the current portion, was \$30.4 billion compared to a principal value of \$28.9 billion. At April 29, 2016 the estimated fair value was \$29.8 billion compared to a principal value of \$27.4 billion. Fair value was estimated using quoted market prices for the publicly registered senior notes, 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 derivative/hedging activity.

**9. Derivatives and Currency Exchange Risk Management**

The Company uses operational and economic hedges, as well as 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

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**Notes to Consolidated Financial Statements (Continued)**

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. The primary currencies of the derivative instruments are the Euro and Japanese Yen. 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 \$10.8 billion at both April 28, 2017 and April 29, 2016.

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, statements of income, and statements of cash flows.

*Freestanding Derivative Contracts*

Freestanding derivative contracts are 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 other currencies. These derivatives 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 gross notional amount of these contracts outstanding at April 28, 2017 and April 29, 2016 was \$4.9 billion and \$5.0 billion, respectively.

The amounts and classification of the gains in the consolidated statements of income related to derivative instruments, not designated as hedging instruments, for fiscal years 2017, 2016, and 2015 are as follows:

(in millions)	Classification	Fiscal Year		
		2017	2016	2015
Currency exchange rate contracts	Other expense, net	\$ 54	\$ 33	\$ 210

*Cash Flow Hedges*

**Currency Exchange Rate Risk**

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. For derivative instruments that are designated and qualify as a cash flow hedge, the effective portion of the gain or loss on the derivative instrument is reported as a component of *accumulated other comprehensive loss*. The effective portion of the gain or loss on the derivative instrument is reclassified into earnings and is included in *other expense, net or cost of products sold* in the consolidated statements of income, depending on the underlying transaction that is being hedged, in the same period or periods during which the hedged transaction affects earnings.

No gains or losses relating to ineffectiveness of cash flow hedges were recognized in earnings during fiscal years 2017, 2016, or 2015. No components of the hedge contracts were excluded in the measurement of hedge ineffectiveness and no hedges were derecognized or discontinued during fiscal years 2017, 2016, or 2015. The gross notional amount of these contracts, designated as cash flow hedges, outstanding at April 28, 2017 and April 29, 2016 was \$5.8 billion and \$5.7 billion, respectively, and will mature within the subsequent three-year period.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

The amount of gross gains (losses), classification of the gains (losses) in the consolidated statements of income, and the accumulated other comprehensive (loss) income (AOCI) related to the effective portion of currency exchange rate contract derivative instruments designated as cash flow hedges for fiscal years 2017, 2016, and 2015 were as follows:

		Fiscal Year 2017			
		Recognized in AOCI		Recognized in Income	
(in millions)		Amount		Classification	Amount
Currency exchange rate contracts	\$	342		Other expense, net	\$ 173
<b>Total</b>	<b>\$</b>	<b>342</b>			<b>\$ 173</b>

		Fiscal Year 2016			
		Recognized in AOCI		Recognized in Income	
(in millions)		Amount		Classification	Amount
Currency exchange rate contracts	\$	(165)		Other expense, net	\$ 405
				Cost of products sold	(37)
<b>Total</b>	<b>\$</b>	<b>(165)</b>			<b>\$ 368</b>

		Fiscal Year 2015			
		Recognized in AOCI		Recognized in Income	
(in millions)		Amount		Classification	Amount
Currency exchange rate contracts	\$	707		Other expense, net	\$ 221
				Cost of products sold	(65)
<b>Total</b>	<b>\$</b>	<b>707</b>			<b>\$ 156</b>

**Forecasted Debt Issuance Interest Rate Risk**

Forward starting interest rate derivative instruments designated as cash flow hedges are designed to manage the exposure to interest rate volatility with regard to future issuances of fixed-rate debt. The effective portion of the gains or losses on forward starting interest rate derivative instruments that are designated and qualify as cash flow hedges are reported as a component of *accumulated other comprehensive loss*. Beginning in the period in which the planned debt issuance occurs and the related derivative instruments are terminated, the effective portion of the gains or losses are then reclassified into *interest expense, net* over the term of the related debt. Any portion of the gains or losses that are determined to be ineffective are immediately recognized in *interest expense, net*.

No gains or losses relating to ineffectiveness of forward starting interest rate derivative instruments were recognized in *interest expense, net* during fiscal years 2017, 2016, or 2015. No components of the hedge contracts were excluded in the measurement of hedge ineffectiveness. At April 29, 2016, the Company had \$300 million of fixed pay, forward starting interest rate swaps with a weighted average fixed rate of 3.10 percent in anticipation of planned debt issuances. During fiscal year 2017, in connection with the issuance of the 2017 Senior Notes, these swaps were terminated. Upon termination, there was no material ineffectiveness on the contracts which were in a net liability position, resulting in a cash payment of \$27 million. During fiscal year 2016, the Company terminated forward starting interest rate derivatives with a consolidated notional amount of \$500 million, which were previously entered into in advance of a planned debt issuance that was no longer expected. Upon termination, these swaps were in a net liability position, resulting in a cash payment of \$45 million.

For fiscal years 2017 and 2016, the reclassification of the effective portion of the net losses on forward starting interest rate derivative instruments from *accumulated other comprehensive loss* to *interest expense, net* was not significant.

There were no unrealized gains or losses on outstanding forward starting interest rate swap derivative instruments at April 28, 2017, as compared to unrealized losses of \$48 million at April 29, 2016. Unrealized losses on outstanding forward starting interest rate swap derivative instruments were recorded in *other liabilities*, with the offset recorded in *accumulated other comprehensive loss* in the consolidated balance sheets. For fiscal years 2017 and 2016, the Company recorded \$363 million and \$(164) million, respectively, of unrealized gains (losses) in *accumulated other comprehensive loss*.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

At April 28, 2017 and April 29, 2016, the Company had \$37 million and \$(90) million, respectively, in after-tax net unrealized gains (losses) associated with cash flow hedging instruments recorded in *accumulated other comprehensive loss*. The Company expects that \$73 million of after-tax net unrealized gains at April 28, 2017 will be reclassified into the consolidated statements of earnings over the next 12 months.

*Fair Value Hedges*

Interest rate derivative instruments designated as fair value hedges are designed to manage the exposure to interest rate movements and to reduce borrowing costs by converting fixed-rate debt into floating-rate debt. Under these agreements, the Company agrees to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed-upon notional principal amount.

Changes in the fair value of the derivative instrument are recognized in *interest expense, net*, and are offset by changes in the fair value of the underlying debt instrument. The gains (losses) from terminated interest rate swap agreements are recognized in *long-term debt*, increasing (decreasing) the outstanding balances of the debt, and amortized as a reduction of (addition to) *interest expense, net* over the remaining life of the related debt. The cash flows from the termination of the interest rate swap agreements are reported as operating activities in the consolidated statements of cash flows.

At April 28, 2017 and April 29, 2016, the Company had interest rate swaps in gross notional amounts of \$1.2 billion designated as fair value hedges of underlying fixed-rate senior note obligations including the Company's \$500 million 4.125 percent 2011 Senior Notes due 2021 and the \$675 million 3.125 percent 2012 Senior Notes due 2022.

At April 28, 2017 and April 29, 2016, the market value of outstanding interest rate swap agreements was an unrealized gain of \$41 million and \$89 million, respectively, and the market value of the hedged items was an unrealized loss of \$41 million and \$89 million, respectively, which was recorded in *other assets* with the offsets recorded in *long-term debt* on the consolidated balance sheets.

No significant hedge ineffectiveness was recorded as a result of these fair value hedges for fiscal years 2017, 2016, and 2015. In addition, the Company did not recognize any gains or losses during fiscal years 2017, 2016, or 2015 on firm commitments that no longer qualify as fair value hedges.



**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

*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 28, 2017 and April 29, 2016. 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 and are further segregated by type of contract within those two categories.

<b>April 28, 2017</b>				
(in millions)	Derivative Assets		Derivative Liabilities	
	Balance Sheet Classification	Fair Value	Balance Sheet Classification	Fair Value
<b>Derivatives designated as hedging instruments</b>				
Currency exchange rate contracts	Prepaid expenses and other current assets	\$ 152	Other accrued expenses	\$ 43
Interest rate contracts	Other assets	41	Other liabilities	—
Currency exchange rate contracts	Other assets	48	Other liabilities	14
Total derivatives designated as hedging instruments		<u>\$ 241</u>		<u>\$ 57</u>
<b>Derivatives not designated as hedging instruments</b>				
Currency exchange rate contracts	Prepaid expenses and other current assets	\$ 16	Other accrued expenses	\$ 36
Cross currency interest rate contracts	Other assets	5	Other liabilities	11
Total derivatives not designated as hedging instruments		<u>\$ 21</u>		<u>\$ 47</u>
Total derivatives		<u>\$ 262</u>		<u>\$ 104</u>
<b>April 29, 2016</b>				
(in millions)	Derivative Assets		Derivative Liabilities	
	Balance Sheet Classification	Fair Value	Balance Sheet Classification	Fair Value
<b>Derivatives designated as hedging instruments</b>				
Currency exchange rate contracts	Prepaid expenses and other current assets	\$ 123	Other accrued expenses	\$ 89
Interest rate contracts	Other assets	89	Other liabilities	48
Currency exchange rate contracts	Other assets	9	Other liabilities	54
Total derivatives designated as hedging instruments		<u>\$ 221</u>		<u>\$ 191</u>
<b>Derivatives not designated as hedging instruments</b>				
Commodity derivatives	Prepaid expenses and other current assets	\$ —	Other accrued expenses	\$ 1
Currency exchange rate contracts	Prepaid expenses and other current assets	13	Other accrued expenses	23
Cross currency interest rate contracts	Other assets	14	Other liabilities	4
Total derivatives not designated as hedging instruments		<u>\$ 27</u>		<u>\$ 28</u>
Total derivatives		<u>\$ 248</u>		<u>\$ 219</u>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

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

(in millions)	April 28, 2017		April 29, 2016	
	Level 1	Level 2	Level 1	Level 2
Derivative assets	\$ 216	\$ 46	\$ 145	\$ 103
Derivative liabilities	93	11	166	53

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 following table provides 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.

(in millions)	April 28, 2017			
	Gross Amount of Recognized Assets (Liabilities)	Gross Amount Not Offset on the Balance Sheet		Net Amount
		Financial Instruments	Collateral (Received) Posted	
<b>Derivative assets:</b>				
Currency exchange rate contracts	\$ 216	\$ (58)	\$ (55)	\$ 103
Interest rate contracts	41	(15)	(5)	21
Cross currency interest rate contracts	5	(2)	—	3
	<u>\$ 262</u>	<u>\$ (75)</u>	<u>\$ (60)</u>	<u>\$ 127</u>
<b>Derivative liabilities:</b>				
Currency exchange rate contracts	\$ (93)	\$ 73	\$ —	\$ (20)
Cross currency interest rate contracts	(11)	2	—	(9)
	<u>(104)</u>	<u>75</u>	<u>—</u>	<u>(29)</u>
Total	<u>\$ 158</u>	<u>\$ —</u>	<u>\$ (60)</u>	<u>\$ 98</u>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

(in millions)	April 29, 2016			
	Gross Amount of Recognized Assets (Liabilities)	Gross Amount Not Offset on the Balance Sheet		Net Amount
		Financial Instruments	Collateral (Received) Posted	
<b>Derivative assets:</b>				
Currency exchange rate contracts	\$ 145	\$ (98)	\$ (1)	\$ 46
Interest rate contracts	89	(20)	—	69
Cross currency interest rate contracts	14	—	—	14
	<u>\$ 248</u>	<u>\$ (118)</u>	<u>\$ (1)</u>	<u>\$ 129</u>
<b>Derivative liabilities:</b>				
Currency exchange rate contracts	\$ (166)	\$ 85	\$ 26	\$ (55)
Interest rate contracts	(48)	34	—	(14)
Cross currency interest rate contracts	(4)	—	—	(4)
Commodity contracts	(1)	—	—	(1)
	<u>(219)</u>	<u>119</u>	<u>26</u>	<u>(74)</u>
Total	<u>\$ 29</u>	<u>\$ 1</u>	<u>\$ 25</u>	<u>\$ 55</u>

*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. At April 28, 2017, the Company received net cash collateral of \$60 million from its counterparties. At April 29, 2016, the Company posted net cash collateral of \$25 million to its counterparties. The collateral received was recorded in *cash and cash equivalents*, with the offset recorded as an increase in *other accrued expenses* on the consolidated balance sheets. The collateral posted was recorded in *prepaid expenses and other current assets*, with the offset recorded as a decrease in *cash and cash equivalents* on the consolidated balance sheets.

**10. Inventories**

Inventory balances, net of reserves, were as follows:

(in millions)	April 28, 2017	April 29, 2016
Finished goods	\$ 2,211	\$ 2,242
Work in-process	458	499
Raw materials	669	732
Total	<u>\$ 3,338</u>	<u>\$ 3,473</u>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**11. Property, Plant, and Equipment**

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

(in millions)	April 28, 2017	April 29, 2016	Estimated Useful Lives (in years)
Land and land improvements	\$ 186	\$ 215	Up to 20
Buildings and leasehold improvements	2,175	2,394	Up to 40
Equipment	6,435	6,328	Generally 3-7, up to 15
Construction in progress	895	777	—
Subtotal	9,691	9,714	
Less: Accumulated depreciation	(5,330)	(4,873)	
Property, plant, and equipment, net	<u>\$ 4,361</u>	<u>\$ 4,841</u>	

Depreciation is recognized using the straight-line method over the estimated useful lives of the assets. Depreciation expense of \$937 million, \$889 million, and \$573 million was recognized in fiscal years 2017, 2016, and 2015, respectively. 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.

**12. Warranty Obligations**

The following table presents the changes in the Company's product warranty obligations:

(in millions)	Warranty Obligation
April 24, 2015	\$ 135
Warranty claims provision	64
Settlements	(91)
April 29, 2016	\$ 108
Warranty claims provision	61
Settlements	(68)
April 28, 2017	<u>\$ 101</u>

**13. 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. As of April 28, 2017, 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. As of April 28, 2017, no Preferred Shares were issued or outstanding.

*A Preferred Shares*

The Company issued 624 A Preferred Shares, par value \$1.00, each to three of its advisors in connection with the transaction agreement associated with the Covidien acquisition dated June 15, 2014, for a total of 1,872 A Preferred Shares outstanding with an aggregate consideration of \$75 thousand. The holders of A Preferred Shares are entitled to payment of dividends prior to any other class of shares in the Company equal to twice the dividend to be paid per Company ordinary share. On a return of assets,

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

whether on liquidation or otherwise, the A Preferred Shares are entitled to repayment of the capital paid up thereon in priority to any repayment of capital to the holders of any other shares and the holders of the A Preferred Shares shall not be entitled to any further participation in the assets or profits of the Company. The holders of the A Preferred Shares are not entitled to receive notice of, nor to attend, speak, or vote at any general meeting of the Company.

*Dividends*

The timing, declaration and payment of future dividends to holders of our ordinary and A Preferred 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 our businesses, industry practice and any other factors the Board of Directors deems relevant.

*Ordinary Share Repurchase Program*

Shares are repurchased from time to time to support the Company's stock-based compensation programs and to return capital to shareholders. During fiscal years 2017 and 2016, the Company repurchased approximately 43 million and 38 million shares, respectively, at an average price of \$83.03 and \$74.92, respectively. In June 2015, the Company's Board of Directors authorized, subject to the ongoing existence of sufficient distributable reserves, the redemption of 80 million of the Company's ordinary shares. As of April 28, 2017, the Company had used 51 million of the 80 million shares authorized under the repurchase program, leaving approximately 29 million shares available for future repurchases. In June 2017, the Company's Board of Directors replaced the existing June 2015 authorization to redeem up to an aggregate number of ordinary shares with an authorization to expend up to an aggregate amount of \$5 billion beginning June 26, 2017 to redeem the Company's ordinary shares. The Company accounts for repurchases of ordinary shares using the par value method and shares repurchased are canceled.

**14. Stock Purchase and Award Plans**

The Medtronic, Inc. 2013 Stock Award and Incentive Plan was originally approved by the Company's shareholders in August 2013. In January 2015, the Company's Board of Directors approved an amendment to and assumption of the existing Medtronic, Inc. 2013 Stock Award and Incentive Plan, which created the new Medtronic plc 2013 Stock Award and Incentive Plan (2013 Plan). In fiscal year 2017, the Company granted stock awards under the 2013 Plan. The 2013 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 28, 2017, there were approximately 21 million shares available for future grants under the 2013 Plan.

**Share Options** Options are granted at the exercise price, which is equal to the closing price of the Company's ordinary share 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. In fiscal year 2017, the Company granted share options under the 2013 Plan. The Company also grants shares of performance-based share options 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** Restricted stock awards and restricted stock units (collectively referred to as restricted stock) are granted to officers and key employees. At April 28, 2017, the Company does not have any outstanding restricted stock awards. The Company grants restricted stock units that typically cliff vest after four years. 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 are expensed over the vesting period and are subject to forfeiture if employment terminates prior to the lapse of the restrictions. 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. In fiscal year 2017, the Company granted restricted stock units under the 2013 Plan. At April 28, 2017, all restricted stock outstanding were restricted stock units.

**Employees Stock Purchase Plan** The Medtronic plc Amended and Restated 2014 Employees Stock Purchase Plan (ESPP) 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 at the end of the calendar quarter purchase period.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

Employees may contribute between 2 percent and 10 percent of their wages or the statutory limit under the U.S. Internal Revenue Code toward the purchase of newly issued ordinary shares of the Company at 85 percent of its market value at the end of the calendar quarter purchase period. Employees purchased 2 million shares at an average price of \$68.68 per share in fiscal year 2017. At April 28, 2017, plan participants had approximately \$11 million withheld to purchase the Company's ordinary shares at 85 percent of its market value on June 30, 2017, the last trading day before the end of the calendar quarter purchase period. At April 28, 2017, approximately 18 million ordinary shares were available for future purchase under the ESPP.

**Stock Option Valuation Assumptions** 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		
	2017	2016	2015
Weighted average fair value of options granted	\$ 14.70	\$ 13.72	\$ 25.39
Assumptions used:			
Expected life (years) <sup>(1)</sup>	6.18	5.94	4.24
Risk-free interest rate <sup>(2)</sup>	1.26%	1.79%	0.99%
Volatility <sup>(3)</sup>	21.07%	21.00%	21.29%
Dividend yield <sup>(4)</sup>	1.97%	1.96%	1.66%

(1) *Expected life:* The Company analyzes historical employee stock option exercise and termination data to estimate the expected life assumption. The Company calculates the expected life assumption using the midpoint scenario, which combines historical exercise data with hypothetical exercise data, as the Company believes this data currently represents the best estimate of the expected life of a new employee option.

(2) *Risk-free interest rate:* The rate is based on the grant date yield of a zero-coupon U.S. Treasury bond whose maturity period equals the expected term of the option.

(3) *Volatility:* Expected volatility is based on a blend of historical volatility and an implied volatility of the Company's ordinary shares. Implied volatility is based on market traded options of the Company's ordinary shares.

(4) *Dividend yield:* The dividend yield rate is calculated by dividing the Company's annual dividend, based on the most recent quarterly dividend rate, by the closing stock price on the grant date.

**Stock-Based Compensation Expense** Pursuant to the transaction agreement associated with the Covidien acquisition dated June 15, 2014, outstanding stock option awards held by Covidien employees upon transaction close were converted into options to acquire the Company's ordinary shares in a manner designed to preserve the intrinsic value of such awards. In addition, unvested restricted stock units granted on or after June 15, 2014 which were held by Covidien employees upon close of the Covidien acquisition were converted into restricted stock units of the Company in a manner designed to preserve the intrinsic value of such awards. The modifications made to the restricted stock units granted on or after June 15, 2014 and all outstanding share options pursuant to the transaction agreement that converted such awards constituted modifications under the authoritative guidance for accounting for stock compensation. This guidance requires the Company to revalue the award upon the transaction close and allocate the revised fair value between consideration paid and continuing expense based on the ratio of service performed through the transaction date over the total service period of the award. The revised fair value allocated to post-combination services resulted in incremental expense which is recognized over the remaining service period of the award. The Company recognized \$23 million and \$58 million of incremental expense related to these modifications during fiscal year 2017 and 2016, respectively, within *acquisition-related items* in the consolidated statements of income. Except for the conversion of share options and restricted stock units discussed herein, the material terms of these awards remained unchanged.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

The following table presents the components and classification of stock-based compensation expense for stock options, restricted stock, and ESPP shares recognized for fiscal years 2017, 2016, and 2015:

(in millions)	Fiscal Year		
	2017	2016	2015
Stock options	\$ 157	\$ 206	\$ 140
Restricted stock	169	148	284
Employees stock purchase plan	22	21	15
Total stock-based compensation expense	\$ 348	\$ 375	\$ 439
Cost of products sold	\$ 49	\$ 50	\$ 23
Research and development expense	41	37	29
Selling, general, and administrative expense	233	212	128
Restructuring charges	2	18	70
Acquisition-related items	23	58	189
Total stock-based compensation expense	348	375	439
Income tax benefits	(98)	(108)	(138)
Total stock-based compensation expense, net of tax	\$ 250	\$ 267	\$ 301

**Stock Options** The following table summarizes all stock option activity, including activity from options assumed or issued as a result of acquisitions, during fiscal year 2017:

	Options (in thousands)	Wtd. Avg. Exercise Price	Wtd. Avg. Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at April 29, 2016	52,970	\$ 57.09		
Granted	4,061	87.35		
Exercised	(9,488)	40.56		
Expired/Forfeited	(2,349)	73.90		
Outstanding at April 28, 2017	45,194	62.41	6.30	\$ 952
Vested and expected to vest at April 28, 2017	22,929	75.32	7.89	194
Exercisable at April 28, 2017	19,138	44.71	4.14	735

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 2017, 2016, and 2015:

(in millions)	Fiscal Year		
	2017	2016	2015
Cash proceeds from options exercised	\$ 367	\$ 452	\$ 609
Intrinsic value of options exercised	403	374	329
Tax benefit related to options exercised	140	131	106

Unrecognized compensation expense related to outstanding stock options at April 28, 2017 was \$178 million and is expected to be recognized over a weighted average period of 1.6 years.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Restricted Stock** The following table summarizes restricted stock activity, including activity from restricted stock assumed or issued as a result of acquisitions, during fiscal year 2017:

	Awards (in thousands)	Wtd. Avg. Grant Price
Nonvested at April 29, 2016	8,820	\$ 64.33
Granted	3,198	85.07
Vested	(2,727)	48.17
Forfeited	(503)	71.32
Nonvested at April 28, 2017	<u>8,788</u>	<u>\$ 76.49</u>

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 2017, 2016, and 2015:

(in millions, except per share data)	Fiscal Year		
	2017	2016	2015
Weighted-average grant-date fair value per restricted stock	\$ 85.07	\$ 77.68	\$ 69.30
Fair value of restricted stock vested	131	276	174
Tax benefit related to restricted stock vested	76	76	50

Unrecognized compensation expense related to restricted stock as of April 28, 2017 was \$334 million and is expected to be recognized over a weighted average period of 2.5 years.

**15. Income Taxes**

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

(in millions)	Fiscal Year		
	2017	2016	2015
U.S.	\$ (234)	\$ 333	\$ 639
International	4,836	4,003	2,847
Income before provision for income taxes	<u>\$ 4,602</u>	<u>\$ 4,336</u>	<u>\$ 3,486</u>

The provision for income taxes consists of the following:

(in millions)	Fiscal Year		
	2017	2016	2015
<b>Current tax expense:</b>			
U.S.	\$ 614	\$ 440	\$ 1,128
International	840	835	502
Total current tax expense	1,454	1,275	1,630
<b>Deferred tax (benefit) expense:</b>			
U.S.	(399)	(67)	(705)
International	(477)	(410)	(114)
Net deferred tax benefit	(876)	(477)	(819)
Total provision for income taxes	<u>\$ 578</u>	<u>\$ 798</u>	<u>\$ 811</u>



**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

Deferred taxes arise because of the different treatment of transactions under 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 recorded 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 recognized in the consolidated financial statements 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. Tax assets (liabilities), shown before jurisdictional netting of deferred tax assets (liabilities), are comprised of the following:

(in millions)	April 28, 2017	April 29, 2016
<b>Deferred tax assets:</b>		
Net operating loss, capital loss, and credit carryforwards	\$ 6,800	\$ 7,568
Other accrued liabilities	658	619
Accrued compensation	427	358
Pension and post-retirement benefits	456	530
Stock-based compensation	278	316
Other	308	341
Inventory	277	225
Federal and state benefit on uncertain tax positions	191	308
Unrealized loss on available-for-sale securities and derivative financial instruments	—	107
Gross deferred tax assets	9,395	10,372
Valuation allowance	(6,311)	(7,032)
Total deferred tax assets	3,084	3,340
<b>Deferred tax liabilities:</b>		
Intangible assets	(4,943)	(5,173)
Basis impairment	—	(230)
Realized loss on derivative financial instruments	(112)	(112)
Other	(74)	(179)
Accumulated depreciation	(149)	(189)
Unrealized gain on available-for-sale securities and derivative financial instruments	(18)	—
Outside basis difference of subsidiaries	(112)	—
Total deferred tax liabilities	(5,408)	(5,883)
Prepaid income taxes	475	365
Income tax receivables	218	529
<b>Tax liabilities, net</b>	<b>\$ (1,631)</b>	<b>\$ (1,649)</b>
<b>Reported as (after valuation allowance and jurisdictional netting):</b>		
Prepaid expenses and other current assets	\$ 545	\$ 697
Tax assets	1,509	1,383
Deferred tax liabilities	(2,978)	(3,729)
Noncurrent liabilities held for sale	(707)	—
<b>Tax liabilities, net</b>	<b>\$ (1,631)</b>	<b>\$ (1,649)</b>

At April 28, 2017, the Company had approximately \$24.9 billion of net operating loss carryforwards in certain non-U.S. jurisdictions, of which \$22.0 billion have no expiration, and the remaining \$2.9 billion will expire during fiscal 2018 through 2037. Included in these net operating loss carryforwards are \$17.6 billion of net operating losses related to a subsidiary of the Company, substantially all of which were recorded in fiscal 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

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**Notes to Consolidated Financial Statements (Continued)**

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 \$7.3 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 28, 2017, the Company had \$1.0 billion of U.S. federal net operating loss carryforwards, which will expire during fiscal year 2018 through fiscal year 2036. For U.S. state purposes, the Company had \$690 million of net operating loss carryforwards at April 28, 2017, which will expire during fiscal year 2018 through fiscal year 2037.

At April 28, 2017, the Company also had \$392 million of tax credits available to reduce future income taxes payable, of which \$75 million have no expiration, and the remaining credits expire during fiscal year 2018 through fiscal year 2037.

The Company has established valuation allowances of \$6.3 billion and \$7.0 billion at April 28, 2017 and April 29, 2016, respectively, primarily related to the uncertainty of the utilization of certain deferred tax assets and primarily comprised of tax loss and credit carryforwards in various jurisdictions. The decrease in the valuation allowance during fiscal year 2017 is primarily driven by carryover attribute utilization and expiration, as well as the effects of currency fluctuations. These valuation allowances would result in a reduction to the provision for income taxes in the consolidated statements of income if they are ultimately not required.

At April 28, 2017, the Company had certain potential non-U.S. tax attributes that had not been recorded in the consolidated financial statements, including \$12.0 billion of non-U.S. special deductions with an indefinite carryforward period. The Company has treated these amounts as special deductions for financial statement purposes since utilization is contingent upon the annual performance of certain economic factors. The Company expects to recognize a small portion of the special deduction annually based on meeting the defined economic factors. The Company continues to analyze whether the utilization of such benefits may be accelerated.

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

	Fiscal Year		
	2017	2016	2015
U.S. federal statutory tax rate	35.0 %	35.0 %	35.0 %
<b>Increase (decrease) in tax rate resulting from:</b>			
U.S. state taxes, net of federal tax benefit	1.0	0.9	0.8
Research and development credit	(0.9)	(1.2)	(0.7)
Domestic production activities	(0.4)	(0.3)	(0.4)
International	(27.1)	(23.4)	(24.3)
Puerto Rico Excise Tax	(1.5)	(1.6)	(1.7)
Impact of adjustments <sup>(1)</sup>	5.7	11.4	13.3
Valuation allowance release	(1.0)	(0.9)	—
Other, net	1.8	(1.5)	1.3
Effective tax rate	12.6 %	18.4 %	23.3 %

(1) Adjustments include the impact of inventory step-up, impact of product technology upgrade commitment, special charge (gain), net, restructuring charges, net, certain litigation charges, acquisition-related items, amortization of intangible assets, loss on previously held forward starting interest rate swaps, debt tender premium, impact of acquisition on interest expense, and certain tax adjustments, net.

During fiscal year 2017, the Company recognized certain tax adjustments of \$202 million, including the following:

- A charge of \$404 million associated with the IRS resolution for the Ardian, CoreValve, Inc., Ablation Frontiers, Inc., PEAK Surgical, Inc. and Salient Surgical Technologies, Inc. acquisition-related issues and the allocation of income between Medtronic, Inc. and its wholly owned subsidiary operating in Puerto Rico for certain businesses. This resolution does not include the businesses that are the subject of the Medtronic, Inc. U.S. Tax Court case for fiscal years 2005 and 2006.
- A net charge of \$125 million associated with the expected divestiture of a portion of our Patient Monitoring & Recovery division to Cardinal Health. The net charge primarily relates to the tax effect from the recognition of the outside basis difference of certain subsidiaries, which are included in the expected divestiture.

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**Notes to Consolidated Financial Statements (Continued)**

- A charge of \$86 million associated with the IRS's disallowance of the utilization of certain net operating losses, along with the recognition of a valuation allowance against the net operating loss deferred tax asset, which were recognized during the year.
- A charge of \$18 million as a result of the redemption of an intercompany minority interest during the year.
- A benefit of \$431 million as the result of the resolution of Covidien's previously disclosed Tyco International plc intercompany debt issues with the U.S. Tax Court and the Appeals Division of the IRS.

The \$202 million of net certain tax adjustments were recognized in *provision for income taxes* in the consolidated statements of income for fiscal year 2017.

During fiscal year 2016 the Company recognized certain tax adjustments of \$417 million, which included the following:

- A charge of \$442 million primarily related to the U.S. income tax expense resulting from the Company's completion of an internal reorganization of the ownership of certain legacy Covidien businesses that reduced the cash and investments held by its U.S.-controlled non-U.S. subsidiaries (the Internal Reorganization). As a result of the Internal Reorganization, approximately \$9.7 billion of cash, cash equivalents and investments in marketable debt and equity securities previously held by U.S.-controlled non-U.S. subsidiaries became available for general corporate purposes.
- A \$25 million tax benefit associated with the disposition of a wholly owned U.S. subsidiary.

The \$417 million of net certain tax adjustments were recorded in the *provision for income taxes* in the consolidated statements of income for fiscal year 2016.

During fiscal year 2015, the Company recognized certain tax adjustments of \$349 million, which included the following:

- A charge of \$329 million related to the resolution of the Kyphon Inc. (Kyphon) acquisition-related issues with the U.S. Internal Revenue Service (IRS).
- A charge of \$20 million related to a taxable gain associated with the Covidien acquisition.

The \$349 million of certain tax adjustments were recognized in *provision for income taxes* in the consolidated statements of income for fiscal year 2015.

No deferred taxes have been provided for any portion of the approximately \$31.8 billion and \$29.0 billion of undistributed earnings of the Company's subsidiaries at April 28, 2017 and April 29, 2016, respectively, since these earnings have been, and under current plans will continue to be, permanently reinvested in these subsidiaries. During fiscal year 2017, the Company removed its permanently reinvested assertion on \$200 million of undistributed earnings of certain subsidiaries in anticipation of the divestiture of a portion of its Patient Monitoring & Recovery division to Cardinal Health. Due to the number of legal entities and jurisdictions involved and the complexity of the legal entity structure of the Company, the complexity of the tax laws in the relevant jurisdictions, including, but not limited to the rules pertaining to the utilization of foreign tax credits in the United States and the impact of projections of income for future years to any calculations, the Company believes it is not practicable to estimate, within any reasonable range, the amount of additional taxes which may be payable upon distribution of these undistributed earnings.

Currently, the Company's operations in Puerto Rico, Switzerland, Singapore, Dominican Republic, Costa Rica, and Israel have various tax incentive grants. The tax reductions as compared to the local statutory rate favorably impacted earnings by \$475 million, \$474 million, and \$414 million in fiscal years 2017, 2016, and 2015, respectively, and earnings per diluted share by \$0.34, \$0.33, and \$0.37 in fiscal years 2017, 2016, and 2015, respectively. Unless these grants are extended, they will expire between fiscal years 2018 and 2029. 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.

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**Notes to Consolidated Financial Statements (Continued)**

The Company had \$1.9 billion, \$2.7 billion, and \$2.9 billion of gross unrecognized tax benefits at April 28, 2017, April 29, 2016, and April 24, 2015, respectively. A reconciliation of the beginning and ending amount of unrecognized tax benefits for fiscal years 2017, 2016, and 2015 is as follows:

(in millions)	Fiscal Year		
	2017	2016	2015
Gross unrecognized tax benefits at beginning of fiscal year	\$ 2,703	\$ 2,860	\$ 1,172
<b>Gross increases:</b>			
Prior year tax positions	147	36	331
Current year tax positions	75	202	231
Acquisitions	4	—	1,199
<b>Gross decreases:</b>			
Prior year tax positions	(538)	(116)	(40)
Settlements	(467)	(275)	(33)
Statute of limitation lapses	(28)	(4)	—
Gross unrecognized tax benefits at end of fiscal year	1,896	2,703	2,860
Cash advance paid in connection with proposed settlements	—	(384)	(378)
Gross unrecognized tax benefits at end of fiscal year, net of cash advance	\$ 1,896	\$ 2,319	\$ 2,482

If all of the Company's unrecognized tax benefits at April 28, 2017, April 29, 2016, and April 24, 2015 were recognized, \$1.8 billion, \$2.1 billion, and \$2.2 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 of \$1.9 billion as a long-term 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 \$225 million, net as a result of the resolution of tax matters with the IRS and other taxing authorities as well as statute of limitation lapses.

The Company recognizes interest and penalties related to income tax matters in *provision for income taxes* in the consolidated statements of income and records the liability in the current or long-term accrued income taxes in the consolidated balance sheets, as appropriate. The Company had \$360 million, \$609 million, and \$656 million of accrued gross interest and penalties at April 28, 2017, April 29, 2016, and April 24, 2015, respectively. During the fiscal years ended April 28, 2017, April 29, 2016, and April 24, 2015, the Company recognized gross interest (income) expense of approximately \$(208) million, \$80 million, and \$142 million, respectively, in *provision for income taxes* in the consolidated statements of income.

The Company's reserves for uncertain tax positions relate 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.

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**Notes to Consolidated Financial Statements (Continued)**

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

<b>Jurisdiction</b>	<b>Earliest Year Open</b>
United States - federal and state	1997
Brazil	2012
Canada	2008
China	2009
Costa Rica	2013
Dominican Republic	2013
France	2011
Germany	2010
India	2001
Ireland	2011
Israel	2010
Italy	2005
Japan	2010
Luxembourg	2012
Mexico	2005
Puerto Rico	2009
Singapore	2011
Switzerland	2011
United Kingdom	2014

See Note 20 for additional information regarding the status of current tax audits and proceedings.

**16. Earnings Per Share**

Earnings per share is calculated using the two-class method, as the Company's A Preferred Shares are considered participating securities. Accordingly, earnings are allocated to both ordinary shares and participating securities in determining earnings per ordinary share. Due to the limited number of A Preferred Shares outstanding, this allocation had no effect on the ordinary earnings per share; therefore, it is not presented below. 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 from the proceeds from issuance of the potentially dilutive ordinary shares. Potentially dilutive ordinary shares include stock options and other stock-based awards granted under the stock-based compensation plans and shares committed to be purchased under the employee stock purchase plan.

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**Notes to Consolidated Financial Statements (Continued)**

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

(in millions, except per share data)	Fiscal Year		
	2017	2016	2015
<b>Numerator:</b>			
Net income attributable to ordinary shareholders	\$ 4,028	\$ 3,538	\$ 2,675
<b>Denominator:</b>			
Basic – weighted average shares outstanding	1,378.9	1,409.6	1,095.5
Effect of dilutive securities:			
Employee stock options	9.0	12.2	9.1
Employee restricted stock units	3.4	4.0	4.3
Other	0.1	0.1	0.1
Diluted – weighted average shares outstanding	1,391.4	1,425.9	1,109.0
Basic earnings per share	\$ 2.92	\$ 2.51	\$ 2.44
Diluted earnings per share	\$ 2.89	\$ 2.48	\$ 2.41

The calculation of weighted average diluted shares outstanding excludes options to purchase approximately 7 million, 4 million, and 2 million ordinary shares in fiscal years 2017, 2016, and 2015, respectively, because their effect would be anti-dilutive on the Company's earnings per share.

#### 17. Retirement Benefit Plans

The Company sponsors various retirement benefit plans, including defined benefit pension plans (pension benefits), post-retirement medical plans (post-retirement benefits), defined contribution savings plans, and termination indemnity plans, covering substantially all U.S. employees and many employees outside the U.S. The expense related to these plans was \$602 million, \$584 million, and \$433 million in fiscal years 2017, 2016, and 2015, respectively.

In the U.S., the Company maintains a qualified pension plan designed to provide guaranteed minimum retirement benefits to all eligible U.S. employees. Pension coverage for non-U.S. employees is provided, to the extent deemed appropriate, through separate plans. In addition, U.S. and Puerto Rico employees are also eligible to receive specified Company-paid health care and life insurance benefits through the Company's post-retirement benefits. 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.

At April 28, 2017 and April 29, 2016, the net underfunded status of the Company's benefit plans was \$1.3 billion and \$1.4 billion, respectively. The \$1.3 billion underfunded status at April 28, 2017 included \$12 million of liabilities classified as held for sale. The liabilities classified as held for sale consisted of \$9 million related to pension benefits and \$3 million related to post-retirement benefits.

During fiscal year 2017, the Company offered certain eligible U.S. employees voluntary early retirement packages. The acceptance of this offer by eligible U.S. employees caused incremental expenses of \$73 million to be recognized during fiscal year 2017. Of this amount, \$60 million related to U.S. pension benefits, \$7 million related to U.S. post-retirement benefits, \$4 million related to defined contribution plans, and \$2 million related to cash payments and administrative fees.

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**Notes to Consolidated Financial Statements (Continued)**

**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		Non-U.S. Pension Benefits	
	Fiscal Year		Fiscal Year	
	2017	2016	2017	2016
<b>Accumulated benefit obligation at end of year:</b>	\$ 2,879	\$ 2,757	\$ 1,518	\$ 1,367
<b>Change in projected benefit obligation:</b>				
Projected benefit obligation at beginning of year	\$ 3,048	\$ 2,956	\$ 1,535	\$ 1,647
Service cost	117	120	70	81
Interest cost	109	122	26	31
Employee contributions	—	—	15	16
Plan curtailments and settlements	—	(28)	6	(133)
Actuarial (gain) loss	(22)	(42)	182	(103)
Benefits paid	(80)	(80)	(43)	(49)
Special termination benefits	60	—	—	—
Currency exchange rate changes and other	—	—	(57)	45
Projected benefit obligation at end of year	\$ 3,232	\$ 3,048	\$ 1,734	\$ 1,535
<b>Change in plan assets:</b>				
Fair value of plan assets at beginning of year	\$ 2,138	\$ 2,204	\$ 1,113	\$ 1,189
Actual return on plan assets	238	(70)	109	(44)
Employer contributions	183	112	76	93
Employee contributions	—	—	15	16
Plan settlements	—	(28)	(1)	(118)
Benefits paid	(80)	(80)	(43)	(49)
Currency exchange rate changes and other	—	—	(34)	26
Fair value of plan assets at end of year	\$ 2,479	\$ 2,138	\$ 1,235	\$ 1,113
<b>Funded status at end of year:</b>				
Fair value of plan assets	\$ 2,479	\$ 2,138	\$ 1,235	\$ 1,113
Benefit obligations	3,232	3,048	1,734	1,535
Underfunded status of the plans	(753)	(910)	(499)	(422)
Recognized liability	\$ (753)	\$ (910)	\$ (499)	\$ (422)
<b>Amounts recognized on the consolidated balance sheets consist of:</b>				
Non-current assets	\$ —	\$ —	\$ 5	\$ 20
Current liabilities	(13)	(12)	(7)	(8)
Non-current liabilities	(740)	(898)	(497)	(434)
Recognized liability	\$ (753)	\$ (910)	\$ (499)	\$ (422)
<b>Amounts recognized in accumulated other comprehensive loss:</b>				
Prior service cost (benefit)	\$ 3	\$ 4	\$ (6)	\$ (14)
Net actuarial loss	1,212	1,361	450	359
Ending balance	\$ 1,215	\$ 1,365	\$ 444	\$ 345

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**Notes to Consolidated Financial Statements (Continued)**

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 28, 2017 and April 29, 2016. U.S. and non-U.S. plans with accumulated benefit obligations in excess of plan assets consist of the following:

(in millions)	Fiscal Year	
	2017	2016
Accumulated benefit obligation	\$ 4,188	\$ 3,922
Projected benefit obligation	4,677	4,333
Plan assets at fair value	3,454	2,981

Plans with projected benefit obligations in excess of plan assets consist of the following:

(in millions)	Fiscal Year	
	2017	2016
Projected benefit obligation	\$ 4,903	\$ 4,362
Plan assets at fair value	3,646	3,009

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

(in millions)	U.S. Pension Benefits			Non-U.S. Pension Benefits		
	Fiscal Year			Fiscal Year		
	2017	2016	2015	2017	2016	2015
Service cost	\$ 117	\$ 120	\$ 104	\$ 70	\$ 81	\$ 60
Interest cost	109	122	105	26	31	33
Expected return on plan assets	(195)	(180)	(160)	(48)	(48)	(41)
Amortization of prior service cost	1	—	—	(1)	—	—
Amortization of net actuarial loss	88	98	65	17	20	12
Settlement gain	—	(1)	—	—	(10)	—
Special termination benefits	60	—	—	—	—	—
Net periodic benefit cost	\$ 180	\$ 159	\$ 114	\$ 64	\$ 74	\$ 64

The other changes in plan assets and projected benefit obligations recognized in *accumulated other comprehensive loss* for fiscal year 2017 are as follows:

(in millions)	U.S. Pension Benefits	Non-U.S. Pension Benefits
Net actuarial (gain) loss	\$ (61)	\$ 121
Amortization of prior service cost	(1)	1
Amortization of net actuarial loss	(88)	(17)
Prior service cost	—	8
Effect of exchange rates	—	(13)
Total (gain) loss recognized in accumulated other comprehensive loss	\$ (150)	\$ 100
Total loss recognized in net periodic benefit cost and accumulated other comprehensive loss	\$ 30	\$ 164

The estimated net actuarial loss that will be amortized from *accumulated other comprehensive loss* into net periodic benefit cost, before tax, in fiscal year 2018 for U.S. and non-U.S. pension benefits is expected to be \$83 million and \$17 million, respectively.



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**Notes to Consolidated Financial Statements (Continued)**

The actuarial assumptions are as follows:

	U.S. Pension Benefits			Non-U.S. Pension Benefits		
	Fiscal Year			Fiscal Year		
	2017	2016	2015	2017	2016	2015
<b>Critical assumptions – projected benefit obligation:</b>						
Discount rate	3.70% - 4.30%	3.60% - 4.30%	4.20%	0.45% - 11.40%	0.25% - 10.20%	1.88%
Rate of compensation increase	3.90%	3.90%	3.90%	2.89%	2.83%	2.92%
<b>Critical assumptions – net periodic benefit cost:</b>						
Discount rate – benefit obligation	3.55% - 4.30%	4.20% - 4.80%	4.75%	0.25% - 10.20%	0.80% - 9.00%	3.32%
Discount rate – service cost	3.60% - 4.45%	4.20% - 4.80%	4.75%	0.05% - 10.20%	0.80% - 9.00%	3.32%
Discount rate – interest cost	2.90% - 3.80%	4.20% - 4.80%	4.75%	0.30% - 10.20%	0.80% - 9.00%	3.32%
Expected return on plan assets	8.20%	8.20%	8.25%	4.45%	4.35%	4.77%
Rate of compensation increase	3.90%	3.90%	3.90%	2.83%	2.92%	2.80%

The Company changed the methodology used to estimate the service and interest cost components of net periodic pension cost and net periodic postretirement benefit cost for the Company's pension and other postretirement benefit plans, effective April 30, 2016. Previously, the Company estimated such cost components utilizing a single weighted-average discount rate derived from the market-observed yield curves of high-quality fixed income securities used to measure the pension benefit obligation and accumulated postretirement benefit obligation. The new methodology utilizes a full yield curve approach in the estimation of these cost components by applying the specific spot rates along the yield curve to their underlying projected cash flows and provides a more precise measurement of service and interest costs by improving the correlation between projected cash flows and their corresponding spot rates. The current yield curves represent high quality, long-term fixed income instruments. The change does not affect the measurement of the Company's pension obligation or accumulated postretirement benefit obligation. The Company accounted for this change prospectively as a change in accounting estimate.

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 legacy Medtronic U.S. pension and other U.S. post-retirement benefit plans are managed in an identical way, as their objectives are similar.

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, active and passive management, and derivative-based styles.

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 28, 2017 for the plans are 37% equity securities, 29% debt securities, and 34% other.

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**Notes to Consolidated Financial Statements (Continued)**

The plans did not hold any investments in the Company's ordinary shares at April 28, 2017 or April 29, 2016.

The Company's U.S. plans target asset allocations at April 28, 2017, compared to the U.S. plans actual asset allocations at April 28, 2017 and April 29, 2016 by asset category, are as follows:

**U.S. Plans**

Asset Category:	Target Allocation	Actual Allocation	
	April 28, 2017	April 28, 2017	April 29, 2016
Equity securities	40%	45%	43%
Debt securities	36	37	35
Other	24	18	22
Total	100%	100%	100%

**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.

*U.S. government securities:* Certain U.S. government securities are valued at the closing price reported in the active markets in which the individual security is traded. Other U.S. government securities are valued based on inputs other than quoted prices that are observable.

*Corporate debt securities:* Valued based on inputs other than quoted prices that are observable.

*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 28, 2017, there is one absolute return strategy fund totaling \$2 million that is in the process of liquidation. The Company expects to receive the proceeds over the next year. 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 28, 2017 is \$158 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 28, 2017, there is one real estate investment totaling \$1 million that is in the process of liquidation. The Company expects to receive the proceeds over the next year. Other 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.

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**Notes to Consolidated Financial Statements (Continued)**

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.

There were no transfers between Level 1, Level 2, or Level 3 during fiscal years 2017 or 2016.

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. See Note 1 for discussion of the fair value measurement terms of Levels 1, 2, and 3. In accordance with authoritative guidance adopted in fiscal year 2017, 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 28, 2017 and April 29, 2016. The revised presentation has been applied retrospectively and fiscal year 2016 values have been reclassified to conform to classifications used in the current year.

**U.S. Pension Benefits**

(in millions)	Fair Value at	Fair Value Measurements Using Inputs Considered as			Investments Measured at Net Asset Value
	April 28, 2017	Level 1	Level 2	Level 3	
Short-term investments	\$ 168	\$ 168	\$ —	\$ —	\$ —
U.S. government securities	167	138	29	—	—
Corporate debt securities	250	—	250	—	—
Equity commingled trusts	1,127	—	—	—	1,127
Fixed income commingled trusts	299	—	—	—	299
Partnership units	468	—	—	468	—
	<u>\$ 2,479</u>	<u>\$ 306</u>	<u>\$ 279</u>	<u>\$ 468</u>	<u>\$ 1,426</u>

(in millions)	Fair Value at	Fair Value Measurements Using Inputs Considered as			Investments Measured at Net Asset Value
	April 29, 2016	Level 1	Level 2	Level 3	
Short-term investments	\$ 127	\$ 127	\$ —	\$ —	\$ —
U.S. government securities	146	137	9	—	—
Corporate debt securities	216	—	216	—	—
Equity commingled trusts	956	—	—	—	956
Fixed income commingled trusts	231	—	—	—	231
Partnership units	462	—	—	462	—
	<u>\$ 2,138</u>	<u>\$ 264</u>	<u>\$ 225</u>	<u>\$ 462</u>	<u>\$ 1,187</u>

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)	Total Level 3 Investments	Partnership Units
April 29, 2016	\$ 462	\$ 462
Total realized gains included in income	25	25
Total unrealized gains included in accumulated other comprehensive (loss) income	28	28
Purchases and sales, net	(47)	(47)
April 28, 2017	<u>\$ 468</u>	<u>\$ 468</u>

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**Notes to Consolidated Financial Statements (Continued)**

(in millions)	Total Level 3 Investments	Corporate Debt Securities	Partnership Units
April 24, 2015	\$ 473	\$ 1	\$ 472
Total realized gains included in income	10	—	10
Total unrealized losses included in accumulated other comprehensive (loss) income	(144)	(1)	(143)
Purchases and sales, net	123	—	123
April 29, 2016	<u>\$ 462</u>	<u>\$ —</u>	<u>\$ 462</u>

**Non-U.S. Pension Benefits**

(in millions)	Fair Value at April 28, 2017	Fair Value Measurements Using Inputs Considered as			Investments Measured at Net Asset Value
		Level 1	Level 2	Level 3	
Registered investment companies	\$ 1,191	\$ —	\$ —	\$ —	\$ 1,191
Insurance contracts	44	—	—	44	—
	<u>\$ 1,235</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 44</u>	<u>\$ 1,191</u>

(in millions)	Fair Value at April 29, 2016	Fair Value Measurements Using Inputs Considered as			Investments Measured at Net Asset Value
		Level 1	Level 2	Level 3	
Registered investment companies	\$ 1,037	\$ —	\$ —	\$ —	\$ 1,037
Insurance contracts	76	—	—	76	—
	<u>\$ 1,113</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 76</u>	<u>\$ 1,037</u>

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

(in millions)	Total Level 3 Investments	Insurance Contracts
April 29, 2016	\$ 76	\$ 76
Total unrealized gains included in accumulated other comprehensive (loss) income	2	2
Purchases and sales, net	(31)	(31)
Currency exchange rate changes	(3)	(3)
April 28, 2017	<u>\$ 44</u>	<u>\$ 44</u>

(in millions)	Total Level 3 Investments	Insurance Contracts	Partnership Units
April 24, 2015	\$ 76	\$ 60	\$ 16
Purchases and sales, net	(2)	14	(16)
Currency exchange rate changes	2	2	—
April 29, 2016	<u>\$ 76</u>	<u>\$ 76</u>	<u>\$ —</u>

**Retirement Benefit Plan Funding** It is the Company's policy to fund retirement costs within the limits of allowable tax deductions. During fiscal year 2017, the Company made discretionary contributions of approximately \$183 million to the U.S. pension plan. Internationally, the Company contributed approximately \$76 million for pension benefits during fiscal year 2017. The Company anticipates that it will make contributions of \$302 million to its pension benefits in fiscal year 2018. 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 2018 contributions will be discretionary. The Company believes that, along with pension

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**Notes to Consolidated Financial Statements (Continued)**

assets, the returns on invested pension assets, and Company contributions, the Company 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) Fiscal Year	U.S. Pension Benefits		Non-U.S. Pension Benefits	
	Gross Payments		Gross Payments	
2018	\$	101	\$	44
2019		110		42
2020		121		43
2021		131		46
2022		143		50
2023 – 2027		901		298
Total	\$	1,507	\$	523

**Post-retirement Benefit Plans** The net periodic benefit cost associated with the Company's post-retirement benefit plans was \$11 million, \$12 million, and \$14 million in fiscal years 2017, 2016, and 2015, respectively. The Company's projected benefit obligation for all post-retirement benefit plans was \$323 million and \$369 million at April 28, 2017 and April 29, 2016, respectively. The Company's fair value of plan assets for all post-retirement benefit plans was \$289 million and \$269 million at April 28, 2017 and April 29, 2016, respectively. The decrease in the Company's projected benefit obligation during fiscal year 2017 was due to the U.S. post-retirement benefit plan being frozen, effective January 1, 2018. The activity during fiscal year 2016 related to the change in projected benefit obligation was not material. The activity during fiscal years 2017 and 2016 related to the change in fair value of plan assets was not material.

**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 \$347 million, \$269 million, and \$188 million in fiscal years 2017, 2016, and 2015, 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 \$58 million, \$58 million, and \$53 million in fiscal years 2017, 2016, and 2015, 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. 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 \$45 million and \$12 million in fiscal years 2017 and 2016, respectively.

## 18. Leases

The Company leases office, manufacturing, and research facilities and warehouses, as well as transportation, data processing, and other equipment under capital and operating leases. A substantial number of these leases contain options that allow the Company to renew at the fair rental value on the date of renewal.

Future minimum payments under capitalized leases and non-cancelable operating leases at April 28, 2017 are:

(in millions) Fiscal Year	Capitalized Leases	Operating Leases
2018	\$ 6	\$ 215
2019	4	158
2020	4	110
2021	3	70
2022	3	41
Thereafter	8	52
Total minimum lease payments	\$ 28	\$ 646
Less amounts representing interest	(5)	N/A
Present value of net minimum lease payments	\$ 23	N/A

Rent expense for all operating leases was \$294 million, \$269 million, and \$195 million in fiscal years 2017, 2016, and 2015, respectively. The increase in fiscal year 2016 rent expense is primarily related to the Covidien acquisition.

### 19. Accumulated Other Comprehensive (Loss) Income

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

(in millions)	Unrealized Gain (Loss) on Available- for-Sale Securities	Cumulative Translation Adjustments	Net Change in Retirement Obligations	Unrealized Gain (Loss) on Derivative Financial Instruments	Total Accumulated Other Comprehensive (Loss) Income
April 24, 2015	\$ 14	\$ (277)	\$ (1,131)	\$ 210	\$ (1,184)
Other comprehensive (loss) income before reclassifications	(107)	(197)	(141)	(94)	(539)
Reclassifications	(14)	—	75	(206)	(145)
Other comprehensive (loss) income	(121)	(197)	(66)	(300)	(684)
April 29, 2016	\$ (107)	\$ (474)	\$ (1,197)	\$ (90)	\$ (1,868)
Other comprehensive (loss) income before reclassifications	52	(978)	(17)	233	(710)
Reclassifications	(14)	—	85	(106)	(35)
Other comprehensive (loss) income	38	(978)	68	127	(745)
April 28, 2017	\$ (69)	\$ (1,452)	\$ (1,129)	\$ 37	\$ (2,613)

The income tax on gains and losses on available-for-sale securities in other comprehensive income before reclassifications during fiscal years 2017, 2016, and 2015 was an expense of \$41 million, a benefit of \$94 million, and an expense of \$60 million, respectively. During fiscal years 2017, 2016, and 2015, realized gains and losses on available-for-sale securities reclassified from AOCI were reduced by income taxes of \$8 million in fiscal years 2017 and 2016 and \$49 million in fiscal year 2015. When realized, gains and losses on available-for-sale securities reclassified from AOCI are recognized within *other expense, net*. Refer to Note 6 for additional information.

Taxes are not provided on cumulative translation adjustments as substantially all translation adjustments relate to earnings that are intended to be indefinitely reinvested outside the U.S.

The net change in retirement obligations in other comprehensive income includes net amortization of prior service costs and 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 2017, 2016, and 2015 was an expense of \$41 million, a benefit of \$85 million, and a benefit of \$198 million, respectively. During fiscal years 2017, 2016, and 2015, the gains and losses on defined benefit and pension items reclassified from AOCI were reduced by income taxes of \$23 million, \$39 million, and \$25 million, respectively. Refer to Note 17 for additional information.

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The income tax on unrealized gains and losses on derivative financial instruments in other comprehensive income before reclassifications during fiscal years 2017, 2016, and 2015 was an expense of \$130 million, a benefit of \$51 million, and an expense of \$199 million, respectively. During fiscal years 2017, 2016, and 2015, gains and losses on derivative financial instruments reclassified from AOCI were reduced by income taxes of \$61 million, \$121 million, and \$53 million, respectively. When realized, cash flow hedge gains and losses reclassified from AOCI are recognized within *other expense, net* or *cost of products sold*, and forward starting interest rate derivative financial instrument gains and losses reclassified from AOCI are recognized within *interest expense, net*. Note 9 for additional information.

**20. Commitments and Contingencies**

The Company and its affiliates are involved in a number of legal actions involving product liability, intellectual property disputes, shareholder related matters, environmental proceedings, income tax disputes, and governmental proceedings and investigations in the United States and around the world, 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 these 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. At April 28, 2017 and April 29, 2016, accrued certain litigation charges were approximately \$1.1 billion and \$1.0 billion, respectively. The ultimate cost to the Company with respect to accrued certain litigation charges 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, or cash flows. The Company includes accrued certain litigation charges in *other accrued expenses* and *other liabilities* on the consolidated balance sheets.

In addition to litigation contingencies, the Company also has certain income tax and guarantee obligations that may potentially result in future charges. While it is not possible to predict the outcome for most of the matters discussed below, 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, or cash flows.

***Product Liability Matters***

***Sprint Fidelis***

In 2007, a putative class action was filed in the Ontario Superior Court of Justice in Canada seeking damages for personal injuries allegedly related to the Company's Sprint Fidelis family of defibrillation leads. On October 20, 2009, the court certified a class proceeding but denied class certification on plaintiffs' claim for punitive damages. Pretrial proceedings are underway. The Company has not recognized an expense related to damages in connection with this matter because any potential loss is not currently probable or reasonably estimable under U.S. GAAP. Additionally, the Company is unable to reasonably estimate the range of loss, if any, that may result from this matter.

***INFUSE Litigation***

The Company estimated law firms representing approximately 6,000 claimants asserted or intended to assert personal injury claims against Medtronic in the U.S. state and federal courts involving the INFUSE bone graft product. As of June 1, 2017, the Company has reached agreements to settle substantially all of these claims, resolving this litigation. The Company's accrued expenses for this matter are included within accrued certain litigation charges in *other accrued expenses* and *other liabilities* on the consolidated balance sheets as discussed above.

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Other INFUSE Litigation

On June 5, 2014, Humana, Inc. filed a lawsuit for unspecified monetary damages in the U.S. District Court for the Western District of Tennessee, alleging that Medtronic, Inc. violated federal racketeering (RICO) law and various state laws, by conspiring with physicians to promote unapproved uses of INFUSE. In September of 2015 the Court granted Medtronic's motion to dismiss the primary allegations, including the RICO claims, in Humana's complaint. In April of 2016, the Court denied Humana's motion to file an amended complaint. The Company has not recognized an expense related to damages in connection with this matter because any potential loss is not currently probable or reasonably estimable under U.S. GAAP. Additionally, the Company cannot reasonably estimate the range of loss, if any, that may result from this matter.

Pelvic Mesh Litigation

The Company, through the acquisition of Covidien, 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 15,800 claimants have asserted or may assert claims involving products manufactured by Covidien's subsidiaries. As of June 1, 2017, the Company has reached agreements to settle approximately 12,300 of these claims. The Company's accrued expenses for this matter are included within accrued certain litigation charges in *other accrued expenses and other liabilities* on the consolidated balance sheets as discussed above.

Patent Litigation

Ethicon

On December 14, 2011, Ethicon filed an action against Covidien in the U.S. District Court for the Southern District of Ohio, alleging patent infringement and seeking monetary damages and injunctive relief. On January 22, 2014, the district court entered summary judgment in Covidien's favor, and the majority of this ruling was affirmed by the Federal Circuit on August 7, 2015. Following appeal, the case was remanded back to the District Court with respect to one patent. On January 21, 2016, Covidien filed a second action in the U.S. District Court for the Southern District of Ohio, seeking a declaration of non-infringement with respect to a second set of patents held by Ethicon. The court consolidated this second action with the remaining patent issues from the first action. Following consolidation of the cases, Ethicon dismissed 6 of the asserted patents, leaving a single asserted patent. In addition to claims of non-infringement, the Company asserts an affirmative defense of invalidity. The case is currently in the discovery stage. The Company has not recognized an expense related to damages in connection with this matter because any potential loss is not currently probable or reasonably estimable under U.S. GAAP. Additionally, the Company is unable to reasonably estimate the range of loss, if any, that may result from this matter.

Shareholder Related Matters

INFUSE

On March 12, 2012, Charlotte Kokocinski (Kokocinski) filed a shareholder derivative action against both Medtronic, Inc. and certain of its current and former officers and directors in the U.S. District Court for the District of Minnesota, setting forth certain allegations, including a claim that defendants violated various purported duties in connection with the INFUSE bone graft product and otherwise. On March 25, 2013, the District Court dismissed the case without prejudice, and Kokocinski subsequently filed an amended complaint. On March 30, 2015, the District Court granted defendants' motion to dismiss the amended complaint, dismissing the case with prejudice. Kokocinski sought reconsideration of that decision, and, on September 30, 2015, the District Court denied Kokocinski's request for reconsideration. Kokocinski appealed the District Court's decision to the U.S. Court of Appeals for the Eighth Circuit. On March 1, 2017, the Eighth Circuit Court of Appeals affirmed the lower Court's dismissal of the case with prejudice, and on April 11, 2017, the Eighth Circuit rejected Kokocinski's request for reconsideration.

West Virginia Pipe Trades and Phil Pace, on June 27, 2013 and July 3, 2013, respectively, filed putative class action complaints against Medtronic, Inc. and certain of its officers in the U.S. District Court for the District of Minnesota, alleging that the defendants



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made false and misleading public statements and engaged in a scheme to defraud regarding the INFUSE Bone Graft product during the period of December 8, 2010 through August 3, 2011. The matters were consolidated in September, 2013, and in the consolidated complaint plaintiffs alleged a class period of September 28, 2010 through August 3, 2011. On September 30, 2015, the District Court granted defendants' motion for summary judgment in the consolidated matters. Plaintiffs appealed the dismissal to the U.S. Court of Appeals for the Eighth Circuit, and in December of 2016 the Eighth Circuit Court reversed and remanded the case to the District Court for further proceedings.

COVIDIEN ACQUISITION

On July 2, 2014, Lewis Merenstein filed a putative shareholder class action in Hennepin County, Minnesota, District Court seeking to enjoin the then-potential acquisition of Covidien. The lawsuit named Medtronic, Inc., Covidien, and each member of the Medtronic, Inc. Board of Directors at the time as defendants, and alleged that the directors breached their fiduciary duties to shareholders with regard to the then-potential acquisition. On August 21, 2014, Kenneth Steiner filed a putative shareholder class action in Hennepin County, Minnesota, District Court, also seeking an injunction to prevent the potential Covidien acquisition. In September 2014, the *Merenstein* and *Steiner* matters were consolidated and in December 2014, the plaintiffs filed a preliminary injunction motion seeking to enjoin the Covidien transaction. On December 30, 2014, a hearing was held on plaintiffs' motion for preliminary injunction and on defendants' motion to dismiss. On January 2, 2015, the District Court denied the plaintiffs' motion for preliminary injunction and on January 5, 2015 issued its opinion. On March 20, 2015, the District Court issued its order and opinion granting Medtronic's motion to dismiss the case. In May of 2015, the plaintiffs filed an appeal, and, in January of 2016, the Minnesota State Court of Appeals affirmed in part, reversed in part, and remanded the case to the District Court for further proceedings. In February of 2016, the Company petitioned the Minnesota Supreme Court to review the decision of the Minnesota State Court of Appeals, and on April 19, 2016 the Minnesota Supreme Court granted the Company's petition on the issue of whether most of the original claims are properly characterized as direct or derivative under Minnesota law. A decision from the Minnesota Supreme Court is expected in calendar year 2017.

HEARTWARE

On January 22, 2016, the St. Paul Teachers' Retirement Fund Association filed a putative class action complaint (the "Complaint") in the United States District Court for the Southern District of New York against HeartWare on behalf of all persons and entities who purchased or otherwise acquired shares of HeartWare from June 10, 2014 through January 11, 2016 (the "Class Period"). The Complaint was amended on June 29, 2016 and claims HeartWare and one of its executives violated Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 by making false and misleading statements about, among other things, HeartWare's response to a June 2014 U.S. FDA warning letter, the development of the Miniaturized Ventricular Assist Device (MVAD) System and the proposed acquisition of Valtech Cardio Ltd. The Complaint seeks to recover damages on behalf of all purchasers or acquirers of HeartWare's stock during the Class Period. In August of 2016 the Company acquired HeartWare.

The Company has not recognized an expense related to damages in connection with the shareholder related matters, because any potential loss is not currently probable or reasonably estimable under U.S. GAAP. Additionally, the Company is unable to reasonably estimate the range of loss, if any, that may result from these matters.

***Environmental Proceedings***

The Company, through the acquisition of Covidien, 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 implementation of the investigation and remediation at the site in accordance with the MDEP order as modified by the Maine Board order.

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The Company has 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 Covidien 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.

On July 29, 2002, following a March 2002 trial, the District Court entered an opinion and order which held that conditions in the Penobscot River and Bay may pose an imminent and substantial endangerment and that Covidien was liable for the cost of performing a study of the river and bay. The District Court subsequently appointed an independent study panel to oversee the study and ordered Covidien to pay costs associated with the study. A report issued by the study panel contains recommendations for a variety of potential remedial options which could be implemented individually or in a variety of combinations, and included preliminary cost estimates for a variety of potential remedial options, which the report describes as "very rough estimates of cost," ranging from \$25 million to \$235 million. The report indicates that these costs are subject to uncertainties, and that before any remedial option is implemented, further engineering studies and engineering design work are necessary to determine the feasibility of the proposed remedial options. In June of 2014, a trial was held to determine if remediation was necessary and feasible, and on September 2, 2015, the District Court issued an order concluding that further engineering study and engineering design work is appropriate to determine the nature and extent of remediation in the Penobscot River and Bay. In January of 2016, the Court appointed an engineering firm to conduct the next phase of the study. The study is targeted for completion late calendar year 2017.

The Company's accrued expenses for environmental proceedings are included within accrued certain litigation charges in *other accrued expenses* and *other liabilities* on the consolidated balance sheets as discussed above.

**Government Matters**

Medtronic has received subpoenas or document requests from the Attorneys General in Massachusetts, California, Oregon, Illinois, and Washington seeking information regarding sales, marketing, clinical, and other information relating to the INFUSE bone graft product. In the third quarter of fiscal year 2017, the Company accrued expenses in connection with these matters, which are included within accrued certain litigation charges in *other accrued expenses* and *other liabilities* on the consolidated balance sheets as discussed above.

On May 2, 2011, the U.S. Attorney's Office for the District of Massachusetts issued a subpoena to ev3, a subsidiary of the Company, requesting production of documents relating to sales and marketing and other issues in connection with several neurovascular products. The matters under investigation relate to activities prior to Covidien's acquisition of ev3 in 2010. ev3 complied as required with the subpoena and cooperated with the investigation. In the third quarter of fiscal year 2016, the Company accrued expenses in connection with this matter, which are included within accrued certain litigation charges in *other accrued expenses* and *other liabilities* on the consolidated balance sheets as discussed above.

On September 2, 2014, the U.S. Department of Health and Human Services, Office of Inspector General and the U.S. Attorney's Office for the Northern District of California, issued a subpoena requesting production of documents relating to sales and marketing practices associated with certain of ev3's peripheral vascular products. The Company has not recognized an expense related to damages in connection with this matter, because any potential loss is not currently probable or reasonably estimable under U.S. GAAP. Additionally, the Company is unable to reasonably estimate the range of loss, if any, that may result from this matter.

**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. On December 23, 2010, the IRS issued a statutory notice of deficiency with respect to the remaining issues. Medtronic, Inc. filed a petition with the U.S. Tax Court on March 21, 2011 objecting to the deficiency. During October and November 2012, Medtronic, Inc. reached resolution with the IRS on various matters, including the deductibility of a settlement payment. Medtronic, Inc. and the IRS agreed to hold one issue, the calculation of amounts eligible for the one-time repatriation holiday, because such specific issue was being addressed by other taxpayers in litigation with the IRS. 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 proceeding with respect to this issue began on February 3, 2015 and ended on March 12, 2015. On June 9, 2016, the U.S. Tax court issued its opinion with respect to the allocation of income between Medtronic, Inc. and its wholly-owned subsidiary operating in Puerto Rico for fiscal years 2005 and 2006. The U.S. Tax Court generally rejected the IRS's position, but also made certain modifications to the Medtronic, Inc. tax returns as filed. During November 2016, Medtronic and the IRS entered into a Stipulation of Settled Issues with the Tax Court which resolved the one-time repatriation holiday as an outstanding issue unless, either party decided to appeal the Tax Court Opinion and a final decision is inconsistent with the U.S. Tax Court Opinion. The

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**Notes to Consolidated Financial Statements (Continued)**

U.S. Tax Court entered their final decision on January 25, 2017. On April 21, 2017, the IRS filed their Notice of Appeal to the U.S. Court of Appeals for the 8th Circuit regarding the Tax Court Opinion. A hearing date for the Appeal has not been set.

In October 2011, the IRS issued its audit report on Medtronic, Inc. for fiscal years 2007 and 2008. Medtronic, Inc. reached agreement with the IRS on some, but not all matters related to these fiscal years. During the first quarter of fiscal year 2016, the Company finalized its agreement with the IRS on the proposed adjustments associated with the tax effects of the Company's acquisition of Kyphon Inc. (Kyphon). The settlement was consistent with the certain tax adjustment recorded during the fourth quarter of fiscal year 2015. During the first quarter of fiscal year 2017, an expected settlement was reached with the IRS for all outstanding issues for fiscal years 2007 and 2008 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 Case for fiscal years 2005 and 2006.

In April 2014, the IRS issued its audit report on Medtronic, Inc. for fiscal years 2009, 2010, and 2011. Medtronic, Inc. reached agreement with the IRS on some but not all matters related to these fiscal years. During the first quarter of fiscal year 2017, an expected settlement was reached with the IRS for all outstanding issues for fiscal years 2009, 2010, and 2011 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 Case for fiscal years 2005 and 2006. During the fourth quarter of fiscal year 2017, an expected settlement was reached with the IRS associated with the tax effects of the Company's acquisition of PEAK Surgical, Inc. and Salient Surgical Technologies, Inc. However, the IRS continues to audit Medtronic, Inc.'s U.S. federal income tax returns for the fiscal years 2012 through 2014.

Covidien and the IRS have concluded and reached agreement on its audit of Covidien's U.S. federal income tax returns for the 2008 and 2009 tax years. The IRS continues to audit Covidien's U.S. federal income tax returns for the years 2010 through 2012.

The IRS concluded its field examination of certain of Tyco International's U.S. federal income tax returns for the years 1997 through 2000 and proposed tax adjustments, several of which also affect Covidien's income tax returns for certain years after 2000. Tyco International appealed certain of the tax adjustments proposed by the IRS and had resolved all but one of the matters associated with the proposed tax adjustments. The IRS asserted that substantially all of Tyco International's intercompany debt originating during the years 1997 through 2000 should not be treated as debt for U.S. federal income tax purposes, and disallowed interest deductions related to the intercompany debt and certain tax attribute adjustments recognized on Tyco International's U.S. income tax returns. The Company disagreed with the IRS's proposed adjustments and, on July 22, 2013, Tyco International filed a petition with the U.S. Tax Court contesting the IRS assessment. On January 15, 2016, Tyco International, as audit managing party under the Tax Sharing Agreement, entered into Stipulations of Settled Issues with the IRS intended to resolve all Federal tax disputes related to this intercompany debt issue for the Tax Sharing Participants for the 1997 - 2000 audit cycle before the U.S. Tax Court. The Stipulations of Settled Issues were contingent upon the IRS Appeals Division applying the same settlement terms to all intercompany debt issues on appeal for subsequent audit cycles (2001 - 2007). On May 17, 2016 the IRS Office of Appeals issued fully executed Forms 870-AD that effectively settled the matters on appeal on the same terms as those set forth in the Stipulations of Settled Issues, and on May 31, 2016 the U.S. Tax Court entered decisions consistent with the Stipulations of Settled Issues. As a result, all aspects of this controversy that were before the U.S. Tax Court and Appeals Division of the IRS have been finally resolved for audit cycles from 1997-2007.

See Note 15 for additional discussion of income taxes.

***Guarantees***

As a result of the acquisition of Covidien, the Company has guarantee commitments and indemnifications with Tyco International, TE Connectivity Ltd. (TE Connectivity), and Mallinckrodt plc (Mallinckrodt) which relate to certain contingent tax liabilities.

On June 29, 2007, Covidien entered into the Tax Sharing Agreement, under which Covidien shares responsibility for certain of its, Tyco International's and TE Connectivity's income tax liabilities for periods prior to Covidien's 2007 separation from Tyco International (2007 separation). Covidien, Tyco International and TE Connectivity share 42 percent, 27 percent, and 31 percent, respectively, of U.S. income tax liabilities that arise from adjustments made by tax authorities to Covidien's, Tyco International's and TE Connectivity's U.S. income tax returns, certain income tax liabilities arising from adjustments made by tax authorities to intercompany transactions or similar adjustments, and certain taxes attributable to internal transactions undertaken in anticipation of the 2007 separation. If Tyco International and TE Connectivity default on their obligations to the Company under the Tax Sharing Agreement, the Company would be liable for the entire amount of these liabilities. All costs and expenses associated with the management of these tax liabilities are being shared equally among the parties.

In connection with the 2007 separation, all tax liabilities associated with Covidien business became Covidien's tax liabilities. Following Covidien's spin-off of its Pharmaceuticals business to Covidien shareholders through a distribution of all the outstanding

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

ordinary shares of Mallinckrodt (2013 separation), Mallinckrodt became the primary obligor to the taxing authorities for the tax liabilities attributable to its subsidiaries, a significant portion of which relate to periods prior to the 2007 separation. However, Covidien remains the sole party subject to the Tax Sharing Agreement. Accordingly, Mallinckrodt does not share in the Company's liability to Tyco International and TE Connectivity, nor in the receivable that the Company has from Tyco International and TE Connectivity.

If any party to the Tax Sharing Agreement were to default in its obligation to another party to pay its share of the distribution taxes that arise as a result of no party's fault, each non-defaulting party would be required to pay, equally with any other non-defaulting party, the amounts in default. In addition, if another party to the Tax Sharing Agreement that is responsible for all or a portion of an income tax liability were to default in its payment of such liability to a taxing authority, the Company could be legally liable under applicable tax law for such liabilities and be required to make additional tax payments. Accordingly, under certain circumstances, the Company may be obligated to pay amounts in excess of the Company's agreed upon share of Covidien's, Tyco International's and TE Connectivity's tax liabilities.

The Company has used available information to develop its best estimates for certain assets and liabilities related to periods prior to the 2007 separation, including amounts subject to or impacted by the provisions of the Tax Sharing Agreement. The actual amounts that the Company may be required to ultimately accrue or pay under the Tax Sharing Agreement, however, could vary depending upon the outcome of the unresolved tax matters. Final determination of the balances will be made in subsequent periods, primarily related to certain pre-2007 separation tax liabilities and tax years open for examination. These balances will also be impacted by the filing of final or amended income tax returns in certain jurisdictions where those returns include a combination of Tyco International, Covidien and/or TE Connectivity legal entities for periods prior to the 2007 separation. The resolutions with the U.S. Tax Court and IRS Appeals for fiscal years 1997 through 2007 were finalized during May 2016. However, the Tax Sharing Agreement remains in place with respect to income tax liabilities that are not the subject of such resolution.

In conjunction with the 2013 separation, Mallinckrodt assumed the tax liabilities that are attributable to its subsidiaries, and Covidien indemnified Mallinckrodt to the extent that such tax liabilities arising from periods prior to 2013 exceed \$200 million, net of certain tax benefits realized. In addition, in connection with the 2013 separation, Covidien entered into certain other guarantee commitments and indemnifications with Mallinckrodt.

Except as described above in this note or for certain income tax related matters, the Company has not recognized an expense related to losses in connection with these matters because any potential loss is not currently probable or reasonably estimable under U.S. GAAP. Additionally, the Company is unable to reasonably estimate the range of loss, if any, that may result from these matters.

In the normal course of business, the Company and/or its affiliates periodically enter into agreements that require one or more of them to indemnify customers or suppliers for specific risks, such as claims for injury or property damage arising out of the Company or its affiliates' products or the negligence of any of their personnel or claims alleging that any of their products infringe third-party patents or other intellectual property. The Company's maximum exposure under these indemnification provisions is unable to be estimated, and the Company has not accrued any liabilities within the consolidated financial statements. Historically, the Company has not experienced significant losses on these types of indemnifications.

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**Notes to Consolidated Financial Statements (Continued)**

**21. Quarterly Financial Data (unaudited)**

(in millions, except per share data)		First Quarter		Second Quarter		Third Quarter		Fourth Quarter		Fiscal Year
<b>Net sales</b>										
	2017	\$ 7,166	\$	7,345	\$	7,283	\$	7,916	\$	29,710
	2016	7,274		7,058		6,934		7,567		28,833
<b>Gross profit</b>										
	2017	\$ 4,905	\$	5,019	\$	5,015	\$	5,480	\$	20,419
	2016	4,818		4,876		4,793		5,204		19,691
<b>Net income</b>										
	2017	\$ 929	\$	1,111	\$	820	\$	1,164	\$	4,024
	2016	820		520		1,095		1,104		3,538
<b>Net income attributable to Medtronic</b>										
	2017	\$ 929	\$	1,115	\$	821	\$	1,163	\$	4,028
	2016	820		520		1,095		1,104		3,538
<b>Basic earnings per share</b>										
	2017	\$ 0.67	\$	0.81	\$	0.60	\$	0.85		2.92
	2016	0.58		0.37		0.78		0.79		2.51
<b>Diluted earnings per share</b>										
	2017	\$ 0.66	\$	0.80	\$	0.59	\$	0.84		2.89
	2016	0.57		0.36		0.77		0.78		2.48

The data in the schedule above has been intentionally rounded to the nearest million, and therefore, the quarterly amounts may not sum to the fiscal year-to-date amounts.

**22. Segment and Geographic Information**

The Company's management evaluates performance and allocates resources based on income before interest expense, net, the provision for income taxes and amortization of intangible assets, not including centralized distribution costs and corporate charges, as presented in the table below. The accounting policies of the reportable segments are the same as those described in Note 1. The financial information that is regularly reviewed by the Company's chief operating decision maker to assess performance and allocate resources changed during fiscal year 2017. As a result, the Company has revised the disclosure for prior periods to align with current presentation.

The Company's Cardiac and Vascular Group consists of three divisions: Cardiac Rhythm & Heart Failure, Coronary & Structural Heart, and Aortic & Peripheral Vascular. The primary products sold by this operating segment include products for cardiac rhythm disorders and cardiovascular disease, as well as services to diagnose, treat, and manage heart and vascular-related disorders and diseases. The products produced by this operating segment require highly-skilled, technical manufacturing processes and are distributed through direct sales representatives in the U.S. and through direct sales representatives and indirect distributors outside of the U.S. Further, the primary customers of this operating segment are surgeons and specialists and the regulatory approval process for the Cardiac and Vascular Group is similar across all divisions.

The Company's Minimally Invasive Therapies Group consists of two divisions: Surgical Solutions and Patient Monitoring & Recovery. The primary products sold by this operating segment include those which enhance patient outcomes through minimally invasive solutions. These products include those for advanced and general surgical care and patient monitoring, patient care, renal care, and airway and ventilation. Further, the regulatory approval process for the Minimally Invasive Therapies Group is similar across all divisions.

In the first quarter of fiscal year 2017, the Company realigned the divisions within the Restorative Therapies Group. The Company's Restorative Therapies Group consists of four divisions: Spine, Brain Therapies, Specialty Therapies, and Pain Therapies. The primary customers of this operating segment include spinal surgeons, neurosurgeons, and pain specialists. The products sold by this operating segment are distributed through direct sales representatives in the U.S. and through direct sales representatives and

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

indirect distributors outside of the U.S. Further, the regulatory approval process for the Restorative Therapies Group is similar across all divisions.

The primary products sold by the Company's Diabetes Group include those for diabetes management, and the regulatory approval process for the Diabetes Group is similar across all divisions.

Net sales of the Company's reportable segments include end-customer revenues from the sale of products each reportable segment develops and manufactures or distributes. Segment disclosures are on a performance basis consistent with internal management reporting. Certain items are at corporate and centralized and are not allocated to the segments. Net sales and earnings before other adjustments by reportable segment are as follows:

(in millions)	Fiscal Year		
	2017	2016	2015
Cardiac and Vascular Group	\$ 10,498	\$ 10,196	\$ 9,361
Minimally Invasive Therapies Group	9,919	9,563	2,387
Restorative Therapies Group	7,366	7,210	6,751
Diabetes Group	1,927	1,864	1,762
Total	\$ 29,710	\$ 28,833	\$ 20,261

(in millions)	Fiscal Year		
	2017	2016	2015
Cardiac and Vascular Group	\$ 4,134	\$ 3,986	\$ 3,836
Minimally Invasive Therapies Group	3,434	3,373	775
Restorative Therapies Group	2,868	2,671	2,445
Diabetes Group	690	667	663
Reportable segments' EBITA before other adjustments <sup>(1)</sup>	11,126	10,697	7,719
Impact of inventory step-up	(38)	(226)	(623)
Impact of product technology upgrade commitment	—	—	(74)
Special charge (gain), net	(100)	(70)	38
Restructuring charges, net <sup>(2)</sup>	(373)	(299)	(252)
Certain litigation charges	(300)	(26)	(42)
Acquisition-related items <sup>(2)</sup>	(230)	(283)	(550)
Amortization of intangible assets	(1,980)	(1,931)	(733)
Centralized distribution costs	(1,543)	(1,177)	(794)
Interest expense, net	(728)	(955)	(280)
Corporate	(1,232)	(1,394)	(923)
Income before provision for income taxes	\$ 4,602	\$ 4,336	\$ 3,486

(1) Represents earnings by segment before *interest expense, net, amortization of intangible assets*, corporate charges, and centralized distribution costs.

(2) *Restructuring charges, net* and *acquisition-related items* within this table include the impact of amounts recognized within *cost of products sold* in the consolidated statements of income.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

The following table presents the Company's assets by reportable segment:

(in millions)	April 28, 2017	April 29, 2016
Cardiac and Vascular Group	\$ 15,192	\$ 13,563
Minimally Invasive Therapies Group <sup>(1)</sup>	49,249	52,227
Restorative Therapies Group	15,441	14,564
Diabetes Group	2,641	2,592
Total assets of reportable segments	82,523	82,946
Corporate	17,293	16,698
Total Assets	\$ 99,816	\$ 99,644

(1) Assets of \$6.3 billion classified as held for sale were included within Minimally Invasive Therapies Group at April 28, 2017.

*Geographic Information*

The following table presents net sales to external customers and property, plant, and equipment, net by geographic region:

(in millions)	Net sales to external customers			Property, plant, and equipment, net	
	2017	2016	2015	April 28, 2017	April 29, 2016
Americas <sup>(1)</sup>	\$ 17,939	\$ 17,578	\$ 12,125	\$ 3,270	\$ 3,728
EMEA <sup>(2)</sup>	6,739	6,700	5,064	709	708
Asia Pacific	3,443	3,060	2,059	192	220
Greater China	1,589	1,495	1,013	190	185
Consolidated	\$ 29,710	\$ 28,833	\$ 20,261	\$ 4,361	\$ 4,841

(1) The U.S., which is included in the Americas, had net sales to external customers of \$16.7 billion, \$16.4 billion, and \$11.3 billion in fiscal years 2017, 2016, and 2015, respectively. *Property, plant, and equipment, net* includes \$2.5 billion and \$3.3 billion in the U.S. in fiscal years 2017 and 2016, respectively.

(2) EMEA consists of the following regions: Europe, Middle East, and Africa. Sales to Ireland were insignificant during all periods presented. *Property, plant, and equipment, net* includes \$171 million and \$169 million in Ireland in fiscal years 2017 and 2016, respectively.

No single customer represented over 10 percent of the Company's consolidated net sales in fiscal years 2017, 2016, or 2015.

**23. Guarantor Financial Information**

On January 26, 2015, Medtronic plc and Medtronic Global Holdings S.C.A. (Medtronic Luxco), a wholly-owned subsidiary guarantor, each provided a full and unconditional guarantee of the obligations of Medtronic, Inc. under the Medtronic 2015 Senior Notes (Medtronic Senior Notes). In addition, Medtronic plc and Medtronic Luxco each provided a full and unconditional guarantee of the obligations of CIFSAs, assumed as part of the Covidien acquisition, under the CIFSAs Senior Notes. The guarantees of the CIFSAs Senior Notes were in addition to the guarantees of the CIFSAs Senior Notes by acquired Covidien holding companies Covidien Ltd. (formerly known as Covidien plc) and Covidien Group Holdings Ltd. (formerly known as Covidien Ltd.), both of which remain wholly-owned guarantors of the CIFSAs Senior Notes.

Medtronic Luxco issued two tranches of Senior Notes (Medtronic Luxco Senior Notes) in March 2017. Effective March 28, 2017, Medtronic plc and Medtronic, Inc. each provided a full and unconditional guarantee of the obligations of Medtronic Luxco under the Medtronic Luxco Senior Notes.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

A summary of the guarantees is as follows:

**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 CIFSAs Senior Notes**

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

The following presents the Company's consolidating statements of comprehensive income and condensed consolidating statements of cash flows as of and for the fiscal years ended April 28, 2017, April 29, 2016, and April 24, 2015, and condensed consolidating balance sheets at April 28, 2017 and April 29, 2016. The guarantees provided by the Parent Company Guarantor and Subsidiary Guarantors are joint and several. Condensed consolidating financial information for Medtronic plc, Medtronic Luxco, Medtronic, Inc., CIFSAs, and CIFSAs Subsidiary Guarantors, on a stand-alone basis, is presented using the equity method of accounting for subsidiaries.

During fiscal year 2017, the Company undertook certain steps to reorganize ownership of various subsidiaries. The transactions were entirely among subsidiaries under the common control of Medtronic. This reorganization has been reflected as of the beginning of the earliest period presented.

The Company made revisions to its consolidating statements of comprehensive income of the guarantees of the Medtronic Senior Notes and CIFSAs Senior notes as previously presented in Note 19 in the Company's Annual Report on 10-K for fiscal year 2016 due to an incorrect presentation of the equity in net (income) loss of subsidiaries balances for the fiscal year ended April 29, 2016. In the consolidating statements of comprehensive income of the guarantees of the Medtronic Senior Notes, the \$7.1 billion revision resulted in additional income reported in the equity in net (income) loss of subsidiaries line item in the Medtronic, Inc. column. In the consolidating statements of comprehensive income of the guarantees of the CIFSAs Senior Notes, the \$7.1 billion revision resulted in reduced income reported in the equity in net (income) loss of subsidiaries line item in the CIFSAs column. There is no impact to the consolidated financial statements of Medtronic plc as previously filed in the 2016 Annual Report on Form 10-K or Quarterly Reports on Form 10-Q.

The Company made revisions to its condensed consolidating balance sheets of the guarantees of the Medtronic Senior Notes and CIFSAs Senior Notes as previously presented in Note 19 in the Company's Annual Report on Form 10-K for fiscal year 2016 primarily due to an income statement error recognized in the second quarter of fiscal year 2016, resulting in an incorrect presentation of the investment in subsidiaries balances. In the condensed consolidating balance sheet of the guarantees of the Medtronic Senior Notes, the \$5.1 billion revision increased the line items investment in subsidiaries and total equity in the Medtronic, Inc. column. In the condensed consolidating balance sheet of the guarantees of the CIFSAs Senior Notes, the \$5.1 billion revision decreased the line items investment in subsidiaries and total equity in the CIFSAs column. There is no impact to the consolidated financial statements of Medtronic plc as previously filed in the 2016 Annual Report on Form 10-K or Quarterly Reports on Form 10-Q.



**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

The Company made revisions to the condensed consolidating balance sheets of the guarantees of the Medtronic Senior Notes and CIFSA Notes as previously presented in Note 19 in the Company's Annual Report on Form 10-K for fiscal year 2016 due to an incorrect presentation of intercompany capital contributions. The \$20.5 billion revision decreased the investment in subsidiaries and intercompany payable balances in the Medtronic plc column and decreased the investment in subsidiaries and total equity balances in the Medtronic Luxco and CIFSA Subsidiary Guarantors column in the condensed consolidating balance sheets of the guarantees of the Medtronic Senior Notes and CIFSA Senior Notes, respectively, decreased the intercompany receivable and total equity balances in Medtronic, Inc. column in the condensed consolidating balance sheets of the guarantees of the Medtronic Senior Notes, and decreased the intercompany receivable and total equity balances in the Subsidiary Non-Guarantors column. There is no impact to the consolidated financial statements of Medtronic plc as previously filed in the 2016 Annual Report on Form 10-K or Quarterly Reports on Form 10-Q.

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Consolidating Statement of Comprehensive Income**  
**Fiscal Year Ended April 28, 2017**  
**Medtronic Senior Notes and Medtronic Luxco Senior Notes**

(in millions)	Medtronic plc	Medtronic, Inc.	Medtronic Luxco	Subsidiary Non-guarantors	Consolidating Adjustments	Total
<b>Net sales</b>	\$ —	\$ 1,296	\$ —	\$ 29,708	\$ (1,294)	\$ 29,710
<b>Costs and expenses:</b>						
Cost of products sold	—	932	—	9,676	(1,317)	9,291
Research and development expense	—	636	—	1,557	—	2,193
Selling, general, and administrative expense	12	1,163	—	8,536	—	9,711
Special charge (gain), net	—	100	—	—	—	100
Restructuring charges, net	—	114	—	249	—	363
Certain litigation charges	—	—	—	300	—	300
Acquisition-related items	—	133	—	87	—	220
Amortization of intangible assets	—	11	—	1,969	—	1,980
Other expense (income), net	18	(2,954)	—	3,158	—	222
<b>Operating (loss) profit</b>	<b>(30)</b>	<b>1,161</b>	<b>—</b>	<b>4,176</b>	<b>23</b>	<b>5,330</b>
Interest income	—	(250)	(649)	(1,065)	1,598	(366)
Interest expense	113	1,652	62	865	(1,598)	1,094
<b>Interest expense (income), net</b>	<b>113</b>	<b>1,402</b>	<b>(587)</b>	<b>(200)</b>	<b>—</b>	<b>728</b>
Equity in net (income) loss of subsidiaries	(4,163)	(2,484)	(3,576)	—	10,223	—
<b>Income (loss) from operations before income taxes</b>	<b>4,020</b>	<b>2,243</b>	<b>4,163</b>	<b>4,376</b>	<b>(10,200)</b>	<b>4,602</b>
<b>Provision (benefit) for income taxes</b>	<b>(8)</b>	<b>(1)</b>	<b>—</b>	<b>587</b>	<b>—</b>	<b>578</b>
<b>Net income</b>	<b>4,028</b>	<b>2,244</b>	<b>4,163</b>	<b>3,789</b>	<b>(10,200)</b>	<b>4,024</b>
Net loss attributable to noncontrolling interests	—	—	—	4	—	4
<b>Net income attributable to Medtronic</b>	<b>4,028</b>	<b>2,244</b>	<b>4,163</b>	<b>3,793</b>	<b>(10,200)</b>	<b>4,028</b>
Other comprehensive (loss) income, net of tax	(745)	111	(745)	(928)	1,563	(744)
Other comprehensive loss attributable to non-controlling interests	—	—	—	3	—	3
<b>Total comprehensive income (loss) attributable to Medtronic</b>	<b>\$ 3,283</b>	<b>\$ 2,355</b>	<b>\$ 3,418</b>	<b>\$ 2,864</b>	<b>\$ (8,637)</b>	<b>\$ 3,283</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Consolidating Statement of Comprehensive Income**  
**Fiscal Year Ended April 29, 2016**  
**Medtronic Senior Notes**

(in millions)	Medtronic plc	Medtronic, Inc.	Medtronic Luxco	Subsidiary Non-guarantors	Consolidating Adjustments	Total
<b>Net sales</b>	\$ —	\$ 1,411	\$ —	\$ 28,832	\$ (1,410)	\$ 28,833
<b>Costs and expenses:</b>						
Cost of products sold	—	991	—	9,561	(1,410)	9,142
Research and development expense	—	627	—	1,597	—	2,224
Selling, general, and administrative expense	10	991	—	8,468	—	9,469
Special charge (gain), net	—	70	—	—	—	70
Restructuring charges, net	—	17	—	273	—	290
Certain litigation charges	—	—	—	26	—	26
Acquisition-related items	—	135	—	148	—	283
Amortization of intangible assets	—	12	—	1,919	—	1,931
Other expense (income), net	112	(2,329)	—	2,324	—	107
<b>Operating (loss) profit</b>	<b>(122)</b>	<b>897</b>	<b>—</b>	<b>4,516</b>	<b>—</b>	<b>5,291</b>
Interest income	—	(237)	(706)	(448)	960	(431)
Interest expense	25	1,906	10	405	(960)	1,386
<b>Interest expense (income), net</b>	<b>25</b>	<b>1,669</b>	<b>(696)</b>	<b>(43)</b>	<b>—</b>	<b>955</b>
Equity in net (income) loss of subsidiaries	(3,676)	(2,447)	(2,980)	—	9,103	—
<b>Income (loss) from operations before income taxes</b>	<b>3,529</b>	<b>1,675</b>	<b>3,676</b>	<b>4,559</b>	<b>(9,103)</b>	<b>4,336</b>
<b>Provision (benefit) for income taxes</b>	<b>(9)</b>	<b>(96)</b>	<b>—</b>	<b>903</b>	<b>—</b>	<b>798</b>
<b>Net income</b>	<b>3,538</b>	<b>1,771</b>	<b>3,676</b>	<b>3,656</b>	<b>(9,103)</b>	<b>3,538</b>
Other comprehensive (loss) income, net of tax	(684)	(493)	(684)	(673)	1,850	(684)
<b>Total comprehensive income (loss)</b>	<b>\$ 2,854</b>	<b>\$ 1,278</b>	<b>\$ 2,992</b>	<b>\$ 2,983</b>	<b>\$ (7,253)</b>	<b>\$ 2,854</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Consolidating Statement of Comprehensive Income**  
**Fiscal Year Ended April 24, 2015**  
**Medtronic Senior Notes**

(in millions)	Medtronic plc	Medtronic, Inc.	Medtronic Luxco	Subsidiary Non-guarantors	Consolidating Adjustments	Total
<b>Net sales</b>	\$ —	\$ 1,261	\$ —	\$ 20,261	\$ (1,261)	\$ 20,261
<b>Costs and expenses:</b>						
Cost of products sold	—	895	—	6,659	(1,245)	6,309
Research and development expense	—	552	—	1,088	—	1,640
Selling, general, and administrative expense	1	857	—	6,046	—	6,904
Special charge (gain), net	—	100	—	(138)	—	(38)
Restructuring charges, net	—	7	—	230	—	237
Certain litigation charges	—	—	—	42	—	42
Acquisition-related items	—	312	—	238	—	550
Amortization of intangible assets	—	11	—	722	—	733
Other expense (income), net	103	(1,618)	—	1,633	—	118
<b>Operating (loss) profit</b>	<b>(104)</b>	<b>145</b>	<b>—</b>	<b>3,741</b>	<b>(16)</b>	<b>3,766</b>
Interest income	—	(56)	(170)	(387)	227	(386)
Interest expense	—	762	—	131	(227)	666
<b>Interest expense (income), net</b>	<b>—</b>	<b>706</b>	<b>(170)</b>	<b>(256)</b>	<b>—</b>	<b>280</b>
Equity in net (income) loss of subsidiaries	(2,790)	(5,500)	(2,620)	—	10,910	—
<b>Income (loss) from operations before income taxes</b>	<b>2,686</b>	<b>4,939</b>	<b>2,790</b>	<b>3,997</b>	<b>(10,926)</b>	<b>3,486</b>
<b>Provision (benefit) for income taxes</b>	<b>11</b>	<b>(44)</b>	<b>—</b>	<b>844</b>	<b>—</b>	<b>811</b>
<b>Net income</b>	<b>2,675</b>	<b>4,983</b>	<b>2,790</b>	<b>3,153</b>	<b>(10,926)</b>	<b>2,675</b>
Other comprehensive income (loss), net of tax	(587)	(542)	(587)	(232)	1,361	(587)
<b>Total comprehensive income (loss)</b>	<b>\$ 2,088</b>	<b>\$ 4,441</b>	<b>\$ 2,203</b>	<b>\$ 2,921</b>	<b>\$ (9,565)</b>	<b>\$ 2,088</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Condensed Consolidating Balance Sheet**  
**April 28, 2017**  
**Medtronic Senior Notes and Medtronic Luxco Senior Notes**

(in millions)	Medtronic plc	Medtronic, Inc.	Medtronic Luxco	Subsidiary Non-guarantors	Consolidating Adjustments	Total
<b>ASSETS</b>						
<b>Current assets:</b>						
Cash and cash equivalents	\$ —	\$ 45	\$ 5	\$ 4,917	\$ —	\$ 4,967
Investments	—	—	—	8,741	—	8,741
Accounts receivable, net	—	—	—	5,591	—	5,591
Inventories, net	—	155	—	3,361	(178)	3,338
Intercompany receivable	63	—	—	12,618	(12,681)	—
Prepaid expenses and other current assets	10	227	—	1,628	—	1,865
Current assets held for sale	—	—	—	371	—	371
<b>Total current assets</b>	<b>73</b>	<b>427</b>	<b>5</b>	<b>37,227</b>	<b>(12,859)</b>	<b>24,873</b>
Property, plant and equipment, net	—	1,311	—	3,050	—	4,361
Goodwill	—	—	—	38,515	—	38,515
Other intangible assets, net	—	20	—	23,387	—	23,407
Tax assets	—	727	—	782	—	1,509
Investment in subsidiaries	55,833	71,931	52,618	—	(180,382)	—
Intercompany loans receivable	3,000	12,162	16,114	32,774	(64,050)	—
Other assets	—	434	—	798	—	1,232
Noncurrent assets held for sale	—	—	—	5,919	—	5,919
<b>Total assets</b>	<b>\$ 58,906</b>	<b>\$ 87,012</b>	<b>\$ 68,737</b>	<b>\$ 142,452</b>	<b>\$ (257,291)</b>	<b>\$ 99,816</b>
<b>LIABILITIES AND EQUITY</b>						
<b>Current liabilities:</b>						
Current debt obligations	\$ —	\$ 5,000	\$ 901	\$ 1,619	\$ —	\$ 7,520
Accounts payable	—	304	—	1,427	—	1,731
Intercompany payable	12	12,669	—	—	(12,681)	—
Accrued compensation	9	734	—	1,117	—	1,860
Accrued income taxes	13	—	—	620	—	633
Other accrued expenses	—	352	4	2,086	—	2,442
Current liabilities held for sale	—	—	—	34	—	34
<b>Total current liabilities</b>	<b>34</b>	<b>19,059</b>	<b>905</b>	<b>6,903</b>	<b>(12,681)</b>	<b>14,220</b>
Long-term debt	—	21,782	1,842	2,297	—	25,921
Accrued compensation and retirement benefits	—	1,120	—	521	—	1,641
Accrued income taxes	10	1,658	—	737	—	2,405
Intercompany loans payable	8,568	13,151	17,160	25,171	(64,050)	—
Deferred tax liabilities	—	—	—	2,978	—	2,978
Other liabilities	—	153	—	1,362	—	1,515
Noncurrent liabilities held for sale	—	—	—	720	—	720
<b>Total liabilities</b>	<b>8,612</b>	<b>56,923</b>	<b>19,907</b>	<b>40,689</b>	<b>(76,731)</b>	<b>49,400</b>
Shareholders' equity	50,294	30,089	48,830	101,641	(180,560)	50,294
Noncontrolling interests	—	—	—	122	—	122
<b>Total equity</b>	<b>50,294</b>	<b>30,089</b>	<b>48,830</b>	<b>101,763</b>	<b>(180,560)</b>	<b>50,416</b>
<b>Total liabilities and equity</b>	<b>\$ 58,906</b>	<b>\$ 87,012</b>	<b>\$ 68,737</b>	<b>\$ 142,452</b>	<b>\$ (257,291)</b>	<b>\$ 99,816</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Condensed Consolidating Balance Sheet**  
**April 29, 2016**  
**Medtronic Senior Notes**

(in millions)	Medtronic plc	Medtronic, Inc.	Medtronic Luxco	Subsidiary Non-guarantors	Consolidating Adjustments	Total
<b>ASSETS</b>						
<b>Current assets:</b>						
Cash and cash equivalents	\$ —	\$ 55	\$ —	\$ 2,821	\$ —	\$ 2,876
Investments	—	—	—	9,758	—	9,758
Accounts receivable, net	—	—	—	5,562	—	5,562
Inventories, net	—	162	—	3,511	(200)	3,473
Intercompany receivable	403	141,368	—	162,278	(304,049)	—
Prepaid expenses and other current assets	24	271	—	1,636	—	1,931
<b>Total current assets</b>	<b>427</b>	<b>141,856</b>	<b>—</b>	<b>185,566</b>	<b>(304,249)</b>	<b>23,600</b>
Property, plant and equipment, net	—	1,139	—	3,702	—	4,841
Goodwill	—	—	—	41,500	—	41,500
Other intangible assets, net	—	31	—	26,868	—	26,899
Tax assets	—	690	—	693	—	1,383
Investment in subsidiaries	52,608	68,903	49,698	—	(171,209)	—
Intercompany loans receivable	3,000	8,884	10,203	18,140	(40,227)	—
Other assets	—	506	—	915	—	1,421
<b>Total assets</b>	<b>\$ 56,035</b>	<b>\$ 222,009</b>	<b>\$ 59,901</b>	<b>\$ 277,384</b>	<b>\$ (515,685)</b>	<b>\$ 99,644</b>
<b>LIABILITIES AND EQUITY</b>						
<b>Current liabilities:</b>						
Current debt obligations	\$ —	\$ 500	\$ —	\$ 493	\$ —	\$ 993
Accounts payable	—	288	—	1,421	—	1,709
Intercompany payable	—	151,687	—	152,362	(304,049)	—
Accrued compensation	32	616	—	1,064	—	1,712
Accrued income taxes	11	—	—	555	—	566
Other accrued expenses	1	243	—	1,941	—	2,185
<b>Total current liabilities</b>	<b>44</b>	<b>153,334</b>	<b>—</b>	<b>157,836</b>	<b>(304,049)</b>	<b>7,165</b>
Long-term debt	—	26,646	—	3,463	—	30,109
Accrued compensation and retirement benefits	—	1,258	—	501	—	1,759
Accrued income taxes	10	1,422	—	1,471	—	2,903
Intercompany loans payable	3,918	10,128	14,297	11,884	(40,227)	—
Deferred tax liabilities	—	—	—	3,729	—	3,729
Other liabilities	—	202	—	1,714	—	1,916
<b>Total liabilities</b>	<b>3,972</b>	<b>192,990</b>	<b>14,297</b>	<b>180,598</b>	<b>(344,276)</b>	<b>47,581</b>
<b>Total equity</b>	<b>52,063</b>	<b>29,019</b>	<b>45,604</b>	<b>96,786</b>	<b>(171,409)</b>	<b>52,063</b>
<b>Total liabilities and equity</b>	<b>\$ 56,035</b>	<b>\$ 222,009</b>	<b>\$ 59,901</b>	<b>\$ 277,384</b>	<b>\$ (515,685)</b>	<b>\$ 99,644</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Condensed Consolidating Statement of Cash Flows**  
**Fiscal Year Ended April 28, 2017**  
**Medtronic Senior Notes and Medtronic Luxco Senior Notes**

(in millions)	Medtronic plc	Medtronic, Inc.	Medtronic Luxco	Subsidiary Non-guarantors	Consolidating Adjustments	Total
<b>Operating Activities:</b>						
Net cash provided by operating activities	\$ 842	\$ 1,902	\$ 302	\$ 4,721	\$ (887)	\$ 6,880
<b>Investing Activities:</b>						
Acquisitions, net of cash acquired	—	(940)	—	(384)	—	(1,324)
Additions to property, plant, and equipment	—	(369)	—	(885)	—	(1,254)
Purchases of investments	—	—	—	(4,533)	162	(4,371)
Sales and maturities of investments	—	210	—	5,308	(162)	5,356
Net (increase) decrease in intercompany loans receivable	—	(3,278)	(5,911)	(4,624)	13,813	—
Capital contributions paid	—	(248)	—	—	248	—
Other investing activities, net	—	—	—	22	—	22
<b>Net cash (used in) provided by investing activities</b>	<b>—</b>	<b>(4,625)</b>	<b>(5,911)</b>	<b>(5,096)</b>	<b>14,061</b>	<b>(1,571)</b>
<b>Financing Activities:</b>						
Acquisition-related contingent consideration	—	—	—	(69)	—	(69)
Change in current debt obligations, net	—	—	901	5	—	906
Repayment of short-term borrowings (maturities greater than 90 days)	—	—	—	(2)	—	(2)
Proceeds from short-term borrowings (maturities greater than 90 days)	—	—	—	12	—	12
Issuance of long-term debt	—	150	1,850	140	—	2,140
Payments on long-term debt	—	(500)	—	(363)	—	(863)
Dividends to shareholders	(2,376)	—	—	—	—	(2,376)
Issuance of ordinary shares	428	—	—	—	—	428
Repurchase of ordinary shares	(3,544)	—	—	—	—	(3,544)
Net intercompany loan borrowings (repayments)	4,650	3,023	2,863	3,277	(13,813)	—
Intercompany dividends paid	—	—	—	(887)	887	—
Capital contributions received	—	—	—	248	(248)	—
Other financing activities	—	40	—	45	—	85
<b>Net cash (used in) provided by financing activities</b>	<b>(842)</b>	<b>2,713</b>	<b>5,614</b>	<b>2,406</b>	<b>(13,174)</b>	<b>(3,283)</b>
Effect of exchange rate changes on cash and cash equivalents	—	—	—	65	—	65
<b>Net change in cash and cash equivalents</b>	<b>—</b>	<b>(10)</b>	<b>5</b>	<b>2,096</b>	<b>—</b>	<b>2,091</b>
Cash and cash equivalents at beginning of period	—	55	—	2,821	—	2,876
<b>Cash and cash equivalents at end of period</b>	<b>\$ —</b>	<b>\$ 45</b>	<b>\$ 5</b>	<b>\$ 4,917</b>	<b>\$ —</b>	<b>\$ 4,967</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Condensed Consolidating Statement of Cash Flows**  
**Fiscal Year Ended April 29, 2016**  
**Medtronic Senior Notes**

(in millions)	Medtronic plc	Medtronic, Inc.	Medtronic Luxco	Subsidiary Non-guarantors	Consolidating Adjustments	Total
<b>Operating Activities:</b>						
Net cash provided by operating activities	\$ 297	\$ 402	\$ 696	\$ 4,635	\$ (812)	\$ 5,218
<b>Investing Activities:</b>						
Acquisitions, net of cash acquired	—	(526)	—	(687)	—	(1,213)
Additions to property, plant, and equipment	—	(334)	—	(712)	—	(1,046)
Purchases of investments	—	—	—	(5,406)	—	(5,406)
Sales and maturities of investments	—	—	—	9,924	—	9,924
Net (increase) decrease in intercompany loans receivable	—	(2,368)	(203)	(7,921)	10,492	—
Capital contributions paid	—	(11)	(4,959)	(4,900)	9,870	—
Other investing activities, net	—	—	—	(14)	—	(14)
Net cash (used in) provided by investing activities	—	(3,239)	(5,162)	(9,716)	20,362	2,245
<b>Financing Activities:</b>						
Acquisition-related contingent consideration	—	—	—	(22)	—	(22)
Change in current debt obligations, net	—	—	—	7	—	7
Repayment of short-term borrowings (maturities greater than 90 days)	—	—	(139)	—	—	(139)
Proceeds from short-term borrowings (maturities greater than 90 days)	—	—	139	—	—	139
Payments on long-term debt	—	(2,988)	—	(2,144)	—	(5,132)
Dividends to shareholders	(2,139)	—	—	—	—	(2,139)
Issuance of ordinary shares	491	—	—	—	—	491
Repurchase of ordinary shares	(2,830)	—	—	—	—	(2,830)
Net intercompany loan borrowings (repayments)	3,918	(91)	4,296	2,369	(10,492)	—
Intercompany dividends paid	—	—	—	(812)	812	—
Capital contributions received	—	4,900	—	4,970	(9,870)	—
Other financing activities	—	—	—	82	—	82
Net cash (used in) provided by financing activities	(560)	1,821	4,296	4,450	(19,550)	(9,543)
Effect of exchange rate changes on cash and cash equivalents	—	—	—	113	—	113
<b>Net change in cash and cash equivalents</b>	<b>(263)</b>	<b>(1,016)</b>	<b>(170)</b>	<b>(518)</b>	<b>—</b>	<b>(1,967)</b>
Cash and cash equivalents at beginning of period	263	1,071	170	3,339	—	4,843
<b>Cash and cash equivalents at end of period</b>	<b>\$ —</b>	<b>\$ 55</b>	<b>\$ —</b>	<b>\$ 2,821</b>	<b>\$ —</b>	<b>\$ 2,876</b>



**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Condensed Consolidating Statement of Cash Flows**  
**Fiscal Year Ended April 24, 2015**  
**Medtronic Senior Notes**

(in millions)	Medtronic plc	Medtronic, Inc.	Medtronic Luxco	Subsidiary Non-guarantors	Consolidating Adjustments	Total
<b>Operating Activities:</b>						
Net cash provided by operating activities	\$ 26	\$ 1,479	\$ 170	\$ 3,640	\$ (413)	\$ 4,902
<b>Investing Activities:</b>						
Acquisitions, net of cash acquired	(9,700)	(65)	—	(5,119)	—	(14,884)
Additions to property, plant, and equipment	—	(187)	—	(384)	—	(571)
Purchases of investments	—	—	—	(7,582)	—	(7,582)
Sales and maturities of investments	—	—	—	5,890	—	5,890
Net (increase) decrease in intercompany loans receivable	—	(16,996)	—	53	16,943	—
Other investing activities, net	—	—	—	89	—	89
Net cash (used in) provided by investing activities	(9,700)	(17,248)	—	(7,053)	16,943	(17,058)
<b>Financing Activities:</b>						
Acquisition-related contingent consideration	—	—	—	(85)	—	(85)
Change in current debt obligations, net	—	—	—	(1)	—	(1)
Repayment of short-term borrowings (maturities greater than 90 days)	—	(150)	—	—	—	(150)
Proceeds from short-term borrowings (maturities greater than 90 days)	—	150	—	—	—	150
Issuance of long-term debt	—	19,942	—	—	—	19,942
Payments on long-term debt	—	(1,268)	—	—	—	(1,268)
Dividends to shareholders	(435)	(902)	—	—	—	(1,337)
Issuance of ordinary shares	172	477	—	—	—	649
Repurchase of ordinary shares	(300)	(1,620)	—	—	—	(1,920)
Net intercompany loan borrowings (repayments)	10,500	(53)	—	6,496	(16,943)	—
Intercompany dividends paid	—	—	—	(413)	413	—
Other financing activities	—	—	—	(31)	—	(31)
Net cash (used in) provided by financing activities	9,937	16,576	—	5,966	(16,530)	15,949
Effect of exchange rate changes on cash and cash equivalents	—	—	—	(353)	—	(353)
Net change in cash and cash equivalents	263	807	170	2,200	—	3,440
Cash and cash equivalents at beginning of period	—	264	—	1,139	—	1,403
Cash and cash equivalents at end of period	\$ 263	\$ 1,071	\$ 170	\$ 3,339	\$ —	\$ 4,843

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Consolidating Statement of Comprehensive Income**  
**Fiscal Year Ended April 28, 2017**  
**CIFSA Senior Notes**

(in millions)	Medtronic plc	CIFSA	CIFSA Subsidiary Guarantors	Subsidiary Non- guarantors	Consolidating Adjustments	Total
<b>Net sales</b>	\$ —	\$ —	\$ —	\$ 29,710	\$ —	\$ 29,710
<b>Costs and expenses:</b>						
Cost of products sold	—	—	—	9,291	—	9,291
Research and development expense	—	—	—	2,193	—	2,193
Selling, general, and administrative expense	12	1	2	9,696	—	9,711
Special charge (gain), net	—	—	—	100	—	100
Restructuring charges, net	—	—	—	363	—	363
Certain litigation charges	—	—	—	300	—	300
Acquisition-related items	—	—	—	220	—	220
Amortization of intangible assets	—	—	—	1,980	—	1,980
Other expense (income), net	18	1	4	199	—	222
<b>Operating (loss) profit</b>	<b>(30)</b>	<b>(2)</b>	<b>(6)</b>	<b>5,368</b>	<b>—</b>	<b>5,330</b>
Interest income	—	(82)	(656)	(433)	805	(366)
Interest expense	113	104	62	1,620	(805)	1,094
<b>Interest expense (income), net</b>	<b>113</b>	<b>22</b>	<b>(594)</b>	<b>1,187</b>	<b>—</b>	<b>728</b>
Equity in net (income) loss of subsidiaries	(4,163)	(2,329)	(3,575)	—	10,067	—
<b>Income (loss) from operations before income taxes</b>	<b>4,020</b>	<b>2,305</b>	<b>4,163</b>	<b>4,181</b>	<b>(10,067)</b>	<b>4,602</b>
<b>Provision (benefit) for income taxes</b>	<b>(8)</b>	<b>—</b>	<b>—</b>	<b>586</b>	<b>—</b>	<b>578</b>
<b>Net income</b>	<b>4,028</b>	<b>2,305</b>	<b>4,163</b>	<b>3,595</b>	<b>(10,067)</b>	<b>4,024</b>
Net loss attributable to noncontrolling interests	—	—	—	4	—	4
<b>Net income attributable to Medtronic</b>	<b>4,028</b>	<b>2,305</b>	<b>4,163</b>	<b>3,599</b>	<b>(10,067)</b>	<b>4,028</b>
Other comprehensive (loss) income, net of tax	(745)	(84)	(745)	(744)	1,574	(744)
Other comprehensive loss attributable to non-controlling interests	—	—	—	3	—	3
<b>Total comprehensive income (loss) attributable to Medtronic</b>	<b>\$ 3,283</b>	<b>\$ 2,221</b>	<b>\$ 3,418</b>	<b>\$ 2,854</b>	<b>\$ (8,493)</b>	<b>\$ 3,283</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Consolidating Statement of Comprehensive Income**  
**Fiscal Year Ended April 29, 2016**  
**CIFSA Senior Notes**

(in millions)	Medtronic plc	CIFSA	CIFSA Subsidiary Guarantors	Subsidiary Non- guarantors	Consolidating Adjustments	Total
<b>Net sales</b>	\$ —	\$ —	\$ —	\$ 28,833	\$ —	\$ 28,833
<b>Costs and expenses:</b>						
Cost of products sold	—	—	—	9,142	—	9,142
Research and development expense	—	—	—	2,224	—	2,224
Selling, general, and administrative expense	10	1	3	9,455	—	9,469
Special charge (gain), net	—	—	—	70	—	70
Restructuring charges, net	—	—	—	290	—	290
Certain litigation charges	—	—	—	26	—	26
Acquisition-related items	—	—	—	283	—	283
Amortization of intangible assets	—	—	—	1,931	—	1,931
Other expense (income), net	112	1	(18)	12	—	107
<b>Operating (loss) profit</b>	<b>(122)</b>	<b>(2)</b>	<b>15</b>	<b>5,400</b>	<b>—</b>	<b>5,291</b>
Interest income	—	(434)	(710)	(464)	1,177	(431)
Interest expense	25	138	10	2,390	(1,177)	1,386
<b>Interest expense (income), net</b>	<b>25</b>	<b>(296)</b>	<b>(700)</b>	<b>1,926</b>	<b>—</b>	<b>955</b>
Equity in net (income) loss of subsidiaries	(3,676)	(2,043)	(2,961)	—	8,680	—
<b>Income (loss) from operations before income taxes</b>	<b>3,529</b>	<b>2,337</b>	<b>3,676</b>	<b>3,474</b>	<b>(8,680)</b>	<b>4,336</b>
<b>Provision (benefit) for income taxes</b>	<b>(9)</b>	<b>—</b>	<b>—</b>	<b>807</b>	<b>—</b>	<b>798</b>
<b>Net income</b>	<b>3,538</b>	<b>2,337</b>	<b>3,676</b>	<b>2,667</b>	<b>(8,680)</b>	<b>3,538</b>
Other comprehensive (loss) income, net of tax	(684)	(102)	(684)	(684)	1,470	(684)
<b>Total comprehensive income (loss)</b>	<b>\$ 2,854</b>	<b>\$ 2,235</b>	<b>\$ 2,992</b>	<b>\$ 1,983</b>	<b>\$ (7,210)</b>	<b>\$ 2,854</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Consolidating Statement of Comprehensive Income**  
**Fiscal Year Ended April 24, 2015**  
**CIFSA Senior Notes**

(in millions)	Medtronic plc	CIFSA	CIFSA Subsidiary Guarantors	Subsidiary Non- guarantors	Consolidating Adjustments	Total
<b>Net sales</b>	\$ —	\$ —	\$ —	\$ 20,261	\$ —	\$ 20,261
<b>Costs and expenses:</b>						
Cost of products sold	—	—	—	6,309	—	6,309
Research and development expense	—	—	—	1,640	—	1,640
Selling, general, and administrative expense	1	—	21	6,882	—	6,904
Special charge (gain), net	—	—	—	(38)	—	(38)
Restructuring charges, net	—	—	—	237	—	237
Certain litigation charges	—	—	—	42	—	42
Acquisition-related items	—	—	—	550	—	550
Amortization of intangible assets	—	—	—	733	—	733
Other expense (income), net	103	—	26	(11)	—	118
<b>Operating (loss) profit</b>	<b>(104)</b>	<b>—</b>	<b>(47)</b>	<b>3,917</b>	<b>—</b>	<b>3,766</b>
Interest income	—	(149)	(170)	(386)	319	(386)
Interest expense	—	29	—	956	(319)	666
<b>Interest expense (income), net</b>	<b>—</b>	<b>(120)</b>	<b>(170)</b>	<b>570</b>	<b>—</b>	<b>280</b>
Equity in net (income) loss of subsidiaries	(2,790)	1,085	(2,667)	—	4,372	—
<b>Income (loss) from operations before income taxes</b>	<b>2,686</b>	<b>(965)</b>	<b>2,790</b>	<b>3,347</b>	<b>(4,372)</b>	<b>3,486</b>
<b>Provision (benefit) for income taxes</b>	<b>11</b>	<b>—</b>	<b>—</b>	<b>800</b>	<b>—</b>	<b>811</b>
<b>Net income</b>	<b>2,675</b>	<b>(965)</b>	<b>2,790</b>	<b>2,547</b>	<b>(4,372)</b>	<b>2,675</b>
Other comprehensive (loss) income, net of tax	(587)	200	(587)	(587)	974	(587)
<b>Total comprehensive income (loss)</b>	<b>\$ 2,088</b>	<b>\$ (765)</b>	<b>\$ 2,203</b>	<b>\$ 1,960</b>	<b>\$ (3,398)</b>	<b>\$ 2,088</b>

Medtronic plc  
Notes to Consolidated Financial Statements (Continued)

Condensed Consolidating Balance Sheet  
April 28, 2017  
CIFSA Senior Notes

(in millions)	Medtronic plc	CIFSA	CIFSA Subsidiary Guarantors	Subsidiary Non- guarantors	Consolidating Adjustments	Total
<b>ASSETS</b>						
<b>Current assets:</b>						
Cash and cash equivalents	\$ —	\$ 33	\$ 5	\$ 4,929	\$ —	\$ 4,967
Investments	—	—	—	8,741	—	8,741
Accounts receivable, net	—	—	—	5,591	—	5,591
Inventories, net	—	—	—	3,338	—	3,338
Intercompany receivable	63	—	60	12	(135)	—
Prepaid expenses and other current assets	10	—	—	1,855	—	1,865
Current assets held for sale	—	—	—	371	—	371
<b>Total current assets</b>	<b>73</b>	<b>33</b>	<b>65</b>	<b>24,837</b>	<b>(135)</b>	<b>24,873</b>
Property, plant and equipment, net	—	—	—	4,361	—	4,361
Goodwill	—	—	—	38,515	—	38,515
Other intangible assets, net	—	—	—	23,407	—	23,407
Tax assets	—	—	—	1,509	—	1,509
Investment in subsidiaries	55,833	31,033	51,294	—	(138,160)	—
Intercompany loans receivable	3,000	2,978	17,383	17,260	(40,621)	—
Other assets	—	—	—	1,232	—	1,232
Noncurrent assets held for sale	—	—	—	5,919	—	5,919
<b>Total assets</b>	<b>\$ 58,906</b>	<b>\$ 34,044</b>	<b>\$ 68,742</b>	<b>\$ 117,040</b>	<b>\$ (178,916)</b>	<b>\$ 99,816</b>
<b>LIABILITIES AND EQUITY</b>						
<b>Current liabilities:</b>						
Current debt obligations	\$ —	\$ 1,176	\$ 901	\$ 5,443	\$ —	\$ 7,520
Accounts payable	—	—	—	1,731	—	1,731
Intercompany payable	12	—	—	123	(135)	—
Accrued compensation	9	—	—	1,851	—	1,860
Accrued income taxes	13	—	—	620	—	633
Other accrued expenses	—	23	8	2,411	—	2,442
Current liabilities held for sale	—	—	—	34	—	34
<b>Total current liabilities</b>	<b>34</b>	<b>1,199</b>	<b>909</b>	<b>12,213</b>	<b>(135)</b>	<b>14,220</b>
Long-term debt	—	2,133	1,842	21,946	—	25,921
Accrued compensation and retirement benefits	—	—	—	1,641	—	1,641
Accrued income taxes	10	—	—	2,395	—	2,405
Intercompany loans payable	8,568	1,369	17,161	13,523	(40,621)	—
Deferred tax liabilities	—	—	—	2,978	—	2,978
Other liabilities	—	—	—	1,515	—	1,515
Noncurrent liabilities held for sale	—	—	—	720	—	720
<b>Total liabilities</b>	<b>8,612</b>	<b>4,701</b>	<b>19,912</b>	<b>56,931</b>	<b>(40,756)</b>	<b>49,400</b>
Shareholders' equity	50,294	29,343	48,830	59,987	(138,160)	50,294
Noncontrolling interests	—	—	—	122	—	122
<b>Total equity</b>	<b>50,294</b>	<b>29,343</b>	<b>48,830</b>	<b>60,109</b>	<b>(138,160)</b>	<b>50,416</b>
<b>Total liabilities and equity</b>	<b>\$ 58,906</b>	<b>\$ 34,044</b>	<b>\$ 68,742</b>	<b>\$ 117,040</b>	<b>\$ (178,916)</b>	<b>\$ 99,816</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Condensed Consolidating Balance Sheet**  
**April 29, 2016**  
**CIFSA Senior Notes**

(in millions)	Medtronic plc	CIFSA	CIFSA Subsidiary Guarantors	Subsidiary Non- guarantors	Consolidating Adjustments	Total
<b>ASSETS</b>						
<b>Current assets:</b>						
Cash and cash equivalents	\$ —	\$ 208	\$ —	\$ 2,668	\$ —	\$ 2,876
Investments	—	—	—	9,758	—	9,758
Accounts receivable, net	—	—	—	5,562	—	5,562
Inventories, net	—	—	—	3,473	—	3,473
Intercompany receivable	403	—	61	—	(464)	—
Prepaid expenses and other current assets	24	—	—	1,907	—	1,931
<b>Total current assets</b>	<b>427</b>	<b>208</b>	<b>61</b>	<b>23,368</b>	<b>(464)</b>	<b>23,600</b>
Property, plant and equipment, net	—	—	1	4,840	—	4,841
Goodwill	—	—	—	41,500	—	41,500
Other intangible assets, net	—	—	—	26,899	—	26,899
Tax assets	—	—	—	1,383	—	1,383
Investment in subsidiaries	52,608	36,476	48,375	—	(137,459)	—
Intercompany loans receivable	3,000	8,253	11,465	27,724	(50,442)	—
Other assets	—	—	—	1,421	—	1,421
<b>Total assets</b>	<b>\$ 56,035</b>	<b>\$ 44,937</b>	<b>\$ 59,902</b>	<b>\$ 127,135</b>	<b>\$ (188,365)</b>	<b>\$ 99,644</b>
<b>LIABILITIES AND EQUITY</b>						
<b>Current liabilities:</b>						
Current debt obligations	\$ —	\$ —	\$ —	\$ 993	\$ —	\$ 993
Accounts payable	—	—	—	1,709	—	1,709
Intercompany payable	—	—	—	464	(464)	—
Accrued compensation	32	—	—	1,680	—	1,712
Accrued income taxes	11	—	—	555	—	566
Other accrued expenses	1	24	—	2,160	—	2,185
<b>Total current liabilities</b>	<b>44</b>	<b>24</b>	<b>—</b>	<b>7,561</b>	<b>(464)</b>	<b>7,165</b>
Long-term debt	—	3,382	—	26,727	—	30,109
Accrued compensation and retirement benefits	—	—	—	1,759	—	1,759
Accrued income taxes	10	—	—	2,893	—	2,903
Intercompany loans payable	3,918	14,689	14,298	17,537	(50,442)	—
Deferred tax liabilities	—	—	—	3,729	—	3,729
Other liabilities	—	—	—	1,916	—	1,916
<b>Total liabilities</b>	<b>3,972</b>	<b>18,095</b>	<b>14,298</b>	<b>62,122</b>	<b>(50,906)</b>	<b>47,581</b>
<b>Total equity</b>	<b>52,063</b>	<b>26,842</b>	<b>45,604</b>	<b>65,013</b>	<b>(137,459)</b>	<b>52,063</b>
<b>Total liabilities and equity</b>	<b>\$ 56,035</b>	<b>\$ 44,937</b>	<b>\$ 59,902</b>	<b>\$ 127,135</b>	<b>\$ (188,365)</b>	<b>\$ 99,644</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Condensed Consolidating Statement of Cash Flows**  
**Fiscal Year Ended April 28, 2017**  
**CIFSA Senior Notes**

(in millions)	Medtronic plc	CIFSA	CIFSA Subsidiary Guarantors	Subsidiary Non- guarantors	Consolidating Adjustments	Total
<b>Operating Activities:</b>						
Net cash provided by operating activities	\$ 842	\$ 1,904	\$ 302	\$ 5,829	\$ (1,997)	\$ 6,880
<b>Investing Activities:</b>						
Acquisitions, net of cash acquired	—	—	—	(1,324)	—	(1,324)
Additions to property, plant, and equipment	—	—	—	(1,254)	—	(1,254)
Purchases of investments	—	—	—	(4,371)	—	(4,371)
Sales and maturities of investments	—	—	—	5,356	—	5,356
Net (increase) decrease in intercompany loans receivable	—	5,275	(5,911)	3,956	(3,320)	—
Capital contributions paid	—	(537)	—	—	537	—
Other investing activities, net	—	—	—	22	—	22
Net cash (used in) provided by investing activities	—	4,738	(5,911)	2,385	(2,783)	(1,571)
<b>Financing Activities:</b>						
Acquisition-related contingent consideration	—	—	—	(69)	—	(69)
Change in current debt obligations, net	—	—	901	5	—	906
Repayment of short-term borrowings (maturities greater than 90 days)	—	—	—	(2)	—	(2)
Proceeds from short-term borrowings (maturities greater than 90 days)	—	—	—	12	—	12
Issuance of long-term debt	—	—	1,850	290	—	2,140
Payments on long-term debt	—	—	—	(863)	—	(863)
Dividends to shareholders	(2,376)	—	—	—	—	(2,376)
Issuance of ordinary shares	428	—	—	—	—	428
Repurchase of ordinary shares	(3,544)	—	—	—	—	(3,544)
Net intercompany loan borrowings (repayments)	4,650	(6,817)	2,863	(4,016)	3,320	—
Intercompany dividend paid	—	—	—	(1,997)	1,997	—
Capital contributions received	—	—	—	537	(537)	—
Other financing activities	—	—	—	85	—	85
Net cash (used in) provided by financing activities	(842)	(6,817)	5,614	(6,018)	4,780	(3,283)
Effect of exchange rate changes on cash and cash equivalents	—	—	—	65	—	65
<b>Net change in cash and cash equivalents</b>	<b>—</b>	<b>(175)</b>	<b>5</b>	<b>2,261</b>	<b>—</b>	<b>2,091</b>
Cash and cash equivalents at beginning of period	—	208	—	2,668	—	2,876
<b>Cash and cash equivalents at end of period</b>	<b>\$ —</b>	<b>\$ 33</b>	<b>\$ 5</b>	<b>\$ 4,929</b>	<b>\$ —</b>	<b>\$ 4,967</b>

**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Condensed Consolidating Statement of Cash Flows**  
**Fiscal Year Ended April 29, 2016**  
**CIFSA Senior Notes**

(in millions)	Medtronic plc	CIFSA	CIFSA Subsidiary Guarantors	Subsidiary Non- guarantors	Consolidating Adjustments	Total
<b>Operating Activities:</b>						
Net cash provided by operating activities	\$ 297	\$ 4,208	\$ 604	\$ 4,114	\$ (4,005)	\$ 5,218
<b>Investing Activities:</b>						
Acquisitions, net of cash acquired	—	—	—	(1,266)	53	(1,213)
Additions to property, plant, and equipment	—	—	—	(1,046)	—	(1,046)
Purchases of investments	—	—	—	(5,406)	—	(5,406)
Sales and maturities of investments	—	—	—	9,924	—	9,924
Net (increase) decrease in intercompany loans receivable	—	(8,193)	(164)	(3,302)	11,659	—
Sale of subsidiaries	—	—	53	—	(53)	—
Capital contributions paid	—	(720)	(4,959)	—	5,679	—
Other investing activities, net	—	—	—	(14)	—	(14)
Net cash (used in) provided by investing activities	—	(8,913)	(5,070)	(1,110)	17,338	2,245
<b>Financing Activities:</b>						
Acquisition-related contingent consideration	—	—	—	(22)	—	(22)
Change in current debt obligations, net	—	—	—	7	—	7
Repayment of short-term borrowings (maturities greater than 90 days)	—	—	(139)	—	—	(139)
Proceeds from short-term borrowings (maturities greater than 90 days)	—	—	139	—	—	139
Payments on long-term debt	—	(2,121)	—	(3,011)	—	(5,132)
Dividends to shareholders	(2,139)	—	—	—	—	(2,139)
Issuance of ordinary shares	491	—	—	—	—	491
Repurchase of ordinary shares	(2,830)	—	—	—	—	(2,830)
Net intercompany loan borrowings (repayments)	3,918	6,306	4,296	(2,861)	(11,659)	—
Intercompany dividend paid	—	—	—	(4,005)	4,005	—
Capital contributions received	—	—	—	5,679	(5,679)	—
Other financing activities	—	—	—	82	—	82
Net cash (used in) provided by financing activities	(560)	4,185	4,296	(4,131)	(13,333)	(9,543)
Effect of exchange rate changes on cash and cash equivalents	—	—	—	113	—	113
<b>Net change in cash and cash equivalents</b>	<b>(263)</b>	<b>(520)</b>	<b>(170)</b>	<b>(1,014)</b>	<b>—</b>	<b>(1,967)</b>
Cash and cash equivalents at beginning of period	263	728	170	3,682	—	4,843
<b>Cash and cash equivalents at end of period</b>	<b>\$ —</b>	<b>\$ 208</b>	<b>\$ —</b>	<b>\$ 2,668</b>	<b>\$ —</b>	<b>\$ 2,876</b>



**Medtronic plc**  
**Notes to Consolidated Financial Statements (Continued)**

**Condensed Consolidating Statement of Cash Flows**  
**Fiscal Year Ended April 24, 2015**  
**CIFSA Senior Notes**

(in millions)	Medtronic plc	CIFSA	CIFSA Subsidiary Guarantors	Subsidiary Non- guarantors	Consolidating Adjustments	Total
<b>Operating Activities:</b>						
Net cash provided by operating activities	\$ 26	\$ 1,238	\$ 142	\$ 4,596	\$ (1,100)	\$ 4,902
<b>Investing Activities:</b>						
Acquisitions, net of cash acquired	(9,700)	440	—	(5,624)	—	(14,884)
Additions to property, plant, and equipment	—	—	(1)	(570)	—	(571)
Purchases of investments	—	—	—	(7,582)	—	(7,582)
Sales and maturities of investments	—	—	—	5,890	—	5,890
Net (increase) decrease in intercompany loans receivable	—	(59)	29	(10,626)	10,656	—
Capital contributions paid	—	(937)	—	—	937	—
Other investing activities, net	—	—	—	89	—	89
<b>Net cash (used in) provided by investing activities</b>	<b>(9,700)</b>	<b>(556)</b>	<b>28</b>	<b>(18,423)</b>	<b>11,593</b>	<b>(17,058)</b>
<b>Financing Activities:</b>						
Acquisition-related contingent consideration	—	—	—	(85)	—	(85)
Change in current debt obligations, net	—	—	—	(1)	—	(1)
Repayment of short-term borrowings (maturities greater than 90 days)	—	—	(150)	—	—	(150)
Proceeds from short-term borrowings (maturities greater than 90 days)	—	—	150	—	—	150
Issuance of long-term debt	—	—	—	19,942	—	19,942
Payments on long-term debt	—	(51)	—	(1,217)	—	(1,268)
Dividends to shareholders	(435)	—	—	(902)	—	(1,337)
Issuance of ordinary shares	172	—	—	477	—	649
Repurchase of ordinary shares	(300)	—	—	(1,620)	—	(1,920)
Net intercompany loan borrowings (repayments)	10,500	97	—	59	(10,656)	—
Intercompany dividend paid	—	—	—	(1,100)	1,100	—
Capital contributions received	—	—	—	937	(937)	—
Other financing activities	—	—	—	(31)	—	(31)
<b>Net cash (used in) provided by financing activities</b>	<b>9,937</b>	<b>46</b>	<b>—</b>	<b>16,459</b>	<b>(10,493)</b>	<b>15,949</b>
Effect of exchange rate changes on cash and cash equivalents	—	—	—	(353)	—	(353)
<b>Net change in cash and cash equivalents</b>	<b>263</b>	<b>728</b>	<b>170</b>	<b>2,279</b>	<b>—</b>	<b>3,440</b>
Cash and cash equivalents at beginning of period	—	—	—	1,403	—	1,403
<b>Cash and cash equivalents at end of period</b>	<b>\$ 263</b>	<b>\$ 728</b>	<b>\$ 170</b>	<b>\$ 3,682</b>	<b>\$ —</b>	<b>\$ 4,843</b>

## **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 at April 28, 2017. Our internal control over financial reporting at April 28, 2017, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm who has also audited our consolidated financial statements, as stated in their report in the section entitled "Report of Independent Registered Public Accounting Firm," which expresses an unqualified opinion on the effectiveness of the Company's internal control over financial reporting at April 28, 2017, 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**

The Company is deploying an enterprise resource planning (ERP) software program, SAP, to the Minimally Invasive Therapies Group. During fiscal year 2017, Medtronic continued the deployment of this software along with other enterprise systems, which resulted in a material change to the internal controls over financial reporting for the Minimally Invasive Therapies Group. The internal controls were updated to reflect these changes. These system deployments will continue with projected completion in fiscal year 2020. There have been no other changes in our internal control over financial reporting (as defined in Rules 13a-15(f) under the Exchange Act) during the period covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

### **Item 9B. Other Information**

None.

## PART III

Part III of this Annual Report on Form 10-K incorporates information by reference from the Company's 2017 definitive proxy statement, which will be filed no later than 120 days after April 28, 2017.

### **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 — Section 16(a) Beneficial Ownership Reporting Compliance” in the Company's Proxy Statement for our 2017 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 28, 2017, are incorporated herein by reference. See also “Executive Officers of Medtronic” herein.

Medtronic has adopted a written Code of Ethics that applies to the Company's Chief Executive Officer, Chief Financial Officer, Corporate Treasurer, Corporate Controller, and other senior financial officers performing similar functions who are identified from time to time by the Chief Executive Officer. The Company has also adopted a written Code of Business Conduct and Ethics for Members of the Board of Directors. The Code of Ethics for Senior Financial Officers, which is part of our broader Code of Conduct applicable to all employees, and the Code of Business Conduct and Ethics for Members of the Board of Directors are posted on Medtronic's website, [www.medtronic.com](http://www.medtronic.com), under the "About Medtronic" menu, under the “Investors” caption, and under the “Corporate Governance” subcaption. Any amendments to, or waivers for, executive officers or directors of, these ethics codes will be disclosed on the Company's website promptly following the date of such amendment or waiver.

### **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 2017 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 28, 2017, are incorporated herein by reference. The section entitled “Compensation Committee Report” in Medtronic's Proxy Statement for the Company's 2017 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 28, 2017, 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 2017 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 28, 2017, 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 2017 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 28, 2017, 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 2017 Annual General Meeting of Shareholders, which will be filed no later than 120 days after April 28, 2017, 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 28, 2017, April 29, 2016, and April 24, 2015.

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**

<b>Exhibit No.</b>	<b>Description</b>
2.1	Transaction Agreement, dated as of June 15, 2014, among Medtronic, Inc., Covidien plc, Medtronic plc (formerly known as Kalani I Limited), Makani II Limited, Aviation Acquisition Co., Inc., and Aviation Merger Sub, LLC (incorporated by reference to Exhibit 2.1 to Medtronic plc's Amendment No. 5 to the Registration Statement on Form S-4, filed on November 20, 2014, File No. 333-197406).
2.2	Appendix III to the Rule 2.5 Announcement (Conditions Appendix) (incorporated by reference to Exhibit 2.2 to Medtronic, Inc.'s Current Report on Form 8-K, filed on June 16, 2014, File No. 001-07707).
2.3	Expenses Reimbursement Agreement, dated as of June 15, 2014, by and between Covidien plc and Medtronic, Inc. (incorporated by reference to Exhibit 2.3 to Medtronic, Inc.'s Current Report on Form 8-K, filed on June 16, 2014, File No. 001-07707).
2.4	Separation and Distribution Agreement, dated as of June 29, 2007, by and among Tyco International Ltd., Covidien Ltd. and Tyco Electronics Ltd. (incorporated by reference to Exhibit 2.1 to Covidien plc's Current Report on Form 8-K, filed on July 5, 2007, File No. 001-33259).
2.5	Separation and Distribution Agreement, dated as of June 28, 2013, between Covidien plc and Mallinckrodt plc (incorporated by reference to Exhibit 2.1 to Covidien plc's Current Report on Form 8-K filed on July 1, 2013, File No. 001-33259).
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 (incorporated by reference to Exhibit 4.1 to Medtronic, Inc.'s Amendment No. 2 to the Registration Statement on Form S-4, filed on January 10, 2005, File No. 333-121239).
4.2	Indenture, dated as of September 15, 2005, between Medtronic, Inc. and Wells Fargo Bank, N. A. (including the Forms of Notes thereof) (incorporated by reference to Exhibit 4.1 to Medtronic, Inc.'s Registration Statement on Form S-4, filed December 6, 2005, File No. 333-130163).
4.3	First 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 4.1 to Medtronic plc's Current Report on Form 8-K12B, filed on January 27, 2015, File No. 001-36820).
4.4	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).
4.5	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).
4.6	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).

- 4.7 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).
- 4.8 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).
- 4.9 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).
- 4.10 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).
- 4.11 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).
- 4.12 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).
- 4.13 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).
- 4.14 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).
- 4.15 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).
- 4.16 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).
- 4.17 First 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(b) to the Covidien plc's Current Report on Form 8-K filed on October 22, 2007, File No. 001-33259).
- 4.18 Second 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(c) to the Covidien plc's Current Report on Form 8-K filed on October 22, 2007, File No. 001-33259).
- 4.19 Third 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(d) to Covidien plc's Current Report on Form 8-K filed on October 22, 2007, File No. 001-33259).
- 4.20 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).

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- 4.21 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).
- 4.22 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).
- 4.23 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).
- 4.24 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).
- 4.25 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).
- 4.26 Registration Rights Agreement, dated December 10, 2014, by and among Medtronic, Inc. and Merrill Lynch, Pierce, Fenner & Smith Incorporated, Deutsche Bank Securities Inc. and J.P. Morgan Securities LLC, as representatives of the several initial purchasers (incorporated by reference to Exhibit 4.10 to Medtronic, Inc.'s Current Report on Form 8-K filed with the Commission on December 10, 2014, File No. 001-07707)
- 4.27 Joinder Agreement to the Registration Rights Agreement, dated as of January 26, 2015, by and among Medtronic plc and Medtronic Global Holdings S.C.A. (incorporated by reference to Exhibit 4.6 to Medtronic plc's Current Report on Form 8-K12B, filed on January 27, 2015, File No. 001-36820).
- 4.28 Form of Senior Indenture by and among Medtronic plc, Medtronic Global Holdings S.C.A., Medtronic, Inc., and the trustee (incorporated by reference to Exhibit 4.1 to Medtronic plc's Registration Statement on Form S-3, filed on February 6, 2017, File No. 333-215895).
- 4.29 Form of Junior Indenture by and among Medtronic plc, Medtronic Global Holdings S.C.A., Medtronic, Inc., and the trustee (incorporated by reference to Exhibit 4.3 to Medtronic plc's Registration Statement on Form S-3, filed on February 6, 2017, File No. 333-215895).
- 4.30 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).
- 4.31 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).
- 10.1 Senior Unsecured Term Loan Credit Agreement, dated as of November 7, 2014, by and among Medtronic, Inc., Medtronic Holdings Limited, Medtronic Global Holdings SCA, the lenders from time to time party thereto and Bank of America, N.A., as administrative agent (incorporated by reference to Exhibit 10.2 to Medtronic Inc.'s Current Report on Form 8-K, filed on November 10, 2014, File No. 001-07707).
- 10.2 Amendment and Restatement Agreement, dated as of November 7, 2014, by and among Medtronic, Inc., Medtronic plc (formerly known as Medtronic Holdings Limited), Medtronic Global Holdings S.C.A., the lenders from time to time party thereto, and Bank of America, N.A., as administrative agent and issuing bank (incorporated by reference to Exhibit 10.3 to Medtronic, Inc.'s Current Report on Form 8-K, filed on November 10, 2014, File No. 001-07707).

- 10.3 Senior Unsecured Bridge Credit Agreement, dated as of November 7, 2014, by and among Medtronic, Inc., Medtronic Holdings Limited, Medtronic Global Holdings SCA, the lenders from time to time party thereto, and Bank of America, N.A., as administrative agent (incorporated by reference to Exhibit 10.1 to Medtronic, Inc.'s Current Report on Form 8-K, filed on November 10, 2014, File No. 001-07707).
- 10.4 Senior Unsecured Bridge Credit Agreement, dated as of June 15, 2014, by and among Medtronic, Inc., Kalani I Limited, the lenders from time to time party thereto, and Bank of America, N.A., as administrative agent (incorporated by reference to Exhibit 10.1 to Medtronic, Inc.'s Current Report on Form 8-K, filed on June 18, 2014, File No. 001-07707).
- 10.5 Senior Unsecured Cash Bridge Credit Agreement, dated as of June 15, 2014, by and among Makani II Limited, Kalani I Limited, the lenders from time to time party thereto, and Bank of America, N.A., as administrative agent (incorporated by reference to Exhibit 10.2 to Medtronic, Inc.'s Current Report on Form 8-K, filed on June 18, 2014, File No. 001-07707).
- 10.6 Amendment dated September 30, 2015, to Senior Unsecured Term Loan Credit Agreement, dated as of November 7, 2014, by and among Medtronic, Inc., Medtronic Holdings Limited, Medtronic Global Holdings, SCA, the lenders from time to time party thereto, and Bank of America, N.A., as administrative agent. (incorporated by reference to Exhibit 10.1 to Medtronic plc's Form 10-Q for the quarter ended October 30, 2015, filed on December 9, 2015, File No. 001-36820).
- 10.7 Amendment dated September 30, 2015, to Amended and Restated Revolving Credit Agreement, dated as of November 7, 2014, by and among Medtronic, Inc., Medtronic Holdings Limited, Medtronic Global Holdings, SCA, the lenders from time to time party thereto, and Bank of America, N.A., as administrative agent and issuing bank (incorporated by reference to Exhibit 10.2 to Medtronic plc's Form 10-Q for the quarter ended October 30, 2015, filed on December 9, 2015, File No. 001-36820).
- 10.8 Amended and Restated Five-Year Senior Credit Agreement, dated as of May 23, 2014, among Covidien International Finance S.A., Covidien plc, the lenders party thereto and Citibank, N.A., as administrative agent (incorporated by reference to Exhibit 10.1 to Covidien plc's Current Report on Form 8-K, filed on May 28, 2014, File No. 001-33259).
- 10.9 Tax Sharing Agreement, dated as of June 29, 2007, by and among Tyco International Ltd., Covidien Ltd. and Tyco Electronics Ltd. (incorporated by reference to Exhibit 10.1 to Covidien plc's Current Report on Form 8-K, filed on July 5, 2007, File No. 001-33259).
- 10.10 Tax Matters Agreement, dated as of June 28, 2013, between Covidien plc and Mallinckrodt plc (incorporated by reference to Exhibit 10.1 to Covidien plc's Current Report on Form 8-K filed on July 1, 2013, File No. 001-33259).
- 10.11 Employee Matters Agreement, dated as of June 28, 2013, between Covidien plc and Mallinckrodt plc (incorporated by reference to Exhibit 10.2 to Covidien plc's Current Report on Form 8-K filed on July 1, 2013, File No. 001-33259).
- 10.12 Transition Services Agreement, dated as of June 28, 2013, between Covidien plc and Mallinckrodt plc (incorporated by reference to Exhibit 10.3 to Covidien plc's Current Report on Form 8-K filed on July 1, 2013, File No. 001-33259).
- 10.13 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).
- 10.14 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).
- \*10.15 Letter Agreement by and between Medtronic, Inc. and Omar Ishrak dated May 11, 2011 (incorporated by reference to Exhibit 10.1 to Medtronic, Inc.'s Current Report on Form 8-K, filed on May 11, 2011, File No. 001-07707).
- \*10.16 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).
- \*10.17 Amendment to Letter Agreement dated May 11, 2011 by and between Medtronic, Inc. and Omar Ishrak (incorporated by reference to Exhibit 10.1 to Medtronic, Inc.'s Quarterly Report on Form 10-Q for the quarter ended July 29, 2011, filed September 7, 2011, File No. 001-07707).

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- \*10.18 Amendment dated February 12, 2015 to the Letter Agreement by and between Medtronic, Inc. and Omar Ishrak dated May 11, 2011 (incorporated by reference to Exhibit 10.24 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).
- \*10.19 Letter Agreement by and between Medtronic, Inc. and Michael J. Coyle dated November 19, 2009 (incorporated by reference to Exhibit 10.55 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).
- \*10.20 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).
- \*10.21 Letter Agreement by and between Medtronic, Inc. and Hooman Hakami dated April 29, 2014 (incorporated by reference to Exhibit 10.5 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).
- \*10.22 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).
- \*10.23 Letter Agreement by and between Medtronic plc and Bryan C. Hanson dated February 12, 2015 (incorporated by reference to Exhibit 10.30 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).
- \*10.24 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).
- \*10.25 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).
- \*10.26 1994 Stock Award Plan (amended and restated as of January 1, 2008) (incorporated by reference to Exhibit 10.1 of 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).
- \*10.27 Amendment to the 1994 Stock Award Plan (incorporated by reference to Exhibit 10.7 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
- \*10.28 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 Current Report on Form 8-K, filed on February 27, 2014, File No. 001-07707).
- \*10.29 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).
- \*10.30 Form of Initial Option Agreement under the 1998 Outside Director Stock Compensation Plan (incorporated by reference to Exhibit 10.17 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 29, 2005, filed June 29, 2005, File No. 001-07707).
- \*10.31 Form of Annual Option Agreement under the 1998 Outside Director Stock Compensation Plan (incorporated by reference to Exhibit 10.18 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 29, 2005, filed June 29, 2005, File No. 001-07707).
- \*10.32 Form of Replacement Option Agreement under the 1998 Outside Director Stock Compensation Plan (incorporated by reference to Exhibit 10.19 to Medtronic, Inc.'s Annual Report on Form 10-K for the year ended April 29, 2005, filed June 29, 2005, File No. 001-07707).
- \*10.33 Kyphon Inc. 2002 Stock Plan (amended and restated July 26, 2007, as further amended on October 18, 2007) (incorporated by reference to Exhibit 10.6 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).
- \*10.34 Addendum: Kyphon Inc. 2002 Stock Plan (dated December 13, 2007) (incorporated by reference to Exhibit 10.7 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).
- \*10.35 Amendment to the Kyphon Inc. 2002 Stock Plan (incorporated by reference to Exhibit 10.1 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).



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- \*10.36 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).
- \*10.37 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).
- \*10.38 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).
- \*10.39 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).
- \*10.40 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).
- \*10.41 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).
- \*10.42 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).
- \*10.43 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).
- \*10.44 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).
- \*10.45 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).
- \*10.46 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).
- \*10.47 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).
- \*10.48 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).
- \*10.49 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).
- \*10.50 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).
- \*10.51 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).
- \*10.52 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).
- \*10.53 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).

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- \*10.54 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).
- \*10.55 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).
- \*10.56 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).
- \*10.57 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).
- \*10.58 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).
- \*10.59 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).
- \*10.60 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).
- \*10.61 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).
- \*10.62 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).
- \*10.63 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).
- \*10.64 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).
- \*10.65 Medtronic Incentive Plan (amended and restated effective January 1, 2008) (incorporated by reference to Exhibit 10.2 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).
- \*10.66 Amended and Restated 2013 Stock Award and Incentive Plan (incorporated by reference to Exhibit 10.9 to Medtronic plc's Current Report on Form 8-K, filed on January 27, 2015, File No. 001-36820).
- \*10.67 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).
- \*10.68 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).
- \*10.69 Form of Non-Employee Director Deferred Unit Award Agreement under the 2008 Stock Award and Incentive Plan (incorporated by reference to Exhibit 19.3 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).
- \*10.70 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).

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- \*10.71 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).
- \*10.72 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).
- \*10.73 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).
- \*10.74 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).
- \*10.75 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).
- \*10.76 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).
- \*10.77 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).
- \*10.78 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).
- \*10.79 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).
- \*10.80 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).
- \*10.81 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).
- \*10.82 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).
- \*10.83 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).
- \*10.84 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).
- \*10.85 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).
- \*10.86 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).

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- \*10.87 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).
- \*10.88 Covidien Savings Related Share Plan (incorporated by reference to Exhibit 99.3 to Covidien plc's Post-Effective Amendment No. 1 to Registration Statement on Form S-8 filed with the Commission on June 5, 2009, File No. 333-144309).
- \*10.89 Covidien Stock and Incentive Plan (incorporated by reference to Exhibit 10.5 to Covidien plc's Current Report on Form 8-K filed on March 26, 2013, File No. 001-33259).
- \*10.90 Covidien Separation and Distribution Agreement Equity Awards under the Separation and Distribution Agreement, dates as of June 29, 2007, by and among Tyco International Ltd., Covidien Ltd., and Tyco Electronics Ltd. (incorporated by reference to Exhibit 2.1 to Covidien plc's Current Report on Form 8-K filed on July 5, 2007, File No. 001-33259).
- \*10.91 Covidien Severance Plan for U.S. Officers and Executives, as amended and restated (incorporated by reference to Exhibit 10.1 to Covidien plc's Current Report on Form 8-K filed on September 23, 2014, File No. 001-33259).
- \*10.92 Covidien Change in Control Severance Plan for Certain U.S. Officers and Executives (incorporated by reference to Exhibit 10.1 to Covidien plc's Current Report on Form 8-K filed on March 26, 2013, File No. 001-33259).
- \*10.93 Covidien Supplemental Savings and Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.1 to Covidien plc's Quarterly Report on Form 10-Q for the quarter ended December 25, 2009, filed on January 26, 2010, File No. 001-33259).
- \*10.94 Form of Non-Competition, Non-Solicitation and Confidentiality Agreement for executive officers and certain key employees (incorporated by reference to Exhibit 10.4 to Covidien plc's Quarterly Report on Form 10-Q for the quarter ended December 26, 2008, filed on January 29, 2009, File No. 001-33259).
- \*10.95 FY09 Grant U.S. Option Terms and Conditions (incorporated by reference to Exhibit 10.3 to Covidien plc's Current Report on Form 8-K filed on September 23, 2014, File No. 001-33259).
- \*10.96 FY09 Grant U.S. Restricted Stock Unit Terms and Conditions (incorporated by reference to Exhibit 10.2 to Covidien plc's Current Report on Form 8-K filed on November 25, 2008, File No. 001-33259).
- \*10.97 Deed Poll of Assumption relating to Covidien Ltd. Employee Equity Plans, dated June 4, 2009 (incorporated by reference to Exhibit 10.3 to Covidien plc's Current Report on Form 8-K filed on June 5, 2009, File No. 001-33259).
- \*10.98 Director Grant Restricted Stock Unit Terms and Conditions (incorporated by reference to Exhibit 10.2 to Covidien plc's Current Report on Form 8-K filed on March 23, 2009, File No. 001-33259).
- \*10.99 Founders' Grant Standard Option Terms and Conditions (incorporated by reference to Exhibit 10.4 to Covidien plc's Current Report on Form 8-K filed on September 23, 2014, File No. 001-33259).
- \*10.100 Founders' Grant Standard Option Terms and Conditions for Directors (incorporated by reference to Exhibit 10.13 to Covidien plc's Current Report on Form 8-K filed on July 5, 2007, File No. 001-33259).
- \*10.101 Form of Deed of Indemnification by and between Covidien plc and Covidien plc's Directors and Secretary (incorporated by reference to Exhibit 10.4 to Covidien plc's Form 10-Q for the quarter ended June 28, 2013, filed on August 5, 2013, File No. 001-33259).
- \*10.102 Form of Terms and Conditions of Option Award (incorporated by reference to Exhibit 10.2 to Covidien plc's Current Report on Form 8-K filed on September 23, 2014, File No. 001-33259).
- \*10.103 Form of Terms and Conditions of Restricted Unit Award (incorporated by reference to Exhibit 10.3 to Covidien plc's Quarterly Report on Form 10-Q for the quarter ended December 25, 2009, filed on January 26, 2010, File No. 001-33259).
- \*10.104 Form of Terms and Conditions of Performance Unit Award (incorporated by reference to Exhibit 10.4 to Covidien plc's Quarterly Report on Form 10-Q for the quarter ended December 25, 2009, filed on January 26, 2010, File No. 001-33259).

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*10.105	Amended Terms and Conditions of Performance Unit Awards FY12-FY14 (incorporated by reference to Exhibit 10.3 to Covidien plc's Current Report on Form 8-K filed on March 26, 2013, File No. 001-33259).
*10.106	Amended Terms and Conditions of Performance Unit Awards FY13-FY15 (incorporated by reference to Exhibit 10.4 to Covidien plc's Current Report on Form 8-K filed on March 26, 2013, File No. 001-33259).
*10.107	Form of Indemnification Agreement between Covidien Ltd. and Covidien plc's Directors and Secretary (incorporated by reference to Exhibit 10.5 to Covidien plc's Form 10-Q for the quarter ended June 28, 2013, filed on August 5, 2013, File No. 001-33259).
*10.108	Consulting Agreement, dated as of December 15, 2016, by and between Medtronic plc and Gary Ellis (incorporated by reference to Exhibit 10.1 to Medtronic plc's Quarterly Report on Form 10-Q for the quarter ended January 27, 2017, filed on March 3, 2017, File No. 001-001-36820).
*10.109	Form of Restricted Stock Award Agreement under Amended and Restated 2013 Stock Award and Incentive Plan.#
12.1	Computation of Ratio of Earnings to Fixed Charges.
21	List of Subsidiaries of Medtronic plc.
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	The following materials from Medtronic plc's Annual Report on Form 10-K for the year ended April 28, 2017, formatted in Extensible Business Reporting Language (XBRL): (i) consolidated statements of income, (ii) consolidated statements of comprehensive income, (iii) consolidated balance sheets, (iv) consolidated statements of cash flows, (v) consolidated statements of shareholders' equity, and (vi) the notes to the consolidated financial statements.

\*Exhibits that are management contracts or compensatory plans or arrangements.

#Filed herewith.

**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		
<b>Allowance for doubtful accounts:</b>						
Year ended 4/28/17	\$ 161	\$ 39	\$ —	\$ (46)	(b)	\$ 155
				\$ 1	(c)	
Year ended 4/29/16	\$ 144	\$ 49	\$ —	\$ (28)	(b)	\$ 161
				\$ (4)	(c)	
Year ended 4/24/15	\$ 115	\$ 35	\$ 34	(a) \$ (36)	(b)	\$ 144
				\$ (4)	(c)	
<b>Deferred tax valuation allowance:</b>						
Year ended 4/28/17	\$ 7,032	\$ 101	\$ 6	(a) \$ (524)	(d)	\$ 6,311
				\$ (304)	(c)	
Year ended 4/29/16	\$ 5,607	\$ 1,194	\$ 4	(a) \$ (88)	(d)	\$ 7,032
				\$ 315	(c)	
Year ended 4/24/15	\$ 397	\$ 40	\$ 5,660	(a) \$ (56)	(d)	\$ 5,607
				\$ (434)	(c)	

(a) Reflects the impact from acquisitions.

(b) Uncollectible accounts written off, less recoveries.

(c) Reflects primarily the effects of currency fluctuations.

(d) Decrease in deferred tax valuation allowance due to carryover attribute utilization and expiration.

**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 PUBLIC LIMITED COMPANY**

Dated: June 27, 2017

By: /s/ Omar Ishrak  
**Omar Ishrak**  
**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 PUBLIC LIMITED COMPANY**

Dated: June 27, 2017

By: /s/ Omar Ishrak  
**Omar Ishrak**  
**Chairman and**  
**Chief Executive Officer**  
**(Principal Executive Officer)**

Dated: June 27, 2017

By: /s/ Karen L. Parkhill  
**Karen L. Parkhill**  
**Executive Vice President and**  
**Chief Financial Officer**  
**(Principal Financial and**  
**Accounting Officer)**

**Directors**

**Richard H. Anderson\***  
**Craig Arnold\***  
**Scott C. Donnelly\***  
**Randall J. Hogan, III\***  
**Omar Ishrak\***  
**Shirley Ann Jackson, Ph.D\***  
**Michael O. Leavitt\***  
**James T. Lenehan\***  
**Elizabeth G. Nabel\***  
**Denise M. O'Leary\***  
**Kendall J. Powell\***  
**Robert C. Pozen\***

\*Bradley E. Lerman, 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 27, 2017

By: /s/ Bradley E. Lerman  
**Bradley E. Lerman**

## MEDTRONIC plc

## RESTRICTED STOCK UNIT AWARD AGREEMENT

## AMENDED AND RESTATED 2013 STOCK AWARD AND INCENTIVE PLAN

1. **Restricted Stock Units Award.** Medtronic plc, an Irish public limited company (the “Company”), hereby awards to the individual named above Restricted Stock Units, in the number and on the Grant Date as each is set forth above. The Restricted Stock Units represent the right to receive ordinary shares of the Company, par value \$0.0001 per share (the “Shares”), subject to the restrictions, limitations, and conditions contained in this Restricted Stock Unit Award Agreement (the “Agreement”) and in the Medtronic plc Amended and Restated 2013 Stock Award and Incentive Plan (the “Plan”). Unless otherwise defined in the Agreement, a capitalized term in the Agreement will have the same meaning as in the Plan. In the event of any inconsistency between the terms of the Agreement and the Plan, the terms of the Plan will govern.
2. **Vesting & Distribution.** The Restricted Stock Units will vest ratably on the first, second, third and fourth anniversaries of the Grant Date. The Company will issue to you a number of Shares equal to the number of your vested Restricted Stock Units (including any dividend equivalents described in Section 5, below) within six weeks following each applicable vesting date, provided that you have not incurred a Termination of Employment prior to such vesting date (the “Restricted Period”). Notwithstanding the preceding sentence, if you incur a Termination of Employment during the Restricted Period as a result of your death, Disability or Retirement, you will vest in the next tranche of your Restricted Stock Units on a pro rata basis (based on the length of time you were employed during the applicable portion of the Restricted Period), and the Company will issue you a number of Shares equal to the number of your vested Restricted Stock Units (including any dividend equivalents described in Section 5, below) within six weeks following your separation from service. Any portion of the Restricted Stock Units that does not vest in accordance with the foregoing will automatically be forfeited and canceled by the Company as of 11:00 p.m. CT (midnight ET) on the date of such Termination of Employment. Upon your Termination of Employment during the Restricted Period for any reason other than death, Disability or Retirement, the Restricted Stock Units will automatically be forfeited in full and canceled by the Company as of 11:00 p.m. CT (midnight ET) on the date of such Termination of Employment. For purposes of this Agreement, the terms “Disability” and “Retirement” shall have the meanings ascribed to those terms, as of the date of this Agreement, under any retirement plan of the Company which is qualified under Section 401 of the Code (which currently provides for retirement on or after age 55, provided you have been employed by the Company and/or one or more Affiliates for at least ten years, or retirement on or after age 62), or under any disability or retirement plan of the Company or any Affiliate applicable to you due to employment by a non-U.S. Affiliate or employment in a non-U.S. location.
3. **Forfeiture.** If you have received or are entitled to receive delivery of Shares as a result of this Agreement within the period beginning six months prior to the date of your Termination of Employment and ending twelve months following the date of your Termination of Employment, the Company, in its sole discretion, may require you to return or forfeit the cash and/or Shares received or receivable with respect to this Restricted Stock Units award, in the event that you engage in any of the following activities:
  - a. performing services for or on behalf of any competitor of, or competing with, the Company or any Affiliate, within six months of the date of your Termination of Employment;
  - b. unauthorized disclosure of material proprietary information of the Company or any Affiliate;
  - c. a violation of applicable business ethics policies or business policies of the Company or any Affiliate; or
  - d. any other occurrence determined by the Committee.

The Company’s right to require forfeiture must be exercised not later than 90 days after the Company acquires actual knowledge of such an activity but in no event later than twelve months after your Termination of Employment. Such right shall be deemed to be exercised upon the Company’s mailing written notice of such exercise to your most recent home address as shown on the personnel records of the Company. In addition to requiring forfeiture as described herein, the Company may exercise its rights under this Section 3 by terminating the Restricted Stock Units awarded under this Agreement.

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If you fail or refuse to forfeit the cash and/or shares of Common Stock demanded by the Company (the number of such shares of Common Stock as may be adjusted for any events described in Section 3.4 of the Plan), you shall be liable to the Company for damages equal to the number of Shares demanded times the highest closing price per share of the Common Stock during the period between the date of your Termination of Employment and the date of any judgment or award to the Company, together with all costs and attorneys' fees incurred by the Company to enforce this provision.

For purposes of this Section 3, forfeiture of Common Stock shall be effected by the redemption of such Common Stock in accordance with the Articles of Association of the Company and to the extent permissible under applicable law.

Notwithstanding the foregoing, this Section 3 shall have no application following a Change of Control, nor shall the Company's Incentive Compensation Forfeiture Policy apply following a Change of Control to the Restricted Stock Units awarded pursuant to this Agreement or to any proceeds in respect of such award.

4. **Change of Control.** Notwithstanding anything in Section 2 of this Agreement to the contrary, if a Change of Control of the Company occurs during the Restricted Period, then the Restricted Stock Units will become 100% vested upon such Change of Control, and the Company will issue to you a number of Shares equal to the number of Restricted Stock Units (including any dividend equivalents described in Section 5, below) within six weeks following the Change of Control, provided that no such vesting or issuance shall occur if the Restricted Stock Units are replaced or continued by a Replacement Award that satisfies the requirements of Section 10.1(b) of the Plan. In the event that the Restricted Stock Units are replaced by a Replacement Award and you incur a Termination of Employment during the two years following a Change of Control by the Company without Cause or by you for Good Reason, such Replacement Award shall vest in full and be settled within six weeks following your Termination of Employment.
  5. **Dividend Equivalents.** You are entitled to receive dividend equivalents on the Restricted Stock Units generally in the same manner and at the same time as if each Restricted Stock Unit were a Share. These dividend equivalents will be credited to you in the form of additional Restricted Stock Units. The additional Restricted Stock Units will be subject to the terms of this Agreement.
  6. **Withhold Taxes.** You are responsible to promptly pay any Social Security and Medicare taxes (together, "FICA") due upon vesting of the Restricted Stock Units, and any Federal, State, and local taxes due upon distribution of the Shares. The Company and its Subsidiaries are authorized to deduct from any payment to you any such taxes required to be withheld. As described in Section 15.4 of the Plan and to the extent permissible under applicable law, you may elect to have the Company withhold a portion of the Shares issued upon settlement of the Restricted Stock Units to satisfy all or part of the withholding tax requirements. You may also elect, at the time you vest in the Restricted Stock Units, to pay your FICA liability due with respect to those Restricted Stock Units out of those units. If you choose to do so, the Company will reduce the number of your vested Restricted Stock Units accordingly. The amount that is applied to pay FICA will be subject to Federal, State, and local taxes.
  7. **Limitation of Rights.** Except as set forth in the Agreement, until the Shares are issued to you in settlement of your Restricted Stock Units, you do not have any right in, or with respect to, any Shares (including any voting rights) by reason of this Agreement. Further, you may not transfer or assign your rights under the Agreement and you do not have any rights in the Company's assets that are superior to a general, unsecured creditor of the Company by reason of this Agreement.
  8. **No Employment Contract.** Nothing contained in the Plan or Agreement creates any right to your continued employment or otherwise affects your status as an employee at will. You hereby acknowledge that the Company and you each have the right to terminate your employment at any time for any reason or for no reason at all.
  9. **Amendment to Agreement Under Section 409A of the Code.** You acknowledge that the Agreement and the Plan are intended to be exempt from Section 409A of the Code, and that changes may need to be made to the Agreement to avoid adverse tax consequences under Section 409A of the Code. You agree that following the issuance of such rules, the Company may amend this Agreement as it deems necessary or desirable to avoid such adverse tax consequences; provided, however, that the Company shall accomplish such amendments in a manner that preserves your intended benefits under the Agreement to the greatest extent possible.
  10. **Agreement.** You agree to be bound by the terms and conditions of this Agreement and the Plan. Your signature is not required in order to make this Agreement effective. You are deemed to consent to the application of all of the terms
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and conditions set forth in this Agreement and the Plan unless you contact HROC-Stock Administration at the address set forth below in writing within thirty (30) days of receiving the grant package. Receipt by the Company of your non-consent will nullify this award unless otherwise agreed to in writing by you and the Company.

Accompanying this Agreement are instructions for accessing the Plan and the Plan Summary (prospectus) from the Administrator's Internet website or HROC-Stock Administration's intranet website. You may also request written copies by contacting HROC-Stock Administration at 763.514.1500.

HROC-Stock Administration

Medtronic plc  
c/o Medtronic, Inc.

710 Medtronic Parkway NE MS LS195

Minneapolis, MN 55432-5604

## MEDTRONIC PLC COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES

The ratio of earnings to fixed charges for the fiscal years ended April 28, 2017, April 29, 2016, April 24, 2015, April 25, 2014, April 26, 2013, and April 27, 2012 was computed based on Medtronic's historical consolidated financial information included in Medtronic's most recent Annual Report incorporated by reference on Form 10-K.

(in millions, except ratio of earnings to fixed charges)	Year ended April 28, 2017	Year ended April 29, 2016	Year ended April 24, 2015	Year ended April 25, 2014	Year ended April 26, 2013	Year ended April 27, 2012
Earnings:						
Income before provision for income taxes	\$ 4,602	\$ 4,336	\$ 3,486	\$ 3,705	\$ 4,251	\$ 4,145
Noncontrolling interest loss (income)	4	4	1	(1)	(1)	8
Capitalized interest <sup>(1)</sup>	(12)	(10)	(5)	(4)	(4)	(4)
	<u>\$ 4,594</u>	<u>\$ 4,330</u>	<u>\$ 3,482</u>	<u>\$ 3,700</u>	<u>\$ 4,246</u>	<u>\$ 4,149</u>
Fixed Charges:						
Interest expense, gross <sup>(2)</sup>	\$ 1,094	\$ 1,386	\$ 666	\$ 379	\$ 392	\$ 353
Rent interest factor <sup>(3)</sup>	88	81	59	45	42	46
	<u>\$ 1,182</u>	<u>\$ 1,467</u>	<u>\$ 725</u>	<u>\$ 424</u>	<u>\$ 434</u>	<u>\$ 399</u>
Earnings before income taxes and fixed charges	<u>\$ 5,776</u>	<u>\$ 5,797</u>	<u>\$ 4,207</u>	<u>\$ 4,124</u>	<u>\$ 4,680</u>	<u>\$ 4,548</u>
Ratio of earnings to fixed charges	<u>5</u>	<u>4</u>	<u>6</u>	<u>10</u>	<u>11</u>	<u>11</u>

(1) Capitalized interest relates to construction projects in process.

(2) Interest expense consists of interest on indebtedness.

(3) Approximately one-third of rental expense is deemed representative of the interest factor.

*Medtronic plc and Subsidiaries**At April 28, 2017***Company**

7157240 Canada Inc.  
A&E Hangers Taiwan Co., Ltd.  
A&E Kamer Limited  
A&E Products (Far East) Limited  
A&E Products de Honduras S.A.  
A&E Products do Brasil Ltda.  
A&E Products Group, Inc.  
Ablation Frontiers L.L.C.  
Accucomp (Pty.) Ltd.  
Accufusion (Pty.) Ltd.  
Advanced Absorbent Products Holdings Limited  
Advanced Medical Technologies GmbH  
Advanced Uro-Solutions, L.L.C.  
Aircraft Medical Ltd.  
Airox  
Airox, Inc.  
Arterial Vascular Engineering Canada, Company  
Arterial Vascular Engineering UK Limited  
ASE Partners SAS  
ATS Acquisition Corp.  
Auto Suture do Brasil Ltda.  
Auto Suture European Services Center  
Auto Suture Holdings Pty Ltd  
Auto Suture Puerto Rico, Inc.  
BARRX Medical Inc.  
Batts LLC  
Batts, Inc.  
Beacon Endoscopic LLC  
Beijing Libeier Bio-engineering Institute Co., Ltd.  
Bellco Canada Inc.  
Bellco Do Brasil  
Bellco France S.A.S.  
Bellco Hoxen Medical (Hong Kong) Co. Limited  
Bellco Hoxen Medical (Shanghai) Co. Ltd.  
Bellco Nordic AB  
Bellco S.r.l.  
Between Investeringsgroep B.V.  
Biostar Biomedikal Mühendislik Anonim Sirketi  
Boryung Bellco Korea Ltd.  
Bo Yao (Shanghai) Medical Device Co. Ltd.  
CardioInsight Technologies Inc.  
Carlisle Philippines, Inc.  
Carlisle Recycling de Mexico S.A. de C.V.  
Carmel Biosensors Ltd.

**Jurisdiction of Formation**

Canada  
Taiwan  
United Kingdom  
Hong Kong  
Honduras  
Brazil  
Delaware  
Delaware  
South Africa  
South Africa  
United Kingdom  
Germany  
Tennessee  
United Kingdom  
France  
Delaware  
Canada  
United Kingdom  
France  
Minnesota  
Brazil  
France  
Australia  
Connecticut  
Delaware  
Delaware  
Delaware  
China  
Canada  
Brazil  
France  
Hong Kong  
China  
Sweden  
Italy  
Netherlands  
Turkey  
South Korea  
China  
Delaware  
Philippines  
Mexico  
Israel

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CCI Centro Covidien de Inovação e Educação para a Saúde Ltda	Brazil
CCI Istanbul Teknolojik Hizmetler Limited Sirketi	Turkey
CDK U.K. Limited	United Kingdom
Changzhou InnoPedics Medical Device Co., Ltd	China
Changzhou Kangdi Medical Stapler Co., Ltd.	China
Changzhou Kanghui Medical Innovation Co., Ltd.	China
CircuLite GmbH	Germany
CircuLite, Inc.	Delaware
Coated Products GP, Inc.	Nevada
Coated Products Holdings, Inc.	Delaware
Comercial Kendall (Chile) Limitada	Chile
Corventis Europe BVBA	Belgium
Corventis Pte. Ltd.	Singapore
Covidien (China) Medical Devices Technology Co., Ltd.	China
Covidien (Gibraltar) Holding Limited	Gibraltar
Covidien (Gibraltar) Limited	Gibraltar
Covidien (HKSAR) Co., Limited	Hong Kong
Covidien (Israel) Ltd.	Israel
Covidien (Proprietary) Limited	South Africa
Covidien (Shanghai) Management Consulting Co., Ltd.	China
Covidien (Thailand) Limited	Thailand
Covidien (UK) Commercial Limited	United Kingdom
Covidien (UK) Manufacturing Limited	United Kingdom
Covidien Adhesives Italia Srl	Italy
Covidien AG	Switzerland
Covidien Argentina S.A.	Argentina
Covidien Asia Investments Limited	Mauritius
Covidien Australia Pty Ltd	Australia
Covidien Belgium 2 NV	Belgium
Covidien Canada Holdings (A) Cooperatie U.A.	Netherlands
Covidien Canada Holdings (B) Cooperatie U.A.	Netherlands
Covidien Canada Holdings (C) Cooperatie U.A.	Netherlands
Covidien Canada Holdings LLC	Delaware
Covidien Canada ULC	Canada
Covidien Caribbean, Inc.	Delaware
Covidien Colombia S.A.	Colombia
Covidien Delaware VI Corp.	Delaware
Covidien Deutschland GmbH	Germany
Covidien Engineering Services Private Limited	India
Covidien Eurasia LLC	Russia
Covidien Finance International GmbH	Switzerland
Covidien Finance Ireland Limited	Ireland
Covidien France Holdings (A) Cooperatie U.A.	Netherlands
Covidien France Holdings (B) Cooperatie U.A.	Netherlands
Covidien France Holdings, Inc.	Connecticut
Covidien Group Holdings Limited	Bermuda
Covidien Group S.a.r.l.	Luxembourg
Covidien Healthcare Holding UK Limited	United Kingdom
Covidien Healthcare India Private Limited	India
Covidien Healthcare International Trading (Shanghai) Co., Ltd.	China

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Covidien Healthcare Trading (Shanghai) Co., Ltd.	China
Covidien Holding Inc.	Massachusetts
Covidien Holdings International Corporation	Delaware
Covidien Holdings Ireland Limited	Ireland
Covidien Holdings S.a.r.l.	Luxembourg
Covidien Hong Kong No.2 Limited	Hong Kong
Covidien Hungary Kft.	Hungary
Covidien International (US) Holdings A, LLC	Delaware
Covidien International Finance S.A.	Luxembourg
Covidien International S.a.r.l.	Luxembourg
Covidien Ireland Commercial Limited	Ireland
Covidien Ireland Limited	Ireland
Covidien Israel Holdings Ltd	Israel
Covidien Israel Investments Ltd	Israel
Covidien Israel Surgical Research Ltd	Israel
Covidien Japan, Inc.	Japan
Covidien Limited	Ireland
Covidien llc	Delaware
Covidien Logistics BVBA	Belgium
Covidien LP	Delaware
Covidien Lyon	France
Covidien Manufacturing Grenoble	France
Covidien Manufacturing Solutions, S.A.	Costa Rica
Covidien Medical	Russia
Covidien Medical Products (Shanghai) Manufacturing L.L.C.	China
Covidien Peru S.A.	Peru
Covidien Philippines, Inc.	Philippines
Covidien Private Limited	Singapore
Covidien Pty Limited	Australia
Covidien Sales LLC	Delaware
Covidien Services Europe Limited	Ireland
Covidien Sigma Limited	Bermuda
Covidien Swiss Holding GmbH	Switzerland
Covidien Trevoux	France
Covidien UK Holding Ltd	United Kingdom
Covidien UK Limited	United Kingdom
Covidien Uruguay S.A.	Uruguay
Covidien US Holdings, Inc.	Delaware
Covidien Ventures Ltd.	Bermuda
Covidien VII (Denmark) ApS	Denmark
Davis & Geck Caribe Limited	Cayman Islands
Dendron GmbH	Germany
Diabeter Nederland B.V.	Netherlands
DISAB Diagnostic Imaging Holding AB	Sweden
Especialidades Medicas Kenmex, S.A. de C.V.	Mexico
Eur-o-Flex de Mexico S.A. de C.V.	Mexico
ev3 Australia Pty Limited	Australia
ev3 B.V.	Netherlands
ev3 Canada Inc.	Canada
ev3 International, Inc.	Delaware

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ev3 Medical Devices (Beijing) Company, Ltd.	China
First Lafayette Holdings LLC	Delaware
Floreane Medical Implants	France
GC Holdings, Inc.	Delaware
Georgia Packaging, Inc.	Delaware
Given Imaging (Asia) Company Limited	Hong Kong
Given Imaging (Los Angeles) LLC	California
Given Imaging B.V.	Netherlands
Given Imaging do Brazil Ltda.	Brazil
Given Imaging GmbH	Germany
Given Imaging Ltd.	Israel
Given Imaging Pty Limited	Australia
Given Imaging Vietnam Co., Ltd.	Vietnam
Given Imaging, Inc.	Delaware
Graphic Controls (Barbados), Ltd.	Barbados
Graphic Holdings, Inc.	Delaware
Haemopharm Biofluids S.r.l.	Italy
Healthcare Aviation Trust	Maryland
Heartstone Services GmbH	Switzerland
Heartware (UK) Limited	United Kingdom
Heartware France SAS	France
Heartware GmbH	Germany
Heartware Hong Kong Limited	Hong Kong
HeartWare International, Inc.	Delaware
Heartware Pty Limited	Australia
Heartware Sweden, AB	Sweden
HeartWare, Inc.	Delaware
HET Systems, LLC	Delaware
IHS Argentina SA	Argentina
IHS Managed Services SAS	Colombia
IHS SAGLIK HIZMETLERI LTD STI	Turkey
Imedex Biomateriaux	France
Inbrand Holdings Limited	United Kingdom
Inbrand Limited	United Kingdom
Inbrand UK Limited	United Kingdom
India Medtronic Private Limited	India
InnerDyne Holdings, Inc.	Delaware
InnerDyne, Inc.	Delaware
Instruventional Inc.	Canada
Integrated Health Solutions Chile S.A.	Chile
Integrated Health Solutions International Sàrl	Switzerland
Integrated Health Solutions Pty Ltd	Australia
Invatec S.p.A.	Italy
Invatec Technology Center GmbH	Switzerland
Karner Europe AB	Sweden
Karner Europe GmbH	Germany
Kendall Company of South Africa (Pty) Limited, The	South Africa
Kendall de Mexico, S.A. de C.V.	Mexico
Kendall de Venezuela, C.A.	Venezuela
Kendall Innovadores en Cuidados al Paciente S.A.	Costa Rica

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Kendall Ludlow Holding Corporation	Delaware
Kendall Patient Recovery BVBA	Belgium
Kendall SAS	France
Kendall, S.A. (Panama)	Panama
Kendall-Gammatron Limited	Thailand
KMS Colon, Panama, S.A.	Panama
KMS Montevideo, Uruguay, S.A.	Uruguay
KPR Australia Pty Ltd	Australia
KPR U.S., Inc.	Delaware
KPR U.S., LLC.	Delaware
Kyphon Cayman Ltd.	Cayman Islands
Kyphon Ireland Research Holding Limited	Ireland
Kyphon Sàrl	Switzerland
Kyphon South Africa (Proprietary) Ltd.	South Africa
La Trevoltiane	France
Laboratoire Soludia SAS	France
Lafayette Healthcare Limited	United Kingdom
Lazarus Effect LLC	Delaware
Lazarus Effect, Inc.	Delaware
Life Design Systems, Inc.	Wisconsin
Ludlow Technical Products Canada, Ltd.	Canada
Ludlow Technical Products Corporation	New York
Ludlow Technical Products France	France
Magnolia Medical, LLC	Delaware
Makani II Unlimited Company	Ireland
Mallinckrodt DAR Srl	Italy
Mallinckrodt Holdings B.V.	Netherlands
Mallinckrodt Holdings, LLC	Delaware
Mallinckrodt International Financial Services Company	Ireland
Mallinckrodt Medical S.A.	Spain
Mallinckrodt Medical Unlimited Company	Ireland
Mallinckrodt Polska Sp.z o.o.	Poland
Mallinckrodt Sweden AB	Sweden
Mallinckrodt US LLC	Delaware
Mareane	France
Medefield Pty Limited	Australia
Medical Education Y.K.	Japan
Medical Medtronic Nigeria Limited	Nigeria
Medina Medical LLC	Delaware
Medina Medical, Inc.	Delaware
Medinse S de RL de CV	Mexico
Mediquip Sdn. Bhd.	Malaysia
Medtronic – Sequoia (Cayman) Innovation Investment Management Partners, Ltd	Cayman Islands
Medtronic (Africa) (Proprietary) Limited	South Africa
Medtronic (Schweiz) A.G. (Medtronic (Suisse) S.A.)	Switzerland
Medtronic (Shanghai) Ltd.	China
Medtronic (Shanghai) Management Co. Ltd.	China
Medtronic (Taiwan) Ltd.	Taiwan
Medtronic (Thailand) Limited	Thailand
Medtronic 3F Therapeutics, Inc.	Delaware

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Medtronic Ablation Frontiers LLC	Delaware
Medtronic Ablation Reorganization LLC	Delaware
Medtronic Adriatic d.o.o.	Croatia
Medtronic Advanced Energy Acquisition LLC	Delaware
Medtronic Advanced Energy LLC	Delaware
Medtronic Advanced Energy Luxembourg S.a.r.l.	Luxembourg
Medtronic Advanced Energy Luxembourg S.a.r.l. LLC	Minnesota
Medtronic AF Acquisition LLC	Delaware
Medtronic AF Luxembourg S.a.r.l.	Luxembourg
Medtronic AG	Switzerland
Medtronic Aktiebolag	Sweden
Medtronic Angiolink, Inc.	Delaware
Medtronic Ardian Acquisition LLC	Delaware
Medtronic Ardian LLC	Delaware
Medtronic Ardian Luxembourg S.a.r.l.	Luxembourg
Medtronic Ardian Luxembourg S.a.r.l. LLC	Delaware
Medtronic Asia, Ltd.	Minnesota
Medtronic ATS Medical, Inc.	Minnesota
Medtronic Australasia Pty Ltd	Australia
Medtronic B.V.	Netherlands
Medtronic Bakken Research Center B.V.	Netherlands
Medtronic Bangladesh Pvt. Ltd.	Bangladesh
Medtronic Belgium S.A./N.V.	Belgium
Medtronic Bio-Medicus, Inc.	Minnesota
Medtronic BioPharma B.V.	Netherlands
Medtronic BioPharma Sàrl	Switzerland
Medtronic Braun, Inc.	Colorado
Medtronic Bulgaria EOOD	Bulgaria
Medtronic Care Management Services, LLC	Minnesota
Medtronic Chile SpA	Chile
Medtronic China Kanghui Holdings	Cayman Islands
Medtronic China Venture Fund (Cayman), L.P.	Cayman Islands
Medtronic China, Ltd.	Minnesota
Medtronic Comercial Ltda.	Brazil
Medtronic CoreValve LLC	Delaware
Medtronic CryoCath LP	Canada
Medtronic CV Luxembourg LLC	Minnesota
Medtronic CV Luxembourg S.a.r.l.	Luxembourg
Medtronic CV Reorganization, LLC	Delaware
Medtronic CV, LLC	Delaware
Medtronic Czechia s.r.o.	Czech Republic
Medtronic Danmark A/S	Denmark
Medtronic Diabetes (Chengdu) Co., Ltd.	China
Medtronic do Brasil Ltda.	Brazil
Medtronic Dominican Republic S.A.S.	Dominican Republic
Medtronic Dominicana (Manufactura), S.A.	Dominican Republic
Medtronic Europe BVBA/SPRL	Belgium
Medtronic Europe Sàrl	Switzerland
Medtronic Fabrication SAS	France
Medtronic Finance Holdings ULC	Cayman Islands

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Medtronic Finland Oy	Finland
Medtronic France S.A.S.	France
Medtronic G.m.b.H.	Germany
Medtronic Global Holdings GP S.à r.l.	Luxembourg
Medtronic Global Holdings S.C.A.	Luxembourg
Medtronic Group Holding, Inc.	Minnesota
Medtronic Hellas Medical Device Commercial S.A.	Greece
Medtronic Holding B.V.	Netherlands
Medtronic Holding Switzerland G.m.b.H.	Switzerland
Medtronic Holding, Inc.	Minnesota
Medtronic Holdings Unlimited	British Virgin Islands
Medtronic Hong Kong Limited	Hong Kong
Medtronic Hong Kong Medical Limited	Hong Kong
Medtronic Hungaria Kereskedelmi Kft	Hungary
Medtronic Ibérica S.A.	Spain
Medtronic Integrated Health Solutions LLC	Minnesota
Medtronic International Holding LLC	Minnesota
Medtronic International Technology, Inc.	Minnesota
Medtronic International Trading Pte. Ltd.	Singapore
Medtronic International Trading Sàrl	Switzerland
Medtronic International Trading, Inc.	Minnesota
Medtronic International, Ltd.	Delaware
Medtronic Interventional Vascular, Inc.	Massachusetts
Medtronic Invatec LLC	Delaware
Medtronic IP Holding International Luxembourg S.a.r.l.	Luxembourg
Medtronic Ireland Limited	Ireland
Medtronic Ireland Manufacturing Unlimited Company	Ireland
Medtronic Irish Finco Unlimited Company	Ireland
Medtronic Italia S.p.A.	Italy
Medtronic Japan Co., Ltd.	Japan
Medtronic Jolife LLC	Delaware
Medtronic Kazakhstan Limited Liability Partnership	Kazakhstan
Medtronic KL Holdings LLC	Minnesota
Medtronic Korea Ltd.	South Korea
Medtronic Latin America, Inc.	Minnesota
Medtronic Limited	United Kingdom
Medtronic LLC	Russia
Medtronic Logistics LLC	Minnesota
Medtronic Luxembourg Global Holdings S.à r.l.	Luxembourg
Medtronic Malaysia Sdn. Bhd.	Malaysia
Medtronic Medical Device (Chengdu) Co., Ltd.	China
Medtronic Medikal Teknoloji Ticaret Limited Sirketi	Turkey
Medtronic Mediterranean SAL	Lebanon
Medtronic META FZ-LLC	United Arab Emirates
Medtronic Mexico S. de R.L. de C.V. (Tijuana)	Mexico
Medtronic Micro Motion Sciences, Inc.	Delaware
Medtronic MiniMed, Inc.	Delaware
Medtronic Monitoring, Inc.	Delaware
Medtronic Navigation Israel Ltd.	Israel
Medtronic Navigation, Inc.	Delaware

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Medtronic New Zealand Limited	New Zealand
Medtronic Norge AS	Norway
Medtronic Oesterreich G.m.b.H.	Austria
Medtronic of Canada Ltd.	Canada
Medtronic Pacific Trading, Inc.	Minnesota
Medtronic Philippines, Inc.	Philippines
Medtronic Poland Sp. z o.o.	Poland
Medtronic Portugal, Lda	Portugal
Medtronic PS Acquisition LLC	Delaware
Medtronic PS Medical, Inc.	California
Medtronic PS Reorganization LLC	Delaware
Medtronic Puerto Rico Operations Co.	Cayman Islands
Medtronic R&D Diabetes Denmark A/S	Denmark
Medtronic Romania SRL	Romania
Medtronic S. de R.L. de C.V. (Mexico City)	Mexico
Medtronic S.A.I.C.	Argentina
Medtronic Saudi Arabia Company	Saudi Arabia
Medtronic Servicios S. de R.L. de C.V.	Mexico
Medtronic SG, LLC	Delaware
Medtronic Shared Services SRL	Costa Rica
Medtronic Singapore Operations Pte. Ltd.	Singapore
Medtronic Slovakia s.r.o.	Slovakia
Medtronic Sofamor Danek Co., Ltd.	Japan
Medtronic Sofamor Danek Deggendorf GmbH	Germany
Medtronic Sofamor Danek South Africa (Proprietary) Limited	South Africa
Medtronic Sofamor Danek USA, Inc.	Tennessee
Medtronic Sofamor Danek, Inc.	Indiana
Medtronic Spine LLC	Delaware
Medtronic Srbija d.o.o. Beograd-Novi Beograd	Serbia
Medtronic Trading NL BV	Netherlands
Medtronic Transneuronix, Inc.	Delaware
Medtronic Ukraine Limited Liability Company	Ukraine
Medtronic Urinary Solutions, Inc.	Ohio
Medtronic USA, Inc.	Minnesota
Medtronic Vascular Galway Unlimited Company	Ireland
Medtronic Vascular Holdings Unlimited Company	Ireland
Medtronic Vascular, Inc.	Delaware
Medtronic Ventor Technologies Ltd.	Israel
Medtronic Vertelink, Inc.	California
Medtronic Vietnam Company Limited	Vietnam
Medtronic VT, LLC	Delaware
Medtronic World Trade Corporation	Minnesota
Medtronic Xomed, Inc.	Delaware
Medtronic, Inc.	Minnesota
Medtronic, trgovina z medicinsko tehnologijo in opremo d.o.o.	Slovenia
Micro Therapeutics, Inc.	Maryland
MiniMed Distribution Corp.	Delaware
MiniMed Pty Ltd.	Australia
MMJ, S.A. de C.V.	Mexico
MSCH LLC	Delaware

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N.G.C. Medical Srl	Italy
NayaMed International Sàrl	Switzerland
NayaMed International, S.A.	Spain
Nederlandse Obesitas Kliniek Zuid B.V.	Netherlands
Nederlandse Obesitas Kliniek B.V.	Netherlands
Nederlandse Obesitas Kliniek West B.V.	Netherlands
Nellcor Puritan Bennett Ireland Holdings Unlimited Company	Ireland
Nellcor Puritan Bennett Ireland Unlimited Company	Ireland
Nellcor Puritan Bennett LLC	Delaware
Nellcor Puritan Bennett Mexico, S.A. de C.V.	Mexico
New Wave Surgical, LLC	Delaware
Newport Medical (Asia) Limited	Hong Kong
Newport Medical Instruments, Inc	California
NGC Medical UK Limited	United Kingdom
Nippon Covidien Ltd.	Japan
Nobles Medical Technology, Inc.	Delaware
Obesitas International B.V.	Netherlands
Obesitas Nederland B.V.	Netherlands
Old Colony State Insurance Company	Vermont
Oridion Capnography, Inc.	Massachusetts
Oridion Medical 1987 Ltd.	Israel
Oridion Systems Ltd.	Israel
Osteotech, Inc.	Delaware
Panmedica Pty Limited	Australia
Peak Surgical, Cayman	Cayman Islands
Plastics Holding Corporation	Nevada
Polyken Technologies Europe, Inc.	Delaware
Polysuture Industria e Comercio Ltda.	Brazil
Power Medical Interventions Deutschland GmbH	Germany
Pryor and Howard (1988) Limited	United Kingdom
PT Medtronic Indonesia	Indonesia
PT. COVIDIEN INDONESIA	Indonesia
PTB International LLC	Delaware
Raychem Tecnologias, S. de R.L. de C.V.	Mexico
Raychem Tijuana Services, S.A.	Mexico
Responsive Orthopedics, LLC	Delaware
Retail Group de Mexico S.A. de C.V.	Mexico
Reverse Medical LLC	Delaware
RF Surgical Systems LLC	Minnesota
Salient Coop Partner LLC	Delaware
Sanatis GmbH	Germany
Sapheon LLC	California
Sapheon Vascular B.V.	Netherlands
Setagon, Inc.	Delaware
Shanghai Zhikang Medical Devices Co., Ltd.	China
Sherwood Medical Company I	Delaware
Sherwood Medical Industries Pty Ltd	Australia
Societe De Fabrication de Material Orthopedique En Abrege Sofamor	France
Sofradim Production	France
Somanetics Corporation	Delaware

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Sophono GmbH	Germany
Sophono, Inc.	Colorado
SpinalGraft Technologies, LLC	Tennessee
Stentex Holding Sarl	Luxembourg
superDimension (Europe) GmbH	Germany
superDimension Ltd.	Israel
superDimension, Inc.	Delaware
Suzhou Medtronic Venture Capital Partnership Enterprise (L.P.)	China
Suzhou Medtronic-Sequoia Innovation Investment Management Co., Ltd.	China
Suzhou Mei Zhong Capital Investment Management Co., Ltd.	China
TGM Medical, Inc.	Delaware
THC Holdings Limited	Thailand
THC Pool LLC	Massachusetts
Tissue Science Laboratories Limited	United Kingdom
Trigate (Pty.) Ltd.	South Africa
Trinance (Pty.) Ltd.	South Africa
Twelve Australia Pty Limited	Australia
Twelve Medical Limited	United Kingdom
Twelve, Inc.	Delaware
TYRX, Inc.	Delaware
U.S.S.C. Puerto Rico (NY), Inc.	New York
U.S.S.C. Puerto Rico, Inc.	Cayman Islands
United States Surgical Corporation	Delaware
USSC (Deutschland) GmbH	Germany
USSC Financial Services Inc.	Connecticut
USSC FSC, Inc.	Barbados
USSC Medical GmbH	Germany
Valera Holdings S.a.r.l.	Luxembourg
Valleylab (Australia) Pty. Limited	Australia
Valleylab Holding Corporation	Delaware
Valor Merger Sub Ltd.	Israel
Verdana Holdings Limited	Gibraltar
Visualase, Inc.	Delaware
Vitatron A.G.	Switzerland
Vitatron Belgium S.A./N.V.	Belgium
Vitatron Holding B.V.	Netherlands
Vitatron Medical España, S.A.	Spain
Vitatron Portugal - Comércio e Distribuição de Dispositivos Médicos, Lda	Portugal
VNUS Medical Technologies II, Inc.	Delaware
Warsaw Orthopedic Inc.	Indiana
WEM Equipamentos Electronicos Ltda.	Brazil
World Heart B.V.	Netherlands
World Heart Corporation	Delaware
Zephyr Technology LLC	Delaware
Zorginitiatieven B.V.	Netherlands

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-215895) and on Form S-8 (No. 333-201737) of Medtronic plc of our report dated June 27, 2017 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

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Minneapolis, Minnesota

June 27, 2017

POWER OF ATTORNEY

Each of the undersigned directors of Medtronic Public Limited Company, an Irish public limited company, hereby constitutes and appoints each of BRADLEY E. LERMAN and MARTHA HA, acting individually or jointly, their true and lawful attorneys-in-fact and agents, with full power to act for them and in their name, place and stead, in any and all capacities, to do any and all acts and execute any and all documents which either such attorney and agent may deem necessary or desirable to enable Medtronic Public Limited Company to comply with the Securities Exchange Act of 1934, as amended, and any rules, regulations and requirements of the Securities and Exchange Commission in respect thereof, in connection with the filing with the Commission of Medtronic's Annual Report on Form 10-K for the fiscal year ended April 28, 2017, including specifically, but without limiting the generality of the foregoing, power and authority to sign the names of the undersigned directors to the Form 10-K and to any instruments and documents filed as part of or in connection with the Form 10-K or any amendments thereto; and the undersigned hereby ratify and confirm all actions taken and documents signed by each said attorney and agent as provided herein.

The undersigned have set their hands this 23<sup>rd</sup> day of June, 2017.

/s/ Richard H. Anderson  
Richard H. Anderson

/s/ Michael O. Leavitt  
Michael O. Leavitt

/s/ Craig Arnold  
Craig Arnold

/s/ James T. Lenehan  
James T. Lenehan

/s/ Scott C. Donnelly  
Scott C. Donnelly

/s/ Elizabeth G. Nabel  
Elizabeth G. Nabel

/s/ Randall J. Hogan  
Randall J. Hogan

/s/ Denise M. O'Leary  
Denise M. O'Leary

/s/ Omar Ishrak  
Omar Ishrak

/s/ Kendall J. Powell  
Kendall J. Powell

/s/ Shirley Ann Jackson, Ph.D.  
Shirley Ann Jackson, Ph.D.

/s/ Robert C. Pozen  
Robert C. Pozen

**Certification of Chief Executive Officer  
Pursuant to Section 302 of the  
Sarbanes-Oxley Act of 2002**

I, Omar Ishrak, certify that:

1. I have reviewed this Annual Report on Form 10-K of Medtronic Public Limited Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

June 27, 2017

/s/ Omar Ishrak

Omar Ishrak

Chairman and Chief Executive Officer



**Certification of Chief Financial Officer  
Pursuant to Section 302 of the  
Sarbanes-Oxley Act of 2002**

I, Karen L. Parkhill, certify that:

1. I have reviewed this Annual Report on Form 10-K of Medtronic Public Limited Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

June 27, 2017

/s/ Karen L. Parkhill  
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Karen L. Parkhill  
Executive Vice President and  
Chief Financial Officer

**Certification of Chief Executive Officer  
Pursuant to Section 906 of the  
Sarbanes-Oxley Act of 2002**

In connection with this annual report on Form 10-K of Medtronic Public Limited Company for the fiscal year ended April 28, 2017, the undersigned hereby certifies, in his capacity as Chief Executive Officer of Medtronic Public Limited Company, for purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in this report fairly presents, in all material respects, the financial condition and results of operations of Medtronic Public Limited Company.

June 27, 2017

/s/ Omar Ishrak

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Omar Ishrak

Chairman and Chief Executive Officer

**Certification of Chief Financial Officer  
Pursuant to Section 906 of the  
Sarbanes-Oxley Act of 2002**

In connection with this annual report on Form 10-K of Medtronic Public Limited Company for the fiscal year ended April 28, 2017, the undersigned hereby certifies, in her capacity as Chief Financial Officer of Medtronic Public Limited Company, for purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in this report fairly presents, in all material respects, the financial condition and results of operations of Medtronic Public Limited Company.

June 27, 2017

/s/ Karen L. Parkhill

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Karen L. Parkhill

Executive Vice President and  
Chief Financial Officer

