WATERS CORP /DE/
Form 10-K
February 26, 2019
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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

**Washington, D.C. 20549**

# Form 10-K

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)**
**OF THE SECURITIES EXCHANGE ACT OF 1934**
**For the fiscal year ended December 31, 2018**

**or**

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)**
**OF THE SECURITIES EXCHANGE ACT OF 1934**
**Commission File Number: 01-14010**

# Waters Corporation

*(Exact name of registrant as specified in its charter)*

| **Delaware** | **13-3668640** |
|---|---|
| *(State or other jurisdiction of* | *(I.R.S. Employer* |
| *incorporation or organization)* | *Identification No.)* |

**34 Maple Street**

**Milford, Massachusetts 01757**

*(Address, including zip code, of principal executive offices)*

**(508) 478-2000**

*(Registrant s telephone number, including area code)*

| | |
|---|---|
| Securities registered pursuant to Section 12(b) of the Act: | Common Stock, par value $0.01 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 Section 15(d) of the Act. Yes No

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of 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 emerging growth company. See the definitions of large accelerated filer , accelerated filer , smaller reporting company , and emerging growth company in Rule 12b-2 of the Exchange Act. (Check one):

| Large accelerated filer | Accelerated filer | Non-accelerated filer | Smaller reporting company |
| --- | --- | --- | --- |
| | | | Emerging growth company |

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

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

State the aggregate market value of the registrant s common stock held by non-affiliates of the registrant as of June 30, 2018: $14,912,684,699.

Indicate the number of shares outstanding of the registrant s common stock as of February 22, 2019: 71,512,391

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant s definitive proxy statement that will be filed for the 2019 Annual Meeting of Stockholders are incorporated by reference in Part III.

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**WATERS CORPORATION AND SUBSIDIARIES**

**ANNUAL REPORT ON FORM 10-K**

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# PART I

## Item 1: *Business*

### General

Waters Corporation (the Company, we, our, or us ) is a specialty measurement company that operates with a fundamental underlying purpose to advance the science that enables our customers to enhance human health and well-being. The Company has pioneered analytical workflow solutions involving liquid chromatography, mass spectrometry and thermal analysis innovations serving the life, materials and food sciences for more than 60 years. The Company primarily designs, manufactures, sells and services high performance liquid chromatography ( HPLC ), ultra performance liquid chromatography ( UPLC™ and together with HPLC, referred to as LC ) and mass spectrometry ( MS ) technology systems and support products, including chromatography columns, other consumable products and comprehensive post-warranty service plans. These systems are complementary products that are frequently employed together ( LC-MS ) and sold as integrated instrument systems using common software platforms. In addition, the Company designs, manufactures, sells and services thermal analysis, rheometry and calorimetry instruments through its TA™ product line. The Company is also a developer and supplier of advanced software-based products that interface with the Company s instruments, as well as other manufacturers instruments.

The Company s products are used by pharmaceutical, biochemical, industrial, nutritional safety, environmental, academic and governmental customers working in research and development, quality assurance and other laboratory applications. LC is a standard technique and is utilized in a broad range of industries to detect, identify, monitor and measure the chemical, physical and biological composition of materials, and to purify a full range of compounds. MS technology, principally in conjunction with chromatography, is employed in drug discovery and development, including clinical trial testing, the analysis of proteins in disease processes (known as proteomics ), nutritional safety analysis and environmental testing. LC-MS instruments combine a liquid phase sample introduction and separation system with mass spectrometric compound identification and quantification. The Company s thermal analysis, rheometry and calorimetry instruments are used in predicting the suitability and stability of fine chemicals, pharmaceuticals, water, polymers, metals and viscous liquids for various industrial, consumer goods and healthcare products, as well as for life science research.

Waters Corporation, organized as a Delaware corporation in 1991, is a holding company that owns all of the outstanding common stock of Waters Technologies Corporation, its operating subsidiary. Waters Corporation became a publicly-traded company with its initial public offering ( IPO ) in November 1995. Since the IPO, the Company has added two significant and complementary technologies to its range of products with the acquisitions of TA Instruments in May 1996 and Micromass Limited in September 1997.

### Business Segments

The Company s business activities, for which discrete financial information is available, are regularly reviewed and evaluated by the chief operating decision maker. As a result of this evaluation, the Company determined that it has two operating segments: Waters™ and TA™. The Waters operating segment is primarily in the business of designing, manufacturing, selling and servicing LC and MS instrument systems, columns and other precision chemistry consumables that can be integrated and used along with other analytical instruments. The TA operating segment is primarily in the business of designing, manufacturing, selling and servicing thermal analysis, rheometry and calorimetry instruments. The Company s two operating segments have similar economic characteristics; product processes; products and services; types and classes of customers; methods of distribution; and regulatory environments. Because of these similarities, the two segments have been aggregated into one reporting segment for financial statement purposes.

Information concerning revenues and long-lived assets attributable to each of the Company s products, services and geographic areas is set forth in Note 17 in the Notes to the Consolidated Financial Statements, which is incorporated herein by reference.

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**Waters Products and Markets**

***High Performance and Ultra Performance Liquid Chromatography***

HPLC is a standard technique used to identify and analyze the constituent components of a variety of chemicals and other materials. The Company believes that HPLC s performance capabilities enable it to separate, identify and quantify a high proportion of all known chemicals. As a result, HPLC is used to analyze substances in a wide variety of industries for research and development purposes, quality control and process engineering applications.

The most significant end-use markets for HPLC are those served by the pharmaceutical and life science industries. In these markets, HPLC is used extensively to understand diseases, identify new drugs, develop manufacturing methods and assure the potency and purity of new pharmaceuticals. HPLC is also used in a variety of other applications, such as analyses of foods and beverages for nutritional labeling and compliance with safety regulations and the testing of water and air purity within the environmental testing industry, as well as applications in other industries, such as chemical and consumer products. HPLC is also used by universities, research institutions and governmental agencies, such as the United States Food and Drug Administration ( FDA ) and the United States Environmental Protection Agency ( EPA ) and their foreign counterparts that mandate safety and efficacy testing.

In 2004, Waters introduced a novel technology that the Company describes as ultra performance liquid chromatography that utilizes a packing material with small, uniform diameter particles and a specialized instrument, the ACQUITY UPLC™, to accommodate the increased pressure and narrower chromatographic bands that are generated by these small and tightly packed particles. By using the ACQUITY UPLC, researchers and analysts are able to achieve more comprehensive chemical separations and faster analysis times in comparison with many analyses previously performed by HPLC. In addition, in using the ACQUITY UPLC, researchers have the potential to extend the range of applications beyond that of HPLC, enabling them to uncover more levels of scientific information. While offering significant performance advantages, the ACQUITY UPLC is also compatible with the Company s software products and the general operating protocols of HPLC. For these reasons, the Company s customers and field sales and support organizations are well positioned to utilize this new technology and instrument. In 2018, the Company introduced the ACQUITY™ ARC™ Bio System, a versatile, iron-free, bio-inert, quaternary liquid chromatograph specifically engineered to improve bioseparation analytical methods. The Company also introduced the ACQUITY™ UPLC™ PLUS series in 2018, consisting of the H-Class PLUS, H-Class PLUS Bio and I-Class PLUS systems, which incorporate foundational enhancements into the legacy systems.

Waters manufactures LC instruments that are offered in configurations that allow for varying degrees of automation, from component configured systems for academic teaching and research applications to fully automated systems for regulated and high sample throughput testing, and that have a variety of detection technologies, from optical-based ultra-violet ( UV ) absorbance, refractive index and fluorescence detectors to a suite of MS-based detectors, optimized for certain analyses.

The primary consumable products for LC are chromatography columns. These columns are packed with separation media used in the LC testing process and are typically replaced at regular intervals. The chromatography column contains one of several types of packing material, typically stationary phase particles made from silica or polymeric resins. As a pressurized sample is introduced to the column inlet and permeates through the packed column, it is separated into its constituent components.

Waters HPLC columns can be used on Waters-branded and competitors LC systems. The Company believes that it is one of a few suppliers in the world that processes silica and polymeric resins, packs columns and distributes its own products. In doing so, the Company believes it can better ensure product consistency, a key attribute for its customers in quality control laboratories, and can react quickly to new customer requirements. The Company believes that its ACQUITY UPLC lines of columns are used primarily on its

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ACQUITY UPLC instrument systems and, furthermore, that its ACQUITY UPLC instruments primarily use ACQUITY UPLC columns. In 2016, the Company continued to expand its column chemistry capabilities through the introduction of CORTECS™ $C_8$, CORTECS™ Phenyl, CORTECS™ T3 and CORTECS™ Shield RP18. In 2018, the Company introduced the BioResolve™ RP mAb Polyphenyl columns, which improve the consistency and reliability of the overly complex separations of monoclonal antibodies and antibody-drug conjugates.

The Company s precision chemistry consumable products also include environmental and nutritional safety testing products, including Certified Reference Materials ( CRM s) and Proficiency Testing ( PT ) products. Laboratories around the world and across multiple industries use these products for quality control and proficiency testing and also purchase product support services required to help with their federal and state mandated accreditation requirements or with quality control over critical pharmaceutical analysis. In 2018, the Company introduced the VICAM™ BPATest™, which provides a sensitive, precise determination of Bisphenol A in as little as ten minutes. VICAM also introduced a user-friendly lateral flow zearalenone strip test, the Zearala-V AQUA™ in 2018.

***Mass Spectrometry and Liquid Chromatography-Mass Spectrometry***

MS is a powerful analytical technology that is used to identify unknown compounds, to quantify known materials and to elucidate the structural and chemical properties of molecules by measuring the masses of molecules that have been converted into ions.

The Company is a technology and market leader in the development, manufacture, sale and service of MS instruments and components. These instruments are typically integrated and used along with other complementary analytical instruments and systems, such as LC, chemical electrophoresis and gas chromatography. A wide variety of instrumental designs fall within the overall category of MS instrumentation, including devices that incorporate quadrupole, ion trap, time-of-flight ( Tof ), magnetic sector and ion mobility technologies. Furthermore, these technologies are often used in tandem (MS-MS) to maximize the speed and/or efficacy of certain experiments.

Currently, the Company offers a wide range of MS instrument systems utilizing various combinations of quadrupole, Tof and ion mobility designs. These instrument systems are used in drug discovery and development, as well as for environmental, clinical and nutritional safety testing. The overwhelming majority of mass spectrometers sold by the Company are designed to utilize an LC system and a liquid compatible interface (such as an electrospray ionization source) as the sample introduction device. These products supply a diverse market with a strong emphasis on the pharmaceutical, biomedical, clinical, food and beverage and environmental market segments worldwide.

MS is an increasingly important detection technology for LC. The Company s smaller-sized mass spectrometers, such as the single quadrupole detector ( SQD ) and the tandem quadrupole detector ( TQD ), are often referred to as LC detectors and are typically sold as part of an LC system or as an LC system upgrade. Larger quadrupole systems, such as the Xevo™ TQ and Xevo™ TQ-S instruments, are used primarily for experiments performed for late-stage drug development, including clinical trial testing. Quadrupole time-of-flight ( Q-Tof™ ) instruments, such as the Company s SYNAPT™ G2-S, are often used to analyze the role of proteins in disease processes, an application sometimes referred to as proteomics . In 2016, the Company introduced the Xevo™ TQ-XS mass spectrometry system enabled by the newly designed StepWave™ SX ion guide, which features a unique combination of ion optics, detection and ionization technologies resulting in levels of sensitivity not previously seen. The Company also introduced SONAR in 2016, which is a new data acquisition technology for use with the Xevo G2-XS that allows for the quantification and identification of lipids, metabolites and proteins in complex samples in a more efficient manner. In 2018, the Company introduced the DART QDa™ system with LiveID™, a direct-from-sample analytical system that verifies sample authenticity or adulteration, specifically for food applications. The Company also introduced the Xevo™ TQ-GC mass spectrometer in 2018, which allows laboratories to meet and exceed low part-per-billion limits of detection when

quantifying pesticide residues and other contaminants in food using GC-MS/MS methods set forth by worldwide regulatory agencies/authorities. In addition, the Company introduced the RenataDX™ screening system, a flow-injection tandem mass spectrometry system for rapid high-throughput analysis of extracted dried blood spots and other human biological matrices.

LC and MS are typically embodied within an analytical system tailored for either a dedicated class of analyses or as a general purpose analytical device. An increasing percentage of the Company s customers are purchasing LC and MS components simultaneously and it has become common for LC and MS instrumentation to be used within the same laboratory and operated by the same user. The descriptions of LC and MS above reflect the historical segmentation of these analytical technologies and the historical categorization of their respective practitioners. Increasingly in today s instrument market, this segmentation and categorization is becoming obsolete as a high percentage of instruments used in the laboratory embody both LC and MS technologies as part of a single device. In response to this development and to further promote the high utilization of these hybrid instruments, the Company has organized its Waters operating segment to develop, manufacture, sell and service integrated LC-MS systems.

Based upon reports from independent marketing research firms and publicly-disclosed sales figures from competitors, the Company believes that it is one of the world s largest manufacturers and distributors of LC and LC-MS instrument systems, chromatography columns and other consumables and related services.

The Company has been a developer and supplier of software-based products that interface with the Company s instruments, as well as other suppliers instruments. The Company s newest software technology, UNIFI™, is a scientific information system that is the culmination of a multi-year effort to substantially bring all of Waters preexisting, distinct software systems under one operating system. UNIFI joins Waters suite of informatics products Empower™ Chromatography Data Software, MassLynx™ Mass Spectrometry Software and NuGenesis™ Scientific Data Management System, each of which is used to support innovations within world-leading institutions. UNIFI is the industry s first comprehensive software that seamlessly integrates UPLC chromatography, mass spectrometry and informatics data workflows. In 2016, the Company announced two reference libraries available within UNIFI, the Metabolic Profiling CCS Library and the *Rapi*Fluor-MS™ Glycan GU Scientific Library. The Company also introduced Symphony Data Pipeline software in 2016, which is a client-server application that automates the movement and transformation of large amounts of LC-MS data to speed up analytical workflows and liberate scientists from mundane yet necessary tasks associated with managing data files. In 2018, the Company announced new analysis capabilities across a variety of molecules by integrating UNIFI acquired data from the Company s Vion™ IMS QTof™ or Xevo GS XS mass spectrometers with Molecular Discovery s Mass-MetaSite and WebMetabase processing software.

***Waters Service***

Services provided by Waters enable customers to maximize technology productivity, support customer compliance activities and provide transparency into enterprise resource management efficiencies. The customer benefits from improved budget control, data-driven technology adoption and accelerated workflow at a site or on a global perspective. The Company considers its service offerings to be highly differentiated from our competition, as evidenced by a consistent increase in annual service revenues. The Company s principal competitors in the service market include PerkinElmer, Inc., Agilent Technologies, Inc., Thermo Fisher Scientific Inc. and General Electric Company. These competitors can provide certain services on Waters instruments to varying degrees and always present competitive risk.

The servicing and support of instruments, software and accessories is an important source of revenue and represents over 30% of sales for Waters. These revenues are derived primarily through the sale of support plans, demand services, spare parts, customer performance validation services and customer training. Support plans typically involve scheduled instrument maintenance and an agreement to promptly repair a non-functioning instrument in return for a fee described in a contract that is priced according to the configuration of the instrument.

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**TA Products and Markets**

***Thermal Analysis, Rheometry and Calorimetry***

Thermal analysis measures the physical or thermodynamic characteristics of materials as a function of temperature. Changes in temperature affect several characteristics of materials, such as their heat flow characteristics, physical state, weight, dimension and mechanical and electrical properties, which may be measured by one or more thermal analysis techniques, including calorimetry. Consequently, thermal analysis techniques are widely used in the development, production and characterization of materials in various industries, such as plastics, chemicals, automobiles, pharmaceuticals and electronics.

Rheometry instruments often complement thermal analyzers in characterizing materials. Rheometry characterizes the flow properties of materials and measures their viscosity, elasticity and deformation under different types of loading or other conditions. The information obtained under such conditions provides insight into a material s behavior during processing, packaging, transport, usage and storage.

Thermal analysis, rheometry and calorimetry instruments are heavily used in material testing laboratories and, in many cases, provide information useful in predicting the suitability and stability of industrial polymers, fine chemicals, pharmaceuticals, water, metals and viscous liquids in various industrial, consumer goods and healthcare products, as well as for life science research. As with systems offered by Waters, a range of instrument configurations is available with increasing levels of sample handling and information processing automation. In addition, systems and accompanying software packages can be tailored for specific applications

In 2016, TA introduced a new line of differential scanning calorimeters and thermogravimetric analyzers. These new Discovery DSC systems feature enhanced sensing technologies resulting in unprecedented performance in baseline flatness, sensitivity, resolution and reproducibility. In addition, TA introduced the ACS-2 Air Chiller System, ElectroForce 3310 test instrument and DuraPulse™ Stent Graft test instrument in 2016.

In 2017, TA introduced the TAM Air microcalorimeter. Although designed to characterize the curing of cement, this instrument is an ideal platform for imaginative experimental design in a wide range of applications, including cement and concrete, material science, food, pharmaceuticals and environmental analysis. TA also introduced three new dilatometer product lines in its 800 platform, which are high precision systems designed to measure dimensional changes of a specimen brought about by dynamic thermal events in a wide range of applications, including material science, ceramics and metals. In 2017, TA introduced the Discovery SDT 650, which provides a true simultaneous measurement of weight change and differential heat flow using advanced technologies, such as dual sample TGA, modulated DSC and modulated and hi-resolution TGA. In addition, TA introduced the Discovery HP-TGA750, a benchtop high pressure TGA that utilizes a patented ultra-high resolution magnetic suspension balance and new high precision temperature control system. Late in 2017, TA introduced the Discovery DMA 850, which measures the viscoelastic mechanical properties of material under controlled conditions of temperature, environment and mechanical stimulus (stress or strain). The DMA 850 features frictionless air bearing supports and a linear optical encoder, which ensures stable, accurate, high-resolution displacement measurement across the full travel range and enables displacement control of 5 nm. In 2017, TA introduced the WinTestTM 8.0 software package, which will be standard on all new ElectroForce™ products. In addition, TA introduced the ElectroForce DMA 3200 in 2017, which combines fatigue and dynamic mechanical analysis into a single mechanical test platform.

In September 2016, the Company acquired all of the outstanding stock of Rubotherm GmbH ( Rubotherm ), a manufacturer of gravimetric analysis systems, for approximately $6 million in cash, $5 million of which was paid at closing and an additional $1 million paid after closing to settle certain liabilities. Rubotherm develops and manufactures analytical test instruments for thermogravimetric and sorption measurements that are used in both industrial and academic research laboratories in disciplines that include chemistry, material science and engineering. The Rubotherm acquisition has helped support and further expand product offerings within TA s thermal analysis business.

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*TA Service*

Similar to Waters, the servicing and support of TA s instruments is an important source of revenue and represents more than 25% of sales for TA. TA operates independently from the Waters operating segment, though many of its overseas offices are situated in Waters facilities to achieve operational efficiencies. TA has dedicated field sales and service operations. Service sales are primarily derived from the sale of support plans, replacement parts and billed labor fees associated with the repair, maintenance and upgrade of installed systems.

**Global Customers**

The Company typically has a broad and diversified customer base that includes pharmaceutical accounts, other industrial accounts, universities and governmental agencies. Purchase of the Company s instrument systems is often dependent on its customers capital spending, or funding as in the cases of governmental, academic and research institutions, which often fluctuate from year to year. The pharmaceutical segment represents the Company s largest sector and includes multinational pharmaceutical companies, generic drug manufacturers, contract research organizations ( CRO s) and biotechnology companies. The Company s other industrial customers include chemical manufacturers, polymer manufacturers, food and beverage companies and environmental testing laboratories. The Company also sells to universities and governmental agencies worldwide. The Company s technical sales and support staff members work closely with its customers in developing and implementing applications that meet their full range of analytical requirements. During 2018, 56% of the Company s net sales were to pharmaceutical accounts, 31% to other industrial accounts and 13% to governmental agencies and academic institutions.

The Company typically experiences an increase in sales in the fourth quarter, as a result of purchasing habits for capital goods of many customers who tend to exhaust their spending budgets by calendar year end. The Company does not rely on any single customer for a material portion of its sales. During fiscal years 2018, 2017 and 2016, no single customer accounted for more than 2% of the Company s net sales.

**Sales and Service**

The Company has one of the largest direct sales and service organizations focused exclusively on the analytical workflows offered by the Company. Across these product technologies, using respective specialized sales and service workforces, the Company serves its customer base with 87 sales offices throughout the world as of December 31, 2018 and approximately 3,900, 3,800 and 3,600 field representatives in 2018, 2017 and 2016, respectively. This investment in sales and service personnel serves to maintain and expand the Company s installed base of instruments. The Company s sales representatives have direct responsibility for account relationships, while service representatives work in the field to install instruments, train customers and minimize instrument downtime. In-house and field-based technical support representatives work directly with customers, providing them assistance with applications and procedures on Company products. The Company provides customers with comprehensive information through various corporate and regional internet websites and product literature, and also makes consumable products available through electronic ordering facilities and a dedicated catalog.

**Manufacturing and Distribution**

The Company provides high product quality by overseeing each stage of the production of its instruments, columns and chemical reagents.

The Company currently assembles a portion of its LC instruments at its facility in Milford, Massachusetts, where it performs machining, assembly and testing. The Milford facility maintains quality management and environmental management systems in accordance with the requirements of ISO 9001:2015, ISO 13485:2016 and ISO 14001:2015, and adheres to applicable regulatory requirements (including the FDA Quality System

Regulation and the European In-Vitro Diagnostic Directive). The Company outsources manufacturing of certain electronic components, such as computers, monitors and circuit boards, to outside vendors that meet the Company s quality requirements. In addition, the Company outsources the manufacturing of certain LC instrument systems and components to well-established contract manufacturing firms in Singapore. The Company s Singapore entity is ISO 9001:2015 certified and manages all Asian outsourced manufacturing as well as the distribution of all products from Asia. The Company may pursue outsourcing opportunities as they arise but believes it maintains adequate supply chain and manufacturing capabilities in the event of disruption or natural disasters.

The Company manufactures specialty Supercritical Fluid Chromatography ( SFC ) and Supercritical Fluid Extraction ( SFE ) products in its facility in Sharpsburg, Pennsylvania. The Sharpsburg facility is aligned with the policies and procedures for product manufacturing and distribution as adhered to in the Milford, Massachusetts facility and is under the same structural leadership organization.

The Company primarily manufactures and distributes its LC columns at its facilities in Taunton, Massachusetts and Wexford, Ireland. In February 2018, the Company s Board of Directors approved expanding its Taunton location and anticipates spending an estimated $215 million to build and equip this new state-of-the-art manufacturing facility. The Company has spent $11 million on this facility through the end of 2018. The Taunton facility processes, sizes and treats silica and polymeric media that are packed into columns, solid phase extraction cartridges and bulk shipping containers in both Taunton and Wexford. The Wexford facility also manufactures and distributes certain data, instruments and software components for the Company s LC, MS and TA product lines. The Company s Taunton facility is certified to ISO 9001:2015. The Wexford facility is certified to ISO 9001:2015 and ISO 13485:2016/EN ISO 13485:2016. VICAM™ manufactures antibody-linked resins and magnetic beads that are packed into columns and kits in Milford, Massachusetts and Nixa, Missouri. The Company manufactures and distributes its Analytical Standards and Reagents and Environmental Resource Associates ( ERA ) product lines at its facility in Golden, Colorado, which is certified to ISO 9001:2015 and accredited to ISO/IEC 17025:2017, ISO/IEC 17034:16 and ISO Guide 34. Some ERA products are also manufactured in the Wexford, Ireland facility, which is also accredited to ISO/IEC 17025:2005, ISO/IEC 17034:2016.

The Company manufactures and distributes its MS products at its facilities in Wilmslow, England and Wexford, Ireland. Certain components or modules of the Company s MS instruments are manufactured at its facility in Solihull, England and by long-standing outside contractors. Each stage of this supply chain is closely monitored by the Company to maintain high quality and performance standards. The instruments, components or modules are then returned to the Company s facilities, where its engineers perform final assembly, calibrations to customer specifications and quality control procedures. The Company s MS facilities are certified to ISO 9001:2015 and ISO 13485:2016/EN ISO 13485:2016 and adhere to applicable regulatory requirements (including the FDA Quality System Regulation and the European In-Vitro Diagnostic Directive).

TA s thermal analysis, rheometry and calorimetry products are manufactured and distributed at the Company s New Castle, Delaware, Wakefield, Massachusetts, Eden Prairie, Minnesota, Lindon, Utah and Huellhorst, Germany facilities. Similar to MS, elements of TA s products are manufactured by outside contractors and are then returned to the Company s facilities for final assembly, calibration and quality control. The Company s New Castle facility is certified to ISO 9001:2015 and ISO 17025:2005 standards and the Eden Prairie facility is certified to both ISO 9001:2015 and ISO/IEC 17025:2017 standards.

**Raw Materials**

The Company purchases a variety of raw materials, primarily consisting of high temperature alloy sheet metal and castings, forgings, pre-plated metals and electrical components from various vendors. The materials used by the Company s operations are generally available from a number of sources and in sufficient quantities to meet current requirements subject to normal lead times.

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The Company is subject to rules of the Securities and Exchange Commission ( SEC ) under the Dodd-Frank Wall Street Reform and Consumer Protection Act, requiring disclosure as to whether certain materials (tantalum, tin, gold and tungsten), known as conflict minerals, which may be contained in the Company s products, are mined from the Democratic Republic of the Congo and adjoining countries. In 2017, the Company was not able to determine with certainty the country of origin of some of the conflict minerals in its manufactured products. However, the Company does not have knowledge that any of its conflict minerals originated from the Democratic Republic of the Congo or adjoining countries. The Company is in the process of evaluating its 2018 supply chain, and the Company plans to file its 2018 Form SD with the SEC in May 2019. The results of this and future evaluations may impose additional costs and may introduce new risks related to the Company s ability to verify the origin of any conflict minerals contained in its products.

In addition, the Company continues to monitor environmental health and safety regulations in countries in which it operates throughout the world, in particular, European Union and China Restrictions on the use of certain Hazardous Substances in electrical and electronic equipment (RoHS) and European Union Waste Electrical and Electronic Equipment directives. Further information regarding these regulations is available on the Company s website, www.waters.com, under the caption About Waters / Environmental Health & Safety .

**Research and Development**

The Company maintains an active research and development program focused on the development and commercialization of products that extend, complement and update its existing product offering. The Company s research and development expenditures for 2018, 2017 and 2016 were $143 million, $133 million and $125 million, respectively. In addition, in 2017, the Company incurred a $5 million charge for acquired in-process research and development related to milestone payments associated with a licensing arrangement for certain intellectual property relating to mass spectrometry technologies yet to be commercialized and for which there was no future alternative use as of the acquisition date. This licensing arrangement is significantly related to new, biologically-focused applications, as well as other applications, and require the Company to make additional future payments of up to $7 million if certain milestones are achieved, as well as royalties on future net sales.

Nearly all of the Company s LC products have been developed at the Company s main research and development center located in Milford, Massachusetts, with input and feedback from the Company s extensive field organizations and customers. The majority of the Company s MS products are developed at facilities in England and most of the Company s current materials characterization products are developed at the Company s research and development center in New Castle, Delaware. At December 31, 2018, 2017 and 2016, there were 1,011, 1,004 and 971 employees, respectively, involved in the Company s research and development efforts. The Company has increased research and development expenses from its continued commitment to invest significantly in new product development and existing product enhancements, and as a result of acquisitions. Despite the Company s active research and development programs, there can be no assurance that the Company s product development and commercialization efforts will be successful or that the products developed by the Company will be accepted by the marketplace.

**Employees**

The Company employed approximately 7,200 employees at both December 31, 2018 and 2017 and 6,900 at December 31, 2016, with approximately 39% of the Company s employees located in the United States. The Company believes its employee relations are generally good. The Company s employees are not unionized or affiliated with any internal or external labor organizations. The Company firmly believes that its future success largely depends upon its continued ability to attract and retain highly skilled employees.

**Competition**

The analytical instrument systems, supplies and services market is highly competitive. The Company encounters competition from several worldwide suppliers and other companies in both domestic and foreign markets for

each of its three primary technologies. The Company competes in its markets primarily on the basis of product performance, reliability, service and, to a lesser extent, price. Competitors continuously introduce new products and have instrument businesses that are generally more diversified than the Company s business. Some competitors have greater financial resources and broader distribution than the Company s.

In the markets served by Waters, the Company s principal competitors include: Agilent Technologies, Inc., Shimadzu Corporation, Bruker Corporation, Danaher Corporation and Thermo Fisher Scientific Inc. In the markets served by TA, the Company s principal competitors include: PerkinElmer, Inc., Mettler-Toledo International Inc., NETZSCH-Geraetebau GmbH, Thermo Fisher Scientific Inc., Malvern PANalytical Ltd., a subsidiary of Spectris plc and Anton-Paar GmbH.

The market for consumable LC products, including separation columns, is highly competitive and generally more fragmented than the analytical instruments market. The Company encounters competition in the consumable columns market from chemical companies that produce column sorbents and small specialized companies that primarily pack purchased sorbents into columns and subsequently package and distribute columns. The Company believes that it is one of the few suppliers that processes silica and polymeric resins, packs columns and distributes its own products. The Company competes in this market on the basis of performance, reproducibility, reputation and, to a lesser extent, price. In recent years, the Company s principal competitors for consumable products have included: Danaher Corporation; Merck KGaA; Agilent Technologies, Inc.; General Electric Company and Thermo Fisher Scientific Inc. The ACQUITY UPLC instrument is designed to offer a predictable level of performance when used with ACQUITY UPLC columns and the Company believes that the expansion of the ACQUITY UPLC instrument base will enhance its chromatographic column business because of the high level of synergy between ACQUITY UPLC columns and the ACQUITY UPLC instruments.

**Patents, Trademarks and Licenses**

The Company owns a number of United States and foreign patents and has patent applications pending in the United States and abroad. Certain technology and software has been acquired or is licensed from third parties. The Company also owns a number of trademarks. The Company s patents, trademarks and licenses are viewed as valuable assets to its operations. However, the Company believes that no one patent or group of patents, trademark or license is, in and of itself, essential to the Company such that its loss would materially affect the Company s business as a whole.

**Environmental Matters and Climate Change**

The Company is subject to foreign and U.S. federal, state and local laws, regulations and ordinances that (i) govern activities or operations that may have adverse environmental effects, such as discharges to air and water as well as handling and disposal practices for solid and hazardous wastes, and (ii) impose liability for the costs of cleaning up and certain damages resulting from sites of past spills, disposals or other releases of hazardous substances. The Company believes that it currently conducts its operations and has operated its business in the past in substantial compliance with applicable environmental laws. From time to time, Company operations have resulted or may result in noncompliance with environmental laws or liability for cleanup pursuant to environmental laws. The Company does not currently anticipate any material adverse effect on its operations, financial condition or competitive position as a result of its efforts to comply with environmental laws.

The Company is sensitive to the growing global debate with respect to climate change. An internal sustainability working group develops increasingly robust data with respect to the Company s utilization of carbon producing substances in an effort to continuously reduce the Company s carbon footprint. In 2018, the Company published a sustainability report identifying the various actions and behaviors the Company has adopted from 2014 to 2017 concerning its commitment to both the environment and the broader topic of social responsibility. See Item 1A, Risk Factors *The effects of climate change could harm the Company s business*,

for more information on the potential significance of climate change legislation. See also Note 17 in the Notes to the Consolidated Financial Statements for financial information about geographic areas.

**Available Information**

The Company files or furnishes all required reports with the SEC. The Company is an electronic filer and the SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. The address of the SEC electronic filing website is http://www.sec.gov. The Company also makes available, free of charge on its website, its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. The website address for Waters Corporation is http://www.waters.com and SEC filings can be found under the caption Investors .

***Forward-Looking Statements***

Certain of the statements in this Form 10-K and the documents incorporated herein, may contain forward-looking statements with respect to future results and events, including any statements regarding, among other items, anticipated trends or growth in the Company s business, including, but not limited to, the impact of new or proposed tariff or trade regulations; the impact of foreign currency translation on financial results; development of products by acquired businesses; the growth rate of sales and research and development expenses; the impact of costs associated with developing new technologies and bringing these new technologies to market; the impact of new product launches and the associated costs, such as the amortization expense related to software platforms; geographic sales mix of business; development of products by acquired businesses and the amount of contingent payments to the sellers of an acquired business; anticipated expenses, including interest expense, capitalized software costs and effective tax rates; the impact of the Tax Cuts and Jobs Act (the 2017 Tax Act ) in the U.S.; the impact and outcome of the Company s various ongoing tax audit examinations; the achievement of contractual milestones to preserve foreign tax rates; the impact and outcome of litigation matters; the impact of the loss of intellectual property protection; the impact of new accounting standards and pronouncements; the adequacy of the Company s supply chain and manufacturing capabilities and facilities; the impact of regulatory compliance; the Company s expected cash flow, borrowing capacity, debt repayment and refinancing; the Company s ability to fund working capital, capital expenditures, service debt, repay outstanding lines of credit, make authorized share repurchases, fund potential acquisitions and pay any adverse litigation or tax audit liabilities, particularly in the U.S.; future impairment charges; the Company s contributions to defined benefit plans; the Company s expectations regarding changes to its financial position; compliance with applicable environmental laws; and the impact of recent acquisitions on sales and earnings.

Many of these statements appear, in particular, in Part II, Item 7, Management s Discussion and Analysis of Financial Condition and Results of Operations of this Form 10-K. Statements that are not statements of historical fact may be deemed forward-looking statements. You can identify these forward-looking statements by the use of the words feels , believes , anticipates , plans , expects , may , will , would , intends , estimates , projects , should and similar expressions, whether in the negative or affirmative. These statements are subject to various risks and uncertainties, many of which are outside the control of the Company, including, and without limitation:

- Foreign currency exchange rate fluctuations that could adversely affect translation of the Company s future sales, financial operating results and the condition of its non-U.S. operations, especially when a currency weakens against the U.S. dollar.

- Current global economic, sovereign and political conditions and uncertainties, particularly regarding the effect of new or proposed tariff or trade regulations; the U.K. voting to exit the European Union as well as the Chinese government s ongoing tightening of restrictions on procurement by government-funded customers; the Company s ability to access capital and maintain liquidity in volatile market conditions;

changes in timing and demand for the Company s products among the Company s customers and various market sectors, particularly if they should reduce capital expenditures or are unable to obtain funding, as in the cases of governmental, academic and research institutions; the effect of mergers and acquisitions on customer demand for the Company s products; and the Company s ability to sustain and enhance service.

Negative industry trends; changes in the competitive landscape as a result of changes in ownership, mergers and continued consolidation among the Company s competitors; introduction of competing products by other companies and loss of market share; pressures on prices from customers or resulting from competition; regulatory, economic and competitive obstacles to new product introductions; lack of acceptance of new products; expansion of our business in developing markets; spending by certain end-markets; ability to obtain alternative sources for components and modules; and the possibility that future sales of new products related to acquisitions, which trigger contingent purchase payments, may exceed the Company s expectations.

Increased regulatory burdens as the Company s business evolves, especially with respect to the FDA and EPA, among others, as well as regulatory, environmental and logistical obstacles affecting the distribution of the Company s products, completion of purchase order documentation by our customers and ability of customers to obtain letters of credit or other financing alternatives.

Risks associated with lawsuits, particularly involving claims for infringement of patents and other intellectual property rights.

The impact and costs incurred from changes in accounting principles and practices; the impact and costs of changes in statutory or contractual tax rates in jurisdictions in which the Company operates, specifically as it relates to the 2017 Tax Act in the U.S.; shifts in taxable income among jurisdictions with different effective tax rates; and the outcome of and costs associated with ongoing and future tax audit examinations or changes in respective country legislation affecting the Company s effective rates.

Certain of these and other factors are further described below in Item 1A, Risk Factors, of this Form 10-K. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements, whether because of these factors or for other reasons. All forward-looking statements speak only as of the date of this annual report on Form 10-K and are expressly qualified in their entirety by the cautionary statements included in this report. Except as required by law, the Company does not assume any obligation to update any forward-looking statements.

**Item 1A:** ***Risk Factors***

The Company is subject to risks and uncertainties, including, but not limited to, the following:

*The Company s international operations may be negatively affected by political events, wars or terrorism and regulatory changes, related to either a specific country or a larger region. These potential political, currency and economic disruptions, as well as foreign currency exchange rate fluctuations, could have a material adverse effect on the Company s results of operations or financial condition.*

Approximately 72% and 71% of the Company s net sales in 2018 and 2017, respectively, were outside of the United States and were primarily denominated in foreign currencies. In addition, the Company has considerable manufacturing operations in Ireland and the United Kingdom, as well as significant subcontractors located in Singapore. As a result, a significant portion of the Company s sales and operations are subject to certain risks, including adverse developments in the political, regulatory and economic environment, in particular, uncertainty regarding possible changes to foreign and domestic trade policy; the effect of the U.K. voting to exit the European Union as well as the financial difficulties and debt burden experienced by a number of European countries; the instability and potential impact of war or terrorism; the instability and possible dissolution of the Euro as a single currency; sudden movements in a country s foreign exchange rates due to a change in a country s sovereign risk profile or foreign exchange regulatory practices; tariffs and other trade barriers; difficulties in staffing and managing foreign operations; and associated adverse operational, contractual and tax consequences.

Additionally, the U.S. dollar value of the Company s net sales, cost of sales, operating expenses, interest, taxes and net income varies with foreign currency exchange rate fluctuations. Significant increases or decreases in the value of the U.S. dollar relative to certain foreign currencies, particularly the Euro, Japanese yen and British pound, could have a material adverse effect or benefit on the Company s results of operations or financial condition.

*Global economic conditions may decrease demand for the Company s products and harm the Company s financial results.*

The Company is a global business that may be adversely affected by changes in global economic conditions. These changes in global economic conditions, both inside and outside the U.S., may affect the demand for the Company s products and services. This may result in a decline in sales in the future, increased rate of order cancellations or delays, increased risk of excess or obsolete inventories, longer sales cycles and potential difficulty in collecting sales proceeds. There can be no assurance regarding demand for the Company s products and services in the future.

*The Company s financial results are subject to changes in customer demand, which may decrease for a number of reasons, many beyond the Company s control.*

The demand for the Company s products is dependent upon the size of the markets for its LC, LC-MS, thermal analysis, rheometry and calorimetry products; the timing and level of capital spending and expenditures of the Company s customers; changes in governmental regulations, particularly affecting drug, food and drinking water testing; funding available to governmental, academic and research institutions; general economic conditions and the rate of economic growth in the Company s major markets; and competitive considerations. The Company typically experiences an increase in sales in its fourth quarter as a result of purchasing habits for capital goods by customers that tend to exhaust their spending budgets by calendar year end. However, there can be no assurance that the Company will effectively forecast customer demand and appropriately allocated research and development expenditures to products with high growth and high margin prospects. Additionally, there can be no assurance that the Company s results of operations or financial condition will not be adversely impacted by a change in any of the factors listed above or the continuation of uncertain global economic conditions.

Additionally, the analytical instrument market may, from time to time, experience low sales growth. Approximately 56% of the Company s net sales in both 2018 and 2017 were to worldwide pharmaceutical and biotechnology companies, which may be periodically subject to unfavorable market conditions and consolidations. Unfavorable industry conditions could have a material adverse effect on the Company s results of operations or financial condition.

*Disruption in worldwide financial markets could adversely impact the Company s access to capital and financial condition.*

Financial markets in the U.S., Europe and Asia have experienced times of extreme disruption, including, among other things, sharp increases in the cost of new capital, credit rating downgrades and bailouts, severely diminished capital availability and severely reduced liquidity in money markets. Financial and banking institutions have also experienced disruptions, resulting in large asset write-downs, higher costs of capital, rating downgrades and reduced desire to lend money. There can be no assurance that there will not be future deterioration or prolonged disruption in financial markets or financial institutions. Any future deterioration or prolonged disruption in financial markets or financial institutions in which the Company participates may impair the Company s ability to access its existing cash, utilize its existing syndicated bank credit facility funded by such financial institutions, and impair its ability to access sources of new capital. The cost to the Company of any new capital raised and interest expense would increase if this were to occur.

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*Competitors may introduce more effective or less expensive products than the Company s, which could result in decreased sales. The competitive landscape may transform as a result of potential changes in ownership, mergers and continued consolidations among the Company s competitors, which could harm the Company s business.*

The analytical instrument market and, in particular, the portion related to the Company s HPLC, UPLC, LC-MS, thermal analysis, rheometry and calorimetry product lines, is highly competitive and subject to rapid changes in technology. The Company encounters competition from several international instrument suppliers and other companies in both domestic and foreign markets. Some competitors have instrument businesses that are generally more diversified than the Company s business, but are typically less focused on the Company s chosen markets. Over the years, some competitors have merged with other competitors for various reasons, including increasing product line offerings, improving market share and reducing costs. There can be no assurance that the Company s competitors will not introduce more effective and less costly products than those of the Company or that the Company will be able to increase its sales and profitability from new product introductions. There can be no assurance that the Company s sales and marketing forces will compete successfully against the Company s competitors in the future.

*Strategies for organic growth require developing new technologies and bringing these new technologies to market, which could negatively impact the Company s financial results.*

The Company s corporate strategy is fundamentally based on winning through organic innovation and deep application expertise. The Company is in the process of developing new products with recently acquired technologies. The future development of these new products will require a significant amount of spending over the next few years before significant, robust sales will be realized. Furthermore, these new products will be sold into both the non-clinical and clinical markets, and any new products requiring FDA clearance may take longer to bring to market. There can be no assurance given as to the timing of these new product launches and the ultimate realization of sales and profitability in the future.

*The Company s software or hardware may contain coding or manufacturing errors that could impact their function, performance and security, and result in other negative consequences.*

Despite testing prior to the release and throughout the lifecycle of a product or service, the detection and correction of any errors in released software or hardware can be time consuming and costly. This could delay the development or release of new products or services, or new versions of products or services, create security vulnerabilities in the Company s products or services, and adversely affect market acceptance of products or services. If the Company experiences errors or delays in releasing its software or hardware, or new versions thereof, its sales could be affected and revenues could decline. Errors in software or hardware could expose the Company to product liability, performance and warranty claims as well as harm to brand and reputation, which could impact future sales.

*The loss of key members of management and the risks inherent in succession planning could adversely affect the Company s results of operations or financial condition.*

The operation of the Company requires managerial and operational expertise. None of the Company s key management employees, with the exception of the Chairman and Chief Executive Officer and the Senior Vice President and Chief Financial Officer, have an employment contract with the Company and there can be no assurance that such individuals will remain with the Company. If, for any reason, other such key personnel do not continue to be active in management, the Company s results of operations or financial condition could be adversely affected.

*Disruption of operations at the Company s manufacturing facilities could harm the Company s financial condition.*

The Company manufactures LC instruments at facilities in Milford, Massachusetts and through a subcontractor in Singapore; precision chemistry separation columns at its facilities in Taunton, Massachusetts and Wexford,

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Ireland; MS products at its facilities in Wilmslow, England, Solihull, England and Wexford, Ireland; thermal analysis and rheometry products at its facilities in New Castle, Delaware and other instruments and consumables at various other locations as a result of the Company s acquisitions. Any prolonged disruption to the operations at any of these facilities, whether due to labor difficulties, destruction of or damage to any facility or other reasons, could have a material adverse effect on the Company s results of operations or financial condition.

*Failure to adequately protect intellectual property could have materially adverse effects on the Company s results of operations or financial condition.*

There can be no assurance that any patents held by the Company will not be challenged, invalidated or circumvented or that the rights granted thereunder will provide competitive advantages to the Company. Additionally, there could be successful claims against the Company by third-party patent holders with respect to certain Company products that may infringe the intellectual property rights of such third parties. The Company s patents, including those licensed from others, expire on various dates. If the Company is unable to protect its intellectual property rights, it could have an adverse and material effect on the Company s results of operations or financial condition.

*The Company s business would suffer if the Company were unable to acquire adequate sources of supply.*

Most of the raw materials, components and supplies purchased by the Company are available from a number of different suppliers; however, a number of items are purchased from limited or single sources of supply and disruption of these sources could have, at a minimum, a temporary adverse effect on shipments and the financial results of the Company. A prolonged inability to obtain certain materials or components could have an adverse effect on the Company s financial condition or results of operations and could result in damage to its relationships with its customers and, accordingly, adversely affect the Company s business.

*The Company s sales would deteriorate if the Company s outside contractors fail to provide necessary components or modules.*

Certain components or modules of the Company s LC and MS instruments are manufactured by outside contractors, including the manufacturing of LC instrument systems and related components by contract manufacturing firms in Singapore. Disruptions of service by these outside contractors could have an adverse effect on the supply chain and the financial results of the Company. A prolonged inability to obtain these components or modules could have an adverse effect on the Company s financial condition or results of operations.

*The Company s business could be harmed by actions of distributors and other third parties that sell our products.*

The Company sells some products through third parties, including distributors and value-added resellers. This exposes us to various risks, including competitive pressure, concentration of sales volumes, credit risks and compliance risks. We may rely on one or a few key distributors for a product or market and the loss of these distributors could reduce our revenue or net earnings. Distributors may also face financial difficulties, including bankruptcy, which could harm our collection of accounts receivable. Violations of the U.S. Foreign Corrupt Practices Act ( FCPA ), the U.K. Bribery Act or similar anti-bribery laws by distributors or other third-party intermediaries could materially impact our business. Risks related to our use of distributors may reduce sales, increase expenses and weaken our competitive position.

*The Company may be harmed by improper conduct of any of our employees, agents or business partners.*

We cannot provide assurance that our internal controls and compliance systems will always protect the Company from acts committed by employees, agents or business partners that would violate domestic and international laws, including laws governing payments to government officials, bribery, fraud, kickbacks and false claims, pricing, sales and marketing practices, conflicts of interest, competition, export and import compliance, money

laundering and data privacy. In particular, the FCPA, the U.K. Bribery Act and similar anti-bribery laws generally prohibit companies and their intermediaries from making improper payments to government officials for the purpose of obtaining or retaining business, and we operate in many parts of the world that have experienced governmental corruption to some degree. Any such improper actions or allegations of such acts could damage our reputation and subject us to civil or criminal investigations in the U.S. and in other jurisdictions and related shareholder lawsuits, could lead to substantial civil and criminal, monetary and non-monetary penalties and could cause us to incur significant legal and investigatory fees. In addition, the government may seek to hold us liable as a successor for violations committed by companies in which we invest or that we acquire. We also rely on our suppliers to adhere to our supplier standards of conduct and material violations of such standards of conduct could occur that could have a material effect on our business, reputation and financial statements.

*The effects of climate change could harm the Company s business.*

The Company s manufacturing processes for certain of its products involve the use of chemicals and other substances that are regulated under various international, federal, state and local laws governing the environment. In the event that any future climate change legislation would require that stricter standards be imposed by domestic or international environmental regulatory authorities with respect to the use and/or levels of possible emissions from such chemicals and/or other substances, the Company may be required to make certain changes and adaptations to its manufacturing processes. Any such changes could have a material adverse effect on the financial statements of the Company.

Another potential effect of climate change is an increase in the severity of global weather conditions. The Company s manufacturing facilities are located in the United States, United Kingdom, Ireland and Germany. In addition, the Company manufactures a growing percentage of its HPLC, UPLC and MS products in both Singapore and Ireland. Severe weather and geological conditions or events, including earthquakes, hurricanes and/or tsunamis, could potentially cause significant damage to the Company s manufacturing facilities in each of these countries. The effects of such damage and the resulting disruption of manufacturing operations and the impact of lost sales could have a material adverse impact on the financial results of the Company.

*The Company s financial results are subject to unexpected shifts in pre-tax income between tax jurisdictions, changing application of tax law and tax audit examinations.*

The Company is subject to rates of income tax that range from 0% up to 35% in various jurisdictions in which it conducts business. In addition, the Company typically generates a substantial portion of its income in the fourth quarter of each fiscal year. Geographical shifts in income from previous quarters projections caused by factors including, but not limited to, changes in volume and product mix and fluctuations in foreign currency translation rates, could therefore have potentially significant favorable or unfavorable effects on the Company s income tax expense, effective tax rate and results of operations.

Governments in the jurisdictions in which the Company operates implement changes to tax laws and regulations from time to time. Any changes in corporate income tax rates or regulations regarding transfer pricing or repatriation of dividends or capital, as well as changes in the interpretation of existing tax laws and regulations, in the jurisdictions in which the Company operates could adversely affect the Company s cash flow and lead to increases in its overall tax burden, which would negatively affect the Company s profitability.

On December 22, 2017, the U.S. enacted the 2017 Tax Act. The 2017 Tax Act changed the U.S. tax system to a territorial tax system, including base broadening measures on non-U.S. earnings, whereby historical unremitted, earnings of foreign subsidiaries are deemed to have been repatriated to the U.S. in 2017 regardless of when the assets are actually remitted to the U.S., as well as reducing or eliminating certain domestic deductions and credits and limiting the deductibility of interest expense and executive compensation. Earnings deemed to have been distributed to the U.S. in accordance with the aforementioned 2017 Tax Act deemed distribution rules are subject to a transition tax, which is a one-time, mandatory deemed repatriation tax on the accumulated

foreign earnings that have not been previously taxed. To the extent those earnings are deemed to have been invested in cash and cash equivalents, they will be taxed at a rate of 15.5%; the remainder of those earnings will be taxed at a rate of 8.0%. As a result, the Company s historical unremitted foreign earnings were deemed repatriated in 2017 and the Company incurred a $550 million estimated tax provision, which primarily consisted of an estimated transition tax, as well as estimated income tax provisions for state and withholding taxes and a provision associated with the remeasurement of the Company s deferred tax assets and liabilities from 35% to the new U.S. corporate income tax rate of 21%. The transition tax will be paid over an eight-year period, which started in 2018, and will not accrue interest. During 2018, the Internal Revenue Service issued proposed regulations with respect to the transition tax and other new areas of the Tax Reform law that impact the 2018 tax provision. The Company anticipates additional proposed regulations, and the final versions of the currently proposed regulations could clarify or change the interpretation of the new laws. As permitted by the SEC Staff Accounting Bulletin No. 118, the Company completed its analysis and calculation of the 2017 Tax Act federal and state transition tax liability during 2018, which remained significantly unchanged.

The Company has a contractual tax rate in Singapore of 0% through March 2021, based upon the achievement and continued satisfaction of certain operational and financial milestones, which the Company expects to continue to meet. Currently, the Company has determined that it is more likely than not to realize the contractual tax rate in Singapore of 0% and has not recognized any uncertain tax position in its balance sheet related to the achievement of the contractual milestones in Singapore. In the event that it appears that the milestone targets will not be met, the Company will no longer be entitled to a 0% contractual tax rate benefit on income earned in Singapore dating back to the start date of the agreement (April 1, 2016), at which time all tax benefits previously recorded would be reversed and an income tax charge equal to the statutory tax of 17% on income earned during that period would be recorded.

As a global business, the Company is subject to tax audit examinations in various jurisdictions throughout the world. The Company must manage the cost and disruption of responding to governmental audits, investigation and proceedings. In addition, the impact of the settlement of pending or future tax audit examination could have an unfavorable effect on the Company s income tax expense, effective tax rate and results of operations.

*The Company s financial condition and results of operations could be adversely affected if the Company is unable to maintain a sufficient level of cash flow.*

The Company had $1,148 million in debt and $1,735 million in cash, cash equivalents and investments as of December 31, 2018. As of December 31, 2018, the Company also had the ability to borrow an additional $1,208 million from its existing, committed credit facility. All but a small portion of the Company s debt was in the U.S. There is a substantial cash requirement in the U.S. to fund operations and capital expenditures, service debt interest obligations, finance potential U.S. acquisitions and continue authorized stock repurchase programs.

The Company has conducted a post-tax reform evaluation of its capital allocation strategy and is currently planning to use its existing cash, cash equivalents and investments, cash flow from operations and available debt capacity to repurchase up to $4 billion of the Company s common stock over the next two years. As a result, the Company s financial condition and results of operations could be adversely impacted if the Company is unable to generate and maintain a sufficient level of cash flow to address these requirements through (1) cash from operations, (2) the Company s ability to access its existing cash and revolving credit facility, (3) the ability to expand the Company s borrowing capacity and (4) other sources of capital obtained at an acceptable cost.

*Debt covenants, and the Company s failure to comply with them, could negatively impact the Company s capital and financial results.*

The Company s debt is subject to restrictive debt covenants that limit the Company s ability to engage in certain activities that could otherwise benefit the Company. These debt covenants include restrictions on the Company s ability to enter into certain contracts or agreements, which may limit the Company s ability to make dividend or other payments, secure other indebtedness, enter into transactions with affiliates and consolidate, merge or

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transfer all or substantially all of the Company s assets. The Company is also required to meet specified financial ratios under the terms of the Company s debt agreements. The Company s ability to comply with these financial restrictions and all other covenants is dependent on the Company s future performance, which is subject to, but not limited to, prevailing economic conditions and other factors, including factors that are beyond the Company s control, such as foreign exchange rates, interest rates, changes in technology and changes in the level of competition. As of December 31, 2018, the Company was in compliance with all debt covenants.

*Disruption, cyber attack or unforeseen problems with the security, maintenance or upgrade of the Company s information and web-based systems could have an adverse effect on the Company s operations and financial condition.*

The Company relies on its technology infrastructure and that of its software and banking partners, among other functions, to interact with suppliers, sell products and services, fulfill contract obligations, ship products, collect and make electronic wire and check based payments and otherwise conduct business. The Company s technology infrastructure may be vulnerable to damage or interruption from, but not limited to, natural disasters, power loss, telecommunication failures, terrorist attacks, computer viruses, unauthorized access to customer or employee data, unauthorized access to and funds transfers from Company bank accounts and other attempts to harm the Company s systems. Any prolonged disruption to the Company s technology infrastructure, at any of its facilities, could have a material adverse effect on the Company s results of operations or financial condition.

*If the Company s security measures are compromised or fail to adequately protect its technology infrastructure, research and development efforts or manufacturing operations, the Company s products and services may be perceived as vulnerable or unreliable, the information the Company s controls and processes may be subject to unauthorized access, acquisition or modification, the Company s brand and reputation could be damaged, the services that the Company provides to its customers could be disrupted, and customers may stop using the Company s products and services, all of which could reduce the Company s revenue and earnings, increase its expenses and expose the Company to legal claims and regulatory actions.*

The Company is in the business of designing, manufacturing, selling and servicing analytical instruments to life science, pharmaceutical, biochemical, industrial, nutritional safety, and environmental, academic and governmental customers working in research and development, quality assurance and other laboratory applications, and the Company is also a developer and supplier of software-based products that support instrument systems. Many of the Company s customers are in highly regulated industries. While the Company has invested time and resources implementing measures designed to protect the integrity and security of its technology infrastructure, research and development processes, manufacturing operations, products and services, and the internal and external data managed by the Company, there is a risk these measures will be defeated or compromised or that they are otherwise insufficient to protect against existing or emerging threats. The Company also has acquired companies, products, services and technologies over time and may face inherit risk when integrating these acquisitions into the Company. In addition, at times, the Company faces attempts by third parties to defeat its security measures or exploit vulnerabilities in its systems. These risks will increase as the Company continues to grow and expand geographically, and its systems, products and services become increasingly digital and sensor- and web-based.

The Company could suffer significant damage to its brand and reputation if a security incident resulted in unauthorized access to, acquisition of, or modification to the Company s technology infrastructure, research and development processes, manufacturing operations, its products and services as well as the internal and external data managed by the Company. Such an incident could disrupt the Company s operations and customers could lose confidence in the Company s ability to deliver quality and reliable products or services. This could negatively impact sales and could increase costs related to fixing and addressing these incidents and any vulnerabilities exposed by them, as well as to lawsuits, regulatory investigations, claims or legal liability including contractual liability, costs and expenses owed to customers and business partners.

*Compliance failures could harm the Company s business.*

The Company is subject to regulation by various federal, state and foreign governments and agencies in areas including, among others, health and safety, import/export, privacy and data protection, FCPA and environmental laws and regulations. A portion of the Company s operations are subject to regulation by the FDA and similar foreign regulatory agencies. These regulations are complex and govern an array of product activities, including design, development, labeling, manufacturing, promotion, sales and distribution. Any failure by the Company to comply with applicable governmental regulations could result in product recalls, the imposition of fines, restrictions on the Company s ability to conduct or expand its operations or the cessation of all or a portion of its operations.

Regulators globally are increasingly imposing greater fines and penalties for privacy and data protection violations, and the European Union has enacted a broad data protection regulation with fines based on a percentage of global revenues. Changes in laws or regulations associated with enhanced protection of certain sensitive types of personal information, such as information related to health, could greatly increase the cost of compliance and the cost of providing the Company s products or services. Any failure, or perceived failure, by the Company to comply with laws and regulations on privacy, data security or consumer protection, or other policies, public perception, standards, self-regulatory requirements or legal obligations, could result in lost or restricted business, proceedings, actions or fines brought against the Company or levied by governmental entities or others, or could otherwise adversely affect the business and harm the Company s reputation.

Some of the Company s operations are subject to domestic and international laws and regulations with respect to the manufacturing, handling, use or sale of toxic or hazardous substances. This requires the Company to devote substantial resources to maintain compliance with those applicable laws and regulations. If the Company fails to comply with such requirements in the manufacturing or distribution of its products, it could face civil and/or criminal penalties and potentially be prohibited from distributing or selling such products until they are compliant.

Some of the Company s products are also subject to the rules of certain industrial standards bodies, such as the International Standards Organization. The Company must comply with these rules, as well as those of other agencies, such as the United States Occupational Safety and Health Administration. Failure to comply with such rules could result in the loss of certification and/or the imposition of fines and penalties, which could have a material adverse effect on the Company s operations.

As a publicly-traded company, the Company is subject to the rules of the SEC and the New York Stock Exchange. In addition, the Company must comply with the Sarbanes-Oxley regulations, which require the Company to establish and maintain adequate internal control over financial reporting. The Company s efforts to comply with such laws and regulations are time consuming and costly. While we continue to enhance our controls, we cannot be certain that we will be able to prevent future significant deficiencies or material weaknesses. Failure to comply with such regulations or having inadequate internal controls could have a material adverse effect on the Company s financial condition and operations, which could cause investors to lose confidence in our reported financial information and could have a negative effect on the trading price of our stock and our access to capital.

The Company is subject to the rules of the SEC under the Dodd-Frank Wall Street Reform and Consumer Protection Act, requiring disclosure as to whether certain materials (tantalum, tin, gold and tungsten), known as conflict minerals, which may be contained in the Company s products, are mined from the Democratic Republic of the Congo and adjoining countries. In 2017, the Company was not able to determine with certainty the country of origin of some of the conflict minerals in its manufactured products. However, the Company does not have knowledge that any of its conflict minerals originated from the Democratic Republic of the Congo or adjoining countries. The Company is in the process of evaluating its 2018 supply chain, and the Company plans to file its 2018 Form SD with the SEC in May 2019. The results of this and future evaluations may impose additional costs and may introduce new risks related to the Company s ability to verify the origin of any conflict minerals contained in its products.

*The Company s financial condition and results of operations could be adversely affected by changes to the Company s retirement plans or retirement plan assets.*

In December 2018, the Company settled a frozen U.S. defined benefit pension plan by making lump-sum cash payments and purchasing annuity contracts for participants to permanently extinguish the pension plan s obligations. This plan was the Company s largest defined benefit pension plan. The Company still sponsors various retirement plans, both inside and outside the U.S. Any changes in regulations made by governments in countries in which the Company sponsors retirement plans could adversely impact the Company s cash flows or results of operations. In connection with these retirement plans, the Company is exposed to market risks associated with changes in the various capital markets. For example, changes in long-term interest rates affect the discount rate that is used to measure the Company s retirement plan obligations and related expense. In addition, changes in the market value of investments held by the retirement plans could materially impact the funded status of the retirement plans, and affect the related pension expense and level and timing of contributions required under applicable laws.

*Estimates and assumptions made in accounting for the Company s results from operations are dependent on future results, which involve significant judgments and may be imprecise and may differ materially from actual results.*

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities at the dates of the financial statements. These estimates and assumptions must be made due to certain information used in preparation of our financial statements which is dependent on future events, cannot be calculated with a high degree of precision from data available or is not capable of being readily calculated based on generally accepted methodologies. The Company believes that the accounting related to revenue recognition, product returns and allowances, bad debts, inventory valuation, goodwill and intangible assets, income taxes, warranty and installation provisions, litigation, retirement plan obligations, stock-based compensation, equity investments, business combinations and asset acquisitions, uncertain tax positions and contingencies involves significant judgments and estimates. Actual results for all estimates could differ materially from the estimates and assumptions used, which could have a material adverse effect on our financial condition and results of operations.

**Item 1B:** ***Unresolved Staff Comments***

None.

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**Item 2:** ***Properties***

Waters Corporation operates 22 United States facilities and 72 international facilities, including field offices. The Company believes its facilities are suitable and adequate for its current production level and for reasonable growth over the next several years. The Company s primary facilities are summarized in the table below.

***Primary Facility Locations***

| Location | Function (1) | Owned/Leased |
|---|---|---|
| Golden, CO | M, R, S, D, A | Leased |
| New Castle, DE | M, R, S, D, A | Owned |
| Franklin, MA | D | Leased |
| Milford, MA | M, R, S, A | Owned |
| Taunton, MA | M, R | Owned |
| Wakefield, MA | M, R, S, D, A | Leased |
| Eden Prairie, MN | M, R, S, D, A | Leased |
| Nixa, MO | M, S, D, A | Leased |
| Sharpsburg, PA | M, R, S, D, A | Leased |
| Lindon, UT | M, R, S, D, A | Leased |
| Newcastle, England | R, S, D, A | Leased |
| Solihull, England | M,A | Owned |
| Wilmslow, England | M, R, S, D, A | Owned |
| St. Quentin, France | S, A | Leased |
| Bochum, Germany | R, S, A | Leased |
| Huellhorst, Germany | M, R, S, D, A | Owned |
| Budapest, Hungary | R | Leased |
| Wexford, Ireland | M, R, D, A | Owned |
| Etten-Leur, Netherlands | S, D, A | Owned |
| Brasov, Romania | R, A | Leased |
| Singapore | R, S, D, A | Leased |

(1) M = Manufacturing; R = Research; S = Sales and Service; D = Distribution; A = Administration

The Company operates and maintains 11 field offices in the United States and 61 field offices abroad in addition to sales offices in the primary facilities listed above. The Company s field office locations are listed below.

***Field Office Locations (2)***

| United States | International | | |
|---|---|---|---|
| Costa Mesa, CA | Australia | India | Portugal |
| Pleasanton, CA | Austria | Ireland | Poland |
| Wood Dale, IL | Belgium | Israel | Puerto Rico |
| Carmel, IN | Brazil | Italy | Spain |
| Columbia, MD | Canada | Japan | Sweden |
| Beverly, MA | Czech Republic | Korea | Switzerland |
| Durham, NC | Denmark | Malaysia | Taiwan |
| Morrisville, NC | Finland | Mexico | United Kingdom |
| Parsippany, NJ | France | Netherlands | |
| Plymouth Meeting, PA | Germany | Norway | |
| Bellaire, TX | Hungary | People s Republic of China | |

(2) The Company operates more than one field office within certain states and foreign countries.

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**Item 3:** ***Legal Proceedings***

From time to time, the Company and its subsidiaries are involved in various litigation matters arising in the ordinary course of business. The Company believes it has meritorious arguments in its current litigation matters and believes any outcome, either individually or in the aggregate, will not be material to the Company s financial position or results of operations.

**Item 4:** ***Mine Safety Disclosures***

Not applicable.

**EXECUTIVE OFFICERS OF THE REGISTRANT**

Officers of the Company are elected annually by the Board of Directors and hold office at the discretion of the Board of Directors. The following persons serve as executive officers of the Company:

Christopher J. O Connell, 52, has served as a Director of the Company since September 2015, when he assumed the position of President and Chief Executive Officer of the Company. In December 2017, Mr. O Connell was appointed as the Chairman of the Board of Directors of the Company. Mr. O Connell served as Executive Vice President and President of Restorative Therapies Group of Medtronic plc from August 2009 to August 2015. From 1994 to August 2009, Mr. O Connell served in the following positions at Medtronic plc: Senior Vice President and President of Medtronic Diabetes, President of Medtronic Physio-Control, Vice President of Sales and Marketing for the Cardiac Rhythm Management business, Vice President/General Manager of the Patient Management Business, Vice President of Corporate Strategy, Director of Investor Relations and Corporate Development Associate.

Mark T. Beaudouin, 64, was appointed Senior Vice President, General Counsel and Secretary in February 2016 and was Vice President, General Counsel and Secretary of the Company since April 2003. Prior to joining Waters Corporation, he served as Senior Vice President, General Counsel and Secretary of PAREXEL International Corporation, a bio/pharmaceutical services company, from January 2000 to April 2003. Previously, from May 1985 to January 2000, Mr. Beaudouin served in several senior legal management positions, including Vice President, General Counsel and Secretary of BC International, Inc., a development stage biotechnology company, First Senior Vice President, General Counsel and Secretary of J. Baker, Inc., a diversified retail company, and General Counsel and Secretary of GenRad, Inc., a high technology test equipment manufacturer.

Sherry L. Buck, 55, was appointed Senior Vice President and Chief Financial Officer in January 2017. Previously, Ms. Buck served as the Vice President, Chief Financial Officer of Libbey Inc. since August 2012. From 1993 to 2012, Ms. Buck held several positions at Whirlpool Corporation, including Vice President, Finance/Chief Financial Officer, Global Product and Enterprise Cost Leadership; Vice President, Finance US; Vice President, Cost Leadership; Vice President, Finance International; and Vice President, Business Performance Management.

Robert G. Carson, 45, was appointed Senior Vice President, Corporate Development in February 2018. Prior to joining Waters Corporation, he held several positions during his 16 years at Medtronic plc, including Vice President and General Manager, Pacemaker Business from January 2017 to January 2018. In addition, Mr. Carson spent nearly 12 years in Medtronic s spinal implants and biologics business, serving as Vice President and General Manager from July 2016 to January 2017, Vice President of Global Marketing & Strategy from April 2015 to July 2016 and Vice President & Therapy Segment Leader from October 2012 to April 2015. Mr. Carson began his career with Banc of America Securities.

Dr. Michael C. Harrington, 58, was appointed Senior Vice President, Global Markets in February 2016. Dr. Harrington joined Waters Corporation in 1987 and has held several senior positions with Waters Corporation,

including Vice President, Europe and Asia Pacific Operations, Senior Director of US Sales Operations, Director of US Chemistry Sales and General Manager of Phase Separations. Prior to joining Waters Corporation, Dr. Harrington held senior sales positions at Celsis, Inc.

Terrance P. Kelly, 56, was appointed Senior Vice President and President, TA Instruments in February 2016. Mr. Kelly has served as President, TA instruments since February 2005. Mr. Kelly started his career in finance and accounting at ICI in 1985. He joined DuPont in 1988. He held various sales and marketing positions with DuPont, and later TA Instruments. Mr. Kelly joined Waters Corporation in 1996, when TA Instruments was acquired.

Francis Kim, 52, was appointed Senior Vice President, Global Operations in February 2018. Mr. Kim previously served as Vice President of Global Quality Assurance since November 2016. Prior to joining Waters Corporation, he held several positions during his 20 years at Medtronic plc, including Vice President of Quality, Restorative Therapies Group from May 2015 to November 2016 and Vice President of Quality, Regulatory and Clinical Affairs, Surgical Technologies Division from January 2011 to May 2015.

Ian S. King, 62, was appointed Senior Vice President, Global Products in July 2017. Mr. King joined Waters in 1982 and previously served as Senior Vice President, Instrument Technology; Vice President, Separations Technologies; and Vice President and General Manager of Consumable Division, as well as a variety of scientific and management positions in Waters Corporation s international subsidiaries. Prior to joining Waters Corporation, Mr. King worked at Edinburgh University as a research scientist.

Elizabeth B. Rae, 61, was appointed Senior Vice President, Global Human Resources in February 2016 and was Vice President of Human Resources since October 2005 and Vice President of Worldwide Compensation and Benefits since January 2002. Ms. Rae joined Waters Corporation in January 1996 as Director of Worldwide Compensation. Prior to joining Waters Corporation, she held senior human resources positions in retail, healthcare and financial services companies.

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## PART II

**Item 5:** ***Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

The Company s common stock is registered under the Securities Exchange Act of 1934, as amended (the Exchange Act ), and is listed on the New York Stock Exchange under the symbol WAT . As of February 21, 2019, the Company had 86 common stockholders of record. The Company has not declared or paid any dividends on its common stock in its past three fiscal years and does not intend to pay cash dividends in the foreseeable future. Any future determination to pay cash dividends will be made at the discretion of the Board of Directors and will depend on restrictions and other factors the Board of Directors may deem relevant. The Company has not made any sales of unregistered equity securities in the years ended December 31, 2018, 2017 or 2016.

**Securities Authorized for Issuance under Equity Compensation Plans**

Equity compensation plan information is incorporated by reference from Part III, Item 12, Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters, of this document and should be considered an integral part of this Item 5.

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**Stock Price Performance Graph**

*The following performance graph and related information shall not be deemed to be soliciting material or to be filed with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference into such filing.*

The following graph compares the cumulative total return on $100 invested as of December 31, 2013 (the last day of public trading of the Company s common stock in fiscal year 2013) through December 31, 2018 (the last day of public trading of the common stock in fiscal year 2018) in the Company s common stock, the NYSE Market Index, the SIC Code 3826 Index and the S&P 500 Index. The return of the indices is calculated assuming reinvestment of dividends during the period presented. The Company has not paid any dividends since its IPO. The stock price performance shown on the graph below is not necessarily indicative of future price performance.

**COMPARISON OF CUMULATIVE TOTAL RETURN SINCE DECEMBER 31, 2013**

**AMONG WATERS CORPORATION, NYSE MARKET INDEX, SIC CODE 3826 INDEX LABORATORY ANALYTICAL INSTRUMENTS AND S&P 500 INDEX**

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| WATERS CORPORATION | $ 100.00 | $ 112.72 | $ 134.58 | $ 134.39 | $ 193.19 | $ 188.65 |
| NYSE MARKET INDEX | $ 100.00 | $ 106.75 | $ 102.38 | $ 114.61 | $ 136.07 | $ 123.89 |
| SIC CODE INDEX | $ 100.00 | $ 127.50 | $ 141.59 | $ 130.44 | $ 199.51 | $ 210.24 |
| S&P 500 INDEX | $ 100.00 | $ 113.69 | $ 115.26 | $ 129.05 | $ 157.22 | $ 150.33 |

**Purchases of Equity Securities by the Issuer**

The following table provides information about purchases by the Company during the three months ended December 31, 2018 of equity securities registered by the Company under the Exchange Act (in thousands, except per share data):

| Period | Total Number of Shares Purchased (1) | Average Price Paid per Share | Total Number of Shares Purchased as Part of Publicly Announced Programs (2) | Maximum Dollar Value of Shares that May Yet Be Purchased Under the Programs (2) |
|---|---|---|---|---|
| September 30 to October 27, 2018 | 128 | $ 182.79 | 128 | $ 2,968,685 |
| October 28 to November 24, 2018 | 1,126 | $ 195.56 | 1,126 | $ 2,748,484 |
| November 25 to December 31, 2018 | 1,466 | $ 189.54 | 1,460 | $ 2,471,785 |
| Total | 2,720 | $ 191.71 | 2,714 | $ 2,471,785 |

(1) The Company repurchased 6 thousand shares of common stock at a cost of less than $1 million related to the vesting of restricted stock units during the three months ended December 31, 2018.

(2) In April 2018, the Company s Board of Directors authorized the repurchase of up to $3.5 billion of its outstanding common stock in open market or private transactions over a three-year period. In January 2019, the Company s Board of Directors authorized the Company to repurchase up to $4 billion of its outstanding common stock in open market or private transactions over a two-year period. This new program replaced the remaining amounts available under the April 2018 authorization.

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**Item 6: Selected Financial Data**

The following table sets forth selected historical consolidated financial and operating data for the periods indicated. The statement of operations and balance sheet data is derived from financial statements for the years 2018, 2017, 2016, 2015 and 2014. The Company s financial statements as of December 31, 2018 and 2017, and for each of the three years in the period ended December 31, 2018 are included in Part II, Item 8, Financial Statements and Supplementary Data, of this Form 10-K.

| In thousands, except per share and employees data | 2018 | 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|---|
| **STATEMENT OF OPERATIONS DATA:** | | | | | |
| Net sales | $ 2,419,929 | $ 2,309,078 | $ 2,167,423 | $ 2,042,332 | $ 1,989,344 |
| Income from operations before income taxes | $ 682,146 | $ 641,097 | $ 600,114 | $ 541,918 | $ 490,740 |
| Net income* | $ 593,794 | $ 20,311 | $ 521,503 | $ 469,275 | $ 431,620 |
| Net income per basic common share* | $ 7.71 | $ 0.25 | $ 6.46 | $ 5.70 | $ 5.12 |
| Weighted-average number of basic common shares | 76,992 | 79,793 | 80,786 | 82,336 | 84,358 |
| Net income per diluted common share* | $ 7.65 | $ 0.25 | $ 6.41 | $ 5.65 | $ 5.07 |
| Weighted-average number of diluted common shares and equivalents | 77,618 | 80,604 | 81,417 | 83,087 | 85,151 |
| **BALANCE SHEET AND OTHER DATA:** | | | | | |
| Cash, cash equivalents and investments | $ 1,735,224 | $ 3,393,701 | $ 2,813,032 | $ 2,399,263 | $ 2,055,388 |
| Working capital, including current maturities of debt** | $ 2,214,232 | $ 3,663,977 | $ 3,115,124 | $ 2,649,457 | $ 2,236,558 |
| Total assets** | $ 3,727,426 | $ 5,324,354 | $ 4,662,059 | $ 4,268,677 | $ 3,874,690 |
| Long-term debt** | $ 1,148,172 | $ 1,897,501 | $ 1,701,966 | $ 1,493,027 | $ 1,237,463 |
| Stockholders equity*** | $ 1,567,258 | $ 2,233,788 | $ 2,301,949 | $ 2,058,851 | $ 1,894,666 |
| Employees | 7,246 | 7,020 | 6,899 | 6,594 | 6,161 |

* The provision for income taxes for 2017 includes a $550 million estimate for the impact of the enactment of the 2017 Tax Act, which was signed into law on December 22, 2017. The $550 million income tax provision reduced net income per share by $6.82. The $550 million income tax provision primarily consists of an estimated transition tax, as well as estimated income tax provisions for state and withholding taxes and a provision associated with the remeasurement of the Company s deferred tax assets and liabilities from 35% to the new U.S. corporate income tax rate of 21%.

The Company adopted new accounting guidance related to stock-based compensation in 2017. The new accounting guidance requires the excess tax benefits or deficiencies related to stock-based compensation to be reflected in the consolidated statements of operations as a component of the provision for income taxes, whereas they were previously recognized in equity. This aspect of the new accounting guidance was required to be adopted on a prospective basis for the statement of operations and retroactive restatement is not permitted. In 2018 and 2017, the Company recognized an excess tax benefit, which decreased income tax expense by $9 million and $20 million, respectively, and added $0.11 and $0.24, respectively, to net income per diluted share.

In addition, in December 2018, the Company settled a pension plan obligation by making lump-sum cash payments and purchasing annuity contracts for participants to permanently extinguish the pension plan s obligations. As a result, the Company recorded a $46 million charge, which consisted of a $6 million cash contribution to the plan and a $40 million non-cash charge related to the reversal of unrecognized actuarial losses recorded in accumulated other comprehensive income in the stockholders equity. The $46 million pre-tax charge reduced net income per diluted share by $0.39.

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** In 2015, the Company adopted new accounting guidance related to the presentation of debt issuance costs and deferred income taxes, both standards have been applied above retrospectively. Certain debt issuance costs have been reclassified from intangible assets and are presented as a direct deduction from the carrying value of the associated debt. Current deferred tax assets and liabilities have been reclassified as non-current deferred tax assets and liabilities.

*** In 2018, the Company adopted new accounting guidance which eliminates the deferral of tax effects on intra-entity transfers other than inventory and requires an entity to recognize the income tax consequences when the transfer occurs. The Company adopted this standard as of January 1, 2018 with a $4 million charge to beginning retained earnings in the consolidated balance sheet.

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

**Business and Financial Overview**

The Company has two operating segments: Waters™ and TA™. Waters products and services primarily consist of high performance liquid chromatography ( HPLC ), ultra performance liquid chromatography ( UPLC™ and together with HPLC, referred to as LC ), mass spectrometry ( MS ) and precision chemistry consumable products and related services. TA products and services primarily consist of thermal analysis, rheometry and calorimetry instrument systems and service sales. The Company s products are used by pharmaceutical, biochemical, industrial, nutritional safety, environmental, academic and governmental customers. These customers use the Company s products to detect, identify, monitor and measure the chemical, physical and biological composition of materials and to predict the suitability and stability of fine chemicals, pharmaceuticals, water, polymers, metals and viscous liquids in various industrial, consumer goods and healthcare products.

The Company s operating results are as follows for the years ended December 31, 2018, 2017 and 2016 (dollars in thousands, except per share data):

| | Year Ended December 31, | | | *% change* | |
|---|---|---|---|---|---|
| | **2018** | **2017** | **2016** | ***2018 vs. 2017*** | ***2017 vs. 2016*** |
| Revenues: | | | | | |
| Product sales | $ 1,604,993 | $ 1,552,349 | $ 1,460,296 | *3%* | *6%* |
| Service sales | 814,936 | 756,729 | 707,127 | *8%* | *7%* |
| Total net sales | 2,419,929 | 2,309,078 | 2,167,423 | *5%* | *7%* |
| Costs and operating expenses: | | | | | |
| Cost of sales | 992,564 | 947,067 | 891,453 | *5%* | *6%* |
| Selling and administrative expenses | 536,902 | 544,363 | 512,331 | *(1%)* | *6%* |
| Research and development expenses | 143,403 | 132,593 | 125,187 | *8%* | *6%* |
| Purchased intangibles amortization | 7,712 | 6,743 | 9,889 | *14%* | *(32%)* |
| Litigation (settlement) provision | (426) | 11,114 | 3,524 | *(104%)* | *215%* |
| Acquired in-process research and development | | 5,000 | | *(100%)* | |
| Operating income | 739,774 | 662,198 | 625,039 | *12%* | *6%* |
| *Operating income as a % of sales* | *30.6%* | *28.7%* | *28.8%* | | |
| Other expense | (47,794) | (340) | (700) | ** | *51%* |
| Interest expense, net | (9,834) | (20,761) | (24,225) | *(53%)* | *(14%)* |
| Income before income taxes | 682,146 | 641,097 | 600,114 | *6%* | *7%* |
| Provision for income taxes | 88,352 | 620,786 | 78,611 | *(86%)* | *690%* |
| Net income | $ 593,794 | $ 20,311 | $ 521,503 | ** | *(96%)* |
| Net income per diluted common share | $ 7.65 | $ 0.25 | $ 6.41 | ** | *(96%)* |

** Percentage not meaningful

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The Company s net sales increased 5% in 2018 as compared to 2017, and 7% in 2017 as compared to 2016. Foreign currency translation increased sales growth by 1% in both 2018 and 2017. Recent acquisitions did not have an impact on sales growth. Unless otherwise noted, sales growth or decline percentages are presented as compared with the same period in the prior year.

Instrument system sales increased 2% and 6% in 2018 and 2017, respectively. In 2018, the increase in instrument system sales was primarily driven by an increase in demand for LC and TA s instrument systems. During 2018, the demand for our LC-MS instrument systems was somewhat unfavorably impacted by the timing of new product introductions, as many of the Company s new products were not launched until the second half of 2018 or early in 2019. In 2017, the demand for instrument system sales was balanced across our LC-MS and TA instrument systems. Recurring revenues (combined sales of precision chemistry consumables and services) increased 8% and 7% in 2018 and 2017, respectively, as a result of a larger installed base of customers and higher billing demand for service sales.

Geographically, the Company s sales growth in both 2018 and 2017 was primarily driven by the 7% and 10% sales growth in Asia, respectively, with double-digit sales growth in China for both years. Europe s sales grew 4% and 10% in 2018 and 2017, respectively, and benefited from the effect of foreign currency translation, which added 3% and 2% to sales growth, respectively. The Company s 2018 sales were impacted by lower sales growth in India and Europe, resulting from lower customer demand for our instrument systems. Sales in the Americas grew 3% in 2018 and were flat in 2017. The Americas sales growth in 2017 was negatively impacted by natural disasters in the U.S., Mexico and Puerto Rico, as well as weaker customer sentiment in the first half of 2017.

Sales to pharmaceutical customers grew 5% and 7% in 2018 and 2017, respectively. These increases were driven by the increasing need for global access to prescription drugs and the testing of newer and more complex biologic drugs. Combined sales to industrial customers, which include materials characterization, food, environmental and fine chemical markets, grew 2% and 4% in 2018 and 2017, respectively. The growth in both 2018 and 2017 was driven by recent product introductions and rising global regulatory standards in both food and materials markets. Combined sales to governmental and academic customers increased 8% in both 2018 and 2017. Sales to governmental and academic customers are highly dependent on when institutions receive funding to purchase our instrument systems and, as such, sales growth rates can vary significantly from period to period.

Operating income was $740 million in 2018, an increase of 12% as compared to 2017. This increase was primarily a result of the effect of higher sales volume achieved in 2018, as well as the effect of approximately $33 million of facility closure, litigation and intellectual property payment charges from 2017 that did not recur in 2018.

Operating income increased 6% in 2017 as compared to 2016. This increase was primarily a result of the effect of higher sales volume achieved in 2017, which was somewhat offset by the impact of $13 million of severance costs primarily associated with the closure of a facility in Germany and costs associated with providing U.S. employees with an early retirement transition incentive; an $11 million litigation settlement provision and related costs and a $5 million charge relating to a milestone payment for the licensing of certain intellectual property relating to mass spectrometry technologies yet to be commercialized. The change in operating income in 2017 as compared with 2016 was also impacted by $4 million of expense in 2017 related to the acceleration of certain stock awards as compared to $7 million of similar expense in 2016.

The Company s effective tax rates were 13.0%, 96.8% and 13.1% for 2018, 2017 and 2016, respectively. Net income per diluted share was $7.65, $0.25 and $6.41 in 2018, 2017 and 2016, respectively. The Company s effective tax and net income per diluted share were impacted by the following items:

In December 2018, the Company settled a pension plan obligation by making lump-sum cash payments and purchasing annuity contracts for participants to permanently extinguish the pension plan s

obligations. As a result, the Company recorded a $46 million charge, which consisted of a $6 million cash contribution to the plan and a $40 million non-cash charge related to the reversal of unrecognized actuarial losses recorded in accumulated other comprehensive income in the stockholders equity. The $46 million pre-tax charge reduced net income per diluted share by $0.39.

The significant increase in the provision for income taxes for 2017 was a result of the $550 million estimate for the impact of the enactment of the legislation informally referred to as the Tax Cuts and Jobs Act (the 2017 Tax Act ). The 2017 Tax Act changed the U.S. tax system to a territorial system, including broadening measures requiring the taxation of the Company s historical unremitted foreign earnings through a deemed repatriation. This provision reduced net income per diluted share by $6.82 in 2017, and the Company s effective tax rate was 11.0% excluding this $550 million provision. As permitted by the U.S. Securities and Exchange Commission ( SEC ) Staff Accounting Bulletin No. 118, the Company completed its analysis and calculation of the 2017 Tax Act federal and state transition tax liability during 2018, which remained significantly unchanged.

The Company generated $604 million, $698 million and $643 million of net cash flows from operations in 2018, 2017 and 2016, respectively. The decrease in operating cash flow in 2018 was primarily a result of $103 million of income tax payments made in the U.S. relating to the Company s estimated 2017 transition tax liability and 2018 estimated tax payments, a $15 million litigation settlement payment and $11 million of contributions to certain defined benefit pension plans. Over the next four years, the Company is required to make annual U.S. federal tax payments of approximately $38 million to tax authorities in connection with the Company s estimated transition tax liabilities of $433 million under the 2017 Tax Act. The remaining 60% of the total liability is required to be paid over a three-year period beginning in 2023. The increase in operating cash flow in 2017 was primarily a result of the increase in sales and operating income.

Cash flows used in investing activities included capital expenditures related to property, plant, equipment and software capitalization of $96 million, $85 million and $95 million in 2018, 2017 and 2016, respectively. In February 2018, the Company s Board of Directors approved expanding its precision chemistry consumable manufacturing operations in the U.S. The Company anticipates spending an estimated $215 million to build and equip this new state-of-the-art manufacturing facility, which will be paid for with existing cash, investments and available debt capacity. The Company has spent $11 million on this facility through the end of 2018.

During the past three years, the Company has acquired technology to expand its future sales. In July 2018, the Company acquired the sole intellectual property rights to the Desorption Electrospray Ionization ( DESI ) imaging technology for $30 million in cash and a future contractual obligation to pay a minimum royalty of $3 million over the remaining life of the patent. DESI is a mass spectrometry imaging technique that is used to develop medical therapies. During 2018, the Company made $8 million of investments in unaffiliated companies. In 2017, the Company made a $7 million payment for an investment in a developer of analytical system solutions used to make measurements, predict stability and accelerate product discovery in the routine analytic, process monitoring and quality control release processes for life science and biopharmaceutical markets. In addition, the Company made a milestone payment of $5 million in 2017 to acquire and license intellectual property. In September 2016, the Company acquired Rubotherm GmbH for approximately $6 million in cash.

During 2018, the Company had net proceeds from the maturity of short-term investments of $1.8 billion. Most of these proceeds were repatriated into the U.S. in 2018, and were taxed at lower income tax rates as a result of the 2017 Tax Act, and used to reduce the Company s debt by $850 million and fund $1,315 million of share repurchases.

The Company has conducted a post-tax reform evaluation of its capital allocation strategy and the Company is currently planning to use its existing cash, cash equivalents and investments, cash flow from operations and its available debt capacity to repurchase up to $4 billion of the Company s common stock over the next two years. The Company is currently planning to increase its outstanding debt balances to approximately 2.5 times the

Company s net debt-to-earnings before interest, taxes, depreciation and amortization ratio to fund a significant portion of these share repurchases.

In January 2019, the Company s Board of Directors authorized the Company to repurchase up to $4 billion of its outstanding common stock over a two-year period. This new program replaced the remaining amounts available under the April 2018 authorization of $3 billion. During 2018, 2017 and 2016, the Company repurchased $1,306 million, $323 million and $318 million of the Company s outstanding common stock, respectively, under authorized share repurchase programs. The Company believes that it has the financial flexibility to fund these share repurchases given current cash and investment levels and debt borrowing capacity, as well as to invest in research, technology and business acquisitions to further grow the Company s sales and profits.

During 2018, the Company entered into $300 million of U.S.-to-Euro interest rate cross-currency swap agreements that hedge the Company s net investment in its Euro denominated net assets. As a result of entering into these agreements, the Company lowered its net interest expense by $3 million during 2018. The Company anticipates that these swap agreements will lower net interest expense by approximately $9 million annually in 2019 and 2020, and less in 2021 as the three year term of the agreements expire.

In January 2019, the Company made organizational changes to better align our resources with our growth and innovation strategies, resulting in a worldwide workforce reduction, impacting 1% of the Company s employees. The Company currently estimates that it will incur approximately $15 million of severance and related costs during 2019.

**Results of Operations**

*Sales by Geography*

Geographic sales information is presented below for the years ended December 31, 2018, 2017 and 2016 (dollars in thousands):

| | Year Ended December 31, | | | *% change* | |
|---|---|---|---|---|---|
| | **2018** | **2017** | **2016** | ***2018 vs. 2017*** | ***2017 vs. 2016*** |
| Net Sales: | | | | | |
| Asia: | | | | | |
| China | $ 443,321 | $ 387,059 | $ 331,354 | *15%* | *17%* |
| Japan | 173,357 | 167,258 | 167,977 | *4%* | |
| Asia Other | 305,613 | 308,300 | 283,653 | *(1%)* | *9%* |
| Total Asia | 922,291 | 862,617 | 782,984 | *7%* | *10%* |
| Americas: | | | | | |
| United States | 683,596 | 669,274 | 665,280 | *2%* | *1%* |
| Americas Other | 151,581 | 140,715 | 141,902 | *8%* | *(1%)* |
| Total Americas | 835,177 | 809,989 | 807,182 | *3%* | |
| Europe | 662,461 | 636,472 | 577,257 | *4%* | *10%* |
| Total net sales | $ 2,419,929 | $ 2,309,078 | $ 2,167,423 | *5%* | *7%* |

In 2018, sales in China increased across all product lines and were driven by double-digit increases in sales to pharmaceutical, governmental and academic customers. The effect of foreign currency translation increased sales in Japan by 2% in 2018 and sales growth was also driven by increased sales to pharmaceutical and industrial customers. The sales decline in the rest of Asia in 2018 was a result of lower customer demand in India and weaker sales to environmental customers in the first quarter of 2018. In 2018, sales growth in Europe was driven by TA s products and services and recurring revenues to pharmaceutical and industrial customers. In

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addition, the effect of foreign currency translation increased sales in Europe by 3% in 2018. Sales growth in the U.S. in 2018 was driven by recurring revenues and TA instruments. Sales in the rest of the Americas had double-digit sales growth for instrument systems and double-digit sales growth for pharmaceutical customers, which was offset by a decline in sales to industrial customers.

In 2017, the sales growth in Asia was driven by double-digit increases in China s sales across all product and customer classes. The increase in Asia Other in 2017 was driven by strong sales in India across all product and customer classes. Japan s sales in 2017 were flat as the effect of foreign currency decreased sales by 3%. Japan s sales in 2017 were driven by recurring revenue sales to governmental and academic customers. Europe s sales in 2017 were balanced across all product lines and driven by sales to pharmaceutical, governmental and academic customers. Sales growth in the U.S. in 2017 was driven by TA instrument system sales and recurring revenues. In 2017, sales to the rest of the world were impacted by a decrease in demand from industrial customers resulting from recent natural disasters.

Net sales by customer class are presented below for the years ended December 31, 2018, 2017 and 2016 (dollars in thousands):

| | Year Ended December 31, | | | % change | |
|---|---|---|---|---|---|
| | 2018 | 2017 | 2016 | 2018 vs. 2017 | 2017 vs. 2016 |
| Pharmaceutical | $ 1,365,731 | $ 1,294,668 | $ 1,206,316 | 5% | 7% |
| Industrial | 737,144 | 721,088 | 690,119 | 2% | 4% |
| Governmental and academic | 317,054 | 293,322 | 270,988 | 8% | 8% |
| Total net sales | $ 2,419,929 | $ 2,309,078 | $ 2,167,423 | 5% | 7% |

In 2018, sales to pharmaceutical customers were driven by recurring revenues, with double-digit growth in China, Canada and Latin America. Sales growth for the industrial market in 2018 was driven by TA products and services, and mid-single-digit sales growth in Europe, Japan and India. The increase in sales to governmental and academic customers in 2018 was broad-based across all product classes and geographies, with double-digit growth in China, India and Canada.

In 2017, the growth within our pharmaceutical market was driven by double-digit growth in China, India and Europe. Sales growth to the industrial market in 2017 was highest in China and India, with modest growth in other regions offset by flat sales in the Americas. The increase in sales to governmental and academic customers in 2017 was broad-based across all geographies, with double-digit growth in Europe and the Americas.

*Waters Products and Services Net Sales*

Net sales for Waters products and services are as follows for the years ended December 31, 2018, 2017 and 2016 (dollars in thousands):

| | Year Ended December 31, | | | | | | % change | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | % of Total | 2017 | % of Total | 2016 | % of Total | 2018 vs. 2017 | 2017 vs. 2016 |
| Waters instrument systems | $ 1,000,625 | 47% | $ 988,750 | 48% | $ 943,218 | 49% | 1% | 5% |
| Chemistry consumables | 400,287 | 18% | 372,157 | 18% | 345,413 | 18% | 8% | 8% |
| Total Waters product sales | 1,400,912 | 65% | 1,360,907 | 66% | 1,288,631 | 67% | 3% | 6% |
| Waters service | 738,433 | 35% | 686,656 | 34% | 639,432 | 33% | 8% | 7% |
| Total Waters net sales | $ 2,139,345 | 100% | $ 2,047,563 | 100% | $ 1,928,063 | 100% | 4% | 6% |

Precision chemistry consumables sales increased in both 2018 and 2017 on the uptake in columns and application-specific testing kits. Waters service sales in both 2018 and 2017 benefited from increased sales of

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service plans and higher service demand billings to a higher installed base of customers. The increase in Waters instrument system sales (LC and MS technology-based) in 2018 is primarily attributable to sales of LC systems, while sales growth in 2017 was driven by higher sales of LC-MS systems that incorporate the Company s tandem quadrupole technologies. The effect of foreign currency translation had a minimal impact on Waters sales in both 2018 and 2017.

In 2018, Waters sales increased 7% in Asia, 4% in Europe and 2% in the Americas. Waters sales increased 15% in China in 2018 and were broad-based across all product classes, with double-digit increases in sales to pharmaceutical, governmental and academic customers. Waters sales in Japan in 2018 increased 5%, with the effect of foreign currency translation increasing sales 2%. Sales in the rest of Asia declined 2% in 2018, primarily due to lower customer demand in India and a negative 2% impact of foreign currency translation. In the Americas, U.S. sales increased 1% in 2018.

In 2017, Waters sales increased 10% in both Europe and Asia and were flat in the Americas. Waters sales increased 16% in China and were broad-based across all product and customer classes. Waters sales in Japan decreased 1%, primarily due to foreign currency translation, which decreased sales by 3%. Waters sales in the rest of Asia increased 8% and were driven by recurring revenues across all customer classes.

*TA Product and Services Net Sales*

Net sales for TA products and services are as follows for the years ended December 31, 2018 and December 31, 2017 (dollars in thousands):

| | Year Ended December 31, | | | | | | % change | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | % of Total | 2017 | % of Total | 2016 | % of Total | 2018 vs. 2017 | 2017 vs. 2016 |
| TA instrument systems | $ 204,081 | 73% | $ 191,442 | 73% | $ 171,665 | 72% | 7% | 12% |
| TA service | 76,503 | 27% | 70,073 | 27% | 67,695 | 28% | 9% | 4% |
| Total TA net sales | $ 280,584 | 100% | $ 261,515 | 100% | $ 239,360 | 100% | 7% | 9% |

TA s instrument system sales were broad-based across all product classes in 2018, while 2017 instrument system sales grew primarily from the Discovery product line of thermal instrument systems. In addition, TA s rheology instrument systems saw strong performance across the entire range of products in the portfolio in 2017, driven by the Discovery Hybrid Rheometer and Rubber Rheometer instrument systems. TA service sales increased in both 2018 and 2017 due to sales of service plans and billings to a higher installed base of customers. The effect of foreign currency translation and recent acquisitions had a minimal impact on TA s sales in both 2018 and 2017.

In 2018, TA sales increased 9% in the Americas, 8% in Europe and 5% in Asia. TA sales in the U.S. increased 9% in 2018, while sales in the rest of the Americas increased 8%. TA s sales in Asia were driven by double-digit sales growth in India and 8% sales growth in China, which was offset by declines in Japan.

In 2017, TA sales increased 14% in Asia, 11% in Europe and 5% in the Americas. TA achieved double-digit sales growth in Asia, with the exception of Japan, where a 5% sales growth included a 2% negative impact of foreign currency translation. TA sales in the U.S. in 2017 increased 8%, while sales in the rest of the Americas declined after strong sales in the prior year.

*Cost of Sales*

The increases in cost of sales for both 2018 and 2017 were consistent with the increase in sales volumes. The effect of foreign currency translation had a minimal impact on cost of sales in both 2018 and 2017.

Cost of sales is affected by many factors, including, but not limited to, foreign currency translation, product mix, product costs of instrument systems and amortization of software platforms. At current foreign currency exchange rates, the Company expects that the impact of foreign currency translation may decrease sales and gross profit during 2019.

*Selling and Administrative Expenses*

Selling and administrative expenses decreased 1% in 2018 and increased 6% in 2017. The decrease in 2018 was primarily due to the impact of $13 million of severance costs incurred in 2017 in connection with the closure of a facility in Germany and an early retirement transition incentive program. The effect of foreign currency translation increased selling and administrative expenses by 3% in 2017 and had a minimal impact in 2018. In addition, selling and administrative expenses in both 2018 and 2017 were impacted by headcount additions and higher merit compensation costs, as well as $1 million and $4 million, respectively, of stock compensation expense related to the modification of certain stock awards upon the retirement of senior executives.

As a percentage of net sales, selling and administrative expenses were 22.2%, 23.6% and 23.6% for 2018, 2017 and 2016, respectively.

*Research and Development Expenses*

Research and development expenses increased 8% and 6% in 2018 and 2017, respectively. Research and development expenses in both 2018 and 2017 were impacted by additional headcount, merit compensation and costs associated with new products and the development of new technology initiatives. In addition, the effect of foreign currency translation reduced research and development expenses by 4% in 2017, primarily due to the weakening of the British pound on the Company s U.K.-based research and development expenses. Foreign currency translation had a minimal impact on research and development costs in 2018.

*Litigation Settlement*

In the second quarter of 2017, the Company incurred an $11 million litigation provision related to the issuance of a verdict in a patent litigation case. In the first quarter of 2018, the Company resolved the case with a final settlement that resulted in a gain of $2 million.

*Acquired In-Process Research and Development*

During 2017, the Company incurred charges of $5 million for acquired in-process research and development related to milestone payments associated with a licensing arrangement for certain intellectual property relating to mass spectrometry technologies yet to be commercialized and for which there was no future alternative use as of the acquisition date. These licensing arrangements are significantly related to new, biologically-focused applications, as well as other applications, and require the Company to make additional future payments of up to $7 million if certain milestones are achieved, as well as royalties on future net sales. These future payments may be significant and occur over multiple years.

*Interest Expense, Net*

The decrease in net interest expense in 2018 was primarily attributable to the Company using cash, cash equivalents and investment balances recently repatriated into the U.S. to reduce its debt by $850 million during the 2018, as well as higher yields on investments. The Company is currently planning to increase its outstanding debt balances in the future and, as a result, the Company is expecting its net interest expense to increase by an estimated $25 million in 2019 at current interest rates.

In 2018, the Company entered into three-year U.S.-to-Euro interest rate cross-currency swap agreements with a notional value of $300 million that hedges the Company s net investment in its Euro denominated net assets. The difference between the interest rate received and paid under the interest rate cross-currency swap agreement is recorded as interest income. During 2018, the Company recorded $3 million of interest income related to these agreements. This interest rate cross-currency swap agreement is estimated to generate $9 million of interest income annually over a three-year period.

*Provision for Income Taxes*

The four principal jurisdictions in which the Company manufactures are the U.S., Ireland, the U.K. and Singapore, where the statutory tax rates were 21%, 12.5%, 19% and 17%, respectively, as of December 31, 2018. The Company has a contractual tax rate in Singapore of 0% on qualifying activities in Singapore through March 2021, based upon the achievement of certain contractual milestones, which the Company expects to continue to meet. The effect of applying the contractual tax rate rather than the statutory tax rate to income from qualifying activities in Singapore increased the Company s net income in 2018, 2017 and 2016 by $28 million, $25 million and $23 million, respectively, and increased the Company s net income per diluted share by $0.36, $0.31 and $0.29, respectively.

The Company s effective tax rates were 13.0%, 96.8% and 13.1% in 2018, 2017 and 2016, respectively, and were impacted by the following:

In December 2017, the U.S. enacted legislation informally referred to as the Tax Cuts and Jobs Act (the 2017 Tax Act ). For the year ended December 31, 2017 the Company accrued a $550 million tax provision related to the 2017 Tax Act. The $550 million expense consisted of $490 million related to the federal transition tax, $40 million for state income taxes and foreign withholding taxes and $20 million for the revaluation of the Company s deferred tax assets and liabilities at the new federal tax rate of 21%. This provision reduced net income per diluted share by $6.82 in 2017, and the Company s effective tax rate was 11.0% excluding this $550 million provision.

During 2018, the Internal Revenue Service issued proposed regulations on the federal transition tax and various other aspects of the Tax Reform law. The Company finalized its analysis of the transition tax and related liabilities, including uncertain tax positions, in the fourth quarter of 2018 pursuant to U.S. Securities and Exchange Commission ( SEC ) Staff Accounting Bulletin No. 118. As a result of the new guidance issued and additional work to complete the calculation of its federal transition tax, the Company reduced its provisional accrual for federal, state and foreign taxes by net $24 million during 2018. In addition, the Company also assessed its uncertain tax positions related to these taxes and accrued income tax reserves of $18 million during 2018. The net favorable impact to the 2018 provision for income taxes is $6 million.

The provision for income taxes for 2018 includes a $7 million expense related to the 2017 Tax Act. This additional tax results from the change in foreign currency exchange rates on the earnings taxed on December 31, 2017 under 2017 Tax Act as compared with the foreign currency exchange rates on the date of distribution of assets into the U.S. We do not expect this expense to recur in future periods.

The 2018 effective income tax rate of 13.0% was impacted by the reduction in the U.S. federal income tax rate from 35% to 21% as a result of the 2017 Tax Act, which decreased the Company s effective tax rate by 2.0 percentage points as compared to 2017. The 2017 Tax act also added a new Global Intangible Low-Taxed Income (GILTI) tax, which increased the Company s 2018 effective tax rate by approximately 2.0 percentage points.

After the completion of the Company s review of its capital allocation strategy in the fourth quarter of 2018, the Company determined that it will provide income taxes on all future foreign earnings from 2018 forward. As a result, this change added 0.6 percentage points to the 2018 effective tax rate as compared to 2017.

In addition, the reduction in the U.S. federal income tax rate from 35% to 21% as a result of the 2017 Tax Act also reduced the 2018 tax benefit on stock compensation. The Company recorded a tax benefit on stock-based compensation in 2018 and 2017 that decreased income tax expense by $9 million and $20 million, respectively, and added $0.11 and $0.24 to net income per diluted share, respectively.

The difference between the 2017 and 2016 effective tax rates can be attributed primarily to the 2016 provision for income taxes including a $3 million tax benefit (0.7 percentage points) related to the release of a valuation allowance on certain net operating loss

carryforwards.

The remaining differences between effective tax rates can primarily be attributed to differences in the proportionate amounts of pre-tax income recognized in jurisdictions with different effective tax rates.

The Company s effective tax rate is influenced by many significant factors, including, but not limited to, the wide range of income tax rates in jurisdictions in which the Company operates; sales volumes and profit levels in each tax jurisdiction; changes in tax laws, tax rates and policies; the outcome of various ongoing tax audit examinations; and the impact of foreign currency transactions and translation. In addition, upon completion of the Company s review of its capital allocation strategy in the fourth quarter of 2018, the Company has determined that it will provide income taxes on all future foreign earnings. The Company estimates that this will increase the Company s effective income tax rate by approximately one percentage point in the future. However, the Company will continue to be permanently reinvested in relation to the cumulative historical outside basis difference that is not related to earnings. As a result of variability in these factors, the Company s effective tax rates in the future may not be similar to the effective tax rates for the current or prior years, or for previously forecasted periods.

**Liquidity and Capital Resources**

***Condensed Consolidated Statements of Cash Flows (in thousands):***

| | Year Ended December 31, | | |
|---|---|---|---|
| | **2018** | **2017** | **2016** |
| Net income | $ 593,794 | $ 20,311 | $ 521,503 |
| Depreciation and amortization | 108,408 | 106,002 | 96,449 |
| Stock-based compensation | 37,541 | 39,436 | 40,998 |
| Deferred income taxes | 2,405 | 45,510 | 1,204 |
| Excess tax benefit related to stock option plans | | | 13,844 |
| Gain on sale of assets | | | (1,500) |
| In-process research and development and other non-cash charges | | 5,000 | |
| Change in accounts receivable | (47,921) | (24,013) | (31,721) |
| Change in inventories | (25,396) | 731 | (20,147) |
| Change in accounts payable and other current liabilities | (81,663) | 3,175 | 6,842 |
| Change in deferred revenue and customer advances | 2,721 | 10,386 | 9,974 |
| Effect of the 2017 Tax Act | (6,059) | 530,383 | |
| Other changes | 20,616 | (39,281) | 5,474 |
| Net cash provided by operating activities | 604,446 | 697,640 | 642,920 |
| Net cash provided by (used in) investing activities | 1,683,302 | (535,752) | (487,918) |
| Net cash used in financing activities | (2,119,522) | (63,869) | (115,701) |
| Effect of exchange rate changes on cash and cash equivalents | (14,265) | 38,669 | (21,335) |
| Increase in cash and cash equivalents | $ 153,961 | $ 136,688 | $ 17,966 |

**Cash Flow from Operating Activities**

Net cash provided by operating activities was $604 million, $698 million and $643 million in 2018, 2017 and 2016, respectively. The changes within net cash provided by operating activities include the following significant changes in the sources and uses of net cash provided by operating activities, aside from the changes in net income:

The changes in accounts receivable were primarily attributable to timing of payments made by customers and timing of sales. Days sales outstanding was 74 days at December 31, 2018 and 71 days at both December 31, 2017 and 2016.

The changes in inventory were primarily attributable to anticipated annual increases in sales volumes, as well as new product launches.

The changes in accounts payable and other current liabilities were the result of timing of payments to vendors. In addition, the change in 2018 included $103 million of income tax payments made in the U.S. relating to the Company s estimated 2017 tax reform liability and 2018 estimated income tax payments and a $15 million litigation settlement payment.

Net cash provided from deferred revenue and customer advances results from annual increases in new service contracts as a higher installed base of customers renew annual service contracts.

Other changes were attributable to variation in the timing of various provisions, expenditures, prepaid income taxes and accruals in other current assets, other assets, other liabilities, and income tax expenses related to the 2017 Tax Act. In addition, the Company made $11 million of contributions to certain defined benefit pension plans.

In addition, as a result of the adoption of a new accounting standard related to stock-based compensation, the Company reclassified $14 million of excess tax benefits related to stock-based compensation in 2016 from cash flows from financing activities to cash flows from operating activities.

**Cash Provided By (Used in) Investing Activities**

Net cash provided by investing activities totaled $1,683 million in 2018, while net cash used in investing activities totaled $536 million and $488 million in 2017 and 2016, respectively. Additions to fixed assets and capitalized software were $96 million, $85 million and $95 million in 2018, 2017 and 2016, respectively. In February 2018, the Company s Board of Directors approved expanding its chemistry synthesis operations in the U.S. The Company anticipates spending an estimated $215 million to build and equip this new state-of-the-art manufacturing facility, which will be paid for with existing cash, investments and debt capacity.

During 2018, 2017 and 2016, the Company purchased $1.0 billion, $3.0 billion and $2.4 billion of investments, respectively, while $2.8 billion, $2.5 billion and $2.0 billion of investments matured, respectively. Most of the proceeds received in 2018 were repatriated into the U.S. at lower income tax rates as a result of the 2017 Tax Act and used to reduce the Company s debt by $850 million and fund the Company s share repurchase program.

Asset and business acquisitions, net of cash acquired, were $31 million and $6 million during 2018 and 2016, respectively. There were no business acquisitions in 2017. During 2018, the Company made $8 million of investments in unaffiliated companies. During 2017, the Company made a $7 million payment for an investment in a developer of analytical system solutions used to make measurements, predict stability and accelerate product discovery in the routine analytic, process monitoring and quality control release processes for life science and biopharmaceutical markets. During 2017, the Company made payments of $5 million to acquire and license intellectual property relating to mass spectrometry technologies yet to be commercialized. In 2016, the Company sold an equity investment for $4 million.

**Cash Used in Financing Activities**

In November 2017, the Company entered into a credit agreement (the 2017 Credit Agreement ), which provides for a $1.5 billion revolving facility and a $300 million term loan. The revolving facility and term loan both mature on November 30, 2022 and require no scheduled prepayments before that date.

The interest rates applicable to the 2017 Credit Agreement are, at the Company s option, equal to either the alternate base rate (which is a rate per annum equal to the greatest of (a) the prime rate in effect on such day, (b) the Federal Reserve Bank of New York Rate on such day plus 1/2 of 1% per annum and (c) the adjusted

LIBO rate on such day (or if such day is not a business day, the immediately preceding business day) for a deposit in U.S. dollars with a maturity of one month plus 1% per annum) or the applicable 1, 2, 3 or 6 month adjusted LIBO rate or EURIBO rate for Euro-denominated loans, in each case, plus an interest rate margin based upon the Company s leverage ratio, which can range between 0 and 12.5 basis points for alternate base rate loans and between 80 and 112.5 basis points for LIBO rate or EURIBO rate loans. The facility fee on the 2017 Credit Agreement ranges between 7.5 and 25 basis points per annum, based on the leverage ratio, of the amount of the revolving facility commitments and the outstanding term loan. The 2017 Credit Agreement requires that the Company comply with an interest coverage ratio test of not less than 3.50:1 as of the end of any fiscal quarter for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, the 2017 Credit Agreement includes negative covenants, affirmative covenants, representations and warranties and events of default that are customary for investment grade credit facilities.

Interest on the Company s fixed rate senior unsecured notes is payable semi-annually each year. Interest on the floating rate senior unsecured notes is payable quarterly. The Company may prepay all or some of the senior unsecured notes at any time in an amount not less than 10% of the aggregate principal amount outstanding, plus the applicable make-whole amount or prepayment premium for Series H and J senior unsecured notes. In the event of a change in control of the Company (as defined in the note purchase agreement), the Company may be required to prepay the senior unsecured notes at a price equal to 100% of the principal amount thereof, plus accrued and unpaid interest. These senior unsecured notes require that the Company comply with an interest coverage ratio test of not less than 3.50:1 for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, these senior unsecured notes include customary negative covenants, affirmative covenants, representations and warranties and events of default.

During 2018, the Company s net debt borrowings decreased by $850 million, using cash repatriated under the 2017 Tax Act. During 2017 and 2016, the Company s net debt borrowings increased $170 million and $160 million, respectively. As of December 31, 2018, the Company had a total of $1.1 billion in outstanding debt, which consisted of $560 million in outstanding senior unsecured notes, $300 million borrowed under a term loan and $290 million borrowed under a revolving credit facility, with both the term loan and revolving credit facilities under the 2017 Credit Agreement. As of December 31, 2018, the Company had a total amount available to borrow under the 2017 Credit Agreement of $1,208 million after outstanding letters of credit. As of December 31, 2018, the Company was in compliance with all debt covenants.

During 2018, the Company entered into $300 million of U.S.-to-Euro interest rate cross-currency swap agreements that hedge the Company s net investment in its Euro denominated net assets. As a result of entering into these agreements, the Company anticipates lowering net interest expense by approximately $9 million annually over the three-year term of the agreements.

In January 2019, the Company s Board of Directors authorized the Company to repurchase up to $4 billion of its outstanding common stock over a two-year period. This new program replaced the remaining amounts available under the April 2018 authorization of $3 billion. During 2018, 2017 and 2016, the Company repurchased 6.8 million, 1.8 million and 2.3 million shares of the Company s outstanding common stock at a cost of $1,306 million, $323 million and $318 million, respectively, under the April 2018 authorization and other previously announced programs. In addition, the Company repurchased $10 million, $10 million and $8 million of common stock related to the vesting of restricted stock units during the years ended December 31, 2018, 2017 and 2016, respectively.

The Company received $52 million, $98 million and $62 million of proceeds from the exercise of stock options and the purchase of shares pursuant to the Company s employee stock purchase plan in 2018, 2017 and 2016, respectively.

The Company had cash, cash equivalents and investments of $1,735 million as of December 31, 2018. The majority of the Company s cash, cash equivalents and investments are generated from foreign operations, with

$471 million held by foreign subsidiaries at December 31, 2018, of which $251 million was held in currencies other than U.S. dollars. The Company believes it has sufficient levels of cash flow and access to its existing cash, cash equivalents and investments to fund operations and capital expenditures, service debt interest, finance potential acquisitions and continue the authorized stock repurchase program in the U.S. These cash requirements are managed by the Company s cash flow from operations, its existing cash, cash equivalents and investments, and the use of the Company s revolving credit facility.

Management believes, as of the date of this report, that the Company s financial position, along with expected future cash flows from earnings based on historical trends and the ability to raise funds from external sources and the borrowing capacity from existing, committed credit facilities, will be sufficient to service debt and fund working capital and capital spending requirements, authorized share repurchase amounts and potential acquisitions for at least the next twelve months. The Company has conducted a post-tax reform evaluation of its capital allocation strategy and the Company is currently planning to use its existing cash, cash equivalents and investments, cash flow from operations and its available debt capacity to repurchase up to $4 billion of the Company s common stock over the next two years. The Company is currently planning to increase its outstanding debt balances to approximately 2.5 times the Company s net debt-to-earnings before interest, taxes, depreciation and amortization ratio to fund a significant portion of these share repurchases. In addition, as of December 31, 2018, the Company has determined that it will provide income taxes on all future foreign earnings and reverse its historical assertion that its foreign earnings were permanently invested. However, the Company will continue to be permanently reinvested in relation to the cumulative historical outside basis difference that is not related to the unremitted earnings. There have been no other significant changes to the Company s financial position.

**Contractual Obligations and Commercial Commitments**

The following is a summary of the Company s known contractual obligations as of December 31, 2018 (in thousands):

| | Payments Due by Year (1) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | After 2024 |
| Notes payable and debt | $ 178 | $ 178 | $ | $ | $ | $ | $ | $ |
| Interest on senior unsecured notes | 86,418 | 21,214 | 16,630 | 12,942 | 10,829 | 9,851 | 7,384 | 7,568 |
| Long-term debt (2) | 1,150,000 | | 100,000 | 150,000 | 590,000 | 50,000 | 100,000 | 160,000 |
| 2017 Tax Act liability | 432,877 | 29,109 | 38,454 | 38,454 | 38,454 | 72,101 | 96,135 | 120,170 |
| Operating leases | 102,958 | 28,417 | 23,424 | 16,032 | 11,816 | 6,601 | 5,285 | 11,383 |
| Total | $ 1,772,431 | $ 78,918 | $ 178,508 | $ 217,428 | $ 651,099 | $ 138,553 | $ 208,804 | $ 299,121 |

(1) Does not include normal purchases made in the ordinary course of business and uncertain tax positions discussed below.

2) The interest rates applicable to the 2017 Credit Agreement are, at the Company s option, equal to either the alternate base rate (which is a rate per annum equal to the greatest of (a) the prime rate in effect on such day, (b) the Federal Reserve Bank of New York Rate on such day plus 1/2 of 1% per annum and (c) the adjusted LIBO rate on such day (or if such day is not a business day, the immediately preceding business day) for a deposit in U.S. dollars with a maturity of one month plus 1% per annum) or the applicable 1, 2, 3 or 6 month adjusted LIBO rate or EURIBO rate for Euro-denominated loans, in each case, plus an interest rate margin based upon the Company s leverage ratio, which can range between 0 and 12.5 basis points for alternate base rate loans and between 80 and 112.5 basis points for LIBO rate or EURIBO rate loans. The facility fee on the 2017 Credit Agreement ranges between 7.5 and 25 basis points per annum, based on the leverage ratio, of the amount of the revolving facility commitments and the outstanding term loan. The 2017 Credit Agreement requires that the Company comply with an interest coverage ratio test of not less than 3.50:1 as

of the end of any fiscal quarter for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, the 2017 Credit Agreement includes negative covenants, affirmative covenants, representations and warranties and events of default that are customary for investment grade credit facilities. As of December 31, 2018, the Company was in compliance with all such covenants.

The following is a summary of the Company s known commercial commitments as of December 31, 2018 (in thousands):

| | | Amount of Commitments Expiration Per Period | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Total | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | After 2024 |
| Letters of credit | $ 1,572 | $ 1,572 | $ | $ | $ | $ | $ | $ |

From time to time, the Company and its subsidiaries are involved in various litigation matters arising in the ordinary course of business. The Company believes it has meritorious arguments in its current litigation matters and believes any outcome, either individually or in the aggregate, will not be material to the Company s financial position or results of operations.

The Company has long-term liabilities for deferred employee compensation, including pension and supplemental executive retirement plans. The payments related to the supplemental retirement plan are not included above since they are dependent upon when the employee retires or leaves the Company and whether the employee elects lump-sum or annuity payments. During fiscal year 2019, the Company expects to contribute approximately $3 million to $6 million to the Company s defined benefit plans.

The Company has contingent consideration for an earnout pertaining to its July 2014 acquisition of the net assets of Medimass Research, Development and Service Kft. ( Medimass ). The earnout payments are not included above since they are dependent upon many factors that cannot be predicted with any certainty. The estimated fair value of the contingent consideration as of December 31, 2018 is $2 million.

The Company licenses certain technology and software from third parties. Future minimum license fees payable under existing license agreements as of December 31, 2018 are immaterial. The Company enters into licensing arrangements with third parties that require future milestone or royalty payments contingent upon future events. Upon the achievement of certain milestones in existing agreements, the Company could make additional future payments of up to $7 million, as well as royalties on future net sales. It is not possible to predict with reasonable certainty whether these milestones will be achieved or the timing for achievement. As a result, these potential payments are not included in the table above.

The Company accounts for its uncertain tax positions in accordance with the accounting standards for income taxes, which require financial statement reporting of the expected future tax consequences of uncertain tax positions on the presumption that all concerned tax authorities possess full knowledge of those tax positions, as well as all of the pertinent facts and circumstances, but prohibit any discounting of unrecognized tax benefits associated with those positions for the time value of money. The Company classified interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes. If all of the Company s unrecognized tax benefits accrued as of December 31, 2018 were to become recognizable in the future, the Company would record a total reduction of approximately $26 million in its income tax provision.

With limited exceptions, the Company is no longer subject to tax audit examinations in significant jurisdictions for the years ended on or before December 31, 2013. However, carryforward tax attributes that were generated in years beginning on or before January 1, 2014 may still be adjusted upon examination by tax authorities if the attributes are utilized. The Company continuously monitors the lapsing of statutes of limitations on potential tax assessments for related changes in the measurement of unrecognized tax benefits, related net interest and penalties, and deferred tax assets and liabilities.

As of December 31, 2018, the Company expects to record additional reductions in the measurement of its unrecognized tax benefits and related net interest and penalties of approximately $1 million within the next twelve months due to potential tax audit settlements and the lapsing of statutes of limitations on potential tax assessments. The Company does not expect to record any other material reductions in the measurement of its unrecognized tax benefits within the next twelve months.

The Company has not paid any dividends and has no plans, at this time, to pay any dividends in the future.

**Off-Balance Sheet Arrangements**

The Company has not created, and is not party to, any special-purpose or off-balance sheet entities for the purpose of raising capital, incurring debt or operating parts of its business that are not consolidated (to the extent of the Company s ownership interest therein) into the consolidated financial statements. The Company has not entered into any transactions with unconsolidated entities whereby it has subordinated retained interests, derivative instruments or other contingent arrangements that expose the Company to material continuing risks, contingent liabilities or any other obligation under a variable interest in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to the Company.

The Company enters into standard indemnification agreements in its ordinary course of business. Pursuant to these agreements, the Company indemnifies, holds harmless and agrees to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally the Company s business partners or customers, in connection with patent, copyright or other intellectual property infringement claims by any third party with respect to its current products, as well as claims relating to property damage or personal injury resulting from the performance of services by the Company or its subcontractors. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited. Historically, the Company s costs to defend lawsuits or settle claims relating to such indemnity agreements have been minimal and management accordingly believes the estimated fair value of these agreements is immaterial.

**Critical Accounting Policies and Estimates**

*Summary*

The preparation of consolidated financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. Critical accounting policies are those that are central to the presentation of the Company s financial condition and results of operations that require management to make estimates about matters that are highly uncertain and that would have a material impact on the Company s results of operations given changes in the estimate that are reasonably likely to occur from period to period or use of different estimates that reasonably could have been used in the current period. On an ongoing basis, the Company evaluates its policies and estimates. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual amounts may differ from these estimates under different assumptions or conditions. There are other items within the Company s consolidated financial statements that require estimation, but are not deemed critical as defined above. Changes in estimates used in these and other items could potentially have a material impact on the Company s consolidated financial statements.

*Revenue Recognition*

The Company adopted new accounting guidance regarding the recognition of revenue from contracts with customers as of January 1, 2018 and applied the modified-retrospective method. The Company elected the practical expedient and only evaluated the contracts that were considered incomplete as of January 1, 2018 when quantifying the cumulative effect adjustment under the modified retrospective method. Ultimately, the Company

determined that there was not a significant change in the timing or pattern of revenue recognition for the Company s products and services. The adoption of this standard did not have a material impact on the Company s financial position, results of operations or cash flows and, as such, did not require any adjustments to information reported in the prior year. The revenue recognition policies described below were effective as of January 1, 2018.

The Company recognizes revenue upon transfer of control of promised products and services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those products or services. The Company generally enters into contracts that include a combination of products and services. Revenue is allocated to distinct performance obligations and is recognized net of allowances for returns and discounts.

The Company recognizes revenue on product sales at the time control of the product transfers to the customer. In substantially all of the Company s arrangements, title of the product transfers at shipping point and, as a result, the Company determined control transfers at the point of shipment. In more limited cases, there are destination-based shipping terms and, thus, control is deemed to transfer when the products arrive at the customer site. All incremental costs of obtaining a contract are expensed as and when incurred if the expected amortization period of the asset that would have been recognized is one year or less. Shipping and handling costs are included as a component of cost of sales. In situations where the control of the goods transfers prior to the completion of the Company s obligation to ship the products to its customers, the Company has elected the practical expedient to account for the shipping services as a fulfillment cost. Accordingly, such costs are recognized when control of the related goods is transferred to the customer. In more rare situations, the Company has revenue associated with products that contain specific customer acceptance criteria and the related revenue is not recognized before the customer acceptance criteria are satisfied. The Company elected to exclude from the measurement of the transaction price all taxes assessed by a governmental authority that are both imposed on and concurrent with specific revenue-producing transactions and collected by the Company from a customer.

Generally, the Company s contracts for products include a performance obligation related to installation. The Company has determined that the installation represents a distinct performance obligation and revenue is recognized separately upon the completion of installation. The Company determines the amount of the transaction price to allocate to the installation service based on the standalone selling price of the product and the service, which requires judgment. The Company determines relative standalone selling price of installation based upon a number of factors, including hourly service billing rates and estimated installation hours. In developing these estimates, the Company considers past history, competition, billing rates of current services and other factors.

The Company has sales from standalone software, which is included in instrument systems revenue. These arrangements typically include software licenses and maintenance contracts, both of which the Company has determined are distinct performance obligations. The Company determines the amount of the transaction price to allocate to the license and maintenance contract based on the relative standalone selling price of each performance obligation. Software license revenue is recognized at the point in time when control has been transferred to the customer. The revenue allocated to the software maintenance contract is recognized on a straight-line basis over the maintenance period, which is the contractual term of the contract, as a time-based measure of progress best reflects the Company s performance in satisfying this obligation. Unspecified rights to software upgrades are typically sold as part of the maintenance contract on a when-and-if-available basis.

Payment terms and conditions vary among the Company s revenue streams, although terms generally include a requirement of payment within 30 to 60 days of product shipment. Prior to providing payment terms to customers, an evaluation of the customer s credit risk is performed. Returns and customer credits are infrequent and insignificant and are recorded as a reduction to sales. Rights of return are not included in sales arrangements and, therefore, there is minimal variable consideration included in the transaction price of our products.

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Service revenue includes (i) service and software maintenance contracts and (ii) service calls (time and materials). Instrument service contracts and software maintenance contracts are typically annual contracts, which are billed at the beginning of the contract or maintenance period. The amount of the service and software maintenance contract is recognized on a straight-line basis to revenue over the maintenance service period, which is the contractual term of the contract, as a time-based measure of progress best reflects the Company s performance in satisfying this obligation. There are no deferred costs associated with the service contract, as the cost of the service is recorded when the service is performed. Service calls are recognized to revenue at the time a service is performed.

The Company s deferred revenue liabilities at December 31, 2018 was $204 million on the consolidated balance sheets consists of the obligation on instrument service contracts and customer payments received in advance, prior to transfer of control of the instrument. The Company records deferred revenue primarily related to its service contracts, where consideration is billable at the beginning of the service period.

*Loss Provisions on Accounts Receivable and Inventory*

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. If the financial condition of the Company s customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. The Company does not request collateral from its customers, but collectibility is enhanced through the use of credit card payments and letters of credit. The Company assesses collectibility based on a number of factors, including, but not limited to, past transaction history with the customer, the credit-worthiness of the customer, industry trends and the macro-economic environment. Historically, the Company has not experienced significant bad debt losses. Sales returns and allowances are estimates of future product returns related to current period revenue. Material differences may result in the amount and timing of revenue for any period if management made different judgments or utilized different estimates for sales returns and allowances for doubtful accounts. The Company s accounts receivable balance at December 31, 2018 was $568 million, net of allowances for doubtful accounts of $8 million.

The Company values all of its inventories at the lower of cost or net realizable value on a first-in, first-out basis ( FIFO ). The Company estimates revisions to its inventory valuations based on technical obsolescence, historical demand, projections of future demand, including that in the Company s current backlog of orders, and industry and market conditions. If actual future demand or market conditions are less favorable than those projected by management, additional write-downs may be required. The Company s inventory balance at December 31, 2018 was recorded at its net realizable value of $292 million, which is net of write-downs of $23 million.

*Long-Lived Assets, Intangible Assets and Goodwill*

The Company assesses the impairment of identifiable intangibles, long-lived assets and goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors the Company considers important which could trigger impairment include, but are not limited to, the following:

- significant underperformance relative to historical or projected future operating results, particularly as it pertains to capitalized software and patent costs;
- significant negative industry or economic trends, competitive products and technologies; and
- significant changes or developments in strategic technological collaborations or legal matters which affect the Company s capitalized patents, purchased technology, trademarks and intellectual properties, such as licenses.

When the Company determines that the carrying value of an individual intangible asset, long-lived asset or goodwill may not be recoverable based upon the existence of one or more of the above indicators, an estimate of

undiscounted future cash flows produced by that intangible asset, long-lived asset or goodwill, including its eventual residual value, is compared to the carrying value to determine whether impairment exists. In the event that such cash flows are not expected to be sufficient to recover the carrying amount of the asset, the asset is written-down to its estimated fair value. Net intangible assets, long-lived assets and goodwill amounted to $247 million, $343 million and $356 million, respectively, as of December 31, 2018.

The Company performs annual impairment reviews of its goodwill on January 1 of each year. For goodwill impairment review purposes, the Company has two reporting units: Waters and TA. The Company currently does not expect to record an impairment charge in the foreseeable future; however, there can be no assurance that, at the time future reviews are completed, a material impairment charge will not be recorded. The factors that could cause a material goodwill impairment charge in the future include, but are not limited to, the following:

- significant decline in the Company s projected revenue, earnings or cash flows;
- significant adverse change in legal factors or business climate;
- significant decline in the Company s stock price or the stock price of comparable companies;
- adverse action or assessment by a regulator; and
- unanticipated competition.

*Income Taxes*

As part of the process of preparing the consolidated financial statements, the Company is required to estimate its income taxes in each of the jurisdictions in which it operates. This process involves the Company estimating its income taxes, taking into account the amount, timing and character of taxable income, tax deductions and credits and assessing changes in tax laws, regulations, agreements and treaties. Differing treatment of items for tax and accounting purposes, such as depreciation, amortization and inventory reserves, result in deferred tax assets and liabilities, which are included within the consolidated balance sheets. In the event that actual results differ from these estimates, or the Company adjusts these estimates in future periods, such changes could materially impact the Company s financial position and results of operations.

The accounting standards for income taxes require that a company continually evaluate the necessity of establishing or changing a valuation allowance for deferred tax assets depending on whether it is more likely than not that the actual benefit of those assets will be realized in future periods.

*Uncertain Tax Positions*

The Company accounts for its uncertain tax return positions in accordance with the accounting standards for income taxes, which require financial statement reporting of the expected future tax consequences of uncertain tax positions on the presumption that all concerned tax authorities possess full knowledge of those tax positions, as well as all of the pertinent facts and circumstances, but prohibit any discounting of unrecognized tax benefits associated with those positions for the time value of money. The Company classified interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes. At December 31, 2018, the Company had unrecognized tax benefits of $27 million.

The Company has been granted a 0% contractual tax rate in Singapore that requires the achievement of certain operational and financial milestones that the Company expects to meet, to the extent not already achieved, by December 31, 2020 and maintain through at least March 31, 2021. As part of the Company s determination of uncertain tax positions, the Company regularly assesses its progress against these operational and financial milestone targets to determine whether the milestones can be reasonably achieved. These milestones were negotiated with the Singaporean tax authorities and established based on the Company s historical financial performance; the anticipated customer end-market demand, particularly in certain regions in the world, and the Company s anticipated future operating plans. These assessments require significant judgments and estimates

about the Company s ability to meet the milestone targets for the following types of objectives: reaching and maintaining annual revenue and business spending targets; meeting capital expenditures targets; attaining and sustaining employment targets; and establishing a local research and development and service center. The Company regularly monitors its actual and forecasted sales and operating results against these milestones and the Company makes the determination as to whether the future forecasted financial results are most likely to be achieved. These milestones are very similar in nature to the previous Singaporean tax holiday contractual agreements that the Company successfully completed. These milestones are not required to be met until December 21, 2020, at the earliest, which gives the Company sufficient time to make any necessary adjustments to its operating plans to achieve the milestones.

Currently, the Company has determined that it is more likely than not to realize the contractual tax rate in Singapore of 0% and has not recognized an uncertain tax position in its balance sheet related to the achievement of the contractual milestones in Singapore. However, these milestones can be significantly influenced by the business climate in Singapore and the Company s overall financial performance and, in the event that the Company determines that the milestone targets are not expected to be met, the Company would no longer be able to record a tax benefit at a 0% contractual tax rate on income earned in Singapore from and after the April 1, 2016 start date of the contract period. At such time, the Company would record an income tax charge on the affected Singapore income earned back to April 1, 2016 at the Singapore statutory tax rate(s) (currently 17%), with a corresponding income tax liability recorded on the balance sheet. For the year ended 2018, the effect of applying the contractual tax rate rather than the statutory tax rate to income from qualifying activities in Singapore increased the Company s net income and net income per diluted share by $28 million and $0.36, respectively.

*Warranty*

Product warranties are recorded at the time revenue is recognized for certain product shipments. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, the Company s warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from the Company s previous estimates, revisions to the estimated warranty liability would be required. At December 31, 2018, the Company s warranty liability was $12 million.

*Litigation*

As described in Part I, Item 3, Legal Proceedings, of this Form 10-K, the Company is a party to various pending litigation matters. With respect to each pending claim, management determines whether it can reasonably estimate whether a loss is probable and, if so, the probable range of that loss. If and when management has determined, with respect to a particular claim, both that a loss is probable and that it can reasonably estimate the range of that loss, the Company records a charge equal to either its best estimate of that loss or the lowest amount in that probable range of loss. The Company will disclose additional exposures when the range of loss is subject to considerable uncertainty.

*Pension and Other Retirement Benefits*

Assumptions used in determining projected benefit obligations and the fair values of plan assets for the Company s pension plans and other retirement benefits are evaluated periodically by management. Changes in assumptions are based on relevant Company data. Critical assumptions, such as the discount rate used to measure the benefit obligations and the expected long-term rate of return on plan assets, are evaluated and updated annually. The Company has assumed that the weighted-average expected long-term rate of return on plan assets will be 4.35% for its U.S. benefit plans and 2.75% for its non-U.S. benefit plans.

At the end of each year, the Company determines the discount rate that reflects the current rate at which the pension liabilities could be effectively settled. The Company utilized Milliman s Bond Matching model to

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determine the discount rate for its U.S. benefit plans. The Company determined the discount rate for its non-U.S. benefit plans based on the analysis of the Mercer Pension Discount Curve for high quality investments as of December 31, 2018 that best matched the timing of the plan s future cash flows for the period to maturity of the pension benefits. Once the interest rates were determined, the plan s cash flow was discounted at the spot interest rate back to the measurement date. At December 31, 2018, the Company determined the weighted-average discount rate to be 4.40% for the U.S. benefit plans and 1.95% for the non-U.S. benefits plans.

A one-quarter percentage point increase in the assumed long-term rate of return would decrease the Company s net periodic benefit cost by less than $1 million. A one-quarter percentage point increase in the discount rate would decrease the Company s net periodic benefit cost by less than $1 million.

*Stock-based Compensation*

The accounting standards for stock-based compensation require that all share-based payments to employees be recognized in the statements of operations based on their fair values. The Company has used the Black-Scholes option pricing model and Monte Carlo simulation model to determine the fair value of its stock option awards and performance stock unit awards, respectively. Under the fair-value recognition provisions of this statement, share-based compensation cost is measured at the grant date based on the value of the award and is recognized as expense over the vesting period. Determining the fair value of share-based awards at the grant date requires judgment, including estimating stock price volatility and employee stock option exercise behaviors. If actual results differ significantly from these estimates, stock-based compensation expense and the Company s results of operations could be materially impacted. As stock-based compensation expense recognized in the consolidated statements of operations is based on awards that ultimately are expected to vest, the amount of the expense has been reduced for estimated forfeitures. These accounting standards require forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures are estimated based on historical experience. If factors change and the Company employs different assumptions in the application of these accounting standards, the compensation expense that the Company records in future periods may differ significantly from what the Company has recorded in the current period. The Company recognizes the expense using the straight-line attribution method.

As of December 31, 2018, unrecognized compensation costs and related weighted-average lives over which the costs will be amortized were as follows (in millions):

| | Unrecognized Compensation Costs | Weighted-Average Life in Years |
|---|---|---|
| Stock options | $ 42 | 3.5 |
| Restricted stock units | 34 | 3.2 |
| Performance stock units | 14 | 2.3 |
| Restricted stock | | |
| Total | $ 90 | 3.2 |

*Business Combinations and Asset Acquisitions*

The Company accounts for business acquisitions under the accounting standards for business combinations. The results of each acquisition are included in the Company s consolidated results as of the acquisition date and the purchase price of an acquisition is allocated to tangible and intangible assets and assumed liabilities based on their estimated fair values. Any excess of the fair value consideration transferred over the estimated fair values of the net assets acquired is recognized as goodwill. Acquired in-process research and development ( IPR&D ) included in a business combination is capitalized as an indefinite-lived intangible asset. Development costs incurred after the acquisition are expensed as incurred and acquired IPR&D is tested for impairment annually until completion of the acquired programs. Upon commercialization, this indefinite-lived intangible asset is then accounted for as a finite-lived intangible asset and amortized on a straight-line basis over its estimated useful life,

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subject to periodic impairment reviews. If the research and development project is abandoned, the indefinite-lived asset is charged to expense. Legal costs, due diligence costs, business valuation costs and all other business acquisition costs are expensed when incurred.

The Company also acquires intellectual property through licensing arrangements. These arrangements often require upfront payments and may include additional milestone or royalty payments, contingent upon certain future events. IPR&D acquired in an asset acquisition (as opposed to a business combination) is expensed immediately unless there is an alternative future use. Subsequent payments made for the achievement of milestones are evaluated to determine whether they have an alternative future use or should be expensed. Payments made to third parties subsequent to commercialization are capitalized and amortized over the remaining useful life of the related asset, and are classified as intangible assets.

*Contingent Consideration*

In addition to the initial cash consideration paid to acquire Medimass, the Company is obligated to make additional earnout payments based on a royalty due on future sales of products containing the REIMS technology. In accordance with the accounting standards for business combinations, the Company determines the fair value of the liability for contingent consideration at each reporting date using a probability-weighted discounted cash flow model. Subsequent changes in the fair value of the contingent consideration liability are recorded in the results of operations. The fair value of the contingent consideration liability associated with future earnout payments is based on several factors, including estimated future results and a discount rate reflective of the Company s creditworthiness. A change in any of these unobservable inputs can significantly change the fair value of the contingent consideration. Although there is no contractual limit, total future undiscounted contingent consideration payments were estimated to be $2 million as of December 31, 2018, based on the Company s best estimate, as the earnout is based on future sales of certain products through 2034.

**Recent Accounting Standard Changes and Developments**

Information regarding recent accounting standard changes and developments is incorporated by reference from Part II, Item 8, Financial Statements and Supplementary Data, of this document and should be considered an integral part of this Item 7. See Note 2 in the Notes to the Consolidated Financial Statements for recently adopted and issued accounting standards.

**Item 7A:** ***Quantitative and Qualitative Disclosures About Market Risk***

*Derivative Transactions*

The Company is a global company that operates in over 35 countries and, as a result, the Company s net sales, cost of sales, operating expenses and balance sheet amounts are significantly impacted by fluctuations in foreign currency exchange rates. The Company is exposed to currency price risk on foreign currency exchange rate fluctuations when it translates its non-U.S. dollar foreign subsidiaries financial statements into U.S. dollars, and when any of the Company s subsidiaries purchase or sell products or services in a currency other than its own currency.

The Company s principal strategies in managing exposures to changes in foreign currency exchange rates are to (1) naturally hedge the foreign-currency-denominated liabilities on the Company s balance sheet against corresponding assets of the same currency, such that any changes in liabilities due to fluctuations in foreign currency exchange rates are typically offset by corresponding changes in assets and (2) mitigate foreign exchange risk exposure of international operations by hedging the variability in the movement of foreign currency exchange rates on a portion of its Euro-denominated net asset investments. The Company presents the derivative transactions in financing activities in the statement of cash flows.

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Foreign Currency Exchange Contracts

The Company does not specifically enter into any derivatives that hedge foreign-currency-denominated operating assets, liabilities or commitments on its balance sheet, other than a portion of certain third-party accounts receivable and accounts payable, and the Company s net worldwide intercompany receivables and payables, which are eliminated in consolidation. The Company periodically aggregates these net worldwide balances by currency and then enters into foreign currency exchange contracts that mature within 90 days to hedge a portion of the remaining balance to minimize some of the Company s currency price risk exposure. The foreign currency exchange contracts are not designated for hedge accounting treatment. Principal hedged currencies include the Euro, Japanese yen, British pound, Mexican peso and Brazilian real.

Interest Rate Cross-Currency Swap Agreements

In 2018, the Company entered into three-year interest rate cross-currency swap derivative agreements with a notional value of $300 million to hedge the variability in the movement of foreign currency exchange rates on a portion of its Euro-denominated net asset investments. Under hedge accounting, the change in fair value of the derivative that relates to changes in the foreign currency spot rate are recorded in the currency translation adjustment in other comprehensive income and remain in accumulated comprehensive income in stockholders equity until the sale or substantial liquidation of the foreign operation. The difference between the interest rate received and paid under the interest rate cross-currency swap derivative agreement is recorded in interest income in the statement of operations.

The Company s foreign currency exchange contracts and interest rate cross-currency swap agreements included in the consolidated balance sheets are classified as follows (in thousands):

| | December 31, 2018 | | December 31, 2017 | |
|---|---|---|---|---|
| | Notional Value | Fair Value | Notional Value | Fair Value |
| Foreign currency exchange contracts: | | | | |
| Other current assets | $ 112,212 | $ 503 | $ 110,759 | $ 566 |
| Other current liabilities | $ 40,175 | $ 224 | $ 37,104 | $ 182 |
| Interest rate cross-currency swap agreements: | | | | |
| Other assets | $ 300,000 | $ 1,093 | $ | $ |
| Accumulated other comprehensive income | | $ (1,093) | | $ |

The following is a summary of the activity included in the statements of comprehensive income related to the foreign currency exchange contracts (in thousands):

| | Financial Statement Classification | Year Ended December 31, | | |
|---|---|---|---|---|
| | | 2018 | 2017 | 2016 |
| Foreign currency exchange contracts: | | | | |
| Realized (losses) gains on closed contracts | Cost of sales | $ (6,684) | $ 3,894 | $ (10,401) |
| Unrealized (losses) gains on open contracts | Cost of sales | (105) | 1,054 | (883) |
| Cumulative net pre-tax (losses) gains | Cost of sales | $ (6,789) | $ 4,948 | $ (11,284) |
| Interest rate cross-currency swap agreements: | | | | |
| Interest earned | Interest income | $ 2,713 | $ | $ |
| Unrealized gains on open contracts | Stockholders equity | $ 1,093 | $ | $ |

Assuming a hypothetical adverse change of 10% in year-end exchange rates (a strengthening of the U.S. dollar), the fair market value of the foreign currency exchange contracts outstanding as of December 31, 2018 would decrease pre-tax earnings by approximately $15 million. Assuming a hypothetical adverse change of 10% in year-end exchange rates (a strengthening of the U.S. dollar), the fair market value of the interest rate cross-currency swap agreements outstanding as of December 31, 2018 would increase by approximately $30 million and would be recorded to foreign currency translation in other comprehensive income within stockholders equity. The related impact on interest income would not have a material effect on pre-tax earnings.

The Company s cash and cash equivalents are not subject to significant interest rate risk due to the short maturities of these instruments. The Company s cash equivalents represent highly liquid investments, with original maturities of 90 days or less, primarily in bank deposits, U.S. treasury bill money market funds and commercial paper. As of December 31, 2018, the carrying value of the Company s cash and cash equivalents approximated fair value.

The Company is exposed to the risk of interest rate fluctuations from the investments of cash generated from operations. Investments with maturities greater than 90 days are classified as investments, and are held primarily in U.S. dollar-denominated treasury bills and commercial paper, bank deposits and corporate debt securities. As of December 31, 2018, the Company estimates that a hypothetical adverse change of 100 basis points across all maturities would not have a material effect on the fair market value of its portfolio.

The Company is also exposed to the risk of exchange rate fluctuations. The Company maintains cash balances in various operating accounts in excess of federally insured limits, and in foreign subsidiary accounts in currencies other than the U.S. dollar. As of December 31, 2018 and 2017, $471 million out of $1,735 million and $3,326 million out of $3,394 million, respectively, of the Company s total cash, cash equivalents and investments were held by foreign subsidiaries. In addition, $251 million out of $1,735 million and $304 million out of $3,394 million of cash, cash equivalents and investments were held in currencies other than the U.S. dollar at December 31, 2018 and 2017, respectively. As of December 31, 2018, the Company has no holdings in auction rate securities or commercial paper issued by structured investment vehicles.

Assuming a hypothetical adverse change of 10% in year-end exchange rates (a strengthening of the U.S. dollar), the fair market value of the Company s cash, cash equivalents and investments held in currencies other than the U.S. dollar as of December 31, 2018 would decrease by approximately $25 million, of which the majority would be recorded to foreign currency translation in other comprehensive income within stockholders equity.

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

**Management s Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. 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.

Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of our 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 our evaluation under the framework in *Internal Control Integrated Framework (2013)*, our management, including our chief executive officer and chief financial officer, concluded that our internal control over financial reporting was effective as of December 31, 2018.

The effectiveness of our internal control over financial reporting as of December 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

## Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Waters Corporation

***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of Waters Corporation and its subsidiaries (the Company ) as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive income, stockholders equity and cash flows for each of the three years in the period ended December 31, 2018, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2018 appearing under Item 15(c) (collectively referred to as the consolidated financial statements ). We also have audited the Company s internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control Integrated Framework (2013) issued by the COSO.

*Change in Accounting Principle*

As discussed in Note 10 to the consolidated financial statements, the Company changed the manner in which it accounts for share-based payment transactions in 2017.

***Basis for Opinions***

The Company s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management s Report on Internal Control Over Financial Reporting. Our responsibility is to express opinions on the Company s consolidated financial statements and on the Company s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

***Definition and Limitations of Internal Control over Financial Reporting***

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

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

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
February 26, 2019
We have served as the Company s auditor since 1994.

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**WATERS CORPORATION AND SUBSIDIARIES**

**CONSOLIDATED BALANCE SHEETS**

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| | (In thousands, except per share data) | |
| **ASSETS** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 796,280 | $ 642,319 |
| Investments | 938,944 | 2,751,382 |
| Accounts receivable, net | 568,316 | 533,825 |
| Inventories | 291,569 | 270,294 |
| Other current assets | 68,054 | 72,314 |
| Total current assets | 2,663,163 | 4,270,134 |
| Property, plant and equipment, net | 343,083 | 349,278 |
| Intangible assets, net | 246,902 | 228,395 |
| Goodwill | 355,614 | 359,819 |
| Other assets | 118,664 | 116,728 |
| Total assets | $ 3,727,426 | $ 5,324,354 |
| **LIABILITIES AND STOCKHOLDERS EQUITY** | | |
| Current liabilities: | | |
| Notes payable and debt | $ 178 | $ 100,273 |
| Accounts payable | 68,168 | 64,537 |
| Accrued employee compensation | 64,545 | 69,024 |
| Deferred revenue and customer advances | 164,965 | 166,840 |
| Accrued income taxes | 22,943 | 73,008 |
| Accrued warranty | 12,300 | 13,026 |
| Other current liabilities | 115,832 | 119,449 |
| Total current liabilities | 448,931 | 606,157 |
| Long-term liabilities: | | |
| Long-term debt | 1,148,172 | 1,897,501 |
| Long-term portion of retirement benefits | 55,853 | 67,334 |
| Long-term income tax liabilities | 430,866 | 456,949 |
| Other long-term liabilities | 76,346 | 62,625 |
| Total long-term liabilities | 1,711,237 | 2,484,409 |
| Total liabilities | 2,160,168 | 3,090,566 |
| Commitments and contingencies (Notes 6, 9, 10, 11, 12 and 16) | | |
| Stockholders equity: | | |
| Preferred stock, par value $0.01 per share, 5,000 shares authorized, none issued at December 31, 2018 and December 31, 2017 | | |
| Common stock, par value $0.01 per share, 400,000 shares authorized, 160,472 and 159,845 shares issued, 73,115 and 79,337 shares outstanding at December 31, 2018 and December 31, 2017, respectively | 1,605 | 1,598 |
| Additional paid-in capital | 1,834,741 | 1,745,088 |
| Retained earnings | 5,995,205 | 5,405,380 |
| Treasury stock, at cost, 87,357 and 80,509 shares at December 31, 2018 and December 31, 2017, respectively | (6,146,322) | (4,808,211) |

| | | |
|---|---|---|
| Accumulated other comprehensive loss | (117,971) | (110,067) |
| Total stockholders equity | 1,567,258 | 2,233,788 |
| Total liabilities and stockholders equity | $ 3,727,426 | $ 5,324,354 |

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

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**WATERS CORPORATION AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF OPERATIONS**

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| | (In thousands, except per share data) | | |
| Revenues: | | | |
| Product sales | $ 1,604,993 | $ 1,552,349 | $ 1,460,296 |
| Service sales | 814,936 | 756,729 | 707,127 |
| Total net sales | 2,419,929 | 2,309,078 | 2,167,423 |
| Costs and operating expenses: | | | |
| Cost of product sales | 656,275 | 623,214 | 595,796 |
| Cost of service sales | 336,289 | 323,853 | 295,657 |
| Selling and administrative expenses | 536,902 | 544,363 | 512,331 |
| Research and development expenses | 143,403 | 132,593 | 125,187 |
| Purchased intangibles amortization | 7,712 | 6,743 | 9,889 |
| Litigation (settlement) provision (Note 11) | (426) | 11,114 | 3,524 |
| Acquired in-process research and development (Note 2) | | 5,000 | |
| Total costs and operating expenses | 1,680,155 | 1,646,880 | 1,542,384 |
| Operating income | 739,774 | 662,198 | 625,039 |
| Other expense | (47,794) | (340) | (700) |
| Interest expense | (48,641) | (56,839) | (44,911) |
| Interest income | 38,807 | 36,078 | 20,686 |
| Income before income taxes | 682,146 | 641,097 | 600,114 |
| Provision for income taxes | 88,352 | 620,786 | 78,611 |
| Net income | $ 593,794 | $ 20,311 | $ 521,503 |
| Net income per basic common share | $ 7.71 | $ 0.25 | $ 6.46 |
| Weighted-average number of basic common shares | 76,992 | 79,793 | 80,786 |
| Net income per diluted common share | $ 7.65 | $ 0.25 | $ 6.41 |
| Weighted-average number of diluted common shares and equivalents | 77,618 | 80,604 | 81,417 |

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

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**WATERS CORPORATION AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

| | Year Ended December 31, | | |
|---|---|---|---|
| | **2018** | **2017** | **2016** |
| | | (In thousands) | |
| Net income | $ 593,794 | $ 20,311 | $ 521,503 |
| Other comprehensive (loss) income: | | | |
| Foreign currency translation | (36,279) | 101,148 | (66,996) |
| Unrealized gains (losses) on investments before income taxes | 698 | (1,794) | 279 |
| Income tax benefit | 443 | 68 | 111 |
| Unrealized gains (losses) on investments, net of tax | 1,141 | (1,726) | 390 |
| Retirement liability adjustment before reclassifications | (6,722) | 7,832 | (6,783) |
| Amounts reclassified to other expense | 48,792 | 3,948 | 3,263 |
| Retirement liability adjustment before income taxes | 42,070 | 11,780 | (3,520) |
| Income tax (expense) benefit | (14,836) | (4,989) | 572 |
| Retirement liability adjustment, net of tax | 27,234 | 6,791 | (2,948) |
| Other comprehensive (loss) income | (7,904) | 106,213 | (69,554) |
| Comprehensive income | $ 585,890 | $ 126,524 | $ 451,949 |

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

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**WATERS CORPORATION AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2018 | 2017 (In thousands) | 2016 |
| Cash flows from operating activities: | | | |
| Net income | $ 593,794 | $ 20,311 | $ 521,503 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | |
| Stock-based compensation | 37,541 | 39,436 | 40,998 |
| Deferred income taxes | 2,405 | 45,510 | 1,204 |
| Depreciation | 57,952 | 61,450 | 51,684 |
| Amortization of intangibles | 50,456 | 44,552 | 44,765 |
| Excess tax benefit related to stock option plans | | | 13,844 |
| Gain on sale of assets | | | (1,500) |
| In-process research and development and other non-cash charges | | 5,000 | |
| Change in operating assets and liabilities, net of acquisitions: | | | |
| Increase in accounts receivable | (47,921) | (24,013) | (31,721) |
| (Increase) decrease in inventories | (25,396) | 731 | (20,147) |
| Increase in other current assets | (12,446) | (16,323) | (2,436) |
| Decrease (increase) in other assets | 6,047 | (24,098) | (1,076) |
| (Decrease) increase in accounts payable and other current liabilities | (81,663) | 3,175 | 6,842 |
| Increase in deferred revenue and customer advances | 2,721 | 10,386 | 9,974 |
| Enactment of the 2017 Tax Act | (6,059) | 530,383 | |
| Increase in other liabilities | (27,015) | 1,140 | 8,986 |
| Net cash provided by operating activities | 604,446 | 697,640 | 642,920 |
| Cash flows from investing activities: | | | |
| Additions to property, plant, equipment and software capitalization | (96,079) | (85,473) | (94,967) |
| Asset and business acquisitions, net of cash acquired | (31,486) | | (5,609) |
| Investment in unaffiliated company | (7,615) | (7,000) | |
| Payments for intellectual property licenses | | (5,000) | |
| Purchases of investments | (1,006,080) | (2,960,379) | (2,396,032) |
| Maturities and sales of investments | 2,824,562 | 2,522,100 | 2,004,690 |
| Proceeds from sale of assets | | | 4,000 |
| Net cash provided by (used in) investing activities | 1,683,302 | (535,752) | (487,918) |
| Cash flows from financing activities: | | | |
| Proceeds from debt issuances | 274 | 1,480,190 | 485,298 |
| Payments on debt | (850,435) | (1,310,214) | (325,323) |
| Payments of debt issuance costs | | (2,984) | (1,705) |
| Proceeds from stock plans | 52,429 | 97,789 | 62,189 |
| Purchases of treasury shares | (1,315,106) | (332,544) | (325,759) |
| (Payments for) proceeds from derivative contracts | (6,684) | 3,894 | (10,401) |
| Net cash used in financing activities | (2,119,522) | (63,869) | (115,701) |
| Effect of exchange rate changes on cash and cash equivalents | (14,265) | 38,669 | (21,335) |
| Increase in cash and cash equivalents | 153,961 | 136,688 | 17,966 |
| Cash and cash equivalents at beginning of period | 642,319 | 505,631 | 487,665 |
| Cash and cash equivalents at end of period | $ 796,280 | $ 642,319 | $ 505,631 |

| Supplemental cash flow information: | | | |
|---|---|---|---|
| Income taxes paid | $ 159,397 | $ 70,583 | $ 50,007 |
| Interest paid | $ 50,798 | $ 56,503 | $ 43,595 |

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

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**WATERS CORPORATION AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY**

| | Number of Common Shares | Common Stock | Additional Paid-In Capital | Retained Earnings | Treasury Stock | Accumulated Other Comprehensive Income (Loss) | Total Stockholders Equity |
|---|---|---|---|---|---|---|---|
| | | | | (In thousands) | | | |
| Balance December 31, 2015 | 157,677 | $ 1,577 | $ 1,490,342 | $ 4,863,566 | $ (4,149,908) | $ (146,726) | $ 2,058,851 |
| Net income | | | | 521,503 | | | 521,503 |
| Other comprehensive loss | | | | | | (69,554) | (69,554) |
| Issuance of common stock for employees: | | | | | | | |
| Employee Stock Purchase Plan | 53 | 1 | 6,277 | | | | 6,278 |
| Stock options exercised | 730 | 7 | 55,904 | | | | 55,911 |
| Tax benefit related to stock option plans | | | 13,844 | | | | 13,844 |
| Treasury stock | | | | | (325,759) | | (325,759) |
| Stock-based compensation | 174 | 1 | 40,874 | | | | 40,875 |
| Balance December 31, 2016 | 158,634 | $ 1,586 | $ 1,607,241 | $ 5,385,069 | $ (4,475,667) | $ (216,280) | $ 2,301,949 |
| Net income | | | | 20,311 | | | 20,311 |
| Other comprehensive income | | | | | | 106,213 | 106,213 |
| Issuance of common stock for employees: | | | | | | | |
| Employee Stock Purchase Plan | 50 | 1 | 6,874 | | | | 6,875 |
| Stock options exercised | 972 | 10 | 90,904 | | | | 90,914 |
| Treasury stock | | | | | (332,544) | | (332,544) |
| Stock-based compensation | 189 | 1 | 40,069 | | | | 40,070 |
| Balance December 31, 2017 | 159,845 | $ 1,598 | $ 1,745,088 | $ 5,405,380 | $ (4,808,211) | $ (110,067) | $ 2,233,788 |
| Adoption of new accounting pronouncement | | | | (3,969) | | | (3,969) |
| Net income | | | | 593,794 | | | 593,794 |
| Other comprehensive loss | | | | | | (7,904) | (7,904) |
| Issuance of common stock for employees: | | | | | | | |
| Employee Stock Purchase Plan | 45 | | 7,874 | | | | 7,874 |
| Stock options exercised | 438 | 5 | 44,550 | | | | 44,555 |
| Treasury stock | | | | | (1,338,111) | | (1,338,111) |
| Stock-based compensation | 144 | 2 | 37,229 | | | | 37,231 |
| Balance December 31, 2018 | 160,472 | $ 1,605 | $ 1,834,741 | $ 5,995,205 | $ (6,146,322) | $ (117,971) | $ 1,567,258 |

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

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1 Description of Business and Organization

Waters Corporation (the Company, we, our, or us ) is a specialty measurement company that operates with a fundamental underlying purpose to advance the science that enables our customers to enhance human health and well-being. The Company has pioneered analytical workflow solutions involving liquid chromatography, mass spectrometry and thermal analysis innovations serving the life, materials and food sciences for more than 60 years. The Company primarily designs, manufactures, sells and services high performance liquid chromatography ( HPLC ), ultra performance liquid chromatography ( UPLC™ and together with HPLC, referred to as LC ) and mass spectrometry ( MS ) technology systems and support products, including chromatography columns, other consumable products and comprehensive post-warranty service plans. These systems are complementary products that are frequently employed together ( LC-MS ) and sold as integrated instrument systems using common software platforms. LC is a standard technique and is utilized in a broad range of industries to detect, identify, monitor and measure the chemical, physical and biological composition of materials, and to purify a full range of compounds. MS technology, principally in conjunction with chromatography, is employed in drug discovery and development, including clinical trial testing, the analysis of proteins in disease processes (known as proteomics ), nutritional safety analysis and environmental testing. LC-MS instruments combine a liquid phase sample introduction and separation system with mass spectrometric compound identification and quantification. In addition, the Company designs, manufactures, sells and services thermal analysis, rheometry and calorimetry instruments through its TA™ product line. These instruments are used in predicting the suitability and stability of fine chemicals, pharmaceuticals, water, polymers, metals and viscous liquids for various industrial, consumer goods and healthcare products, as well as for life science research. The Company is also a developer and supplier of advanced software-based products that interface with the Company s instruments, as well as other manufacturers instruments.

### 2 Basis of Presentation and Summary of Significant Accounting Policies

*Use of Estimates*

The preparation of consolidated financial statements in conformity with generally accepted accounting principles ( GAAP ) requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities at the dates of the financial statements. On an ongoing basis, the Company evaluates its estimates, including those related to revenue recognition, product returns and allowances, bad debts, inventory valuation, goodwill and intangible assets, income taxes, warranty and installation provisions, litigation, retirement plan obligations, stock-based compensation, equity investments and contingencies. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual amounts may differ from these estimates under different assumptions or conditions.

*Risks and Uncertainties*

The Company is subject to risks common to companies in the analytical instrument industry, including, but not limited to, global economic and financial market conditions, fluctuations in foreign currency exchange rates, fluctuations in customer demand, development by its competitors of new technological innovations, costs of developing new technologies, levels of debt and debt service requirements, risk of disruption, dependence on key personnel, protection and litigation of proprietary technology, shifts in taxable income between tax jurisdictions and compliance with regulations of the U.S. Food and Drug Administration and similar foreign regulatory authorities and agencies.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Principles of Consolidation*

The consolidated financial statements include the accounts of the Company and its subsidiaries, which are wholly owned. The Company consolidates entities in which it owns or controls fifty percent or more of the voting shares. All inter-company balances and transactions have been eliminated.

*Translation of Foreign Currencies*

The functional currency of each of the Company s foreign operating subsidiaries is the local currency of its country of domicile, except for the Company s subsidiaries in Hong Kong, Singapore and the Cayman Islands, where the underlying transactional cash flows are denominated in currencies other than the respective local currency of domicile. The functional currency of the Hong Kong, Singapore and Cayman Islands subsidiaries is the U.S. dollar, based on the respective entity s cash flows.

For most of the Company s foreign operations, assets and liabilities are translated into U.S. dollars at exchange rates prevailing on the balance sheet date, while revenues and expenses are translated at average exchange rates prevailing during the respective period. Any resulting translation gains or losses are included in accumulated other comprehensive income in the consolidated balance sheets.

The Company s net sales derived from operations outside the United States were 72%, 71% and 69% in 2018, 2017 and 2016, respectively. Gains and losses from foreign currency transactions are included in net income in the consolidated statements of operations. In 2018, 2017 and 2016, foreign currency transactions resulted in net losses of $3 million, $1 million and $4 million, respectively.

*Seasonality of Business*

The Company typically experiences an increase in sales in the fourth quarter, as a result of purchasing habits for capital goods of customers that tend to exhaust their spending budgets by calendar year end.

*Cash, Cash Equivalents and Investments*

Cash equivalents represent highly liquid investments, with original maturities of 90 days or less, primarily in bank deposits, U.S. treasury bill money market funds and commercial paper. Investments with longer maturities are classified as investments, and are held primarily in U.S. treasury bills, U.S. dollar-denominated treasury bills and commercial paper, bank deposits and corporate debt securities.

Investments are classified as available-for-sale in accordance with the accounting standards for investments in debt securities. All debt securities are recorded at fair market value and any unrealized holding gains and losses, to the extent deemed temporary, are included in accumulated other comprehensive income in stockholders equity, net of the related tax effects. If any adjustment to fair value reflects a decline in the value of the investment, the Company considers all available evidence to evaluate the extent to which the decline is other than temporary and, if so, records a loss as a charge to the statement of operations. The Company classifies its investments exclusive of those categorized as cash equivalents.

The Company maintains cash balances in various operating accounts in excess of federally insured limits, and in foreign subsidiary accounts in currencies other than the U.S. dollar. As of December 31, 2018 and 2017, $471 million out of $1,735 million and $3,326 million out of $3,394 million, respectively, of the Company s total cash, cash equivalents and investments were held by foreign subsidiaries. In addition, $251 million out of $1,735 million and $304 million out of $3,394 million of cash, cash equivalents and investments were held in currencies other than the U.S. dollar at December 31, 2018 and 2017, respectively.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Accounts Receivable and Allowance for Doubtful Accounts*

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The Company has very limited use of rebates and other cash considerations payable to customers and, as a result, the transaction price determination does not have any material variable consideration. The allowance for doubtful accounts is the best estimate of the amount of probable credit losses in the existing accounts receivable. The allowance is based on a number of factors, including historical experience and the customer s credit-worthiness. The allowance for doubtful accounts is reviewed on at least a quarterly basis. Past due balances over 90 days and over a specified amount are reviewed individually for collectibility. Account balances are charged against the allowance when the Company determines it is probable that the receivable will not be recovered. The Company does not have any off-balance sheet credit exposure related to its customers. Historically, the Company has not experienced significant bad debt losses.

The following is a summary of the activity of the Company s allowance for doubtful accounts for the years ended December 31, 2018, 2017 and 2016 (in thousands):

| | Balance at Beginning of Period | Additions | Deduction | Balance at End of Period |
|---|---|---|---|---|
| Allowance for Doubtful Accounts | | | | |
| December 31, 2018 | $ 6,109 | $ 6,333 | $ (4,779) | $ 7,663 |
| December 31, 2017 | $ 5,141 | $ 3,752 | $ (2,784) | $ 6,109 |
| December 31, 2016 | $ 4,617 | $ 2,399 | $ (1,875) | $ 5,141 |

*Concentration of Credit Risk*

The Company sells its products and services to a significant number of large and small customers throughout the world, with net sales to the pharmaceutical industry of approximately 56% in each of the years 2018, 2017 and 2016. None of the Company s individual customers accounted for more than 2% of annual Company sales in 2018, 2017 or 2016. The Company performs continuing credit evaluations of its customers and generally does not require collateral, but in certain circumstances may require letters of credit or deposits. Historically, the Company has not experienced significant bad debt losses.

*Inventory*

The Company values all of its inventories at the lower of cost or net realizable value on a first-in, first-out basis ( FIFO ).

*Income Taxes*

Deferred income taxes are recognized for temporary differences between the financial statement and income tax basis of assets and liabilities using tax rates in effect for the years in which the differences are expected to reverse. A valuation allowance is provided to offset any net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. Appropriate long-term liabilities have also been recorded to recognize uncertain tax positions.

As part of the 2017 Tax Act, there is a provision for the taxation of certain off-shore earnings referred to as the Global Intangible Low-Taxed Income ( GILTI ) provision. This new provision taxes off-shore earnings at a rate of 10.5%, partially offset with foreign tax credits. In connection with this new provision, the Company has adopted an accounting policy to treat this new tax as a current period cost.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Property, Plant and Equipment*

Property, plant and equipment are recorded at cost. Expenditures for maintenance and repairs are charged to expense, while the costs of significant improvements are capitalized. Depreciation is provided using the straight-line method over the following estimated useful lives: buildings fifteen to thirty years; building improvements five to ten years; leasehold improvements the shorter of the economic useful life or life of lease; and production and other equipment three to ten years. Upon retirement or sale, the cost of the assets disposed of and the related accumulated depreciation are eliminated from the consolidated balance sheets and related gains or losses are reflected in the consolidated statements of operations.

*Asset Impairments*

The Company reviews its long-lived assets for impairment in accordance with the accounting standards for property, plant and equipment. Whenever events or circumstances indicate that the carrying amount of an asset may not be recoverable, the Company evaluates the recoverability of the carrying value of the asset based on the expected future cash flows, relying on a number of factors, including, but not limited to, operating results, business plans, economic projections and anticipated future cash flows. If the asset is deemed not recoverable, it is written down to fair value and the impairment is recorded in the consolidated statements of operations.

*Business Combinations and Asset Acquisitions*

The Company accounts for business acquisitions under the accounting standards for business combinations. The results of each acquisition are included in the Company s consolidated results as of the acquisition date and the purchase price of an acquisition is allocated to tangible and intangible assets and assumed liabilities based on their estimated fair values. Any excess of the fair value consideration transferred over the estimated fair values of the net assets acquired is recognized as goodwill. Acquired in-process research and development ( IPR&D ) included in a business combination is capitalized as an indefinite-lived intangible asset. Development costs incurred after the acquisition are expensed as incurred and acquired IPR&D is tested for impairment annually until completion of the acquired programs. Upon commercialization, this indefinite-lived intangible asset is then accounted for as a finite-lived intangible asset and amortized on a straight-line basis over its estimated useful life, subject to periodic impairment reviews. If the research and development project is abandoned, the indefinite-lived asset is charged to expense. Legal costs, due diligence costs, business valuation costs and all other business acquisition costs are expensed when incurred.

The Company also acquires intellectual property through licensing arrangements. These arrangements often require upfront payments and may include additional milestone or royalty payments, contingent upon certain future events. IPR&D acquired in an asset acquisition (as opposed to a business combination) is expensed immediately unless there is an alternative future use. Subsequent payments made for the achievement of milestones are evaluated to determine whether they have an alternative future use or should be expensed. Payments made to third parties subsequent to commercialization are capitalized and amortized over the remaining useful life of the related asset, and are classified as intangible assets.

*Goodwill and Other Intangible Assets*

The Company tests for goodwill impairment using a fair-value approach at the reporting unit level annually, or earlier, if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Additionally, the Company performs an annual goodwill impairment assessment for its reporting units as of January 1 each year. The goodwill and other intangible assets accounting standards define a reporting unit as an operating segment, or one level below an operating segment, if discrete financial information is prepared and reviewed by management. For goodwill impairment review purposes, the

Company has two reporting units: Waters and TA. Goodwill is allocated to the reporting units at the time of acquisition. Under the impairment test, if a reporting unit s carrying amount exceeds its estimated fair value, goodwill impairment is recognized to the extent that the carrying amount of goodwill exceeds the implied fair value of the goodwill. The fair value of reporting units was estimated using a discounted cash flows technique, which includes certain management assumptions, such as estimated future cash flows, estimated growth rates and discount rates.

The Company s intangible assets include purchased technology; capitalized software development costs; costs associated with acquiring Company patents, trademarks and intellectual properties, such as licenses; debt issuance costs and acquired IPR&D. Purchased intangibles are recorded at their fair market values as of the acquisition date and amortized over their estimated useful lives, ranging from one to fifteen years. Other intangibles are amortized over a period ranging from one to ten years. Debt issuance costs are amortized over the life of the related debt. Acquired IPR&D is amortized from the date of completion of the acquired program over its estimated useful life. IPR&D and indefinite-lived intangibles are tested annually for impairment.

*Software Development Costs*

The Company capitalizes internal and external software development costs for products offered for sale in accordance with the accounting standards for the costs of software to be sold, leased, or otherwise marketed. Capitalized costs are amortized to cost of sales over the period of economic benefit, which approximates a straight-line basis over the estimated useful lives of the related software products, generally three to ten years. The Company capitalized $34 million and $35 million of direct expenses that were related to the development of software in 2018 and 2017, respectively. Net capitalized software included in intangible assets totaled $147 million and $153 million at December 31, 2018 and 2017, respectively. See Note 8, Goodwill and Other Intangibles .

The Company capitalizes internal software development costs for internal use. Capitalized internal software development costs are amortized over the period of economic benefit, which approximates a straight-line basis over ten years. Net capitalized internal software included in property, plant and equipment totaled $2 million and $3 million at December 31, 2018 and 2017, respectively.

*Other Investments*

The Company accounts for its investments that represent less than twenty percent ownership, and for which the Company does not have the ability to exercise significant influence, using the accounting standards for investments in equity securities. Investments for which the Company does not have the ability to exercise significant influence, and for which there is not a readily determinable market value, are accounted for under the cost method of accounting. The Company periodically evaluates the carrying value of its investments accounted for under the cost method of accounting and carries them at the lower of cost or estimated net realizable value. For investments in which the Company owns or controls between twenty and forty-nine percent of the voting shares, or over which it has the ability to exercise significant influence over operating and financial policies, the equity method of accounting is used. The Company s share of net income or losses of equity investments is included in the consolidated statements of operations and was not material in any period presented.

During the year ended December 31, 2018, the Company made $8 million of investments in unaffiliated companies. During the year ended December 31, 2017, the Company made a $7 million investment in a developer of analytical system solutions used to make measurements, predict stability and accelerate product discovery in the routine analytic, process monitoring and quality control release processes for life science and biopharmaceutical markets. During the year ended December 31, 2016, the Company sold an equity investment that was accounted for using the equity method of accounting and was included in other assets in the consolidated balance sheet for $4 million in cash.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Fair Value Measurements*

In accordance with the accounting standards for fair value measurements and disclosures, certain of the Company s assets and liabilities are measured at fair value on a recurring basis as of December 31, 2018 and 2017. Fair values determined by Level 1 inputs utilize observable data, such as quoted prices in active markets. Fair values determined by Level 2 inputs utilize data points other than quoted prices in active markets that are observable either directly or indirectly. Fair values determined by Level 3 inputs utilize unobservable data points for which there is little or no market data, which require the reporting entity to develop its own assumptions.

The following table represents the Company s assets and liabilities measured at fair value on a recurring basis at December 31, 2018 (in thousands):

| | Total at December 31, 2018 | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
|---|---|---|---|---|
| Assets: | | | | |
| U.S. Treasury securities | $ 164,315 | $ | $ 164,315 | $ |
| Foreign government securities | 3,463 | | 3,463 | |
| Corporate debt securities | 723,059 | | 723,059 | |
| Time deposits | 108,638 | | 108,638 | |
| Waters 401(k) Restoration Plan assets | 33,104 | 33,104 | | |
| Foreign currency exchange contracts | 503 | | 503 | |
| Interest rate cross-currency swap agreements | 1,093 | | 1,093 | |
| Total | $ 1,034,175 | $ 33,104 | $ 1,001,071 | $ |
| Liabilities: | | | | |
| Contingent consideration | $ 2,476 | $ | $ | $ 2,476 |
| Foreign currency exchange contracts | 224 | | 224 | |
| Total | $ 2,700 | $ | $ 224 | $ 2,476 |

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The following table represents the Company s assets and liabilities measured at fair value on a recurring basis at December 31, 2017 (in thousands):

| | Total at December 31, 2017 | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
|---|---|---|---|---|
| Assets: | | | | |
| U.S. Treasury securities | $ 591,988 | $ | $ 591,988 | $ |
| Foreign government securities | 6,952 | | 6,952 | |
| Corporate debt securities | 1,975,160 | | 1,975,160 | |
| Time deposits | 371,511 | | 371,511 | |
| Equity securities | 147 | | 147 | |
| Waters 401(k) Restoration Plan assets | 35,645 | 35,645 | | |
| Foreign currency exchange contracts | 566 | | 566 | |
| Total | $ 2,981,969 | $ 35,645 | $ 2,946,324 | $ |
| Liabilities: | | | | |
| Contingent consideration | $ 3,247 | $ | $ | $ 3,247 |
| Foreign currency exchange contracts | 182 | | 182 | |
| Total | $ 3,429 | $ | $ 182 | $ 3,247 |

*Fair Value of 401(k) Restoration Plan Assets*

The 401(k) Restoration Plan is a nonqualified defined contribution plan and the assets were held in registered mutual funds and have been classified as Level 1. The fair values of the assets in the plan are determined through market and observable sources from daily quoted prices on nationally recognized securities exchanges.

*Fair Value of Cash Equivalents, Investments, Foreign Currency Exchange Contracts and Interest Rate Cross-Currency Swap Agreements*

The fair values of the Company s cash equivalents, investments and foreign currency exchange contracts are determined through market and observable sources and have been classified as Level 2. These assets and liabilities have been initially valued at the transaction price and subsequently valued, typically utilizing third-party pricing services. The pricing services use many inputs to determine value, including reportable trades, benchmark yields, credit spreads, broker/dealer quotes, current spot rates and other industry and economic events. The Company validates the prices provided by third-party pricing services by reviewing their pricing methods and obtaining market values from other pricing sources.

*Fair Value of Contingent Consideration*

The fair value of the Company s liability for contingent consideration relates to earnout payments in connection with the July 2014 acquisition of Medimass Research, Development and Service Kft. and is determined using a probability-weighted discounted cash flow model, which uses significant unobservable inputs, and has been classified as Level 3. Subsequent changes in the fair value of the contingent consideration liability are recorded in the results of operations. The fair value of the contingent consideration liability associated with future earnout payments is based on several factors, including the estimated future results and a discount rate that reflects both the likelihood of achieving the estimated future results and the Company s creditworthiness. A change in any of these unobservable inputs can significantly change the fair value of the contingent consideration. Although there

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

is no contractual limit, the fair value of future contingent consideration payments was estimated to be $2 million and $3 million at December 31, 2018 and 2017, respectively, based on the Company s best estimate, as the earnout is based on future sales of certain products, some of which are currently in development, through 2034.

*Fair Value of Other Financial Instruments*

The Company s accounts receivable, accounts payable and variable interest rate debt are recorded at cost, which approximates fair value due to their short-term nature. The carrying value of the Company s fixed interest rate debt was $510 million and $610 million at December 31, 2018 and 2017, respectively. The fair value of the Company s fixed interest rate debt was estimated using discounted cash flow models, based on estimated current rates offered for similar debt under current market conditions for the Company. The fair value of the Company s fixed interest rate debt was estimated to be $502 million and $608 million at December 31, 2018 and 2017, respectively, using Level 2 inputs.

*Derivative Transactions*

The Company is a global company that operates in over 35 countries and, as a result, the Company s net sales, cost of sales, operating expenses and balance sheet amounts are significantly impacted by fluctuations in foreign currency exchange rates. The Company is exposed to currency price risk on foreign currency exchange rate fluctuations when it translates its non-U.S. dollar foreign subsidiaries financial statements into U.S. dollars, and when any of the Company s subsidiaries purchase or sell products or services in a currency other than its own currency.

The Company s principal strategies in managing exposures to changes in foreign currency exchange rates are to (1) naturally hedge the foreign-currency-denominated liabilities on the Company s balance sheet against corresponding assets of the same currency, such that any changes in liabilities due to fluctuations in foreign currency exchange rates are typically offset by corresponding changes in assets and (2) mitigate foreign exchange risk exposure of international operations by hedging the variability in the movement of foreign currency exchange rates on a portion of its Euro-denominated net asset investments. The Company presents the derivative transactions in financing activities in the statement of cash flows.

Foreign Currency Exchange Contracts

The Company does not specifically enter into any derivatives that hedge foreign-currency-denominated operating assets, liabilities or commitments on its balance sheet, other than a portion of certain third-party accounts receivable and accounts payable, and the Company s net worldwide intercompany receivables and payables, which are eliminated in consolidation. The Company periodically aggregates its net worldwide balances by currency and then enters into foreign currency exchange contracts that mature within 90 days to hedge a portion of the remaining balance to minimize some of the Company s currency price risk exposure. The foreign currency exchange contracts are not designated for hedge accounting treatment. Principal hedged currencies include the Euro, Japanese yen, British pound, Mexican peso and Brazilian real.

Interest Rate Cross-Currency Swap Agreements

In 2018, the Company entered into three-year interest rate cross-currency swap derivative agreements with a notional value of $300 million to hedge the variability in the movement of foreign currency exchange rates on a portion of its Euro-denominated net asset investments. Under hedge accounting, the change in fair value of the derivative that relates to changes in the foreign currency spot rate are recorded in the currency translation adjustment in other comprehensive income and remain in accumulated comprehensive income in stockholders equity until the sale or substantial liquidation of the foreign operation. The difference between the interest rate received and paid under the interest rate cross-currency swap derivative agreement is recorded in interest income in the statement of operations.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The Company s foreign currency exchange contracts and interest rate cross-currency swap agreements included in the consolidated balance sheets are classified as follows (in thousands):

| | December 31, 2018 | | December 31, 2017 | |
|---|---|---|---|---|
| | Notional Value | Fair Value | Notional Value | Fair Value |
| Foreign currency exchange contracts: | | | | |
| Other current assets | $ 112,212 | $ 503 | $ 110,759 | $ 566 |
| Other current liabilities | $ 40,175 | $ 224 | $ 37,104 | $ 182 |
| Interest rate cross-currency swap agreements: | | | | |
| Other assets | $ 300,000 | $ 1,093 | $ | $ |
| Accumulated other comprehensive income | | $ (1,093) | | $ |

The following is a summary of the activity included in the statements of comprehensive income related to the foreign currency exchange contracts (in thousands):

| | Financial Statement Classification | Year Ended December 31, | | |
|---|---|---|---|---|
| | | 2018 | 2017 | 2016 |
| Foreign currency exchange contracts: | | | | |
| Realized (losses) gains on closed contracts | Cost of sales | $ (6,684) | $ 3,894 | $ (10,401) |
| Unrealized (losses) gains on open contracts | Cost of sales | (105) | 1,054 | (883) |
| Cumulative net pre-tax (losses) gains | Cost of sales | $ (6,789) | $ 4,948 | $ (11,284) |
| Interest rate cross-currency swap agreements: | | | | |
| Interest earned | Interest income | $ 2,713 | $ | $ |
| Unrealized gains on open contracts | Stockholders equity | $ 1,093 | $ | $ |

*Stockholders Equity*

In January 2019, the Company s Board of Directors authorized the Company to repurchase up to $4 billion of its outstanding common stock over a two-year period. This new program replaced the remaining amounts available under the April 2018 authorization of $3 billion. During 2018, 2017 and 2016, the Company repurchased 6.8 million, 1.8 million and 2.3 million shares of the Company s outstanding common stock at a cost of $1,329 million, $323 million and $318 million, respectively, under the April 2018 authorization and other previously announced programs. In addition, the Company repurchased $10 million, $10 million and $8 million of common stock related to the vesting of restricted stock units during the years ended December 31, 2018, 2017 and 2016, respectively. The Company believes that it has the financial flexibility to fund these share repurchases given current cash levels and debt borrowing capacity, as well as to invest in research, technology and business acquisitions to further grow the Company s sales and profits.

In December 2018, the Company accrued $23 million as a result of treasury stock purchases that were unsettled as of December 31, 2018. These transactions were settled in January 2019.

*Product Warranty Costs*

The Company accrues estimated product warranty costs at the time of sale, which are included in cost of sales in the consolidated statements of operations. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, the Company s warranty obligation is affected by product failure rates, material usage and service delivery costs

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

incurred in correcting a product failure. The amount of the accrued warranty liability is based on historical information, such as past experience, product failure rates, number of units repaired and estimated costs of material and labor. The liability is reviewed for reasonableness at least quarterly.

The following is a summary of the activity of the Company s accrued warranty liability for the years ended December 31, 2018, 2017 and 2016 (in thousands):

| | Balance at Beginning of Period | Accruals for Warranties | Settlements Made | Balance at End of Period |
|---|---|---|---|---|
| Accrued warranty liability: | | | | |
| December 31, 2018 | $ 13,026 | $ 5,033 | $ (5,759) | $ 12,300 |
| December 31, 2017 | $ 13,391 | $ 8,746 | $ (9,111) | $ 13,026 |
| December 31, 2016 | $ 13,349 | $ 9,755 | $ (9,713) | $ 13,391 |

*Advertising Costs*

All advertising costs are expensed as incurred and are included in selling and administrative expenses in the consolidated statements of operations. Advertising expenses were $7 million, $6 million and $11 million for 2018, 2017 and 2016, respectively.

*Research and Development Expenses*

Research and development expenses are comprised of costs incurred in performing research and development activities, including salaries and benefits, facilities costs, overhead costs, contract services and other outside costs. Research and development expenses are expensed as incurred. During 2017, the Company incurred a $5 million charge for acquired in-process research and development related to the licensing of certain intellectual property relating to mass spectrometry technologies yet to be commercialized and for which there was no future alternative use as of the acquisition date. These licensing arrangements are significantly related to new, biologically-focused applications, as well as other applications, and require the Company to make additional future payments of up to $7 million if certain milestones are achieved, as well as royalties on future net sales.

*Stock-Based Compensation*

The Company has two stock-based compensation plans, which are described in Note 13, Stock-Based Compensation .

*Earnings Per Share*

In accordance with the earnings per share accounting standards, the Company presents two earnings per share ( EPS ) amounts. Income per basic common share is based on income available to common shareholders and the weighted-average number of common shares outstanding during the periods presented. Income per diluted common share includes additional dilution from potential common stock, such as stock issuable pursuant to the exercise of stock options outstanding.

*Retirement Plans*

The Company sponsors various retirement plans, which are described in Note 16, Retirement Plans .

*Comprehensive Income*

The Company accounts for comprehensive income in accordance with the accounting standards for comprehensive income, which establish the accounting rules for reporting and displaying comprehensive income.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

These standards require that all components of comprehensive income be reported in a financial statement that is displayed with the same prominence as other financial statements.

*Subsequent Events*

In January 2019, the Company s Board of Directors authorized the Company to repurchase up to $4 billion of its outstanding common stock over a two-year period. See discussion under the heading, Stockholders Equity , above.

In January 2019, the Company made organizational changes to better align our resources with our growth and innovation strategies, resulting in a worldwide workforce reduction, impacting 1% of the Company s employees. The Company currently estimates that it will incur approximately $15 million of severance and related costs during 2019.

In February 2019, certain defined terms related to the subsidiary guarantors were amended in the Company s credit agreement and senior unsecured note agreements. In addition, the Company amended the senior unsecured note agreements to allow the Company to elect an increase in the permitted leverage ratio from 3.50:1 to 4.0:1, for a period of three consecutive quarters, for a material acquisition of $400 million or more. During the period of time where the leverage ratio exceeds 3.50:1, the interest payable on the senior unsecured notes shall increase by 0.50%. The debt covenants in the senior unsecured note agreements were also modified to address the change in accounting guidance for leases.

*Recently Adopted Accounting Standards*

In May 2014, amended accounting guidance was issued regarding the recognition of revenue from contracts with customers. The objective of this guidance is to significantly enhance comparability and clarify principles of revenue recognition practices across entities, industries, jurisdictions and capital markets. This guidance was originally effective for annual and interim reporting periods beginning after December 15, 2016; however, the Financial Accounting Standards Board ( FASB ) amended the standard in August 2015 to delay the effective period date by one year to annual and interim periods beginning after December 15, 2017. Adoption prior to December 15, 2016 was not permitted. In March 2016, the FASB clarified the implementation guidance on principal versus agent considerations and, in April 2016, clarification was made regarding certain aspects of identifying performance obligations and licensing implementation guidance. In May 2016, additional guidance was issued related to disclosure of remaining performance obligations, as well as other amendments to guidance on collectibility, non-cash consideration and the presentation of sales and other similar taxes collected from customers. The Company adopted this standard as of January 1, 2018 and applied the modified-retrospective method. The Company elected the practical expedient and only evaluated the contracts that were considered incomplete as of January 1, 2018 when quantifying the cumulative effect adjustment under the modified retrospective method. The adoption of this standard did not have a material impact on the Company s financial position, results of operations or cash flows and, as such, did not require any adjustments to information reported in the prior year.

In January 2016, accounting guidance was issued which primarily affects the classification and measurement of certain financial instruments, principally equity investments and certain financial liabilities. Under the new guidance, there will no longer be an available-for-sale classification for equity securities with readily determinable fair values. Changes to the fair value of equity investments will be recognized through earnings. Equity investments carried at cost should be adjusted for changes in observable prices, as applicable, and qualitatively assessed for impairment annually. Changes to the fair value of financial liabilities under the fair value option due to instrument specific credit risk will be recognized separately in other comprehensive income. The new guidance also requires financial assets and financial liabilities to be presented separately and grouped by

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

measurement category in the notes to the financial statements. The Company adopted this standard as of January 1, 2018 and the adoption of this standard did not have a material impact on the Company s financial position, results of operations and cash flows.

In August 2016, accounting guidance was issued that clarifies the classification of certain cash flows. The new guidance addresses eight specific areas where current accounting guidance is either unclear or does not specifically address classification issues. This guidance is effective for annual and interim periods beginning after December 15, 2017 and early adoption is permitted. The Company adopted this standard as of January 1, 2018 and the adoption of this standard did not have a material impact on the Company s cash flows.

In October 2016, accounting guidance was issued regarding intra-entity transfers of assets other than inventory. The new guidance eliminates the deferral of tax effects on intra-entity transfers other than inventory and requires an entity to recognize the income tax consequences when the transfer occurs. The Company adopted this standard as of January 1, 2018 with a $4 million charge to beginning retained earnings in the consolidated balance sheet. Please see Note 10, Income Taxes , for additional information.

In January 2017, accounting guidance was issued that clarifies the definition of a business. The new guidance provides a more robust framework to use in determining when a set of assets and activities is a business, thus narrowing the definition and the amount of transactions accounted for as business combinations. The Company adopted this standard as of January 1, 2018 and will apply this guidance prospectively to any business combination transactions that take place in the future.

In March 2017, accounting guidance was issued regarding the presentation of net periodic pension cost and net periodic postretirement benefit cost. The new guidance requires that an employer disaggregate the service cost component from other components of net benefit cost, with service cost reported in the same line items as other compensation costs and the other components of net benefit costs presented outside income from operations. The Company adopted this standard as of January 1, 2018 and has reported the components of net periodic benefit cost other than the service cost component in other income on the consolidated statements of operations for all periods presented. Please see Note 16, Retirement Plans , for additional information.

In May 2017, accounting guidance was issued that clarifies the accounting for a change to the terms or conditions of a share-based payment award. The standard provides more specific guidance for determining when a change to an award requires modification accounting and when it should be deemed purely administrative in nature. The Company adopted this standard as of January 1, 2018 and the adoption of this standard did not have a material impact on the Company s financial position, results of operations and cash flows.

In August 2017, accounting guidance was issued which simplifies the application of hedge accounting and enables companies to better portray the economics of their risk management activities in their financial statements. The Company adopted this standard in the second quarter of 2018, and this adoption did not have a material impact on the Company s financial position, results of operations and cash flows.

*Recently Issued Accounting Standards*

In February 2016, accounting guidance was issued regarding the accounting for leases. This new comprehensive lease standard amends various aspects of existing accounting guidance for leases. The core principle of the new guidance will require lessees to present the assets and liabilities that arise from leases on their balance sheets. This guidance is effective for annual and interim reporting periods beginning after December 15, 2018 and early adoption is permitted. The Company has adopted this standard using a modified retrospective transition approach to be applied to leases existing as of, or entered into after, January 1, 2019. The adoption of this standard will have a material effect on the Company s balance sheet by recording a right-of-use lease asset and lease liability

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

that is estimated to be approximately $97 million; however, it will not have an overall material impact on the Company s results of operations and cash flows.

In June 2016, accounting guidance was issued that modifies the recognition of credit losses related to financial assets, such as debt securities, trade receivables, net investments in leases, off-balance sheet credit exposures, and other financial assets that have the contractual right to receive cash. Current guidance requires the recognition of a credit loss when it is considered probable that a loss event has occurred. The new guidance requires the measurement of expected credit losses to be based upon relevant information, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the asset. As such, expected credit losses may be recognized sooner under the new guidance due to the broader range of information that will be required to determine credit loss estimates. The new guidance also amends the current other-than-temporary impairment model used for debt securities classified as available-for-sale. When the fair value of an available-for-sale debt security is below its amortized cost, the new guidance requires the total unrealized loss to be bifurcated into its credit and non-credit components. Any expected credit losses or subsequent recoveries will be recognized in earnings and any changes not considered credit related will continue to be recognized within other comprehensive income. This guidance is effective for annual and interim periods beginning after December 15, 2019. The Company currently does not expect that the adoption of this standard will have a material effect on the Company s financial position, results of operations and cash flows.

In January 2017, accounting guidance was issued that simplifies the accounting for goodwill impairment. The guidance eliminates step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. This guidance is effective for annual and interim periods beginning after December 15, 2019 and early adoption is permitted. The Company currently does not expect that the adoption of this standard will have a material effect on the Company s financial position, results of operations and cash flows.

In March 2017, accounting guidance was issued to amend the amortization period for certain purchased callable debt securities held at a premium. Specifically, the amortization period for certain callable debt securities will be shortened to end at the earliest call date. This guidance is effective for annual and interim periods beginning after December 15, 2018 and early adoption is permitted. The Company currently does not believe that the adoption of this standard will have a material impact on the Company s financial position, results of operations and cash flows.

In February 2018, accounting guidance was issued to address the impact of the 2017 Tax Cuts and Jobs Act on items recorded in accumulated other comprehensive income. Current accounting guidance requires deferred tax liabilities and assets to be adjusted for the effect of a change in tax laws or rates with the effect recorded in income from continuing operations, even if the related tax effects were originally recognized in other comprehensive income, the new guidance allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the 2017 Tax Act. This guidance is effective for annual and interim periods beginning after December 15, 2018 and early adoption is permitted. The Company does not expect that the adoption of this standard will have a material impact on the Company s financial position, results of operations and cash flows.

In August 2018, accounting guidance was issued that modifies the disclosure requirements of fair value measurements. The amendments remove disclosures that are no longer considered cost beneficial, clarify the specific requirements of disclosure and add disclosure requirement identified as relevant. This guidance is effective for annual and interim periods beginning after December 15, 2019 and early adoption is permitted. The Company does not expect that the adoption of this standard will have a material impact on the Company s financial position, results of operations and cash flows.

In August 2018, accounting guidance was issued that modifies the disclosure requirements of retirement benefit plans. The amendments remove disclosures that are no longer considered cost beneficial, clarify the

specific requirements of disclosure and add disclosure requirement identified as relevant. This guidance is effective for annual and interim periods beginning after December 15, 2020 and early adoption is permitted. The Company does not expect that the adoption of this standard will have a material impact on the Company s financial position, results of operations and cash flows.

**3 Revenue Recognition**

The Company adopted new accounting guidance regarding the recognition of revenue from contracts with customers as of January 1, 2018 and applied the modified-retrospective method. The Company elected the practical expedient and only evaluated the contracts that were considered incomplete as of January 1, 2018 when quantifying the cumulative effect adjustment under the modified retrospective method. Ultimately, the Company determined that there was not a significant change in the timing or pattern of revenue recognition for the Company s products and services. The adoption of this standard did not have a material impact on the Company s financial position, results of operations or cash flows and, as such, did not require any adjustments to information reported in the prior year. The revenue recognition policies described below were effective as of January 1, 2018.

The Company recognizes revenue upon transfer of control of promised products and services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those products or services. The Company generally enters into contracts that include a combination of products and services. Revenue is allocated to distinct performance obligations and is recognized net of allowances for returns and discounts.

The Company recognizes revenue on product sales at the time control of the product transfers to the customer. In substantially all of the Company s arrangements, title of the product transfers at shipping point and, as a result, the Company determined control transfers at the point of shipment. In more limited cases, there are destination-based shipping terms and, thus, control is deemed to transfer when the products arrive at the customer site. All incremental costs of obtaining a contract are expensed as and when incurred if the expected amortization period of the asset that would have been recognized is one year or less. Shipping and handling costs are included as a component of cost of sales. In situations where the control of the goods transfers prior to the completion of the Company s obligation to ship the products to its customers, the Company has elected the practical expedient to account for the shipping services as a fulfillment cost. Accordingly, such costs are recognized when control of the related goods is transferred to the customer. In more rare situations, the Company has revenue associated with products that contain specific customer acceptance criteria and the related revenue is not recognized before the customer acceptance criteria are satisfied. The Company elected to exclude from the measurement of the transaction price all taxes assessed by a governmental authority that are both imposed on and concurrent with specific revenue-producing transactions and collected by the Company from a customer.

Generally, the Company s contracts for products include a performance obligation related to installation. The Company has determined that the installation represents a distinct performance obligation and revenue is recognized separately upon the completion of installation. The Company determines the amount of the transaction price to allocate to the installation service based on the standalone selling price of the product and the service, which requires judgment. The Company determines relative standalone selling price of installation based upon a number of factors, including hourly service billing rates and estimated installation hours. In developing these estimates, the Company considers past history, competition, billing rates of current services and other factors.

The Company has sales from standalone software, which is included in instrument systems revenue. These arrangements typically include software licenses and maintenance contracts, both of which the Company has determined are distinct performance obligations. The Company determines the amount of the transaction price to

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

allocate to the license and maintenance contract based on the relative standalone selling price of each performance obligation. Software license revenue is recognized at the point in time when control has been transferred to the customer. The revenue allocated to the software maintenance contract is recognized on a straight-line basis over the maintenance period, which is the contractual term of the contract, as a time-based measure of progress best reflects the Company s performance in satisfying this obligation. Unspecified rights to software upgrades are typically sold as part of the maintenance contract on a when-and-if-available basis.

Payment terms and conditions vary among the Company s revenue streams, although terms generally include a requirement of payment within 30 to 60 days of product shipment. Prior to providing payment terms to customers, an evaluation of the customer s credit risk is performed. Returns and customer credits are infrequent and insignificant and are recorded as a reduction to sales. Rights of return are not included in sales arrangements and, therefore, there is minimal variable consideration included in the transaction price of our products.

Service revenue includes (i) service and software maintenance contracts and (ii) service calls (time and materials). Instrument service contracts and software maintenance contracts are typically annual contracts, which are billed at the beginning of the contract or maintenance period. The amount of the service and software maintenance contract is recognized on a straight-line basis to revenue over the maintenance service period, which is the contractual term of the contract, as a time-based measure of progress best reflects the Company s performance in satisfying this obligation. There are no deferred costs associated with the service contract, as the cost of the service is recorded when the service is performed. Service calls are recognized to revenue at the time a service is performed.

The Company s deferred revenue liabilities on the consolidated balance sheets consists of the obligation on instrument service contracts and customer payments received in advance, prior to transfer of control of the instrument. The Company records deferred revenue primarily related to its service contracts, where consideration is billable at the beginning of the service period.

The following is a summary of the activity of the Company s deferred revenue and customer advances for the year ended December 31, 2018, 2017 and 2016 (in thousands):

| | | December 31, | |
|---|---|---|---|
| | **2018** | **2017** | **2016** |
| Balance at the beginning of the period | $ 192,589 | $ 173,780 | $ 170,201 |
| Recognition of revenue included in balance at beginning of the period | (159,258) | (143,589) | (140,688) |
| Revenue deferred during the period, net of revenue recognized | 170,926 | 162,398 | 144,267 |
| Balance at the end of the period | $ 204,257 | $ 192,589 | $ 173,780 |

As of December 31, 2018 and 2017, $39 million and $26 million of deferred revenue and customer advances were classified in other long-term liabilities, respectively.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The amount of deferred revenue and customer advances equals the transaction price allocated to unfulfilled performance obligations for the period presented. Such amounts are expected to be recognized in the future as follows (in thousands):

| | December 31, 2018 |
|---|---|
| Deferred revenue and customer advances expected to be recognized: | |
| In one year or less | $ 164,965 |
| In 13-24 months | 22,856 |
| In 25 months and beyond | 16,436 |
| Total | $ 204,257 |

**4 Marketable Securities**

The Company s marketable securities within cash equivalents and investments included in the consolidated balance sheets are detailed as follows (in thousands):

| | December 31, 2018 | | | |
|---|---|---|---|---|
| | Amortized Cost | Unrealized Gain | Unrealized Loss | Fair Value |
| U.S. Treasury securities | $ 164,619 | $ 16 | $ (320) | $ 164,315 |
| Foreign government securities | 3,486 | 1 | (24) | 3,463 |
| Corporate debt securities | 725,778 | 41 | (2,760) | 723,059 |
| Time deposits | 108,638 | | | 108,638 |
| Total | $ 1,002,521 | $ 58 | $ (3,104) | $ 999,475 |
| Amounts included in: | | | | |
| Cash equivalents | $ 60,532 | $ | $ (1) | $ 60,531 |
| Investments | 941,989 | 58 | (3,103) | 938,944 |
| Total | $ 1,002,521 | $ 58 | $ (3,104) | $ 999,475 |

| | December 31, 2017 | | | |
|---|---|---|---|---|
| | Amortized Cost | Unrealized Gain | Unrealized Loss | Fair Value |
| U.S. Treasury securities | $ 593,599 | $ 82 | $ (1,693) | $ 591,988 |
| Foreign government securities | 6,982 | | (30) | 6,952 |
| Corporate debt securities | 1,977,329 | 897 | (3,066) | 1,975,160 |
| Time deposits | 371,515 | | (4) | 371,511 |
| Equity securities | 77 | 70 | | 147 |
| Total | $ 2,949,502 | $ 1,049 | $ (4,793) | $ 2,945,758 |
| Amounts included in: | | | | |

| | | | | |
|---|---|---|---|---|
| Cash equivalents | $ 194,377 | $ | $ (1) | $ 194,376 |
| Investments | 2,755,125 | 1,049 | (4,792) | 2,751,382 |
| Total | $ 2,949,502 | $ 1,049 | $ (4,793) | $ 2,945,758 |

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The estimated fair value of marketable debt securities by maturity date is as follows (in thousands):

| | December 31, | |
|---|---|---|
| | 2018 | 2017 |
| Due in one year or less | $ 797,649 | $ 2,042,673 |
| Due after one year through three years | 201,826 | 902,938 |
| Total | $ 999,475 | $ 2,945,611 |

In 2018, net realized losses on sales of investments were $1 million. Realized gains and losses on sales of investments were not material in 2017 and 2016.

**5 Inventories**

Inventories are classified as follows (in thousands):

| | December 31, | |
|---|---|---|
| | 2018 | 2017 |
| Raw materials | $ 111,641 | $ 99,033 |
| Work in progress | 15,552 | 15,324 |
| Finished goods | 164,376 | 155,937 |
| Total inventories | $ 291,569 | $ 270,294 |

During 2018, 2017 and 2016, the Company recorded inventory-related excess and obsolescence provisions of $8 million, $2 million and $9 million, respectively.

**6 Property, Plant and Equipment**

Property, plant and equipment consist of the following (in thousands):

| | December 31, | |
|---|---|---|
| | 2018 | 2017 |
| Land and land improvements | $ 36,554 | $ 37,525 |
| Buildings and leasehold improvements | 299,103 | 294,219 |
| Production and other equipment | 494,302 | 484,475 |
| Construction in progress | 41,909 | 22,140 |
| Total property, plant and equipment | 871,868 | 838,359 |
| Less: accumulated depreciation and amortization | (528,785) | (489,081) |
| Property, plant and equipment, net | $ 343,083 | $ 349,278 |

In February 2018, the Company s Board of Directors approved expanding its precision chemistry consumable manufacturing operations in the U.S. The Company anticipates spending an estimated $215 million to build and equip this new state-of-the-art manufacturing facility, and has spent $11 million on this facility through December 31, 2018.

During 2018, 2017 and 2016, the Company retired and disposed of approximately $9 million, $15 million and $15 million of property, plant and equipment, respectively, most of which was fully depreciated and no longer in use. Gains on disposal were immaterial for the years ended December 31, 2018 and 2017.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**7 Acquisitions**

In July 2018, the Company acquired the sole intellectual property rights to the Desorption Electrospray Ionization ( DESI ) imaging technology for $30 million in cash and a future contractual obligation to pay a minimum royalty of $3 million over the remaining life of the patent. DESI is a mass spectrometry imaging technique that is used to develop medical therapies. The Company accounted for this transaction as an asset acquisition as it did not meet the definition of a business. The Company allocated $33 million of fair value to a purchased intangible asset which will be amortized over the useful life of 12 years.

In September 2016, the Company acquired all of the outstanding stock of Rubotherm GmbH ( Rubotherm ), a manufacturer of gravimetric analysis systems, for approximately $6 million in cash, $5 million of which was paid at closing and an additional $1 million paid after closing to settle certain liabilities. Rubotherm develops and manufactures analytical test instruments for thermogravimetric and sorption measurements that are used in both industrial and academic research laboratories in disciplines that include chemistry, material science and engineering. The Rubotherm acquisition will help support and further expand product offerings within TA s thermal analysis business.

In each acquisition, the sellers provided the Company with customary representations, warranties and indemnification, which would be settled in the future if and when a breach of the contractual representation or warranty condition occurs. The pro forma effect of the ongoing operations for Waters Corporation, the DESI imaging technology and Rubotherm, either individually or in the aggregate, as though these acquisitions had occurred at the beginning of the periods covered by this report was immaterial.

**8 Goodwill and Other Intangibles**

The carrying amount of goodwill was $356 million and $360 million at December 31, 2018 and 2017, respectively. During the year ended December 31, 2018, the effect of foreign currency translation decreased goodwill by $4 million.

The Company s intangible assets included in the consolidated balance sheets are detailed as follows (dollars in thousands):

| | December 31, 2018 | | | December 31, 2017 | | |
|---|---|---|---|---|---|---|
| | Gross Carrying Amount | Accumulated Amortization | Weighted-Average Amortization Period | Gross Carrying Amount | Accumulated Amortization | Weighted-Average Amortization Period |
| Capitalized software | $ 454,307 | $ 307,634 | 5 years | $ 438,652 | $ 285,461 | 5 years |
| Purchased intangibles | 201,566 | 144,184 | 11 years | 169,870 | 138,750 | 11 years |
| Trademarks and IPR&D | 13,677 | | | 13,923 | | |
| Licenses | 5,568 | 4,875 | 6 years | 5,840 | 4,628 | 6 years |
| Patents and other intangibles | 77,753 | 49,276 | 8 years | 72,815 | 43,866 | 8 years |
| Total | $ 752,871 | $ 505,969 | 7 years | $ 701,100 | $ 472,705 | 7 years |

The gross carrying value of intangible assets and accumulated amortization for intangible assets decreased by $23 million and $17 million, respectively, in the year ended December 31, 2018 due to the effects of foreign currency translation. Amortization expense for intangible assets was $50 million, $45 million and $45 million for the years ended December 31, 2018, 2017 and 2016, respectively. Amortization expense for intangible assets is estimated to be $51 million per year for each of the next five years.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**9 Debt**

In November 2017, the Company entered into a new credit agreement (the 2017 Credit Agreement ) that provides for a $1.5 billion revolving facility and a $300 million term loan. The revolving facility and term loan both mature on November 30, 2022 and require no scheduled prepayments before that date.

The interest rates applicable to the 2017 Credit Agreement are, at the Company s option, equal to either the alternate base rate (which is a rate per annum equal to the greatest of (a) the prime rate in effect on such day, (b) the Federal Reserve Bank of New York Rate on such day plus 1/2 of 1% per annum and (c) the adjusted LIBO rate on such day (or if such day is not a business day, the immediately preceding business day) for a deposit in U.S. dollars with a maturity of one month plus 1% per annum) or the applicable 1, 2, 3 or 6 month adjusted LIBO rate or EURIBO rate for Euro-denominated loans, in each case, plus an interest rate margin based upon the Company s leverage ratio, which can range between 0 and 12.5 basis points for alternate base rate loans and between 80 and 112.5 basis points for LIBO rate or EURIBO rate loans. The facility fee on the 2017 Credit Agreement ranges between 7.5 and 25 basis points per annum, based on the leverage ratio, of the amount of the revolving facility commitments and the outstanding term loan. The 2017 Credit Agreement requires that the Company comply with an interest coverage ratio test of not less than 3.50:1 as of the end of any fiscal quarter for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, the 2017 Credit Agreement includes negative covenants, affirmative covenants, representations and warranties and events of default that are customary for investment grade credit facilities.

As of December 31, 2018 and 2017, the Company had a total of $560 million and $700 million of outstanding senior unsecured notes, respectively. Interest on the fixed rate senior unsecured notes is payable semi-annually each year. Interest on the floating rate senior unsecured notes is payable quarterly. The Company may prepay all or some of the senior unsecured notes at any time in an amount not less than 10% of the aggregate principal amount outstanding, plus the applicable make-whole amount or prepayment premium for Series H and J senior unsecured notes. In the event of a change in control of the Company (as defined in the note purchase agreement), the Company may be required to prepay the senior unsecured notes at a price equal to 100% of the principal amount thereof, plus accrued and unpaid interest. These senior unsecured notes require that the Company comply with an interest coverage ratio test of not less than 3.50:1 for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, these senior unsecured notes include customary negative covenants, affirmative covenants, representations and warranties and events of default.

In 2018, the Company entered into three-year interest rate cross-currency swap derivative agreements with a notional value of $300 million to hedge the variability in the movement of foreign currency exchange rates on a portion of its Euro-denominated net asset investments. See Note 2, Basis of Presentation and Summary of Significant Accounting Policies.

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The Company had the following outstanding debt at December 31, 2018 and 2017 (in thousands):

| | December 31, | |
|---|---|---|
| | 2018 | 2017 |
| Foreign subsidiary lines of credit | $ 178 | $ 273 |
| Senior unsecured notes - Series D - 3.22%, due March 2018 | | 100,000 |
| Total notes payable and debt, current | 178 | 100,273 |
| Senior unsecured notes - Series B - 5.00%, due February 2020 | 100,000 | 100,000 |
| Senior unsecured notes - Series E - 3.97%, due March 2021 | 50,000 | 50,000 |
| Senior unsecured notes - Series F - 3.40%, due June 2021 | 100,000 | 100,000 |
| Senior unsecured notes - Series G - 3.92%, due June 2024 | 50,000 | 50,000 |
| Senior unsecured notes - Series H - floating rate*, due June 2024 | 50,000 | 50,000 |
| Senior unsecured notes - Series I - 3.13%, due May 2023 | 50,000 | 50,000 |
| Senior unsecured notes - Series J - floating rate**, due May 2024 | | 40,000 |
| Senior unsecured notes - Series K - 3.44%, due May 2026 | 160,000 | 160,000 |
| Credit agreement | 590,000 | 1,300,000 |
| Unamortized debt issuance costs | (1,828) | (2,499) |
| Total long-term debt | 1,148,172 | 1,897,501 |
| Total debt | $ 1,148,350 | $ 1,997,774 |

* Series H senior unsecured notes bear interest at a 3-month LIBOR for that floating rate interest period plus 1.25%.

** Series J senior unsecured notes bore interest at a 3-month LIBOR for that floating rate interest period plus 1.45%.

As of December 31, 2018 and 2017, the Company had a total amount available to borrow under existing credit agreements of $1,208 million and $498 million, respectively, after outstanding letters of credit. The weighted-average interest rates applicable to the senior unsecured notes and credit agreement borrowings collectively were 3.83% and 2.98% at December 31, 2018 and 2017, respectively. As of December 31, 2018, the Company was in compliance with all debt covenants.

The Company and its foreign subsidiaries also had available short-term lines of credit totaling $90 million and $91 million at December 31, 2018 and 2017, respectively, for the purpose of short-term borrowing and issuance of commercial guarantees. The weighted-average interest rates applicable to these short-term borrowings were 1.88% and 1.48% for December 31, 2018 and 2017, respectively.

Annual maturities of debt outstanding at December 31, 2018 are as follows (in thousands):

| | Total |
|---|---|
| 2019 | $ 178 |
| 2020 | 100,000 |
| 2021 | 150,000 |
| 2022 | 590,000 |
| 2023 | 50,000 |
| Thereafter | 260,000 |

| Total | $ 1,150,178 |
|---|---|

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

## 10 Income Taxes

Income tax data for the years ended December 31, 2018, 2017 and 2016 is as follows (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| The components of income from operations before income taxes are as follows: | | | |
| Domestic | $ 57,822 | $ 55,751 | $ 35,154 |
| Foreign | 624,324 | 585,346 | 564,960 |
| Total | $ 682,146 | $ 641,097 | $ 600,114 |

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| The current and deferred components of the provision for income taxes on operations are as follows: | | | |
| Current | $ 85,947 | $ 575,276 | $ 77,407 |
| Deferred | 2,405 | 45,510 | 1,204 |
| Total | $ 88,352 | $ 620,786 | $ 78,611 |
| The jurisdictional components of the provision for income taxes on operations are as follows: | | | |
| Federal | $ 24,021 | $ 535,777 | $ 19,693 |
| State | (9,717) | 26,561 | 3,090 |
| Foreign | 74,048 | 58,448 | 55,828 |
| Total | $ 88,352 | $ 620,786 | $ 78,611 |

The differences between income taxes computed at the United States statutory rate and the provision for income taxes are summarized as follows for the years ended December 31, 2018, 2017 and 2016 (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| Federal tax computed at U.S. statutory income tax rate | $ 143,251 | $ 224,384 | $ 210,040 |
| Enactment of the 2017 Tax Act | (6,059) | 550,000 | |
| Foreign currency exchange impact on distributed earnings | 7,495 | | |
| GILTI, net of foreign tax credits | 13,727 | | |
| Settlement of tax audits | | 706 | 345 |
| State income tax, net of federal income tax benefit | 2,910 | 1,289 | 2,008 |
| Net effect of foreign operations | (66,092) | (134,117) | (133,518) |
| Effect of stock-based compensation | (9,089) | (19,566) | |
| Other, net | 2,209 | (1,910) | (264) |
| Provision for income taxes | $ 88,352 | $ 620,786 | $ 78,611 |

The four principal jurisdictions in which the Company manufactures are the U.S., Ireland, the U.K. and Singapore, where the statutory tax rates were 21%, 12.5%, 19% and 17%, respectively, as of December 31, 2018. The Company has a contractual tax rate in Singapore of 0% on qualifying activities in Singapore through March 2021, based upon the achievement of certain contractual milestones, which the Company expects to continue to meet. The effect of applying the contractual tax rate rather than the statutory tax rate to income from qualifying activities in Singapore increased the Company s net income during the years ended December 31, 2018, 2017

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

and 2016 by $28 million, $25 million and $23 million, respectively, and increased the Company s net income per diluted share by $0.36, $0.31 and $0.29, respectively.

The Company s effective tax rates were 13.0%, 96.8% and 13.1% for the years ended December 31, 2018, 2017 and 2016, respectively, and were impacted by the following:

In December 2017, the U.S. enacted legislation informally referred to as the Tax Cuts and Jobs Act (the 2017 Tax Act ). For the year ended December 31, 2017 the Company accrued a $550 million tax provision related to the 2017 Tax Act. The $550 million expense consisted of $490 million related to the federal transition tax, $40 million for state income taxes and foreign withholding taxes and $20 million for the revaluation of the Company s deferred tax assets and liabilities at the new federal tax rate of 21%. This provision reduced net income per diluted share by $6.82 in 2017, and the Company s effective tax rate was 11.0% excluding this $550 million provision.

During 2018, the Internal Revenue Service issued proposed regulations on the federal transition tax and various other aspects of the Tax Reform law. The Company finalized its analysis of the transition tax and related liabilities, including uncertain tax positions, in the fourth quarter of 2018 pursuant to U.S. Securities and Exchange Commission ( SEC ) Staff Accounting Bulletin No. 118. As a result of the new guidance issued and additional work to complete the calculation of its federal transition tax, the Company reduced its provisional accrual for federal, state and foreign taxes by net $24 million during 2018. In addition, the Company also assessed its uncertain tax positions related to these taxes and accrued income tax reserves of $18 million during 2018. The net favorable impact to the 2018 provision for income taxes is $6 million.

The provision for income taxes for 2018 includes a $7 million expense related to the 2017 Tax Act. This additional tax results from the change in foreign currency exchange rates on the earnings taxed on December 31, 2017 under 2017 Tax Act as compared with the foreign currency exchange rates on the date of distribution of assets into the U.S. We do not expect this expense to recur in future periods.

The 2018 effective income tax rate of 13.0% was impacted by the reduction in the U.S. federal income tax rate from 35% to 21% as a result of the 2017 Tax Act, which decreased the Company s effective tax rate by 2.0 percentage points as compared to 2017. The 2017 Tax act also added a new Global Intangible Low-Taxed Income (GILTI) tax, which increased the Company s 2018 effective tax rate by approximately 2.0 percentage points.

After the completion of the Company s review of its capital allocation strategy in the fourth quarter of 2018, the Company determined that it will provide income taxes on all future foreign earnings from 2018 forward. As a result, this change added 0.6 percentage points to the 2018 effective tax rate as compared to 2017.

In addition, the reduction in the U.S. federal income tax rate from 35% to 21% as a result of the 2017 Tax Act also reduced the 2018 tax benefit on stock compensation. The Company recorded a tax benefit on stock-based compensation in 2018 and 2017 that decreased income tax expense by $9 million and $20 million, respectively, and added $0.11 and $0.24 to net income per diluted share, respectively.

The difference between the 2017 and 2016 effective tax rates can be attributed primarily to the 2016 provision for income taxes including a $3 million tax benefit (0.7 percentage points) related to the release of a valuation allowance on certain net operating loss carryforwards.

The remaining differences between effective tax rates can primarily be attributed to differences in the proportionate amounts of pre-tax income recognized in jurisdictions with different effective tax rates.

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The tax effects of temporary differences and carryforwards which give rise to deferred tax assets and deferred tax liabilities are summarized as follows (in thousands):

| | December 31, | |
|---|---|---|
| | **2018** | **2017** |
| Deferred tax assets: | | |
| Net operating losses and credits | $ 63,052 | $ 75,630 |
| Depreciation | 7,495 | 5,952 |
| Amortization | 3,633 | |
| Stock-based compensation | 9,984 | 9,815 |
| Deferred compensation | 27,939 | 21,434 |
| Revaluation of equity investments and licenses | 3,148 | 3,465 |
| Inventory | 4,588 | 4,864 |
| Accrued liabilities and reserves | 7,213 | 8,230 |
| Other | 8,727 | 11,873 |
| Total deferred tax assets | 135,779 | 141,263 |
| Valuation allowance | (53,893) | (62,098) |
| Deferred tax assets, net of valuation allowance | 81,886 | 79,165 |
| Deferred tax liabilities: | | |
| Capitalized software | (19,491) | (19,630) |
| Amortization | | (3,394) |
| Indefinite-lived intangibles | (13,753) | (13,254) |
| Deferred tax liability on foreign earnings | (20,443) | (21,000) |
| Total deferred tax liabilities | (53,687) | (57,278) |
| Net deferred tax assets | $ 28,199 | $ 21,887 |

The Company has gross foreign net operating losses of $240 million that do not expire under current laws. As of December 31, 2018, the Company has provided a deferred tax valuation allowance of $54 million, of which $51 million relates to certain foreign net operating losses. The Company s net deferred tax assets associated with net operating losses and tax credit carryforwards are approximately $12 million as of December 31, 2018, which represent the future tax benefit of foreign net operating loss carryforwards that do not expire under current law.

As a result of the adoption of new accounting guidance related to stock-based compensation in 2017, the Company no longer records excess tax benefits related to stock-based compensation in equity. The income tax benefits associated with equity compensation expense recognized for tax purposes and credited to income tax expense were $9 million and $20 million for the years ended December 31, 2018 and 2017, respectively. For the year ended December 31, 2016, the income tax benefit recognized for tax purposes and credited to additional paid-in capital was $14 million.

The Company accounts for its uncertain tax positions in accordance with the accounting standards for income taxes, which require financial statement reporting of the expected future tax consequences of uncertain tax positions on the presumption that all concerned tax authorities possess full knowledge of those tax positions, as well as all of the pertinent facts and circumstances, but prohibit any discounting of unrecognized tax benefits associated with those positions for the time value of money. The Company continues to classify interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following is a summary of the activity of the Company s uncertain tax positions for the years ended December 31, 2018, 2017 and 2016 (in thousands):

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| Balance at the beginning of the period | $ 5,843 | $ 9,964 | $ 14,450 |
| Net reductions for settlement of tax audits | | (22) | (828) |
| Net reductions for lapse of statutes taken during the period | (436) | (5,178) | (4,998) |
| Net additions for tax positions taken during the prior period | 17,651 | | |
| Net additions for tax positions taken during the current period | 3,050 | 1,079 | 1,340 |
| Balance at the end of the period | $ 26,108 | $ 5,843 | $ 9,964 |

With limited exceptions, the Company is no longer subject to tax audit examinations in significant jurisdictions for the years ended on or before December 31, 2013. However, carryforward tax attributes that were generated in years beginning on or before January 1, 2014 may still be adjusted upon examination by tax authorities if the attributes are utilized. The Company continuously monitors the lapsing of statutes of limitations on potential tax assessments for related changes in the measurement of unrecognized tax benefits, related net interest and penalties, and deferred tax assets and liabilities.

As of December 31, 2018, the Company expects to record additional reductions in the measurement of its unrecognized tax benefits and related net interest and penalties of approximately $1 million within the next twelve months due to potential tax audit settlements and the lapsing of statutes of limitations on potential tax assessments. The Company does not expect to record any other material reductions in the measurement of its unrecognized tax benefits within the next twelve months.

In addition, upon completion of the Company s review of its capital allocation strategy in the fourth quarter of 2018, the Company has determined that it will provide income taxes on all future foreign earnings. However, the Company will continue to be permanently reinvested in relation to the cumulative historical outside basis difference that is not related to earnings. The determination of the unrecognized deferred tax liability on cumulative historical outside basis differences that are not related to earnings is not practicable.

The Company adopted new accounting guidance which eliminates the deferral of tax effects on intra-entity transfers other than inventory and requires an entity to recognize the income tax consequences when the transfer occurs. The Company adopted this standard as of January 1, 2018 with a $4 million charge to beginning retained earnings in the consolidated balance sheet.

**11 Litigation**

From time to time, the Company and its subsidiaries are involved in various litigation matters arising in the ordinary course of business. The Company believes it has meritorious arguments in its current litigation matters and believes any outcome, either individually or in the aggregate, will not be material to the Company s financial position, results of operations or cash flows. During the year ended December 31, 2017, the Company incurred $11 million of litigation provisions and related costs, primarily related to the issuance of a verdict in a patent litigation case. In the first quarter of 2018, the Company resolved the case with a final settlement that resulted in a gain of $2 million. During the year ended December 31, 2016, the Company recorded $4 million of litigation provisions and related costs. The accrued patent litigation expense is in other current liabilities in the consolidated balance sheets at December 31, 2018 and 2017.

**12 Other Commitments and Contingencies**

Lease agreements, expiring at various dates through 2031, cover buildings, office equipment and automobiles. Rental expense was $28 million, $27 million and $28 million for the years ended December 31, 2018, 2017 and

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

2016, respectively. Future minimum rents payable as of December 31, 2018 under non-cancelable leases with initial terms exceeding one year are as follows (in thousands):

| | |
|---|---|
| 2019 | $ 28,417 |
| 2020 | 23,424 |
| 2021 | 16,032 |
| 2022 | 11,816 |
| 2023 and thereafter | 23,269 |
| Total | $ 102,958 |

The Company licenses certain technology and software from third parties. Future minimum license fees payable under existing license agreements as of December 31, 2018 are immaterial for the years ended December 31, 2019 and thereafter. The Company enters into licensing arrangements with third parties that require future milestone or royalty payments contingent upon future events. Upon the achievement of certain milestones in existing agreements, the Company could make additional future payments of up to $7 million, as well as royalties on future net sales.

The Company enters into standard indemnification agreements in its ordinary course of business. Pursuant to these agreements, the Company indemnifies, holds harmless and agrees to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally the Company s business partners or customers, in connection with patent, copyright or other intellectual property infringement claims by any third party with respect to its current products, as well as claims relating to property damage or personal injury resulting from the performance of services by the Company or its subcontractors. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited. Historically, the Company s costs to defend lawsuits or settle claims relating to such indemnity agreements have been minimal and management accordingly believes the estimated fair value of these agreements is immaterial.

**13 Stock-Based Compensation**

In May 2012, the Company s shareholders approved the Company s 2012 Equity Incentive Plan ( 2012 Plan ). As of December 31, 2018, the 2012 Plan has 2.4 million shares available for grant in the form of incentive or non-qualified stock options, stock appreciation rights ( SARs ), restricted stock, restricted stock units, performance stock units or other types of awards. The Company issues new shares of common stock upon exercise of stock options, restricted stock unit conversion or performance stock unit conversion. Under the 2012 Plan, the exercise price for stock options may not be less than the fair market value of the underlying stock at the date of grant. The 2012 Plan is scheduled to terminate on May 9, 2022. Options generally will expire no later than ten years after the date on which they are granted and will become exercisable as directed by the Compensation Committee of the Board of Directors and generally vest in equal annual installments over a five-year period. A SAR may be granted alone or in conjunction with an option or other award. Shares of restricted stock, and restricted stock units and performance stock units may be issued under the 2012 Plan for such consideration as is determined by the Compensation Committee of the Board of Directors. As of December 31, 2018, the Company had stock options, restricted stock and restricted and performance stock unit awards outstanding.

In May 2009, the Company s shareholders approved the 2009 Employee Stock Purchase Plan, under which eligible employees may contribute up to 15% of their earnings toward the quarterly purchase of the Company s common stock. The plan makes available 0.9 million shares of the Company s common stock, which includes the remaining shares available under the 1996 Employee Stock Purchase Plan. As of December 31, 2018, 1.4 million shares have been issued under both the 2009 and 1996 Employee Stock Purchase Plans. Each plan period lasts

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

three months beginning on January 1, April 1, July 1 and October 1 of each year. The purchase price for each share of stock is the lesser of 90% of the market price on the first day of the plan period or 100% of the market price on the last day of the plan period. Stock-based compensation expense related to this plan was $1 million for each of the years ended December 31, 2018, 2017 and 2016, respectively.

The Company accounts for stock-based compensation costs in accordance with the accounting standards for stock-based compensation, which require that all share-based payments to employees be recognized in the statements of operations, based on their grant date fair values. The Company recognizes the expense using the straight-line attribution method. The stock-based compensation expense recognized in the consolidated statements of operations is based on awards that ultimately are expected to vest; therefore, the amount of expense has been reduced for estimated forfeitures. Forfeitures are estimated based on historical experience. If actual results differ significantly from these estimates, stock-based compensation expense and the Company s results of operations could be materially impacted. In addition, if the Company employs different assumptions in the application of these standards, the compensation expense that the Company records in the future periods may differ significantly from what the Company has recorded in the current period.

The consolidated statements of operations for the years ended December 31, 2018, 2017 and 2016 include the following stock-based compensation expense related to stock option awards, restricted stock awards, restricted stock unit awards, performance stock unit awards and the employee stock purchase plan (in thousands):

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| Cost of sales | $ 2,212 | $ 3,032 | $ 2,738 |
| Selling and administrative expenses | 30,443 | 33,335 | 34,451 |
| Research and development expenses | 4,886 | 3,069 | 3,809 |
| Total stock-based compensation | $ 37,541 | $ 39,436 | $ 40,998 |

During the years ended December 31, 2018, 2017 and 2016, the Company recognized $1 million, $4 million and $7 million, respectively, of stock compensation expense related to the modification of certain stock awards upon the retirement of senior executives.

*Stock Options*

In determining the fair value of the stock options, the Company makes a variety of assumptions and estimates, including volatility measures, expected yields and expected stock option lives. The fair value of each option grant was estimated on the date of grant using the Black-Scholes option pricing model. The Company uses implied volatility on its publicly-traded options as the basis for its estimate of expected volatility. The Company believes that implied volatility is the most appropriate indicator of expected volatility because it is generally reflective of historical volatility and expectations of how future volatility will differ from historical volatility. The expected life assumption for grants is based on historical experience for the population of non-qualified stock option exercises. The risk-free interest rate is the yield currently available on U.S. Treasury zero-coupon issues with a remaining term approximating the expected term used as the input to the Black-Scholes model. The relevant data used to determine the value of the stock options granted during the year ended December 31, 2018, 2017 and 2016 are as follows:

| Options Issued and Significant Assumptions Used to Estimate Option Fair Values | 2018 | 2017 | 2016 |
|---|---|---|---|
| Options issued in thousands | 321 | 389 | 324 |
| Risk-free interest rate | 2.7% | 2.2% | 1.9% |
| Expected life in years | 6 | 6 | 6 |
| Expected volatility | 25.3% | 22.7% | 24.7% |
| Expected dividends | | | |

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

| Weighted-Average Exercise Price and Fair Value of Options on the Date of Grant | 2018 | 2017 | 2016 |
|---|---|---|---|
| Exercise price | $ 196.78 | $ 170.24 | $ 135.02 |
| Fair value | $ 59.89 | $ 45.73 | $ 37.44 |

The following table summarizes stock option activity for the plans for the year ended December 31, 2018 (in thousands, except per share data):

| | Number of Shares | Exercise Price per Share | | | Weighted-Average Exercise Price per Share |
|---|---|---|---|---|---|
| Outstanding at December 31, 2017 | 2,039 | $ 38.09 | to | $ 194.26 | $ 124.41 |
| Granted | 321 | $ 188.26 | to | $ 208.47 | $ 196.78 |
| Exercised | (433) | $ 38.09 | to | $ 154.33 | $ 102.92 |
| Canceled | (137) | $ 98.21 | to | $ 154.33 | $ 125.93 |
| Outstanding at December 31, 2018 | 1,790 | $ 38.09 | to | $ 208.47 | $ 142.47 |

The following table details the options outstanding at December 31, 2018 by range of exercise prices (in thousands, except per share data):

| Exercise Price Range | Number of Shares Outstanding | Weighted-Average Exercise Price | Remaining Contractual Life of Options Outstanding | Number of Shares Exercisable | Weighted-Average Exercise Price |
|---|---|---|---|---|---|
| $38.09 to $123.55 | 575 | $ 103.24 | 5.1 | 450 | $ 99.53 |
| $123.56 to $141.74 | 597 | $ 133.21 | 7.4 | 290 | $ 132.29 |
| $141.75 to $208.47 | 618 | $ 187.92 | 9.0 | 54 | $ 182.46 |
| Total | 1,790 | $ 142.47 | 7.2 | 794 | $ 117.08 |

During 2018, 2017 and 2016, the total intrinsic value of the stock options exercised (i.e., the difference between the market price at exercise and the price paid by the employee to exercise the options) was $44 million, $76 million and $53 million, respectively. The total cash received from the exercise of these stock options was $45 million, $91 million and $56 million for the years ended December 31, 2018, 2017 and 2016, respectively.

The aggregate intrinsic value of the outstanding stock options at December 31, 2018 was $86 million. Options exercisable at December 31, 2018, 2017 and 2016 were 0.8 million, 0.9 million and 1.3 million, respectively. The weighted-average exercise prices of options exercisable at December 31, 2018, 2017 and 2016 were $117.08, $103.63 and $92.26, respectively. The weighted-average remaining contractual life of the exercisable outstanding stock options at December 31, 2018 was 5.8 years.

At December 31, 2018, the Company had 1.8 million stock options that are vested and expected to vest. The intrinsic value, weighted-average exercise price and remaining contractual life of the vested and expected to vest stock options were $86 million, $142.18 and 7.1 years, respectively, at December 31, 2018.

As of December 31, 2018, there were $41 million of total unrecognized compensation costs related to unvested stock option awards that are expected to vest. These costs are expected to be recognized over a weighted-average period of 3.5 years.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Restricted Stock*

During the years ended December 31, 2018, 2017 and 2016, the Company granted five thousand, eight thousand and ten thousand shares of restricted stock, respectively. The weighted-average fair value per share on the grant date of the restricted stock granted in 2018, 2017 and 2016 was $194.73, $130.35 and $113.88, respectively. The Company has recorded $1 million of compensation expense in each of the years ended December 31, 2018, 2017 and 2016 related to the restricted stock grants. As of December 31, 2018, the Company had five thousand unvested shares of restricted stock outstanding, which have been fully expensed.

*Restricted Stock Units*

The following table summarizes the unvested restricted stock unit award activity for the year ended December 31, 2018 (in thousands, except per share data):

| | Shares | | Weighted-Average Fair Value per Share |
|---|---|---|---|
| Unvested at December 31, 2017 | 374 | $ | 124.81 |
| Granted | 91 | $ | 207.85 |
| Vested | (139) | $ | 115.75 |
| Forfeited | (22) | $ | 131.72 |
| Unvested at December 31, 2018 | 304 | $ | 153.31 |

Restricted stock units are generally granted annually in February and vest in equal annual installments over a five-year period. The amount of compensation costs recognized for the years ended December 31, 2018, 2017 and 2016 on the restricted stock units expected to vest were $16 million, $17 million and $17 million, respectively. As of December 31, 2018, there were $32 million of total unrecognized compensation costs related to the restricted stock unit awards that are expected to vest. These costs are expected to be recognized over a weighted-average period of 3.2 years.

*Performance Stock Units*

The Company s performance stock units are equity compensation awards with a market vesting condition based on the Company s Total Shareholder Return ( TSR ) relative to the TSR of the components of the S&P Health Care Index. TSR is the change in value of a stock price over time, including the reinvestment of dividends. The vesting schedule ranges from 0% to 200% of the target shares awarded.

In determining the fair value of the performance stock units, the Company makes a variety of assumptions and estimates, including volatility measures, expected yields and expected terms. The fair value of each performance stock unit grant was estimated on the date of grant using the Monte Carlo simulation model. The Company uses implied volatility on its publicly-traded options as the basis for its estimate of expected volatility. The Company believes that implied volatility is the most appropriate indicator of expected volatility because it is generally reflective of historical volatility and expectations of how future volatility will differ from historical volatility. The expected life assumption for grants is based on the performance period of the underlying performance stock units. The risk-free interest rate is the yield currently available on U.S. Treasury zero-coupon issues with a remaining term approximating the expected term used as the input to the Monte Carlo simulation model. The correlation coefficient is used to model the way in which each company in the S&P Health Care Index tends to move in relation to each

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

other during the performance period. The relevant data used to determine the value of the performance stock units granted during the year ended December 31, 2018, 2017 and 2016 are as follows:

| Performance Stock Units Issued and Significant Assumptions Used to Estimate Fair Values | 2018 | 2017 | 2016 |
|---|---|---|---|
| Performance stock units issued in thousands | 40 | 40 | 27 |
| Risk-free interest rate | 2.4% | 1.6% | 1.4% |
| Expected life in years | 3.0 | 3.0 | 3.0 |
| Expected volatility | 22.0% | 20.9% | 23.3% |
| Average volatility of peer companies | 25.9% | 25.6% | 26.1% |
| Correlation Coefficient | 35.9% | 37.8% | 38.6% |
| Expected dividends | | | |

The following table summarizes the unvested performance stock unit award activity for the year ended December 31, 2018 (in thousands, except per share data):

| | Shares | Weighted-Average Fair Value per Share |
|---|---|---|
| Unvested at December 31, 2017 | 64 | $ 196.29 |
| Granted | 40 | $ 235.63 |
| Forfeited | (4) | $ 188.45 |
| Unvested at December 31, 2018 | 100 | $ 212.34 |

The amount of compensation costs recognized for the years ended December 31, 2018 and 2017 on the performance stock units expected to vest were $5 million and less than $1 million, respectively. As of December 31, 2018, there were $14 million of total unrecognized compensation costs related to the restricted stock unit awards that are expected to vest. These costs are expected to be recognized over a weighted-average period of 2.3 years.

**14 Earnings Per Share**

Basic and diluted EPS calculations are detailed as follows (in thousands, except per share data):

| | Year Ended December 31, 2018 | | |
|---|---|---|---|
| | Net Income (Numerator) | Weighted-Average Shares (Denominator) | Per Share Amount |
| Net income per basic common share | $ 593,794 | 76,992 | $ 7.71 |
| Effect of dilutive stock option, restricted stock, performance stock unit and restricted stock unit securities | | 626 | (0.06) |
| Net income per diluted common share | $ 593,794 | 77,618 | $ 7.65 |

| | Year Ended December 31, 2017 | | |
| --- | --- | --- | --- |
| | Net Income (Numerator) | Weighted-Average Shares (Denominator) | Per Share Amount |
| Net income per basic common share | $ 20,311 | 79,793 | $ 0.25 |
| Effect of dilutive stock option, restricted stock, performance stock unit and restricted stock unit securities | | 811 | |
| Net income per diluted common share | $ 20,311 | 80,604 | $ 0.25 |

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

| | Year Ended December 31, 2016 | | |
|---|---|---|---|
| | Net Income (Numerator) | Weighted-Average Shares (Denominator) | Per Share Amount |
| Net income per basic common share | $ 521,503 | 80,786 | $ 6.46 |
| Effect of dilutive stock option, restricted stock, performance stock unit and restricted stock unit securities | | 631 | (0.05) |
| Net income per diluted common share | $ 521,503 | 81,417 | $ 6.41 |

For the years ended December 31, 2018, 2017 and 2016, the Company had 0.1 million, 0.4 million and 0.9 million stock options that were antidilutive, respectively, due to having higher exercise prices than the Company s average stock price during the period. These securities were not included in the computation of diluted EPS. The effect of dilutive securities was calculated using the treasury stock method.

**15 Accumulated Other Comprehensive Income**

The components of accumulated other comprehensive income (loss) are detailed as follows (in thousands):

| | Currency Translation | Unrealized Gain (Loss) on Retirement Plans | Unrealized Gain (Loss) on Investments | Accumulated Other Comprehensive Income (Loss) |
|---|---|---|---|---|
| Balance at December 31, 2017 | $ (69,418) | $ (37,103) | $ (3,546) | $ (110,067) |
| Other comprehensive (loss) income, net of tax | (36,279) | 27,234 | 1,141 | (7,904) |
| Balance at December 31, 2018 | $ (105,697) | $ (9,869) | $ (2,405) | $ (117,971) |

**16 Retirement Plans**

U.S. employees are eligible to participate in the Waters Employee Investment Plan, a 401(k) defined contribution plan, immediately upon hire. Employees may contribute up to 60% of eligible pay on a pre-tax or post-tax basis and the Company makes matching contributions of 100% for contributions up to 6% of eligible pay. The Company also sponsors a 401(k) Restoration Plan, which is a nonqualified defined contribution plan. Employees are 100% vested in employee and Company matching contributions for both plans. For the years ended December 31, 2018, 2017 and 2016, the Company s matching contributions amounted to $17 million, $16 million and $15 million, respectively.

The Company adopted new accounting guidance which requires that an employer disaggregate the service cost component from other components of net benefit cost. As a result of the adoption of this standard, the components of net periodic benefit cost other than the service cost component are included in other income in the consolidated statements of operations and all previous periods have been adjusted accordingly.

In May 2018, the Company s board of directors approved the termination of two defined benefit pension plans in the U.S. for which the pay credit accruals have been frozen, the Waters Retirement Plan and the Waters Retirement Restoration Plan (collectively, the U.S. Pension Plans ). In December 2018, the Company settled the Waters Retirement Plan obligation by making lump-sum cash payments and purchasing annuity contracts for participants to permanently extinguish the pension plan s obligations. As a result, the Company recorded a $46 million charge to other expense, which consisted of a $6 million cash contribution to the plan and a $40 million non-cash charge related to the reversal of unrecognized actuarial losses recorded in accumulated other comprehensive income in the stockholders equity. The $46 million pre-tax charge reduced net income per diluted share by $0.39. The termination of the Waters Retirement Restoration Plan is expected to be completed in 2019.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The Company also sponsors other employee benefit plans in the U.S., including a retiree healthcare plan, which provides reimbursement for medical expenses and is contributory. There are various employee benefit plans outside the United States (both defined benefit and defined contribution plans). Certain non-U.S. defined benefit plans ( Non-U.S. Pension Plans ) are included in the disclosures below, which are required under the accounting standards for retirement benefits.

The Company contributed $13 million, $12 million and $12 million in the years ended December 31, 2018, 2017 and 2016, respectively, to the non-U.S. plans (primarily defined contribution plans) which are currently outside of the scope of the required disclosures. The eligibility and vesting of non-U.S. plans are consistent with local laws and regulations.

The net periodic pension cost is made up of several components that reflect different aspects of the Company s financial arrangements as well as the cost of benefits earned by employees. These components are determined using the projected unit credit actuarial cost method and are based on certain actuarial assumptions. The Company s accounting policy is to reflect in the projected benefit obligation all benefit changes to which the Company is committed as of the current valuation date; use a market-related value of assets to determine pension expense; amortize increases in prior service costs on a straight-line basis over the expected future service of active participants as of the date such costs are first recognized; and amortize cumulative actuarial gains and losses in excess of 10% of the larger of the market-related value of plan assets and the projected benefit obligation over the expected future service of active participants.

Summary data for the U.S. Pension Plans, U.S. Retiree Healthcare Plan and Non-U.S. Pension Plans are presented in the following tables, using the measurement dates of December 31, 2018 and 2017, respectively.

The reconciliation of the projected benefit obligations for the plans at December 31, 2018 and 2017 is as follows (in thousands):

| | | 2018 | | | 2017 | |
|---|---|---|---|---|---|---|
| | U.S. Pension Plans | U.S. Retiree Healthcare Plan | Non-U.S. Pension Plans | U.S. Pension Plans | U.S. Retiree Healthcare Plan | Non-U.S. Pension Plans |
| Projected benefit obligation, January 1 | $ 168,064 | $ 17,121 | $ 96,378 | $ 159,416 | $ 14,921 | $ 85,311 |
| Service cost | 568 | 566 | 5,368 | 450 | 546 | 5,082 |
| Employee contributions | | 1,159 | 622 | | 1,041 | 605 |
| Interest cost | 6,491 | 636 | 1,707 | 6,829 | 618 | 1,518 |
| Actuarial losses (gains) | 6,415 | (621) | (2,274) | 8,658 | 942 | (2,590) |
| Benefits paid | (3,416) | (1,007) | (3,277) | (5,058) | (947) | (2,078) |
| Plan amendments | | (130) | (44) | | | 636 |
| Plan settlements | (177,150) | | (2,791) | (2,231) | | (1,229) |
| Other plans | | | 1,063 | | | 196 |
| Currency impact | | | (3,030) | | | 8,927 |
| Projected benefit obligation, December 31 | $ 972 | $ 17,724 | $ 93,722 | $ 168,064 | $ 17,121 | $ 96,378 |

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The accumulated benefit obligations for the plans at December 31, 2018 and 2017 are as follows (in thousands):

| | 2018 | | | 2017 | | |
|---|---|---|---|---|---|---|
| | U.S. Pension Plans | U.S. Retiree Healthcare Plan | Non-U.S. Pension Plans | U.S. Pension Plans | U.S. Retiree Healthcare Plan | Non-U.S. Pension Plans |
| Accumulated benefit obligation | $ 972 | ** | $ 82,026 | $ 168,064 | ** | $ 82,615 |

** Not applicable.

The reconciliation of the fair value of the plan assets at December 31, 2018 and 2017 is as follows (in thousands):

| | 2018 | | | 2017 | | |
|---|---|---|---|---|---|---|
| | U.S. Pension Plans | U.S. Retiree Healthcare Plan | Non-U.S. Pension Plans | U.S. Pension Plans | U.S. Retiree Healthcare Plan | Non-U.S. Pension Plans |
| Fair value of plan assets, January 1 | $ 171,373 | $ 11,125 | $ 74,990 | $ 144,665 | $ 9,142 | $ 65,548 |
| Actual return on plan assets | 2,555 | (584) | 1,070 | 27,729 | 1,542 | 390 |
| Company contributions | 6,625 | 387 | 10,778 | 6,162 | 347 | 4,733 |
| Employee contributions | | 1,159 | 622 | | 1,041 | 605 |
| Plan settlements | (177,137) | | | (2,125) | | (915) |
| Benefits paid | (3,416) | | | | | |

| | Preferred stock | | Common stock | | Unearned paid-in capital | Treasury stock | Accummulated deficit | ESOP shares | Accumulated other comprehensive income | Total stockholders' equity (deficit) |
|---|---|---|---|---|---|---|---|---|---|---|
| | Shares | Amount | Shares | Amount | | | | | | |
| Balance at December 31, 2010 | 401 | $ 1,486 | 5,081 | $ 5 | $ 8,239 | $ - | $ (11,577) | $ (1,024) | $ - | $ (2,871) |
| Net loss | - | - | - | - | - | - | (5,168) | - | - | (5,168) |
| Reverse recapitalization transaction: | | | | | | | | | | |
| Shares deemed issued to Comamtech | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| stockholders in exchange for net assets contributed | - | - | 2,187 | 2 | 3,945 | - | - | - | - | 3,947 |
| Expenses related to reverse recapitalization | - | - | - | - | (730 ) | - | - | - | - | (730 ) |
| Issuance of common shares for finders fee | - | - | 154 | - | 354 | - | - | - | - | 354 |
| Repurchase 153,883 shares of common stock | - | - | - | - | - | (205 ) | - | - | - | (205 ) |
| Employee stock-based compensation | - | - | - | - | 200 | - | - | - | - | 200 |
| | | | | | | | | | | |
| Common shares issued in connection with Exchange Agreement | 1,415 | 4,529 | 695 | 1 | 2,348 | - | - | - | - | 6,878 |
| Common shares issued in exchange for services | - | - | 66 | - | 158 | - | - | - | - | 158 |
| Accrued dividends on preferred stock | - | 305 | - | - | - | - | (486 ) | - | - | (181 ) |
| Principal payment from ESOP | - | - | - | - | - | - | - | 125 | - | 125 |
| | | | | | | | | | | |
| Balance at December 31, 2011 | 1,816 | 6,320 | 8,183 | 8 | 14,514 | (205 ) | (17,231) | (899 ) | - | 2,507 |
| | | | | | | | | | | |
| Net loss | - | - | - | - | - | - | (3,866 ) | - | - | (3,866) |
| Foreign currency translation adjustment | | - | - | - | - | - | - | - | 22 | 22 |
| Convertible Series C Preferred retired | (1,415 ) | (4,906) | - | - | - | - | 377 | - | - | (4,529) |
| Convertible Series D Preferred sold in private placement, | | | | | | | | | | |
| | 704 | 5,668 | - | - | 355 | - | - | - | - | 6,023 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| net of issuance costs | | | | | | | | | | |
| Shares issued in connection with Illume acquisition | - | - | 617 | 1 | 697 | - | - | - | - | 698 |
| Shares issued in connection with Apex acquisition | - | - | 325 | - | 341 | - | - | - | - | 341 |
| Common stock issued as an antidilution adjustment | - | - | 175 | - | 173 | - | - | - | - | 173 |
| Employee stock-based compensation | - | - | - | - | 52 | - | - | - | - | 52 |
| Accrued dividends on preferred stock | - | 288 | - | - | - | - | (954 ) | - | - | (666 ) |
| Principal payment from ESOP | - | - | - | - | - | - | - | 132 | - | 132 |
| | | | | | | | | | | |
| Balance at December 31, 2012 | 1,105 | $ 7,370 | 9,300 | $ 9 | $ 16,132 | $ (205 ) | $ (21,674 ) | $ (767 ) | $ 22 | $ 887 |

See accompanying notes to consolidated financial statements

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DECISIONPOINT SYSTEMS, INC.

Consolidated Statements of Cash Flows
(In thousands)

| | December 31, 2012 | December 31, 2011 |
|---|---|---|
| Cash flows from operating activities: | | |
| Net loss | $(3,866) | $(5,168) |
| Adjustments to reconcile net loss to net cash provided by (used in) operating activities: | | |
| Depreciation and amortization | 1,510 | 560 |
| Amortization of deferred financing costs and note discount | 183 | 140 |
| Employee stock-based compensation | 52 | 200 |
| Non-employee stock-based compensation | 514 | 283 |
| Non-cash interest expense | - | 80 |
| Loss on debt extinguishment | - | 2,269 |
| Loss on disposal of property and equipment | - | 4 |
| ESOP compensation expense | 132 | 125 |
| Allowance for doubtful accounts | 108 | - |
| Other income related to collection of note receivable in excess of carrying value | - | (405) |
| Deferred taxes, net | (256) | 73 |
| Changes in operating assets and liabilities, net of assets and liabilities acquired: | | |
| Accounts receivable, net | 1,801 | (1,221) |
| Due from related parties | 147 | - |
| Inventory, net | (98) | 193 |
| Deferred costs | (810) | (291) |
| Prepaid expenses and other current assets | 182 | 80 |
| Other assets, net | (37) | (33) |
| Accounts payable | 946 | (39) |
| Accrued expenses and other current liabilities | 506 | (257) |
| Due to related parties | - | (735) |
| Unearned revenue | 705 | 1,701 |
| Net cash provided by (used in) operating activities | 1,719 | (2,441) |
| Cash flows from investing activities | | |
| Cash paid for Apex | (4,801) | - |
| Cash paid for Illume | (250) | - |
| Cash paid for CMAC, net of cash acquired | - | (2,205) |
| Capital expenditures | (64) | (49) |
| Collection of note and other receivable received in reverse recapitalization | - | 555 |
| Net cash used in investing activities | (5,115) | (1,699) |
| Cash flows from financing activities | | |
| (Repayments) borrowings from line of credit, net | (594) | (340) |
| Proceeds from the issuance of term debt | 4,033 | 4,000 |
| Cash received in reverse recapitalization, net of expenses | 1,500 | 1,985 |
| Repayment of debt | (1,393) | (1,000) |
| Convertible series C preferred stock retired | (4,529) | - |
| Issuance of convertible series D preferred stock | 7,042 | - |
| Paid financing costs associated with convertible series D preferred stock | (1,020) | - |
| Purchase of treasury stock | - | (250) |

| | | |
|---|---|---|
| Cash dividends paid on Series C Preferred | (651 ) | (91 ) |
| Paid financing costs | (270 ) | (109 ) |
| Holding share liability | - | (4 ) |
| Net cash provided by financing activities | 4,118 | 4,191 |
| Effect on cash of foreign currency translation | 15 | - |
| Net increase in cash | 737 | 51 |
| Cash at beginning of year | 366 | 315 |
| Cash at end of year | $ 1,103 | $ 366 |
| | | |
| Supplemental disclosure of cash flow information: | | |
| Interest paid | $ 888 | $ 1,438 |
| Income taxes paid | 57 | 62 |
| Supplemental disclosure of non-cash financing activities: | | |
| Preferred and common shares issued in exchange for debt and related accrued interest | $ - | $ 4,117 |
| Preferred and common shares issued in exchange for accounts payable and related accrued interest | - | 412 |
| Common shares issued as finder's fee in reverse capitalization | - | 354 |
| Common stock issued in connection with Apex acquisition | 341 | - |
| Common stock issued in connection with Illume acquisition | 698 | - |
| Common stock issued to Preferred Series C holders as an anti dilution adjustment | 173 | - |
| Cumulative and imputed dividends on preferred stock | 288 | 305 |
| Warrants issued in connection with convertible series D preferred stock | 355 | - |

See accompanying notes to consolidated financial statements

DECISIONPOINT SYSTEMS, INC.

Notes to Consolidated Financial Statements
December 31, 2012 and 2011

NOTE 1 - ORGANIZATION AND DESCRIPTION OF BUSINESS

DecisionPoint Systems, Inc., ("DecisionPoint", "Company") through its subsidiaries is an enterprise mobility systems integrator that sells and installs mobile computing and wireless systems that are used both within a company's facilities in conjunction with wireless networks and in the field using carrier-based wireless networks. These systems generally include mobile computers, mobile application software, and related data capture equipment including bar code scanners and radio frequency identification ("RFID") readers. The Company also provides professional services, proprietary and third party software and software customization as an integral part of its customized solutions for its customers. The suite of software products utilizes the latest technologies to empower the mobile worker in many areas including merchandising, sales and delivery; field service; logistics and transportation; and warehouse management.

The Company, formerly known as Comamtech, Inc. ("Comamtech"), was incorporated on August 16, 2010, in Canada under the laws of the Ontario Business Corporations Act ("OCBA"). On June 15, 2011, the Company entered into a Plan of Merger (the "Merger Agreement") among the Company, its wholly-owned subsidiary, 2259736 Ontario Inc., incorporated under the laws of the Province of Ontario, Canada (the "Purchaser") and DecisionPoint Systems, Inc., a Delaware corporation ("Old DecisionPoint") incorporated on December 27, 2006, under the laws of the State of Delaware. Pursuant to the Merger Agreement, under Section 182 of the OCBA, on June 15, 2011 (the "Effective Date") Old DecisionPoint merged (the "Merger") into the Purchaser and became a wholly owned subsidiary of the Company. In connection with the Merger, the Company changed its name to DecisionPoint Systems, Inc., and the Purchaser changed its name to DecisionPoint Systems International, Inc. ("DecisionPoint Systems International"). The Company and DecisionPoint Systems International each reincorporated in the State of Delaware, subsequent to the Merger. Upon completion of the Merger, the Company adopted Old DecisionPoint's business plan.

Accounting Treatment of the Merger; Financial Statement Presentation

Prior to the Merger, Comamtech was a "shell company" (as such term is defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the "Exchange Act")). The Merger was accounted for as a reverse recapitalization pursuant to the guidance in "SEC's Division of Corporation Finance Financial Reporting Manual". These transactions are considered by the SEC to be capital transactions in substance, rather than business combinations. The Merger has been accounted for as a recapitalization which resulted in an exchange ratio of one Old DecisionPoint share for every 7.23273 shares of Comamtech common stock outstanding prior to the Merger. For accounting purposes, Old DecisionPoint is considered the acquirer and surviving entity in the reverse recapitalization. Accordingly, 2,186,689 shares were deemed issued to the Comamtech shareholders in exchange for approximately $3.9 million of net assets received. The accompanying historical consolidated financial statements prior to the Merger are those of Old DecisionPoint.

The accompanying consolidated financial statements present the previously issued shares of Comamtech common stock as having been issued pursuant to the Merger on June 15, 2011, with the consideration received for such issuance being the net assets of Comamtech received in the Merger. The shares of common stock of the Company issued to Old DecisionPoint's stockholders in the Merger are presented as having been outstanding since the original issuance of the shares. Further, the exchange ratio has been retroactively applied to all share, weighted average share, loss per share, and stock option and warrant disclosures.

NOTE 2 - BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The consolidated financial statements of DecisionPoint and its subsidiaries have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”). The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, DecisionPoint Systems International and Apex Systems Integrators, Inc. (“Apex”). DecisionPoint Systems International has two wholly-owned subsidiaries, DecisionPoint Systems Group, Inc. (“DPS Group”) and CMAC, Inc. (“CMAC”). Apex was acquired on June 4, 2012, and as such, the operating results of Apex have been consolidated into the Company’s consolidated results of operations beginning on June 5, 2012. In addition, on July 31, 2012, the Company consummated an asset purchase agreement (“Asset Purchase Agreement”) with MacroSolve, Inc. (the “Seller”) Pursuant to the Asset Purchase Agreement, the Company purchased the business (including substantially all the related assets) of the seller’s Illume Mobile division (“Illume Mobile”). The operating results of Illume Mobile have been consolidated into the Company’s consolidated results of operations beginning on August 1, 2012. The Company currently operates in one business segment. All intercompany transactions have been eliminated.

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Summary of Significant Accounting Policies

Use of Estimates - The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Certain accounting policies involve judgments and uncertainties to such an extent that there is reasonable likelihood that materially different amounts could have been reported under different conditions, or if different assumptions had been used. The Company evaluates its estimates and assumptions on a regular basis. The Company uses historical experience and various other assumptions that are believed to be reasonable under the circumstances to form the basis for making judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may materially differ from these estimates and assumptions used in preparation of the consolidated financial statements.

Purchase Accounting and Business Combinations - The Company accounts for its business combinations using the purchase method of accounting which requires that intangible assets be recognized apart from goodwill if they are contractual in nature or separately identifiable. Acquisitions are measured on the fair value of consideration exchanged and, if the consideration given is not cash, measurement is based on the fair value of the consideration given or the fair value of the assets acquired, whichever is more reliably measurable. The excess of cost of an acquired entity over the fair value of identifiable acquired assets and liabilities assumed is allocated to goodwill.

The valuation and allocation process relies on significant assumptions made by management. In certain situations, the allocations of excess purchase price are based upon preliminary estimates and assumptions. Accordingly, the allocations are subject to revision when the Company receives updated information, including appraisals and other analyses, which are completed within one year of the acquisition. Revisions to the fair values, which may be significant, are recorded when pending information is finalized, within one year from the acquisition date.

Accounts Receivable - Accounts receivable are stated at net realizable value, and as such, current earnings are charged with an allowance for doubtful accounts based on management's best estimate of the amount of probable incurred credit losses in the Company's existing accounts receivable. The Company determines the allowance based on historical write-off experience and specific account information available. Accounts receivable are reflected in the accompanying consolidated balance sheets net of a valuation allowance of $246,000 and $246,000, as of December 31, 2012 and 2011, respectively. When internal collection efforts on accounts have been exhausted, the accounts are written off by reducing the allowance for doubtful accounts.

Inventory - Inventory consists solely of finished goods and is stated at the lower of cost or market. Cost is determined under the first-in, first-out (FIFO) method. The Company periodically reviews its inventory and makes provisions as necessary for estimated obsolete and slow-moving goods. The creation of such provisions results in a write down of inventory to net realizable value and a charge to cost of sales. Inventories are reflected in the accompanying consolidated balance sheets net of a valuation allowance of $83,000 and $155,000, as of December 31, 2012 and 2011, respectively.

Deferred costs – Deferred costs consist primarily of third party extended hardware and software maintenance services which the Company has paid for in advance. The costs are ratably amortized over the life of the contract, generally one to five years.

Property and Equipment - Property and equipment are recorded at cost. Repairs and maintenance that do not improve or extend the lives of the respective assets are expensed in the period incurred.

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Depreciation of property and equipment is provided for by the straight-line method over the estimated useful lives of the related assets as follows:

| | |
|---|---|
| Computer equipment | 3 to 5 years |
| Office furniture and fixtures | 5 to 7 years |

Leasehold improvements are amortized over the shorter of the lease term or the life of the improvements.

Impairment of Long-Lived Assets - The Company reviews its long-lived assets and certain identifiable intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets is measured by comparing the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of by sale are reflected at the lower of their carrying amount or fair value less cost to sell. To date, the Company has not recorded any impairment charges.

Goodwill – Goodwill is the excess of the purchase price paid over the fair value of the net assets of the acquired business. Goodwill is tested annually at December 31 for impairment by comparing the fair value of the reporting unit to its carrying amount including goodwill. If the carrying amount of the reporting unit exceeds its fair value, an impairment loss may be recognized. The amount of impairment loss is determined by comparing the implied fair value of reporting unit goodwill with the carrying amount. If the carrying amount exceeds the implied fair value then an impairment loss is recognized equal to that excess. No impairment charges have been recorded as a result of the Company’s annual impairment assessments.

Intangible assets – Purchased intangible assets with finite useful lives are amortized over their respective estimated useful lives (using an accelerated method for customer relationships and trade names) to their estimated residual values, if any. The Company’s finite-lived intangible assets consist of customer relationships, contractor and resume databases, trade names, and internal use software and are being amortized over periods ranging from two to nine years. Purchased intangible assets are reviewed annually to determine if facts and circumstances indicate that the useful life is shorter than originally estimated or that the carrying amount of assets may not be recoverable. If such facts and circumstances exist, recoverability is assessed by comparing the projected undiscounted net cash flows associated with the related asset or group of assets over their remaining lives against their respective carrying amounts. Impairments, if any, are based on the excess of the carrying amount over the fair value of those assets. If the useful life is shorter than originally estimated, the rate of amortization is accelerated and the remaining carrying value is amortized over the new shorter useful life. No impairments were identified and changes to estimated useful lives have been recorded.

Deferred Financing Costs - Costs incurred by the Company in connection with the issuance of debt are deferred and amortized to interest expense over the life of the underlying indebtedness, adjusted to reflect any early repayments using the effective interest rate method. Deferred financing costs net of amortization totaled approximately $107,000 and $90,000, as of December 31, 2012 and 2011, respectively, and are included in other assets in the accompanying consolidated balance sheets.

Fair Value Measurement - Fair value is the price that would be received from selling an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants as of the measurement date. Applicable accounting guidance provides a hierarchy for inputs used in measuring fair value that prioritize the use of observable inputs over the use of unobservable inputs, when such observable inputs are available. The three levels of inputs that may be used to measure fair value are as follows:

- Level 1 - Quoted prices in active markets for identical assets or liabilities.
- Level 2 - Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets with insufficient volume or infrequent transactions (less active markets), or model-driven valuations in which all significant inputs are observable or can be derived principally from, or corroborated with, observable market data.
- Level 3 - Fair value is derived from valuation techniques in which one or more significant inputs are unobservable, including assumptions and judgments made by the Company.

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Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. The Company reviews the fair value hierarchy classification on a quarterly basis. Changes in the observable inputs may result in a reclassification of assets and liabilities within the three levels of the hierarchy outlined above.

Liabilities Measured and Recorded at Fair Value on a Recurring Basis

The Company measures certain liabilities at fair value on a recurring basis such as our contingent consideration related to business combinations and recognizes transfers within the fair value hierarchy at the end of the fiscal quarter in which the change in circumstances that caused the transfer occurred. There have been no transfers between Level 1, 2 or 3 assets or liabilities during the fiscal year ended December 31, 2012.

The Company has classified its contingent consideration related to the acquisitions as a Level 3 liability. (See "Note 4 – Acquisitions" for a description of the acquisitions along with comprehensive details regarding the assumptions used in calculating fair value of the contingent consideration). Revenue and other assumptions used in the calculation require significant management judgment. The Company reassesses the fair value of the contingent consideration liabilities on a quarterly basis. Based on that assessment, the Company did not recognize any adjustment to the actual calculation of the earn-out obligations during the fiscal year ended December 31, 2012.

As of December 31, 2012, liabilities recorded at fair value on a recurring basis consist of the following (in thousands):

| | | Fair Value Measurements | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| Liabilities | | | | |
| Contingent consideration liability | | | | |
| recorded for business combinations | $1,346 | $- | $- | $1,346 |

The following table summarizes changes to the fair value of the contingent consideration, which is a Level 3 liability (in thousands):

| | Contingent consideration |
|---|---|
| Balance at December 31, 2011 | $ - |
| Apex earn-out | 1,033 |
| Apex bonus consideration | 153 |
| Illume Mobile earn-out | 107 |
| Changes in fair value | - |
| Effect of currency translation | 53 |
| Balance at December 31, 2012 | $ 1,346 |

Assets Measured and Recorded at Fair Value on a Nonrecurring Basis

The Company's non-financial assets and liabilities, such as goodwill, intangible assets, and other long lived assets resulting from business combinations are measured at fair value using income and market comparable valuation methodologies at the date of acquisition and subsequently re-measured if there are indicators of impairment. There were no indicators of impairment identified during the fiscal year ended December 31, 2012.

Translation of Foreign Currencies - The Company's functional currency is the U.S. dollar. The financial statements of the Company's foreign subsidiary is measured using the local currency, in this case the Canadian dollar (CDN$), as its functional currency and is translated to U.S. dollars for reporting purposes. Assets and liabilities of the subsidiary are translated at exchange rates as of the balance sheet dates. Revenues and expenses of the subsidiary are translated at the rates of exchange in effect during the year.

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Revenue Recognition - Revenues are generated through product sales, warranty and maintenance agreements, software customization, and professional services. Product sales are recognized when the following criteria are met (1) there is persuasive evidence that an arrangement exits; (2) delivery has occurred and title has passed to the customer which generally happens at the point of shipment provided that no significant obligations remain; (3) the price is fixed and determinable; and (4) collectability is reasonably assured. The Company generates revenues from the sale of extended warranties on wireless and mobile hardware and systems. Revenue related to extended warranty and service contracts is recorded as unearned revenue and is recognized over the life of the contract as the Company maintains financial risk throughout the term of these contracts and may be liable to refund a customer for amounts paid in certain circumstances. Our policy is to classify shipping and handling costs billed to customers and the related expenses as cost of sales.

The Company also generates revenue from professional services and customer specified software customization on either a fee-for-service or fixed fee basis. Revenue from software customization and professional services that is contracted as fee-for-service is recognized in the period in which the services are performed or delivered. Adjustments to contract price and estimated labor costs are made periodically, and losses expected to be incurred on contracts in progress are charged to operations in the period such losses are determined. The Company records sales net of sales tax.

The Company enters into revenue arrangements that contain multiple deliverables. Judgment is required to properly identify the accounting units of the multiple deliverable transactions and to determine the manner in which revenue should be allocated among the accounting units. Moreover, judgment is used in interpreting the commercial terms and determining when all criteria of revenue recognition have been met for each deliverable in order for revenue recognition to occur in the appropriate accounting period. While changes in the allocation of the arrangement consideration between the units of accounting will not affect the amount of total revenue recognized for a particular sales arrangement, any material changes in these allocations could impact the timing of revenue recognition, which could affect the Company's results of operations. When the Company enters into an arrangement that includes multiple elements, the allocation of value to each element is derived based on management's best estimate of selling price when vendor specific objective evidence or third party evidence is unavailable.

Revenue from software licenses is recognized when all of the software revenue recognition criteria are met and, if applicable, when vendor specific objective evidence, or VSOE, exists to allocate the total license fee to each element of multiple-element software arrangements, including post-contract customer support. Post-contract support is recognized ratably over the support period. When a contract contains multiple elements wherein the only undelivered element is post-contract customer support and VSOE of the fair value of post-contract customer support does not exist, revenue from the entire arrangement is recognized ratably over the support period. Software royalty revenue is recognized in arrears on a quarterly basis, based upon reports received from licensees during the period, unless collectability is not reasonably assured, in which case revenue is recognized when payment is received from the licensee.

Concentration of Risk - Financial instruments that potentially subject the Company to a concentration of credit risk consist primarily of cash and cash equivalents, accounts receivable, and accounts payable. On November 9, 2010, the Federal Deposit Insurance Corporation ("FDIC") implemented section 343 of the Dodd-Frank Wall Street Reform and

Consumer Protection Act that provides for unlimited insurance coverage of noninterest-bearing accounts. Beginning December 31, 2010 and continuing through December 31, 2012, all noninterest-bearing accounts are fully insured regardless of the balance of the account. This coverage is available at all FDIC member institutions. The Company uses Silicon Valley Bank, which is an FDIC insured institution. Based on these facts, collectability of bank balances appears to be adequate.

For the year ended December 31, 2012, the Company had sales to two customers which represented a total of 12.5% and 6.9%, of total revenues. Accounts receivable from two customers at December 31, 2012, were approximately 14% and 10%. For the year ended December 31, 2011, the Company had sales to two customers which represented a total of 26% of total revenues. Accounts receivable from two customers at December 31, 2011, accounted for 14% and 10% of accounts receivable. The loss of a significant customer could have a material adverse impact on the Company.

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The Company has had the same four primary vendors in both periods presented. For the year ended December 31, 2012, the Company had purchases from these four vendors that collectively represented 71% of total purchases and 67% of the total outstanding accounts payable at December 31, 2012. For the year ended December 31, 2011, the Company had purchases from these four vendors that collectively represented 76% of total purchases and 74% of the total outstanding accounts payable at December 31, 2011. The same single vendor represented 28% and 27% of the total purchases for the years ended December 31, 2012 and 2011, respectively. Loss of this certain vendor could have a material adverse effect on our operations.

Fair Value of Financial Instruments - The Company's financial instruments include cash, accounts receivable, accounts payable, accrued expenses, line of credit and long term debt. The carrying value of the short term financial instruments approximates their fair values at December 31, 2012 and 2011, due to their short-term maturities. The carrying value of the Company's long-term debt approximates its fair value, net of a discount related to a final payment to be made on the due date which is equal to two percent of the original loan amount.

Stock-Based Compensation - The Company records the fair value of all stock-based compensation awards in its consolidated financial statements. The terms and vesting schedules for stock-based awards vary by type of grant and generally vest based on the passage of time. The fair value of stock options and warrants is calculated using the Black-Scholes option-pricing model and the expense is recognized on a straight-line basis over the requisite service period, net of estimated forfeitures.

Employee Stock Ownership Plan (ESOP) - The cost of shares issued to the ESOP, but not yet earned is shown as a reduction of equity. Compensation expense is based on the market price of shares as they are committed to be released to participant accounts. As shares of common stock acquired by the ESOP are committed to be released to each employee, the Company reports compensation expense equal to the current market price of the shares, and the shares become outstanding for earnings per share computations.

Comprehensive Loss - Comprehensive loss consists of net loss and accumulated other comprehensive loss, which includes certain changes in equity that are excluded from net loss. Comprehensive loss for the year ended December 31, 2012 is equal to the net loss of $3,866,000 plus other comprehensive income totaling $22,000 (relating to exchange translation adjustments arising from the consolidation of the Company's Canadian Apex subsidiary) to arrive at comprehensive loss of $3,844,000. Comprehensive loss for the year ended 2011 is equal to the net loss reported.

Income Taxes – The Company accounts for income taxes in accordance with the Financial Accounting Standards Board ("FASB") guidance, which requires deferred tax assets and liabilities, be recognized using enacted tax rates to measure the effect of temporary differences between book and tax bases on recorded assets and liabilities. FASB guidance also requires that deferred tax assets be reduced by a valuation allowance, if it is more likely than not some portion or all of the deferred tax assets will not be recognized.

The Company evaluates on an annual basis its ability to realize deferred tax assets by assessing its valuation allowance and by adjusting the amount of such allowance, if necessary. The factors used to assess the likelihood of realization are forecasts of future taxable income and available tax planning strategies that could be implemented to realize the net deferred tax assets.

In accordance with FASB guidance on accounting for uncertainty in income taxes, the Company evaluates tax positions to determine whether the benefits of tax positions are more likely than not of being sustained upon audit based on the technical merits of the tax position. For tax positions that are more likely than not of being sustained upon audit, the Company recognizes the largest amount of the benefit that is greater than 50% likely of being realized upon ultimate settlement. For tax positions that are not more likely than not of being sustained upon audit, the Company does not recognize any portion of the benefit. If the more likely than not threshold is not met in the period for which a tax position is taken, the Company may subsequently recognize the benefit of that tax position if the tax matter is effectively settled, the statute of limitations expires, or if the more likely than not threshold is met in a subsequent period.

Reclassifications - Certain reclassifications have been made to prior years to conform to current period financial statement presentation with no effect on our previously reported consolidated financial position, results of operations, or cash flows.

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New Accounting Standards

In July 2012, The FASB has issued ASU No. 2012-02, Intangibles--Goodwill and Other (Topic 350): Testing Indefinite-Lived Intangible Assets for Impairment. This ASU states that an entity has the option first to assess qualitative factors to determine whether the existence of events and circumstances indicates that it is more likely than not that the indefinite-lived intangible asset is impaired. If, after assessing the totality of events and circumstances, an entity concludes that it is not more likely than not that the indefinite-lived intangible asset is impaired, then the entity is not required to take further action. However, if an entity concludes otherwise, then it is required to determine the fair value of the indefinite-lived intangible asset and perform the quantitative impairment test by comparing the fair value with the carrying amount in accordance with Codification Subtopic 350-30, Intangibles--Goodwill and Other, General Intangibles Other than Goodwill.

Under the guidance in this ASU, an entity also has the option to bypass the qualitative assessment for any indefinite-lived intangible asset in any period and proceed directly to performing the quantitative impairment test. An entity will be able to resume performing the qualitative assessment in any subsequent period.

The amendments in this ASU are effective for annual and interim impairment tests performed for fiscal years beginning after September 15, 2012. Early adoption is permitted, including for annual and interim impairment tests performed as of a date before July 27, 2012, if a public entity's financial statements for the most recent annual or interim period have not yet been issued or, for nonpublic entities, have not yet been made available for issuance. The Company does not believe that the adoption of this pronouncement will have a material effect on the consolidated financial statements.

In October 2012, the FASB issued ASU 2012-04, "Technical Corrections and Improvements." ASU 2012-04 contains amendments to clarify the ASC, correct unintended application of guidance, or make minor improvements to the ASC that are not expected to have a significant effect on current accounting practice or create a significant administrative cost to most entities. Additionally, the amendments are intended to make the ASC easier to understand and the fair value measurement guidance easier to apply by eliminating inconsistencies and providing needed clarifications. The amendments that do not have transition guidance were effective upon issuance. The amendments that are subject to the transition guidance will be effective for fiscal periods beginning after December 15, 2012. The adoption of ASU 2012-04 will not have a material impact on our results of operations or our financial position.

In February 2013, the FASB issued ASU 2013-02, "Comprehensive Income (Topic 220): Reporting of Amounts Reclassified out of Accumulated Other Comprehensive Income." ASU 2013-02 requires an entity to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective line items in net income if the amount being reclassified is required to be reclassified in its entirety to net income. For other amounts that are not required to be reclassified in their entirety to net income in the same reporting period, an entity is required to cross-reference other disclosures that provide additional detail about those amounts. The amendments do not change the current requirements for reporting net income or other comprehensive income in financial statements. For public entities, the amendments are effective prospectively for reporting periods beginning after December 15, 2012. Early adoption is permitted. The adoption of ASU 2013-02 will not have a material impact on our results of operations or our financial position.

NOTE 3 – LOSS PER COMMON SHARE

Basic loss per share is computed by dividing the loss available to common shareholders by the weighted-average number of common shares outstanding. Diluted loss per share is computed similarly to basic loss per share except that the denominator is increased to include the number of additional common shares that would have been outstanding if the potential common shares had been issued and if the additional common shares were dilutive. The weighted-average basic and diluted shares for the years ended December 31, 2012 and 2011, exclude approximately 0.6 million and 0.7 million, respectively, of ESOP shares that have not been committed to be released.

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For periods presented in which there is a net loss, potentially dilutive securities are excluded from the computation of fully diluted net loss per share as their effect is anti-dilutive. Below is a reconciliation of the fully dilutive securities effect for the period with net income (in thousands except share and per share data):

| | December 31, | |
|---|---|---|
| | 2012 | 2011 |
| Net loss attributable to common shareholders | $(4,820) | $(5,654) |
| Weighted average common shares outstanding - basic and diluted | 7,900,693 | 6,019,900 |
| Loss per common share - basic and diluted | $(0.61) | $(0.94) |

For the years ended December 31, 2012 and 2011, respectively, potentially dilutive securities are excluded from the computation of fully diluted net loss per share as their effect is anti-dilutive.

Potential dilutive securities consist of (in thousands):

| | December 31, | |
|---|---|---|
| | 2012 | 2011 |
| Convertible preferred stock - Series A | 270 | 270 |
| Convertible preferred stock - Series B | 131 | 131 |
| Convertible preferred stock - Series C | - | 1,415 |
| Convertible preferred stock - Series D | 7,042 | - |
| Warrants to purchase common stock | 981 | 429 |
| Options to purchase common stock | 544 | 702 |
| Total potentially dilutive securities | 8,968 | 2,947 |

NOTE 4 – ACQUISITIONS

In pursuing our business strategies, we acquire and make investments in certain businesses that meet strategic and financial criteria.

Illume Mobile

On July 31, 2012 (“Illume Mobile Closing Date”), the Company consummated an asset purchase agreement (“Asset Purchase Agreement”) with MacroSolve, Inc. (the “Seller”) Pursuant to the Asset Purchase Agreement, the Company purchased the business (including substantially all the related assets) of the seller’s Illume Mobile division (“Illume Mobile”), based in Tulsa, Oklahoma. Founded in 1996, Illume Mobile is a mobile business solutions provider that serves mobile products and platforms. Illume Mobile’s initial core business is the development and integration of

business applications for mobile environments.

In consideration for the business of Illume Mobile, the Company paid $1,000,000, of which $250,000 was paid in cash and $750,000 was paid in the form of 617,284 shares of the Company's common stock. The number of shares issued was based on the volume weighted-average closing price of the Company's common stock of $1.215 per share over the twenty trading days prior to the Illume Mobile Closing Date. The closing price of the Company's common stock on the day of the Illume Mobile Closing was $1.13 per share. Accordingly, the Company has valued the shares issued in conjunction with the acquisition at $698,000.

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Pursuant to the Asset Purchase Agreement, the Company may be required to make an additional payment ("Earn-Out Payment") to the Seller of up to $500,000, based on the achievement of specified levels of net revenue during the twelve months ending July 31, 2013, of which 50% will be paid in cash, and 50% will be paid in shares of the common stock of the Company. The value of the shares will be based on the closing price of the Company's common stock on the one year anniversary of the Illume Mobile Closing Date. The Earn-Out Payment will be paid within 30 days of the one year anniversary of the Closing Date. Closing costs and associated expenses totaled approximately $140,000. The Company paid Sigma Capital Advisors a fee of $45,000 for services provided in connection with the Asset Purchase Agreement. The transaction was accounted for using the purchase method of accounting and the operating results for Illume Mobile have been consolidated into the Company's results of operations beginning on August 1, 2012.

The purchase price was allocated to the identifiable assets acquired and liabilities assumed based on their estimated fair values on the acquisition date. The following table summarizes the fair value of the Illume Mobile assets acquired and liabilities assumed at July 31, 2012 (in thousands):

| | | |
|---|---|---|
| Assets acquired: | | |
| Accounts receivable | $ | 16 |
| Other current assets | | 15 |
| Property and equipment | | 26 |
| Intangible assets | | 630 |
| Goodwill | | 444 |
| Total assets | | 1,131 |
| | | |
| Liabilities assumed: | | |
| Accounts payable and other accrued liabilities | | 39 |
| Unearned revenue | | 37 |
| Total liabilities assumed | | 76 |
| Net assets acquired | $ | 1,055 |
| | | |
| Purchase consideration: | | |
| Cash paid at closing | $ | 250 |
| Shares issued at closing | | 698 |
| Earn out consideration | | 107 |
| Total purchase consideration | $ | 1,055 |

Under the Asset Purchase Agreement, the Earn-Out Payment will be computed as follows:

(a) If Net Revenue (as defined in the Purchase Agreement) attributable to Illume Mobile, during the one year period commencing on the Illume Mobile Closing Date is $1,500,000 or less, the Earn-Out Payment will be $0.

(b) If Net Revenue (as defined in the Purchase Agreement) is greater than $1,500,000 but less than $2,000,000, the Earn-Out Payment will be $100,000.

(c) If Net Revenue (as defined in the Purchase Agreement) is at least $2,000,000 but less than $3,000,000, the Earn-Out Payment will be equal to the sum of (i) $100,000 plus (ii) 40% of the excess of the Net Revenue amount over $2,000,000.

(d) If Net Revenue (as defined in the Purchase Agreement) is $3,000,000 or more, the Earn-Out Payment will be $500,000.

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The Earn-Out Payment amount was recorded as additional purchase price consideration and the fair value was estimated by using a probability weighting of achieving various future revenue results simulation model to calculate the present value of the earn-out and determine the probability of reaching the earn-out milestones.

The present value of the total earn-out amount was calculated using a discount rate of 21.0%. The discount rate was determined based on an estimated venture capital rate of return. The fair value of the Earn-Out Payment was calculated to be approximately $107,000 and is recorded as accrued earn-out consideration in the Company's consolidated balance sheet as of December 31, 2012.

The fair value of the intangible assets acquired at July 31, 2012, and the estimated useful lives over which they are being amortized are (in thousands):

| | Fair Value | Estimated Useful life |
|---|---|---|
| Software | $310 | 3.5 years |
| Customer relationships | 100 | 3 years |
| Trade name | 130 | 3 years |
| Covenant not to compete | 90 | 2 years |
| | | |
| | $630 | |

The fair value of proprietary software and trade names was determined using a relief from royalty method based on the expected future revenue streams.  The fair value of customer relationships was determined using the estimated future cash flows attributable to existing customers.  The fair value of the covenant not to compete was calculated as the present value of the income expected to be generated as a result of the covenanters not competing with the business.

Amortization of proprietary software is calculated as the greater of the proportional revenue approach or the straight-line approach. Amortization of customer relationships and trade names are calculated on the discounted cash flow methodology to more properly reflect the greater useful life of the assets in the early years and the covenant not to compete is amortized on a straight-line basis.

The transaction resulted in a purchase price residual at the Illume Mobile Closing Date of approximately $444,000 for goodwill, representing the financial, strategic and operational value of the transaction to DecisionPoint. Goodwill is attributed to the premium that the Company was willing to pay to obtain the value of the Illume Mobile business and the synergies created with the integration of key components of a commercial infrastructure. The total amount of the goodwill acquired is deductible for tax purposes.

Apex Systems Integrators, Inc.

On June 4, 2012 ("Closing Date"), pursuant to a Stock Purchase Agreement ("Purchase Agreement"), the Company acquired all of the issued and outstanding shares of Apex Systems Integrators, Inc. ("Apex"), a corporation organized

under the laws of the Province of Ontario, Canada. Apex is a provider of wireless mobile work force software solutions.

In consideration for the shares of Apex, the Company paid CDN$5,000,000 (US$4,801,000 at the Closing Date) (“Closing Amount”) in cash. The Company could pay up to an additional undiscounted amount of CDN$3,500,000 (US$3,361,000 at the Closing Date) in consideration for Apex achieving certain levels of adjusted earnings before interest, depreciation, taxes and amortization (“EBITDA”) in the period ended July 2013. Closing costs and associated expenses either previously paid, payable in cash or recorded as deferred financing costs after the Closing Date total approximately $2.2 million, which includes the issuance of 325,000 shares of the Company’s common stock (Note 11). The shares were valued at $341,000 based on the market price of $1.05 per share on the Closing Date. Of the total amount, approximately $190,000, was reflected as deferred financing costs and the remainder was reflected as a charge to selling, general and administrative expenses in the historical financial statements of the Company as follows: 1) fourth quarter ended December 31, 2011: $46,000; 2) first quarter ended March 31, 2012: $351,000: 3) second quarter ended June 30, 2012: $1,213,000; and 4) third quarter ended September 30, 2012: $380,000 The transaction was accounted for using the purchase method of accounting and the operating results for Apex have been consolidated into the Company’s results of operations beginning on June 5, 2012. The Company funded the purchase of Apex through borrowings as further explained below.

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The purchase price was allocated to the identifiable assets acquired and liabilities assumed based on their estimated fair values on the acquisition date. The following table summarizes the fair value of the Apex assets acquired and liabilities assumed at June 4, 2012 (in thousands):

| | | |
|---|---|---|
| Assets acquired: | | |
| Accounts receivable | $ | 243 |
| Due from related party | | 412 |
| Other current assets | | 62 |
| Property and equipment | | 30 |
| Intangible assets | | 4,466 |
| Goodwill | | 2,449 |
| Total assets | | 7,662 |
| | | |
| Liabilities assumed: | | |
| Accounts payable and other accrued liabilities | | 194 |
| Unearned revenue | | 297 |
| Deferred tax liability | | 1,184 |
| Total liabilities assumed | | 1,675 |
| Net assets acquired | $ | 5,987 |
| | | |
| Purchase consideration: | | |
| Cash paid at closing | $ | 4,801 |
| Accrued earn out consideration | | 1,186 |
| Total purchase consideration | $ | 5,987 |

Under the Purchase Agreement, the following post-closing adjustments will be made:

(a) if the Closing Working Capital as defined in the Purchase Agreement as shown on the closing date balance sheet: (i) is less than CDN$200,000 (US$192,000 at the Closing Date), the Closing Amount shall be reduced on a dollar for dollar basis by the amount of the shortfall; (ii) is greater than CDN$200,000 (US$192,000 at the Closing Date), the Closing Amount shall be increased on a dollar for dollar basis by the amount of such excess; and (iii) is equal to than CDN$200,000 (US$192,000 at the Closing Date), there shall be no adjustment to the Closing Amount as a result of this provision; and

(b) the Closing Amount shall be reduced on a dollar for dollar basis by the amount of any liabilities of Apex on the Closing Date as shown on the closing date balance sheet, including any taxes payable and indebtedness of Apex (other than the executory obligations under contracts and all accounts payable and accrued liabilities of Apex incurred in the ordinary course of business) and excluding any liabilities otherwise adjusted pursuant to (a) above.

Pursuant to the above, a working capital adjustment of approximately $412,000 was recorded at the Closing Date. In July of 2012, pursuant to the above arrangement, the Closing Working Capital was audited and resulted in an adjustment of $76,414 and a reduction to goodwill. The total due from the prior shareholder at December 31, 2012 is $201,000 and is reflected on the accompanying consolidated balance sheet as due from related party.

DECISIONPOINT SYSTEMS, INC.

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In addition, if EBITDA (as uniquely defined in the agreement), of Apex for the twelve months ending July 31, 2013 ("2013 EBITDA"), is equal to or less than CDN$2,000,000 (US$1,920,000 at the Closing Date), then Apex shall pay an amount, to its former owners, equal to the product of the 2013 EBITDA multiplied by four less $4,801,000 ("2013 EBITDA Basic Earn-Out Amount"), up to a maximum of CDN$3,000,000 (US$2,881,000 at the Closing Date). An amount equal to 22.22% of the 2013 EBITDA Basic Earn-Out Amount shall be paid in cash and the balance shall be paid by Apex issuing a subordinated convertible note (the "Note").

Under the terms of the Note, Apex will pay the principal sum due on the Note in eight quarterly payments beginning on January 31, 2014 ("Installment Dates"). Interest from and after August 1, 2013, shall be paid in arrears on the last day of each calendar quarter commencing on January 31, 2014. The interest rate shall be determined as follows:

(i) 9% per annum, calculated and compounded quarterly before November 1, 2014; and

(ii) 11% per annum, calculated and compounded quarterly after October 31, 2014;

(iii) except, however, that, if, during the term of the Note, the Company raises Net Equity Capital (as defined in the Note) in an amount greater than CDN$5,000,000 and this Note is not repaid in full within 30 days from the date that the Company receives such Net Equity Capital, the interest rate otherwise provided in the Note shall be 15% per annum from the end of such 30-day period to the first anniversary thereof and 20% per annum thereafter to the date of payment in full.

The Note is convertible, only on each Installment Date, at the option of the Note holder, into shares of our common stock at a conversion price that is equal to the greater of the market price of our common stock on the day prior to the conversion, or $1.00. The shares issuable under the Note will be restricted but will have certain piggy back registration rights as set forth in the Purchase Agreement.

If the 2013 EBITDA is greater than CDN$2,000,000 (US$1,920,000 at the Closing Date), then Apex shall pay an amount, to its former owners, (the "2013 EBITDA Additional Earn-Out Amount") by which the dollar-for-dollar 2013 EBITDA exceeds CDN$2,000,000 ($1,920,000 at the Closing Date), up to a maximum of CDN$500,000 (US$480,000 at the Closing Date). The 2013 EBITDA Additional Earn-Out shall be paid by the issuance of shares of the Company's common stock. The number of shares to be issued shall be determined by the amount due divided by the 30 day average daily closing price of the shares of the Company's common stock in the month of July 2013. The shares issued will be restricted but will have certain piggy back registration rights as set forth in the Purchase Agreement.

The obligations of Apex under the Purchase Agreement are guaranteed by the Company.

The 2013 EBITDA Basic Earn-Out Amount and 2013 EBITDA Additional Earn-Out Amount were recorded as additional purchase price consideration and the fair value was estimated by using a Monte Carlo simulation model to calculate the present value of the earn-out and determine the probability of reaching the earn-out milestones. The Company simulated the EBITDA in the earn-out periods by varying the following inputs:

•

Revenue – Earn-out period revenue was simulated based on management's projected revenue and a standard deviation based on revenue variance shown throughout management's 2012 - 2014 projections.

- Cost of Goods Sold ("COGS") Margin – Earn-out period COGS margin was simulated based on management's projected margin and a standard deviation based on COGS margin variance shown throughout management's 2012 - 2014 projections.

- General and Administrative Expenses ("G&A") – Earn-out period G&A expense was simulated based on management's projected G&A expense and a standard deviation based on G&A expenses variance shown throughout management's 2012 - 2014 projections. Such G&A amounts are limited with respect to the calculation based on the terms of the agreement.

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Once the EBITDA was simulated in the earn-out period, the Company then determined the amount of the 2013 EBITDA Basic Earn-Out and the 2013 EBITDA Additional Earn-Out that was achieved.

The present value of the total earn-out amount was calculated using a discount rate of 19.7%. The discount rate was determined based on: (i) a discount rate of 16.0% based on the cost of equity less 2.0 percent specific risk premium since the Earn-Out period is only for one year, plus (ii) a counterparty risk of 3.7% based on the after-tax estimated cost of debt. The fair value of the earn-out was calculated to be approximately CDN$1,076,000 (US$1,033,000 at the Closing Date). At December 31, 2012, the Company revised the analysis of earn-out consideration taking in to account actual results and projected results for the remainder of the earn-out period. Based on that analysis, the Company has not adjusted the earn-out accrual totaling CDN$ 1,076,000 (US$1,079,000 at December 31, 2012).

As part of the Purchase Agreement, we are obligated to pay an additional bonus consideration to the CEO of Apex. Such bonus is considered additional contingent purchase consideration as we are obligated to pay the bonus regardless of whether or not his employment is retained. The fair value of the bonus was calculated to be approximately CDN$160,000 (US$153,000 at the Closing Date). At December 31, 2012, the Company revised the analysis of the bonus taking in to account actual results and projected results for the remainder of the bonus period. Based on that analysis, the Company has not adjusted the bonus accrual totaling CDN$160,000 (US$160,000 at December 31, 2012).

As part of the Purchase Agreement, from the Closing Date up until the expiry of the bonus period, the Company is obligated to escrow 25% of any Equity Capital raised in excess of $500,000. The funds in the escrow are to be used to pay the 2013 EBITDA Basic Earn-Out and the 2013 EBITDA Additional Earn-Out and the additional bonus consideration. In December 2012, the Company raised $7,042,000 as part of the Series D Purchase Agreement. The Apex Stock Purchase Agreement requires 25% of net offering proceeds, as defined, to be placed in an escrow account to satisfy the payment obligations of certain earn-out provisions. These funds have not been placed into escrow pending agreement between the Company and the sellers of Apex regarding the financial institution that will escrow the funds, the amount of funds that are to be placed in escrow and the escrow agreement itself.

The fair value at June 4, 2012, of the intangible assets acquired and the estimated useful lives over which they are being amortized are (in thousands):

| | Fair Value | Estimated Useful life |
|---|---|---|
| Apex Ware Software | $2,483 | 3.5 years |
| Customer relationships | 1,536 | 9 years |
| Trade name | 432 | 7 years |
| Covenant not to compete | 15 | 1 years |
| | | |
| | $4,466 | |

The fair value of proprietary software was derived under the cost approach based on the value of replacing the software with software with similar functionality. Trade name fair value was determined using a relief from royalty method based on the expected future revenue streams. The fair value of customer relationships was determined using

the estimated future cash flows attributable to existing customers. The fair value of the covenant not to compete was calculated as the present value of the income expected to be generated as a result of the covenanters not competing with the business.

Amortization of the APEXWare™ software is calculated as the greater of the proportional revenue approach or the straight-line approach. Amortization of customer relationships and trade names are calculated on the discounted cash flow methodology to more properly reflect the greater useful life of the assets in the early years and the covenant not to compete is amortized on a straight-line basis.

The transaction resulted in a purchase price residual at the Closing date of approximately $2,449,000 for goodwill, representing the financial, strategic and operational value of the transaction to DecisionPoint. Goodwill is attributed to the premium that the Company was willing to pay to obtain the value of the Apex business and the synergies created with the integration of key components of a commercial infrastructure. The total amount of the goodwill acquired is not deductible for tax purposes.

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On June 4, 2012, Apex entered into a Credit Agreement ("RBC Credit Agreement") with Royal Bank of Canada ("RBC"), pursuant to which RBC made available certain credit facilities in the aggregate amount of up to CDN$2,750,000 (US$2,641,000 at the Closing date), including a revolving demand facility with an authorized limit of CDN$200,000 (US$192,000 at the Closing Date). In addition, Apex entered into a Loan Agreement ("BDC Loan Agreement") with BDC Capital Inc. ("BDC"), a wholly-owned subsidiary of Business Development Bank of Canada, pursuant to which BDC made available to Apex a term credit facility ("BDC Credit Facility") in the aggregate amount of CDN$1,700,000 (US$1,632,000 at the Closing Date). Further, the Company drew amounts under our line of credit with SVB to fund the remainder of the cash purchase price. See Note 9 for further discussion of these agreements.

Pro Forma Financial Information (unaudited):

The following summarizes the Company's unaudited consolidated results of operations for the years ended December 31, 2012 and 2011 as if the Apex and Illume Mobile acquisitions had occurred on January 1, 2011: (in thousands except per share data):

| | December 31, | | | |
|---|---|---|---|---|
| | 2012 | 2011 | 2012 | 2011 |
| | as reported | | pro forma | |
| Net sales | $71,501 | $58,359 | $73,703 | $62,024 |
| Net loss attributable to common shareholders | (4,820) | (5,654) | (6,887) | (8,441) |
| Net loss per share - basic and diluted | (0.61) | (0.94) | (0.87) | (1.21) |

Included in the pro forma combined results of operations are the following adjustments for Apex: (i) amortization of intangible assets for the years ended December 31, 2012 and 2011 of $572,000 and $1,392,000, respectively, (ii) a net increase in interest expense for the years ended December 31, 2012 and 2011 of $291,000 and $708,000, respectively.

Included in the pro forma combined results of operations are the following adjustments for Illume Mobile: (i) amortization of intangible assets for the years ended December 31, 2012 and 2011 of $125,000 and $214,000, respectively. Net loss per share assumes the 325,000 shares issued in connection with the Apex acquisition and the 617,284 shares issued in connection with the Illume Mobile acquisition are outstanding for each period presented (see discussion at Note 4).

The historical financial information of Apex has been extracted for the periods required from the historical financial statements of Apex Systems Integrators, Inc. which were prepared in accordance with U.S. generally accepted accounting principles. The historical financial information of Illume Mobile has been derived from using internally generated management reports for the periods required.

The unaudited pro forma financial information is not intended to represent or be indicative of the Company's consolidated results of operations that would have been reported had the Apex and Illume Mobile acquisitions been

completed as of the beginning of the period presented, nor should it be taken as indicative of the Company's future consolidated results of operations.

The combined amounts of Apex and Illume Mobile's revenue and net loss since the respective acquisition dates included in the Company's consolidated statement of operations for the year ended December 31, 2012 were $1.5 million and $1.8 million, respectively.

DECISIONPOINT SYSTEMS, INC.

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NOTE 5 - PROPERTY AND EQUIPMENT

Property and equipment consists of the following at (in thousands):

| | December 31, | |
|---|---|---|
| | 2012 | 2011 |
| Computer equipment | $238 | $145 |
| Office furniture and fixtures | 113 | 84 |
| Leasehold improvements | 43 | 44 |
| Total property and equipment | 394 | 273 |
| Less accumulated depreciation and amortization | (215) | (174) |
| Property and equipment, net | $179 | $99 |

Depreciation and amortization expense related to property and equipment for the years ended December 31, 2012 and 2011, totaled $67,000, and $45,000, respectively.

NOTE 6 – GOODWILL AND INTANGIBLE ASSETS

The Company allocates the cost of its acquisitions to the assets acquired and liabilities assumed based on their estimated fair values. The excess cost over the acquired fair value of the identified net assets acquired is recorded as goodwill.

Goodwill is tested annually during the fourth fiscal quarter and whenever events or circumstances indicate impairment may have occurred. If the carrying amount of goodwill exceeds its fair value, estimated based on discounted cash flow analyses, an impairment charge would be recorded. Based on the results of the annual impairment tests, no impairment of goodwill existed at December 31, 2012.

The changes in the carrying amount of goodwill for the years ended December 31, 2012 and 2011 are as follows (in thousands):

| | |
|---|---|
| Balance as of January 1, 2011 | $5,509 |
| Adjustment to goodwill related to CMAC | 29 |
| Balance as of December 31, 2011 | 5,538 |
| Acquisition of Apex in June | 2,449 |
| Adjustment to Apex goodwill | 37 |
| Tax adjustment to Apex goodwill | (9) |
| Acquisition of Illume in July | 444 |
| Impact of foreign currency translation | 112 |

| Balance as of December 31, 2012 | $8,571 |
| --- | --- |

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As of December 31, 2012 and 2011, respectively, the Company's intangible assets and accumulated amortization consist of the following (in thousands):

| | December 31, | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2012 | | | | 2011 | | | |
| | Gross | Accumulated Amortization | Net | WA Life | Gross | Accumulated Amortization | Net | WA Life |
| Customer relationships | $3,373 | $ (966 ) | $2,407 | 7.6 | $1,670 | $ (279 ) | $1,391 | 8.0 |
| Contractor and resume databases | 675 | (270 ) | 405 | 3.0 | 675 | (135 ) | 540 | 4.0 |
| Tradename | 893 | (193 ) | 700 | 5.3 | 310 | (64 ) | 246 | 4.0 |
| Internal use software | 2,978 | (545 ) | 2,433 | 3.1 | 74 | (37 ) | 37 | 1.0 |
| Covenant not to compete | 105 | (27 ) | 78 | 1.5 | - | - | - | - |
| | $8,024 | $ (2,001 ) | $6,023 | 5.1 | $2,729 | $ (515 ) | $2,214 | 6.5 |

Amortization expense for intangible assets was $1,486,000 and $515,000 for the years ended December 31, 2012 and 2011, respectively. The effect of foreign currency translation on the intangible assets for the years ended December 31, 2012 and 2011 was $199,000 and $0, respectively. Amortization is calculated over the estimated useful lives of the assets on a straight line basis for covenant not to compete, internal use software and contractor and resume databases, and on an accelerated basis for customer relationships and trade name.

Based on the current amount of intangibles subject to amortization, estimated amortization expense in the next five years and thereafter, is as follows (in thousands):

| Year | Amount |
|---|---|
| 2013 | $1,934 |
| 2014 | 1,663 |
| 2015 | 1,420 |
| 2016 | 333 |
| 2017 | 255 |
| Thereafter | 418 |
| Total | $6,023 |

NOTE 7 - ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consist of the following (in thousands):

| | December 31, | |
|---|---|---|
| | 2012 | 2011 |
| Salaries and benefits | $1,937 | $1,633 |
| Interest payable | 139 | 58 |
| Professional fees | 33 | 80 |
| Vendor purchases | 92 | 301 |
| Sales tax payable | 293 | 230 |
| Customer deposits | 139 | 75 |
| Other fees and expenses | 262 | 128 |
| Total accrued expenses and other current liabilities | $2,895 | $2,505 |

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NOTE 8 – LINE OF CREDIT

The Company has a $10.0 million revolving line of credit with Silicon Valley Bank ("SVB") which provides for borrowings based upon eligible accounts receivable, as defined in the Loan Agreement ("SVB Loan Agreement"). Under the SVB Loan Agreement as amended, SVB has also provided the Company with a term loan as discussed at Note 9. The SVB Loan Agreement is secured by substantially all the assets of the Company and was scheduled to mature in February 2013. As of December 31, 2012 and 2011, the outstanding balance on the line of credit is approximately $3.3 million and $4.0 million and the interest rate is 7.5%. The Amended SVB Loan Agreement includes various customary covenants, limitations and events of default. Financial covenants, among others, include liquidity and fixed charge coverage ratios, minimum tangible net worth requirements and limitations on indebtedness. As of December 31, 2012, the Company was in compliance with these covenants.

Availability under the line of credit was approximately $5.0 million as of December 31, 2012. As discussed in Note 9, on February 27, 2013 the Company obtained an additional term loan of $1.0 million, which reduces the maximum availability under the line of credit by 50% of the amount outstanding under the term loan. The line of credit allows the Company to cause the issuance of letters of credit on account of the Company to a maximum of the borrowing base as defined in the Loan Agreement. No letters of credit were outstanding as of December 31, 2012 or December 31, 2011.

On February 27, 2013, the SVB Loan Agreement was amended to provide for 1) an extension of the termination date of the line of credit to February 28, 2015, 2) the modification of the line of credit borrowing base, advance rate and financial covenants, 3) the inclusion of an additional $1.0 million term loan (See further discussion at Note 9), 4) a modification of the rate of interest of the line of credit to 3.75% above the bank's prime rate and 5) other various terms and provisions.

Under the RBC Credit Agreement, the revolving demand facility allows for borrowings up to CDN$200,000 (US$ 192,000 at the Closing Date) based upon eligible accounts receivable. Interest is based on the Royal Bank Prime ("RBP") plus 1.5% and is payable on demand. As of December 31, 2012, the outstanding balance on the line of credit was $168,000 and the interest rate is 4.5%. The RBC Credit Agreement is secured by the assets of Apex. The revolving demand facility has certain financial covenants and other non-financial covenants. As of December 31, 2012, Apex was not in compliance with the Fixed Charge Coverage ratio covenant as defined in the RBC Credit Agreement. In March 2013, the Company received a waiver for non-compliance of this covenant through March 31, 2013 and has received communication that the bank will work with the Company to reset this specific covenant commencing with the quarter ending June 30, 2013, however there are no assurances that this will occur.

For the years ended December 31, 2012 and 2011, the Company's interest expense, including fees paid to secure lines of credit, totaled approximately $375,000 and $357,000, respectively.

RBC and SVB entered into a subordination agreement, pursuant to which RBC agreed to subordinate any security interest in assets of the Company granted in connection with the RBC Credit Agreement to SVB's security interest in assets of the Company.

Under the RBC Credit Agreement, the lender provided Apex with a term loan as discussed at Note 9.

DECISIONPOINT SYSTEMS, INC.

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NOTE 9 – LONG TERM DEBT

Long term debt as of December 31, 2012 and 2011, consists of the following (in thousands):

| | Balance January 1, 2012 | Additions | Payments | Amortization of Note Discount | Effect of Currency Translation | Conversion to Equity | Balance December 31, 2012 |
|---|---|---|---|---|---|---|---|
| RBC term loan | $- | $2,401 | $(419) | $ - | $108 | $- | $2,090 |
| note discount | - | (58) | - | 20 | - | - | (38) |
| BDC term loan | - | 1,632 | - | - | 73 | - | 1,705 |
| note discount | - | (34) | - | 3 | - | - | (31) |
| SVB term loan | 2,000 | - | (1,000) | - | - | - | 1,000 |
| note discount | (30) | - | - | 26 | - | - | (4) |
| Total debt | $1,970 | $3,941 | $(1,419) | $ 49 | $181 | $- | 4,722 |
| less current portion | | | | | | | (1,800) |
| Debt, net of current portion | | | | | | | $2,922 |

| | Balance January 1, 2011 | Additions | Payments | Amortization of Note Discount | Currency Translation | Conversion to Equity | Balance December 31, 2011 |
|---|---|---|---|---|---|---|---|
| Senior subordinated secured note | $- | $4,000 | $- | $ - | $- | $(4,000) | $- |
| BDC term loan | - | - | - | - | - | - | - |
| SVB term loan | 3,000 | - | (1,000) | - | - | - | 2,000 |
| note discount | (60) | - | - | 30 | - | - | (30) |
| Total debt | $2,940 | $4,000 | $(1,000) | $ 30 | $- | $(4,000) | 1,970 |
| less current portion | | | | | | | (1,000) |
| | | | | | | | $970 |

Debt, net of
current portion

The Company's debt is recorded at par value adjusted for any unamortized discounts. Discounts and costs directly related to the issuance of debt are capitalized and amortized over the life of the debt using the effective interest rate method and is recorded in interest expense in the accompanying consolidated statements of operations. Unamortized deferred financing costs of approximately $107,000 and $90,000 are included in other assets in the accompanying consolidated balance sheets as of December 31, 2012 and December 31, 2011, respectively.

As of December 31, 2012, maturities of long-term obligations for the next five fiscal years are as follows (in thousands):

| Year | Amount |
|---|---|
| 2013 | $1,800 |
| 2014 | 815 |
| 2015 | 407 |
| 2016 | 1,700 |
| | |
| Total | $4,722 |

RBC Term Loan -- On June 4, 2012, Apex entered into the RBC Credit Agreement with RBC described in Notes 4 and 8, pursuant to which RBC made available certain credit facilities in the aggregate amount of up to CDN$2,750,000, including a term facility ("RBC Term Loan") in the amount of CDN $2,500,000 (US$2,401,000 at the Closing Date). The RBC Term Loan accrues interest at RBP plus 4% (7% at December 31, 2012). Principal and interest is payable over a three year period at a fixed principal amount of CDN $70,000 a month beginning in July 2012 and continuing through June 2015. Apex paid approximately $120,000 in financing costs, which has been recorded as deferred financing costs or note discount in the accompanying consolidated balance sheet as of December 31, 2012, and is being amortized to interest expense over the term of the loan.

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In addition, the RBC Term Loan calls for mandatory repayments based on 20% of Apex's free cash flow as defined in the RBC Credit Agreement, before discretionary bonuses based on the annual year end audited financial statements of Apex, beginning with the fiscal year ended December 31, 2012, and payable within 30 days of the delivery of the annual audited financial statements, and continuing every six months through December 31, 2014. This amount is estimated to be $0 at December 31, 2012.

The RBC Term Loan has certain financial covenants and other non-financial covenants. As of December 31, 2012, Apex was not in compliance with the Fixed Charge Coverage ratio covenant as defined in the Term Loan. In March 2013, the Company received a waiver for non-compliance of this covenant through March 31, 2013 and has received communication that the bank will work with the Company to reset this specific covenant commencing with the quarter ending June 30, 2013, however there are no assurances that this will occur.

BDC Term Loan -- On June 4, 2012, Apex also entered into the BDC Loan Agreement as described in Note 4, pursuant to which BDC made available to Apex a term credit facility ("BDC Term Loan") in the aggregate amount of CDN $1,700,000 (USD $1,632,000 at the Closing Date). The BDC Term Loan accrues interest at the rate of 12% per annum, and matures on June 23, 2016, with an available one year extension for a fee of 2%, payable at the time of extension. In addition to the interest payable, consecutive quarterly payments of CDN$20,000 as additional interest are due beginning on June 23, 2012, and subject to compliance with bank covenants, Apex will make a mandatory annual principal payment in the form of a cash flow sweep which will be equal to 50% of the Excess Available Funds (as defined by the BDC Loan Agreement) before discretionary bonuses based on the annual year end audited financial statements of Apex. The maximum annual cash flow sweep in any year will be CDN$425,000. As of December 31, 2012, the Company estimates that the cash sweep will be approximately $0. Such payments will be applied to reduce the outstanding principal payment due on the maturity date. In the event that Apex's annual audited financial statements are not received within 120 days of its fiscal year end, the full CDN$425,000 becomes due and payable on the next payment date. Apex paid approximately $70,000 in financing costs which has been recorded as deferred financing costs in the accompanying consolidated balance sheet as of December 31, 2012, and is being amortized to interest expense over the term of the loan.

The terms of the BDC loan agreement also provide for a fee to BDC in the event of the occurrence of any of the following:

(a) if 50% or more of any company comprising Apex or the Company (consolidated assets or shares) is sold or merged with an unrelated entity; or

(b) if there is a change of control of Apex and/or the Company prior to the Maturity Date or any extended maturity date of the BDC Tern Loan,

In the event of (a) or (b) above, Apex will pay to the BDC a bonus in an amount equal to 2% of the aggregate value of Apex and the Company determined as at the closing date of such transaction, which bonus shall become due and payable at the time of the closing of such transaction. Notwithstanding any prepayment of the BDC Term Loan, the bonus and Apex's obligation to pay same to the BDC will remain in full force and effect until the maturity date or any amended or extended maturity date agreed by the BDC such that in the event of any sale, initial public offering or similar transaction, Apex's obligation to pay the bonus amount to the BDC will survive such prepayment.

In connection with the BDC Loan Agreement, the RBC Credit Agreement, and the Purchase Agreement, on June 4, 2012, the Company entered into a consent and waiver agreement ("Consent and Waiver") with Sigma Opportunity Fund II, LLC ("Sigma Opportunity Fund"), Sigma Capital Advisors ("Sigma Advisors"), and Donald W. Rowley (the Company's former Chief Financial Officer) (Note 11). On October 3, 2012, the parties entered into an amended consent and waiver agreement ("Amended Consent and Waiver Agreement").

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The BDC Loan Agreement contains certain financial and non-financial covenants. As of December 31, 2012, Apex was not in compliance with their financial covenants. In March 2013, the Company received a waiver for non-compliance of their financial covenants through March 31, 2013 and has received communication that the bank will work with the Company to reset this specific covenant commencing with the quarter ending June 30, 2013, however there are no assurances that this will occur.

SVB Term Loan - On December 31, 2010, pursuant to an Assumption and Amendment to Loan and Security Agreement ("Amended SVB Loan Agreement"), the Company borrowed $3.0 million from Silicon Valley Bank (“SVB”). The SVB Term Loan was due in 36 equal monthly installments of principal plus interest beginning on February 1, 2011. The SVB Term Loan is secured by substantially all of the assets of the Company except for the assets of Apex. On May 20, 2011, pursuant to a Consent and Amendment to Loan and Security Agreement (“Amendment”), the maturity date was amended to April 30, 2012, with the remaining principal due on that date to be paid as a balloon payment. See below for amendment on September 27, 2011. The principal amount outstanding under the Term Loan accrues interest at a fixed rate equal to 9% per annum. In addition, a final payment equal to 2% of the aggregate amount of the Term Loan is due on the earlier of the maturity date or the date the Term Loan is prepaid. This final payment of $60,000 has been recorded as a discount to the SVB Term Loan, which is being amortized to interest expense through December 2013, using the effective interest method.

The Amended SVB Loan Agreement includes various customary covenants, limitations and events of default. Financial covenants, among others, include liquidity and fixed charge coverage ratios, minimum tangible net worth requirements and limitations on indebtedness. As of December 31, 2012, the Company was in compliance with all of its covenants.

On September 27, 2011, pursuant to a Limited Waiver and Amendment to Loan and Security Agreement, the Loan Agreement was amended and certain covenants were replaced or modified resulting in the Company being in full compliance at September 30, 2011. In addition, the maturity date was extended to the earlier of the maturity of the line of credit (see Note 8) or December 1, 2013, the original maturity of the SVB Term Loan and the principal is due in equal installments with no balloon payment.

On February 27, 2013, the Company amended the Loan and Security Agreement which provided an additional term loan of $1,000,000. The new term loan is due in 36 monthly installments of principal plus accrued interest beginning on April 1, 2013. The additional term loan accrues interest at 7.5% per annum.

For the years ended December 31, 2012 and 2011, the Company’s interest expense on the term debt, including amortization of deferred financing costs, was approximately $509,000 and $524,000, respectively.

Senior Subordinated Secured Note - On May 18, 2011, the Company entered into a Note Purchase Agreement (the “Purchase Agreement”), pursuant to which the Company issued a $4,000,000 Senior Subordinated Secured Note (the “Note”). Principal and interest at a rate of 12% was originally due and payable on August 31, 2011. Pursuant to the Purchase Agreement, on June 15, 2011, the consummation date of the Merger, the maturity date of the Note was extended to May 31, 2012, and the interest rate was increased to 24% retroactive to the issuance date. Total cash received under the Purchase Agreement was approximately $3,700,000, net of fees. In conjunction with and as a condition of the Purchase Agreement, the Company and the Note holder entered into an advisory services agreement

pursuant to which the Company paid $150,000 in cash on the effective date of the agreement and $80,000 in cash upon consummation of the Merger. Upon the consummation of the Merger on June 15, 2011, the Company issued 25,000 common shares as settlement of the $80,000 cash payment. The fair value of the common shares of $2.30 or $57,500 was recorded as equity, and the difference of $22,500 was included as a reduction in the loss on debt extinguishment as described below.

On June 30, 2011, the Company entered into an Exchange Agreement (the “Exchange Agreement”) with the Note holder pursuant to which the Company issued 1,286,667 shares of its Series C Cumulative Convertible Preferred Stock (“Series C Preferred”) with a fair value of $3.73 per share, or $4,799,000, in exchange for the surrender and cancellation of the Note and payment of accrued interest of $117,000. In connection with the Exchange Agreement, the Company also issued 505,000 shares of common stock on June 30, 2011, with a closing market price of $2.30 per share, or $1,161,000, for no additional consideration. In addition, the Note holder received protective anti-dilution rights which entitles it to receive additional shares if at any time the Company is required, pursuant solely to the Merger Agreement as described Note 1, to issue additional shares of common stock to its shareholders as is necessary for the Note holder to maintain the same beneficial ownership percentage, on a fully diluted basis, as they had before any such additional shares were issued. On September 30, 2011, pursuant to these protective anti-dilution rights, the Company issued 105,700 shares with a value of $243,000. The shares were valued at $2.30 per share, the closing price of the Company’s common stock on June 30, 2011. The expense related to the issuance of the shares was recorded as a loss on debt extinguishment in the accompanying consolidated statements of operations for the year ended December 31, 2011.

DECISIONPOINT SYSTEMS, INC.

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Pursuant to the Exchange Agreement, the Company had a contingent obligation to issue up to a maximum of 500,000 shares of its common stock to the Note holder. The contingency was dependent upon the receipt by the Company of payments on the note receivable and other receivable acquired pursuant to the Merger with Comamtech. The Exchange Agreement defines certain thresholds for the amounts of these payments, the receipt of which would lower the number of common shares to be contingently issued on an incremental basis. Based upon the probability that the threshold amount expected to be received would result in no additional shares being issued, the fair value per share was estimated to be $0.

In conjunction with the Exchange Agreement, the Company also entered into an agreement between the Company, the Note holder, and the Company's former Chief Financial Officer, ("CFO"). Pursuant to this agreement, the Company issued 128,667 shares of Series C Preferred and 49,000 shares of common stock to the former CFO as settlement of $400,000 of accrued expenses and $12,000 of accrued interest owed to the former CFO. In addition, the former CFO was issued shares of common stock in an amount equal to an aggregate of ten percent (10%) of any additional shares of common stock issued to the Note holder as described above. The Company expensed $24,000 for the issuance of an additional 10,400 common shares to the former CFO. The shares were valued at $2.30 per share, the closing price of the Company's common stock on June 30, 2011. The expense related to the issuance of the shares was recorded as a loss on debt extinguishment in the accompanying consolidated statements of operations for the year ended December 31, 2011. In conjunction with Exchange Agreement the interest rate on the balance of the payable to the former CFO was reduced to 12% per annum until such time as the annual dividend rate on the Series C Preferred was increased, as defined. The Series C Preferred was redeemed by the Company in December 2012.

The Exchange Agreement was accounted for as a debt extinguishment as the exchange was effected by issuance of common and preferred stock that did not represent the exercise of a conversion right contained in the terms of the debt at issuance. The Company determined that the loss on exchange of debt was substantial by comparing the carrying value of the debt extinguished to the fair value of the consideration tendered, and recorded $2,665,000 as a loss on debt extinguishment.

The loss was the result of the difference between the fair value of the consideration given and the carrying value of the senior subordinated secured note extinguished, as follows (in thousands):

| | | |
|---|---|---|
| Fair value of consideration tendered in extinguishment | | |
| Series C Preferred | $5,279 | |
| Common stock | | 1,332 |
| Expense related to issuance of anti-dilution shares | | 267 |
| Expenses related to senior subordinated secured note | | 396 |
| | | 7,274 |
| Carrying value of debt extinguished | | |
| Senior subordinated secured note and related accrued interest | | 4,117 |
| Related party accounts payable and accrued interest | | 412 |
| Advisory services payable related to senior subordinated secured note | | 80 |
| | | 4,609 |
| | | |
| Total loss on extinguishment of debt | $2,665 | |

DECISIONPOINT SYSTEMS, INC.

Notes to Consolidated Financial Statements
December 31, 2012 and 2011

NOTE 10 - INCOME TAXES

The provision for income taxes for the years ended December 31, 2012 and 2011 is as follows (in thousands):

| | December 31, | |
|---|---|---|
| | 2012 | 2011 |
| Current income tax expense (benefit): | | |
| Federal | $- | $- |
| State | 63 | 18 |
| Foreign | 68 | - |
| | 131 | 18 |
| Deferred income tax expense (benefit): | | |
| Federal | 16 | (294) |
| State | 6 | 12 |
| Foreign | (278) | - |
| | (256) | (282) |
| | | |
| Valuation allowance | - | 364 |
| | | |
| Total income tax expense (benefit) | $(125) | $100 |

The Company's deferred tax assets and liabilities are as follows (in thousands):

| | December 31, | |
|---|---|---|
| | 2012 | 2011 |
| | | |
| Allowance for doubtful accounts | $98 | $86 |
| Inventory reserve and uniform capitalization | 44 | 76 |
| Accrued expenses and other liabilities | 365 | 170 |
| Unearned revenue | 226 | 992 |
| Valuation allowance | (685) | (1,324) |
| Deferred tax assets - current | 48 | - |
| | | |
| Other assets | 42 | 4 |
| Property and equipment | 5 | 7 |
| Intangibles | 405 | 178 |
| Net operating loss carryforward | 2,009 | 1,671 |
| Valuation allowance | (2,459) | (1,860) |
| Deferred tax assets - long term | 2 | - |
| | | |
| Total net deferred tax asset | $50 | $- |

| | | |
|---|---|---|
| Long term debt | (18 ) | - |
| Intangibles | (1,022 ) | - |
| Goodwill | (40 ) | (18 ) |
| Total net deferred tax liability | $(1,080 ) | $(18 ) |
| Total | $(1,030 ) | $(18 ) |

DECISIONPOINT SYSTEMS, INC.

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A reconciliation of the United States statutory income tax rate to the effective income tax rate for the years ended December 31, 2012 and 2011 is as follows (in thousands):

| | December 31, 2012 | | December 31, 2011 | |
|---|---|---|---|---|
| | Amount | Rate (%) | Amount | Rate (%) |
| Tax at the Federal statutory rate | $(1,357) | 34.0 | $(1,723) | 34.0 |
| State taxes | (130) | 3.3 | 18 | (0.4) |
| Permanent differences | 752 | (18.9) | 1,426 | (28.2) |
| Valuation allowance | 147 | (3.7) | 364 | (7.2) |
| True up items | 288 | (7.2) | - | - |
| Miscellaneous | 22 | (0.6) | 15 | (0.2) |
| Stock transaction | 57 | (1.4) | - | - |
| Foreign rate | 96 | (2.4) | - | - |
| Effective tax rate | $(125) | 3.1 | $100 | (2.0) |

The Company's deferred income tax assets and liabilities are recognized for the estimated future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. These assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which the temporary differences are expected to reverse.

The Company has net operating loss carryforwards available in certain jurisdictions to reduce future taxable income. Future tax benefits for net operating loss carryforwards are recognized to the extent that realization of these benefits is considered more likely than not. This determination is based on the expectation that related operations will be sufficiently profitable or various tax business and other planning strategies will enable the Company to utilize the net operating loss carryforwards. The Company's evaluation of the realizability of deferred tax assets considers both positive and negative evidence. The weight given to potential effects of positive and negative evidence is based on the extent to which it can be objectively verified. For the years ended December 31, 2012 and 2011, the Company recorded a valuation allowance related to the US federal and state temporary items as it was determined it is more likely than not that the Company will not be able to fully use the assets to reduce future tax liabilities. For the years ended December 31, 2012 and 2011, the Company recorded no allowance related to foreign temporary items as it was determined it is more likely than not that the Company will be able to fully use the assets to reduce future tax liabilities.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in thousands):

| | |
|---|---|
| Balance as of December 31, 2011 | $- |
| Additions based on tax positions related to the current year | 170 |
| Additions for tax positions of prior years | - |
| Reductions for tax positions of prior years | - |
| | |
| Balance as of December 31, 2012 | $170 |

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. During the fiscal years December 31, 2012, the Company recognized approximately $170,000 in liabilities related to tax positions taken by Apex, a foreign subsidiary acquired in 2012.

DECISIONPOINT SYSTEMS, INC.

Notes to Consolidated Financial Statements
December 31, 2012 and 2011

As of December 31, 2012, the Company had federal and state net operating loss carryforwards of approximately $5.9 million and $5.2 million, respectively. These loss carryforwards will expire in varying amounts through 2032. Section 382 of the U.S. Internal Revenue Code, as amended, or ("the Code"), generally imposes an annual limitation on the amount of net operating loss carryforwards that might be used to offset taxable income when a corporation has undergone significant changes in stock ownership. We have determined that we have experienced multiple ownership changes under Section 382 of the Code. As of December 31, 2012, we estimated that approximately $5.1 million of U.S. federal net operating losses and $4.7 million of state net operating losses may be utilized in the future based on limitations that we have calculated under Section 382 of the Code.

The Company continues to remain subject to examination by U.S. federal authority for the years 2009 through 2012 and for various state authorities for the years 2009 through 2012, with few exceptions.

The Company is subject to U.S. federal and Canadian income tax as well as income taxes in various state jurisdictions.

NOTE 11 – STOCKHOLDERS' EQUITY

The Company is authorized to issue two classes of stock designated as common stock and preferred stock. As of December 31, 2012, the Company is authorized to issue 110,000,000 total shares of stock. Of that amount, 100,000,000 shares are common stock, each having a par value of $0.001. The remaining 10,000,000 shares are preferred stock, each having a par value of $0.001, of which 500,000 shares are designated as Series A Preferred Stock, of which 269,608 are issued and outstanding, 500,000 shares are designated as Series B Preferred Stock, of which 131,347 are issued and outstanding, 5,000,000 shares are designated as Series C Preferred Stock, of which 0 shares are issued and outstanding and, 4,000,000 shares are designated as Series D Preferred Stock, of which 704,200 shares are issued and outstanding.

(a) Cumulative Convertible Preferred Stock

A summary of preferred stock outstanding as of December 31, 2012 is as follows (in thousands, except share data):

| Description | | |
|---|---|---|
| Series A Preferred, $0.001 par value per share, 500,000 shares designated, 269,608 shares issued and outstanding, liquidation preference of $975 plus cumulative dividends of $285 | $ 1,260 | |
| Series B Preferred, $0.001 par value per share, 500,000 shares designated, 131,347 shares issued and outstanding, liquidation preference of $380 plus cumulative dividends of $62 | | 442 |
| Series D Preferred, $0.001 par value per share, 4,000,000 shares designated, 704,200 shares issued and outstanding, liquidation preference of $7,042 (net of $1,374 in issuance costs) plus cumulative dividends of $14 | | 5,668 |
| Total convertible preferred stock | $ 7,370 | |

Series A Preferred Stock and Series B Preferred Stock

The holders of the Series A and Series B Preferred Stock shall be entitled to receive, when, as, and if declared by the Board of Directors, dividends at an annual rate of 8% of the stated value. The stated value of the Series A Preferred is $4.00 per share and the stated value of the Series B Preferred is $3.20 per share. Dividends shall be cumulative and shall accrue on each share of the outstanding preferred stock from the date of its issue.

The holders of the Series A and Series B Preferred Stock have no voting rights except on matters affecting their rights or preferences. Subject to the rights of the Series D Preferred Stock, upon any liquidation, dissolution or winding-up of the Company, the holders of the Series A (subject to the rights of the Series B Preferred) and Series B Preferred Stock shall be entitled to receive an amount equal to the stated value per share of $4.00 and $3.20, respectively, plus any accrued and unpaid dividends before any payments shall be made to the holders of any common stock or hereinafter issued preferred stock. The Series A Preferred Stock has preference over the Series B Preferred Stock in liquidation.

Each share of Series A Preferred Stock is convertible, at the option of the holder, at a conversion price of $4.00 per share. Each share of Series B Preferred Stock is convertible, at the option of the holder, at a conversion price of $3.20 per share.

Series C Preferred Stock

On December 20, 2012, all issued and outstanding shares of Series C Preferred Stock were redeemed using the proceeds generated from the sale of the Series D Preferred Stock.

DECISIONPOINT SYSTEMS, INC.

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Series D Preferred Stock

In connection with the Series D Closing, on December 20, 2012, we filed a Certificate of Designation of Series D Preferred Shares (the "Series D Certificate of Designation") with the Secretary of State of Delaware. Pursuant to the Series D Certificate of Designation, we designated 4,000,000 shares of our preferred stock as Series D Preferred Stock. The Series D Preferred Stock has a Stated Value of $10.00 per share, votes on an as-converted basis with the common stock, and is convertible, at the option of the holder, into such number of shares of our common stock equal to the number of shares of Series D Preferred Stock to be converted, multiplied by the Stated Value, divided by the Conversion Price in effect at the time of the conversion. The initial Conversion Price is $1.00, subject to adjustment in the event of stock splits, stock dividends and similar transactions, and in the event of subsequent equity sales at a lower price per share, subject to certain exceptions. The Series D Preferred Stock entitles the holder to cumulative dividends, payable quarterly, at an annual rate of (i) 8% of the Stated Value during the three year period commencing on the date of issue, and (ii) 12% of the Stated Value commencing three years after the date of issue. We may, at our option, pay dividends in PIK Shares, in which event the applicable dividend rate will be 12% and the number of such PIK Shares issuable will be equal to the aggregate dividend payable divided by the lesser of (x) the then effective Conversion Price or (y) the average volume weighted average price of the Company's common stock for the five prior consecutive trading days.

Upon any liquidation, dissolution or winding-up of our Company, holders of Series D Preferred Stock will be entitled to receive, for each share of Series D Preferred Stock, an amount equal to the Stated Value of $10.00 per share plus any accrued but unpaid dividends thereon before any distribution or payment may be made to the holders of any common stock, Series A Preferred Stock, Series B Preferred Stock, or subsequently issued preferred stock.

In addition, commencing on the trading day on which the closing price of the common stock is greater than $2.00 for thirty consecutive trading days with a minimum average daily trading volume of at least 5,000 shares for such period, and at any time thereafter, the Company may, in its sole discretion, effect the conversion of all of the outstanding shares of Series D Preferred Stock to common stock (subject to the condition that, all of the shares issuable upon such conversion may be re-sold without limitation under an effective registration statement or pursuant to Rule 144 under the Securities Act).

The Series D Preferred Stock also contains registration rights which compel the Company to file a registration statement with the SEC within 60 days of the final closing date (December 31, 2012), and requires the registration statement to become effective within 90 days thereafter. The initial registration statement was filed on February 12, 2013. If the registration statement is not declared effective by May 12, 2013, a partial liquidated damage equal to 0.1% of the purchase price paid by each investor shall be payable on each monthly anniversary until the registration statement becomes effective. In no event shall the partial liquidated damage exceed 0.6% of the purchase price paid by each investor.

Pursuant to the Series D Certificate of Designation, commencing two years from the termination or expiration of the offering of the Series D Preferred Stock (which termination occured on December 31, 2012), and at any time thereafter, the Company in its sole discretion may redeem all of the outstanding shares of Series D Preferred Stock at a purchase price of $10.00 per share plus any accrued but unpaid dividends.

Issuance Activity

In December 2012, the Company issued 704,200 shares of Series D Preferred for cash consideration totaling $7,042,000. In conjunction with the issuance, the Company incurred issuance costs totaling $1,374,000, consisting of placement fees of $879,000, legal and other expenses of $141,000, and 704,200 warrants to purchase shares of common stock with an exercise price of $1.10 per share provided to the placement agent with an estimated fair value of $354,000 determined using the Black Scholes option valuation pricing model. The fair value calculation was prepared using the following assumptions: Stock price: $0.80; expected term: 2.5 years; risk free rate of interest of 0.125%; volatility of 126%; and dividend yield of $0.

On June 30, 2011, in conjunction with the Exchange Agreement described in Note 9, the Company issued 1,286,667 shares of Series C Preferred in exchange for the surrender and cancellation of a Senior Subordinated Secured Note in the amount of $4,000,000 and related accrued interest of $117,000. In addition, the Company issued 128,667 shares of Series C Preferred as payment of $400,000 of accounts payable plus related accrued interest of $12,000 to its former CFO.

(b) Common Stock

For the year ended December 31, 2012

On June 4, 2012, the Company issued 325,000 shares of its common stock as consideration for acquisition related expenses in conjunction with the Apex transaction. The shares were valued at $341,000 and were recorded as part of selling, general and administrative expenses in the consolidated statement of operations and comprehensive loss as of December 31, 2012. (Note 4)

On July 31, 2012, pursuant to the Asset Purchase Agreement with MacroSolve, the Company issued 617,284 shares of its common stock to purchase the business of Illume Mobile, a division of MacroSolve. The shares were valued at $698,000 and were recorded as part of the purchase price. (Note 4)

On November 15, 2012, the Company entered into an agreement (the “Sigma Agreement”) with Sigma Opportunity Fund II, LLC (“Sigma Opportunity Fund”) and Sigma Capital Advisors, LLC (“Sigma Advisors”). Pursuant to the Sigma Agreement, the Company issued to the holders of the Series C Preferred Stock an aggregate of 175,364 shares of common stock as an antidilution adjustment.

DECISIONPOINT SYSTEMS, INC.

Notes to Consolidated Financial Statements
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For the year ended December 31, 2011

On June 15, 2011, pursuant to the Merger Agreement, 2,186,869 shares of common stock were deemed issued to the Comamtech shareholders in exchange for the net assets acquired.

On June 15, 2011, pursuant to a services agreement, the Company issued 39,063 common shares with a value of $100,000 to a vendor. The shares were recorded as a prepaid expense which is being amortized over the twelve month service period of the contract.

On June 30, 2011, pursuant to the Exchange Agreement described in Note 9, the Company issued 505,000 and 49,000 shares to the Note holder and the former CFO, respectively. The shares were valued at $1,162,000 and $113,000, respectively, and are included in the loss on debt extinguishment in the accompanying consolidated statement of operations for the year ended December 31, 2011.

On September 30, 2011, the Company issued 116,100 shares of common stock with a value of $267,000 in connection with the Exchange Agreement as described in Note 9. In addition, on September 30, 2011, the Company issued 26,906 shares of common stock with a value of $58,000 to Robert Chaiken, a Director of the Company, in exchange for services rendered in connection with the negotiation of the Transfer Agreement with Empresario.

In conjunction with and as a condition of the Purchase Agreement described in Note 9, the Company issued 25,000 common shares as settlement of the $80,000 to be paid in cash as an advisory fee. The shares were valued at $2.30 per share, or $58,000, and the difference of $23,000 was recorded as an offset to the loss on debt extinguishment in the accompanying consolidated statement of operations for the year ended December 31, 2011.

In conjunction with the Merger, as discussed in Note 1 the Company issued 153,883 shares of common stock valued at $354,000 as a finders' fee. On November 8, 2011, the Company and the finder entered into agreement pursuant to which the finder returned all of the aforementioned shares of the Company's stock in exchange for $250,000 in cash. The value of the shares on the date of the agreement was $1.33 and as such, $205,000, has been recorded as treasury stock for accounting purposes. The remaining $45,000 has been reflected as a charge in selling, general and administrative expense in the accompanying statement of operations for the year ended December 31, 2011.

(c) Warrants

The following table summarizes information about the Company's outstanding common stock warrants as of December 31, 2012:

| | Date | | Strike | Total Warrants Outstanding and | Total Exercise | Weighted Average Exercise |
|---|---|---|---|---|---|---|
| | Issued | Expiration | Price | Exercisable | Price | Price |
| Senior Subordinated Notes | Dec-09 | Dec-14 | $ 3.62 | 138,260 | $ 500,000 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Senior Subordinated Notes | Dec-09 | Dec-14 | 4.34 | 138,260 | | 600,000 | | |
| Placement Agent Preferred Stock - Class D | Dec-12 | Dec-17 | 1.10 | 704,200 | | 774,620 | | |
| | | | | 980,720 | $ | 1,874,620 | $ | 1.91 |

NOTE 12 - ESOP PLAN

In December 2003, the Company formed an Employee Stock Ownership Plan (the “ESOP”) and loaned the ESOP $1,950,000 (the “ESOP Note”) that the ESOP Trust (“Trust”) used to acquire 1,128,558 shares of the of the Company’s stock from its former stockholder for $1,300,000 and 564,195 shares from the Company for $650,000. The ESOP Note bears interest at a rate of 5.25% with annual principal and interest payments and has a 15-year term. The amount owed to the Company under the Note as of December 31, 2012 and 2011, was $767,000 and $899,000, respectively. The ESOP Note is reflected in the accompanying consolidated balance sheet as unearned ESOP shares in stockholders’ equity.

The ESOP covers all non-union employees. Employees are eligible to participate in the Plan after three months of service. Plan participants start vesting after two years of participation and are fully vested after six years of participation. ESOP contributions are determined annually by the Board of Directors, and are a minimum $130,000 per year, to repay the ESOP Note held by the Company. The Company’s contribution expense for the year ended December 31, 2012, was $178,000 representing $131,000 for the ESOP principal payment and $47,000 for the ESOP interest. The Company’s contribution expense for the year ended December 31, 2011 was $178,000 representing $125,000 for the ESOP principal payment and $54,000 for the ESOP interest. The ESOP Note is secured by the unallocated Company stock held by the Trust.

DECISIONPOINT SYSTEMS, INC.

Notes to Consolidated Financial Statements
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ESOP shares are allocated to individual employee accounts as the loan obligation of the ESOP to the Company is reduced. As of December 31, 2012, the ESOP held 553,420 shares of unallocated Company stock and 1,128,303 shares of allocated Company stock. As of December 31, 2011, the ESOP held 664,104 shares of unallocated Company stock and 1,028,615 shares of allocated Company stock. Compensation costs relating to shares released are based on the fair value of shares at the time they are committed to be released. The unreleased shares are not considered outstanding in the computation of earnings per common share. Dividends received on ESOP shares are allocated based on shares held for the benefit of each participant and used to purchase additional shares of stock for each participant. The Company has not received any dividends since the inception of the plan. ESOP compensation expense consisting of both cash contributions and shares committed to be released for 2012 and 2011 was approximately $173,000 and $236,000, respectively. For 2012 and 2011, the fair value of the shares was $1.15 and $2.20 per share, based on the average of the daily market closing share price.

ESOP distributions will be made in shares of Company stock, cash or a combination of Company stock and cash at the discretion of the Company. In 2012, 11,030 shares were distributed to a former employee.

ESOP shares as of December 31, 2012 and 2011 were as follows:

| | December 31, | |
|---|---|---|
| | 2012 | 2011 |
| Allocated shares | 1,017,619 | 917,965 |
| Shares committed for allocation | 110,684 | 110,684 |
| Unallocated shares | 553,420 | 664,104 |
| Total ESOP shares | 1,681,723 | 1,692,753 |

The fair value of the unallocated shares at December 31, 2012 and 2011 was approximately $443,000 and $498, 000, based on the closing share price of the Company's common stock of $0.80 and $0.75, respectively.

NOTE 13 - STOCK OPTION PLAN

In December 2010, the Company established the 2010 Stock Option Plan (the "Plan"). The Plan authorizes the issuance of 1,000,000 shares of common stock. Pursuant to the terms of the Merger Agreement, the Company assumed all of Old DecisionPoint's obligations under their outstanding stock option plans.

The Plan is administered by the Board of Directors, or a committee appointed by the Board of Directors, which determines recipients and types of awards to be granted, including the number of shares subject to the awards, the exercise price and the vesting schedule. The term of stock options granted under the Plans cannot exceed ten years. Options shall not have an exercise price less than 100% of the fair market value of the Company's common stock on the grant date, and generally vest over a period of five years. If the individual possesses more than 10% of the combined voting power of all classes of stock of the Company, the exercise price shall not be less than 110% of the fair market of a share of common stock on the date of grant.

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DECISIONPOINT SYSTEMS, INC.

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December 31, 2012 and 2011

A summary of the status of the Plans as of December 31, 2012, and information with respect to the changes in options outstanding is as follows:

| | Options Available for Grant | Options Outstanding | Weighted - Average Exercise Price | Aggregate Intrinsic Value |
|---|---|---|---|---|
| January 1, 2012 | 298,037 | 701,963 | $2.01 | |
| Granted | - | - | - | |
| Exercised | - | - | - | |
| Forfeited | 157,458 | (157,458 ) | 2.70 | |
| December 31, 2012 | 455,495 | 544,505 | $1.82 | $- |
| | | | | |
| Exercisable options at December 31, 2012 | | 415,921 | $1.72 | $- |

The following table summarizes information about stock options outstanding as of December 31, 2012:

| | Options Outstanding | | | Options Exercisable | | |
|---|---|---|---|---|---|---|
| Range of Exercise Prices | Number Outstanding | Weighted-Average Remaining Contractual Life (Years) | Weighted-Average Exercise Price | Number Exercisable | Weighted-Average Remaining Contractual Life (Years) | Weighted-Average Exercise Price |
| 1.33 - $2.03 | 365,620 | 2.33 | $1.65 | 355,461 | 2.28 | $1.50 |
| 2.06 - $4.34 | 178,885 | 8.35 | 2.16 | 60,460 | 8.26 | 1.37 |
| | | | | | | |
| Total | 544,505 | 4.31 | $1.82 | 415,921 | 3.15 | $1.72 |

No awards were exercised during the years ended December 31, 2012 and 2011, respectively. The total fair value of awards vested for the years ended December 31, 2012 and 2011 was $76,000 and $33,000, respectively.

DECISIONPOINT SYSTEMS, INC.

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Stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the required service period, which is generally equal to the vesting period. The fair value of options granted to employees during the year ended December 31, 2011, was $287,000 (no options were granted during the year ended December 31, 2012). The fair values were estimated using the Black-Scholes option-pricing model with the following weighted-average assumptions:

| | | |
|---|---|---|
| Expected term | 3.84 years | |
| Expected volatility | 77.49 | % |
| Dividend yield | 0 | % |
| Risk-free interest rate | 1.55 | % |

Due to the limited time that the Company's common stock has been publicly traded, management estimates expected volatility based on the average expected volatilities of a sampling of five companies with similar attributes to the Company, including: industry, size and financial leverage. The expected term of the awards represents the period of time that the awards are expected to be outstanding. Management considered expectations for the future to estimate employee exercise and post-vest termination behavior. The Company does not intend to pay dividends in the foreseeable future, and therefore has assumed a dividend yield of zero. The risk-free interest rate is the yield on zero-coupon U.S. Treasury securities for a period that is commensurate with the expected term of the awards.

Employee stock-based compensation costs for the years ended December 31, 2012 and 2011, was $57,000 and $71,000, respectively, and is included in selling, general and administrative expense in the accompanying consolidated statements of operations. As of December 31, 2012, total unrecognized estimated employee compensation cost related to stock options granted prior to that date was $140,000 which is expected to be recognized over a weighted-average vesting period of 3.42 years.

The weighted-average fair value on the grant date of options granted to employees during the year ended December 31, 2011 was $2.17. The Company did not grant any stock options during 2012.

NOTE 14 – COMMITMENTS AND CONTINGENCIES

Leases - The Company leases its facilities and certain equipment under various operating leases which expire at various dates through fiscal 2018 and require us to pay a portion of the related operating expenses such as maintenance, property taxes, and insurance. Certain facilities contain renewal options for varying periods. In most cases, management expects that in the normal course of business, leases will be renewed or replaced by other leases. Certain facilities leases have free or escalating rent payment provisions. Rent expense under such leases is recognized on a straight-line basis over the lease term.

The corporate headquarters and sales operations, including sales administration, software development, depot operation and the financial management were located in Foothill Ranch, California where the Company leased 7,500

square feet of office space which expired in July 2012. In May 2012, the Company entered into a new office lease agreement for 10,325 square feet beginning in July 2012, the lease expires in July 2017. The property is located in Irvine, California. The current monthly rental expense is approximately $12,000.

In addition, the Company has a lease for 4,100 square feet in Shelton, Connecticut for its East coast sales and operations which expires in April 2015. The current monthly rental expense is approximately $6,100. In September 2012, the Company notified the landlord of its early termination of the lease as of April 2013. The Company also leases 6,800 square feet in Edison, New Jersey under a lease which expires in December 2014. The current monthly rental expense is approximately $4,200. The Company has a sales and administrative office located in Alpharetta, Georgia where it leases 5,100 square feet for general office purposes under a lease which expires in April 2015. In addition, the Company has a lease for 4,800 square feet in Alpharetta, Georgia for its technology lab center which expired in April 2012. During April, the lease was extended for an additional 3 years until April 2015, under the same terms and conditions. The current monthly rental expense for the sales and administrative office and the technology lab is approximately $12,000.

Effective upon the Closing Date of the purchase of Apex in June 2012, the Company assumed Apex’s lease of 7,800 square feet in Burlington, Ontario, Canada, which expires in March 2016. The current monthly rental expense is approximately CDN$10,000 per month.

Effective upon the Illume Mobile Closing Date, the Company assumed the Illume Mobile lease of 10,000 square feet in Tulsa, Oklahoma which expires in September 2013, with the same terms and conditions as the underlying lease. The current monthly rental expense is approximately $12,000.

The Company believes that our properties are in good condition, adequately maintained and suitable for the conduct of our business. Certain of our lease agreements provide options to extend the lease for additional specified periods.

Rent expense for the years ended December 31, 2012 and 2011, was $549,000 and $378,000, respectively.

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The aggregate remaining future minimum payments under these leases expiring after December 31, 2012, are as follows (in thousands):

| Years ending December 31: | Amount |
|---|---|
| 2013 | $618 |
| 2014 | 506 |
| 2015 | 439 |
| 2016 | 322 |
| 2017 | 222 |
| Thereafter | 76 |
| | |
| | $2,183 |

Escrow Obligation - As part of the Apex Purchase Agreement, from the Closing Date up until the expiry of the bonus period, the Company is obligated to escrow 25% of any Equity Capital raised in excess of $500,000. The funds in the escrow are to be used to pay the 2013 EBITDA Basic Earn-Out and the 2013 EBITDA Additional Earn-Out and the additional bonus consideration. In December 2012, the Company raised $7,042,000 as part of the Series D Purchase Agreement. These funds have not been placed into escrow pending agreement between the Company and the sellers of Apex regarding the financial institution that will escrow the funds, the amount of funds that are to be placed in escrow and the escrow agreement itself.

Contingencies - The Company is not a party to any material pending legal proceedings other than ordinary routine litigation incidental to the business; the outcome of which the Company believes will not have a material adverse effect on the business, financial condition, cash flows or results of operations. These matters are subject to inherent uncertainties and management’s view of these matters may change in the future.

The Company is subject to the possibility of various loss contingencies, including claims, suits and complaints, arising in the ordinary course of business. The Company considers the likelihood of loss or impairment of an asset or the incurrence of a liability, as well as its ability to reasonably estimate the amount of loss, in determining loss contingencies. An estimated loss contingency is accrued when it is probable that an asset has been impaired or a liability has been incurred and the amount of loss can be reasonably estimated. The Company regularly evaluates current information available to it to determine whether such accruals should be adjusted and whether new accruals are required.

Under the Company’s bylaws, directors and officers have certain rights to indemnification by the Company against certain liabilities that may arise by reason of their status or service as directors or officers. The Company maintains director and officer insurance, which covers certain liabilities arising from the obligation to indemnify directors and officers and former directors in certain circumstances. No material indemnification liabilities were accrued at December 31, 2012.

The Company has employment agreements with three of our key executive officers as of December 31, 2012. The agreements do not provide for any material, out of ordinary course of business provisions or benefits.

The Company also has an employment agreement with its Chief Operating Officer. Pursuant to the Agreement, the officer is entitled to an annual bonus calculated pursuant to terms set forth in the Agreement. The agreement also contains a severance provision providing up to twelve months of salary in certain situations.

The Company also has an employment agreement with Donald Dalicandro, the Chief Executive Officer of Apex, as a result of the Apex acquisition. Under the employment agreement, the Company further agreed Mr. Dalicandro would be appointed to the Company's board of directors effective June 4, 2012, and would not be removed from the Company's board of directors during the Earn-Out Period (as defined in the employment agreement) and the Bonus Period (as defined in the employment agreement) except by except by death, bankruptcy, incapacity or voluntary resignation. The agreement calls for annual bonus upon achieving certain results of operation at Apex for the 12 months ending July 31, 2013, 2014, and 2015. See further discussion at Note 4.

As part of the Apex Purchase Agreement, the Company is obligated to pay an additional bonus consideration to the CEO of Apex. Such bonus is considered additional contingent purchase consideration as we are obligated to pay the bonus regardless of whether or not his employment is retained (see discussion at Note 4).

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NOTE 15 - PROFIT SHARING PLAN

The Company maintains a 401(k) Profit Sharing Plan (“401k Plan”). Employees who are 21 years of age and have performed 90 days of service are eligible to participate. Each year, employees can make salary contributions of up to 25% of their salary. The Company matches 100% of employee contributions up to 3% of eligible employee compensation and 50% of employee contributions of 3% to 5% for a total of 4% of employee compensation. Employer contributions to the 401k Plan were $263,000 and $259,000, for the years ended December 31, 2012 and 2011, respectively.

NOTE 16 - RELATED PARTIES

The Company purchases and sells certain products and services from iTEK Services, Inc. (“iTEK”), a privately held company owned by an unrelated ESOP. iTEK was affiliated with the Company through limited overlapping management and Board representation by the Company's Chief Executive Officer (“CEO”) and former Chief Financial Officer (“former CFO”). Purchases from TEK are on similar terms that Company would have received from an unrelated third-party.

Effective upon the resignation of the Company’s former CFO during July 2012, and the concurrent discontinuance of the CEO’s iTEK Board representation, the parties have no further overlapping management and therefore are no longer considered related parties effective August 2012.

The Company had accounts payable to its former CFO, of $0 and $855,000 at December 31, 2012 and 2011, respectively, including accrued interest. The outstanding accounts payable balance accrues interest at 12% per annum until June 4, 2012, at which time the interest rate increased to 25% pursuant to the Consent and Waiver described in Note 9. The Company incurred interest expense to related parties totaling approximately $114,000 and $275,000, for the years ended December 31, 2012 and 2011, respectively.

The Company has a related party receivable of $201,908 from the seller of Apex in connection with the Working Capital requirement as defined in the Purchase Agreement and described in Note 4.

Apex, a wholly owned subsidiary of the Company, leases premises from an entity controlled by a shareholder. Rent expense included in the consolidated financial statements was $84,000, for the year ended December 31, 2012.

Separation Agreement - On July 23, 2012, the Company and Donald W. Rowley (“DWR”) entered into a Separation Agreement and General Release (“Separation Agreement”). Pursuant to the Separation Agreement, DWR resigned as the Company’s Chief Financial Officer and Director as of July 23, 2012, and as an employee of the Company on July 23, 2012. Pursuant to the Separation Agreement, the Company agreed to pay DWR a total of $205,000 in equal installments in accordance with the Company’s payroll cycle beginning on August 1, 2012 through December 31, 2012. This amount was fully paid by December 31, 2012. The Separation Agreement also contains a general release from DWR.

Under the Separation Agreement, the Company also acknowledged that it owes DWR the amount of $891,000 as of July 23, 2012, which was to be paid in accordance with an Accounts Payable Payment Plan agreement, between the Company and DWR dated July 23, 2012 (“Accounts Payable Agreement”). Pursuant to the Account Payable

Agreement, the Company agreed to pay interest monthly in arrears (beginning on August 1, 2012) to DWR with interest computed daily on the outstanding balance at an annual interest rate of 25%. Under the Accounts Payable Agreement, the Company was to make payments to DWR of $36,000 per month due on the first day of each month beginning May 1, 2013. The total amount due to DWR under the Accounts Payable Agreement was paid in full during the quarter ended September 30, 2012.

In December 2012, the Company sold 17,200 shares of its Series D Preferred Stock to certain related parties. The shares were sold at the same price as additional shares sold to an independent third party. Sales of Series D Preferred Stock to certain related parties are as follows:

| | | Shares |
|---|---|---|
| David Rifkin | Director | 1,000 |
| Lawrence Yelin | Director | 2,200 |
| Jay Sheehy | Director | 1,000 |
| Nicholas R. Toms | CEO, Director | 10,000 |
| Paul E. Ross | Interim, CFO | 2,000 |
| Ralph S. Hubregsen | COO | 1,000 |
| | | |
| | | 17,200 |

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