# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# FORM 10-K

(Mark One)

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

For the Fiscal Year Ended December 31, 2019

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

> For the transition period from Commission file number: 1-10879



AMPHENOL CORPORATION

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State of Incorporation)

22-2785165

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

358 Hall Avenue, Wallingford, Connecticut 06492

(Address of principal executive offices)

#### 203-265-8900

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock \$0.001 per value	АРИ	Naw York Stock Evolunge
Class A Common Stock, \$0.001 par value	APH	New York Stock Exchange

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

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

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

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

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

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

> Large Accelerated Filer ⊠ Non-accelerated Filer □

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 ☒

As of June 30, 2019, the aggregate market value of Amphenol Corporation Class A Common Stock (based upon the closing price of such stock on the New York Stock Exchange) held by non-affiliates was approximately \$21,238 million.

As of January 31, 2020, the total number of shares outstanding of Registrant's Class A Common Stock was 298,101,155.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive proxy statement, which is expected to be filed within 120 days following the end of the fiscal year covered by this report, are incorporated by reference into Part III hereof.

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## **Cautionary Note Regarding Forward-Looking Statements**

This Annual Report on Form 10-K includes forward-looking statements within the meaning of the Private Securities
Litigation Reform Act of 1995, which relate to future events and are subject to risks and uncertainties. The forward-looking
statements, which address the Company's expected business and financial performance and financial condition, among other
matters, may contain words such as: "anticipate," "could," "continue," "expect," "estimate," "forecast," "ongoing,"
"project," "seek," "predict," "target," "will," "intend," "plan," "optimistic," "potential," "guidance," "may," "should" or
"would" and other words and terms of similar meaning.

Forward-looking statements by their nature address matters that are, to different degrees, uncertain, such as statements about expected earnings, revenues, growth, liquidity or other financial matters. Although the Company believes the expectations reflected in such forward-looking statements, including those with regards to results of operations, liquidity or the Company's effective tax rate, are based upon reasonable assumptions, the expectations may not be attained or there may be material deviation. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. There are risks and uncertainties that could cause actual results to differ materially from these forward-looking statements. A description of some of these uncertainties and other risks is set forth under the caption "Risk Factors" in Part I, Item 1A and elsewhere in this Annual Report on Form 10-K, as well as other reports filed with the Securities and Exchange Commission, including but not limited to Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Such forward-looking statements may also be impacted by, among other things, additional guidance under the U.S. Tax Cuts and Jobs Act ("Tax Act"). While the Company completed its accounting of the Tax Act in the fourth quarter of 2018 based on the regulatory guidance issued at that time, the Department of Treasury interpretive guidance initiatives are ongoing. Any future guidance on the Tax Act could impact our forward-looking statements.

These or other uncertainties may cause the Company's actual future results to be materially different from those expressed in any forward-looking statements. The Company undertakes no obligation to update or revise any forward-looking statements except as required by law.

#### PART I

## Item 1. Business

#### General

Amphenol Corporation (together with its subsidiaries, "Amphenol", the "Company", "we", "our", or "us") is one of the world's largest designers, manufacturers and marketers of electrical, electronic and fiber optic connectors and interconnect systems, antennas, sensors and sensor-based products and coaxial and high-speed specialty cable. The Company estimates, based on reports of industry analysts, that worldwide sales of interconnect and sensor-related products were approximately \$175 billion in 2019.

Certain predecessor businesses of the Company were founded in 1932 and the Company was incorporated under the laws of the State of Delaware in 1986. The Company's Class A Common Stock began trading on the New York Stock Exchange in 1991.

The Company's strategy is to provide our customers with comprehensive design capabilities, a broad selection of products and a high level of service on a worldwide basis while maintaining continuing programs of productivity improvement and cost control. The Company operates through two reporting segments: (i) Interconnect Products and Assemblies and (ii) Cable Products and Solutions. The Interconnect Products and Assemblies segment primarily designs, manufactures and markets a broad range of connector and connector systems, value-add products and other products, including antennas and sensors, used in a broad range of applications in a diverse set of end markets. Interconnect products include connectors, which when attached to an electrical, electronic or fiber optic cable, a printed circuit board or other device, facilitate transmission of power or signals. Value-add systems generally consist of a system of cable, flexible circuits or printed circuit boards and connectors for linking electronic equipment. The Cable Products and Solutions segment primarily designs, manufactures and markets cable, value-add products and components for use primarily in the broadband communications and information technology markets as well as certain applications in other markets.

The table below provides a summary of our reporting segments, the 2019 net sales contribution of each segment, the primary industry and end markets that we service and our key products:

Reporting Segment	Interconnect Products and Assemblies	Cable Products and Solutions
% of 2019 Net Sales:	95%	5%
Primary End Markets	<ul> <li>Automotive</li> <li>Broadband Communications</li> <li>Commercial Aerospace</li> <li>Industrial</li> <li>Information Technology and Data Communications</li> <li>Military</li> <li>Mobile Devices</li> <li>Mobile Networks</li> </ul>	<ul> <li>Automotive</li> <li>Broadband Communications</li> <li>Industrial</li> <li>Information Technology and Data Communications</li> <li>Mobile Networks</li> </ul>
Key Products	Connector and Connector Systems:  • fiber optic interconnect products • harsh environment interconnect products • high-speed interconnect products • power interconnect products, busbars and distribution systems • radio frequency interconnect products and antennas • other connectors  Value-Add Products: • backplane interconnect systems	Cable:
	<ul> <li>cable assemblies and harnesses</li> <li>cable management products</li> </ul> Other: <ul> <li>antennas</li> <li>flexible and rigid printed circuit boards</li> <li>hinges</li> <li>molded parts</li> <li>production-related products</li> <li>sensors and sensor-based products</li> <li>switches</li> </ul>	<ul> <li>systems</li> <li>fiber optic components</li> </ul>

Information regarding the Company's operations and assets by reporting segment, as well as the Company's net sales and long-lived assets by geographic area, appears in Note 13 of the Notes to the Consolidated Financial Statements.

## **Our Strategy**

The Company's overall strategy is to provide its customers with comprehensive design capabilities, a broad selection of products and a high level of service on a worldwide basis while maintaining continuing programs of productivity improvement and cost control. Specifically, our business strategy is as follows:

- Pursue broad diversification The Company constantly drives to increase the diversity of its markets, customers, applications and products. Due to the tremendous variety of opportunities in the electronics industry, management believes that it is important to ensure participation wherever significant growth opportunities are available. This diversification positions us to proliferate our technologies across the broadest array of opportunities and reduces our exposure to any particular market, thereby reducing the variability of our financial performance. An overview of the Company's market and product participation is described under "Markets".
- Develop high technology performance-enhancing interconnect solutions The Company seeks to expand the scope and number of its preferred supplier relationships. The Company works closely with its customers at the design stage to create and manufacture innovative solutions. These products generally have higher value-added content than other interconnect products and have been developed across the Company's markets. The Company is focused on technology leadership in the interconnect areas of radio frequency, power, harsh environment, high-speed and fiber optics, as well as sensors, as it views these technology areas to be of particular importance to our global customer base.
- Expand global presence The Company intends to further expand its global manufacturing, engineering, sales and service operations to better serve its existing customer base, penetrate developing markets and establish new customer relationships. As the Company's global customers expand their international operations to access developing world markets and lower manufacturing costs in certain regions, the Company is continuing to expand its international footprint in order to provide real-time capabilities to these customers. The majority of the Company's international operations have broad capabilities including new product development. The Company is also able to take advantage of the lower manufacturing costs in some regions, and has established low-cost manufacturing and assembly facilities in the Americas, Europe/Africa and Asia.
- Control costs The Company recognizes the importance in today's global marketplace of maintaining a competitive cost structure. Innovation, product quality and performance and comprehensive customer service are not mutually exclusive with controlling costs. Controlling costs is part of a mindset. It is having the discipline to invest in programs that have a good return, maintaining a cost structure as flexible as possible to respond to changes in the marketplace, dealing with suppliers and vendors in a fair but prudent way to ensure a reasonable cost for materials and services and creating a mindset where managers manage the Company's assets as if they were their own.
- Pursue strategic acquisitions and investments The Company believes that the industry in which it operates is highly fragmented and continues to provide significant opportunities for strategic acquisitions. Accordingly, we continue to pursue acquisitions of high-growth potential companies with strong management teams that complement our existing business while further expanding our product lines, technological capabilities and geographic presence. Furthermore, we seek to enhance the performance of acquired companies by leveraging Amphenol's position with customers across our diverse end markets, our leading technologies and our access to low-cost manufacturing around the world. In 2019, the Company invested approximately \$937 million to fund nine acquisitions, while in 2018, the Company invested approximately \$159 million to fund three acquisitions. Our acquisitions in 2019 and 2018 have strengthened our customer base and product offerings in many of our end markets.
- Foster collaborative, entrepreneurial management Amphenol's management system is designed to provide clear income statement and balance sheet responsibility in a flat organizational structure. Each general manager is incented to grow and develop his or her business and to think entrepreneurially in providing innovative, timely and cost-effective solutions to customer needs. In addition, Amphenol's general managers have access to the resources of the larger organization and are encouraged to work collaboratively with their peers throughout the Company to meet the needs of the expanding marketplace and to achieve common goals.

#### Markets

The Company sells products to customers in a diversified set of end markets. For a discussion of certain risks related to the Company's markets, refer to the subsection titled "Risks related to our end markets" included in Part I, Item 1A. *Risk Factors* herein.

Automotive - Amphenol is a leading supplier of advanced interconnect systems, sensors and antennas for a growing array of automotive applications. In addition, Amphenol has developed advanced technology solutions for hybrid and electric vehicles and is working with leading global customers to proliferate these advanced interconnect products into next-generation automobiles. Sales into the automotive market represented approximately 19% of the Company's net sales in 2019 with sales into the following primary end applications:

- antennas
- engine management and control
- exhaust monitoring and cleaning
- hybrid and electric vehicles
- infotainment and communications
- lighting
- power management
- safety and security systems
- sensing systems
- telematics systems

Broadband Communications - Amphenol is a world leader in broadband communication products for cable, satellite and telco video and data networks, with industry-leading engineering, design and manufacturing expertise. The Company offers a wide range of products to service the broadband market, from customer premises cable and interconnect devices to distribution cable and fiber optic components, as well as interconnect products integrated into headend equipment. Sales into the broadband communications market represented approximately 4% of the Company's net sales in 2019 with sales into the following primary end applications:

- cable, satellite and telco networks
- customer premises equipment
- high-speed internet hardware
- network switching equipment
- satellite interface devices
- set top boxes

Commercial Aerospace - Amphenol is a leading provider of high-performance interconnect systems and components to the commercial aerospace market. In addition to connector and interconnect assembly products, the Company also provides rigid and flexible printed circuits as well as high-technology cable management products. Our products are specifically designed to operate in the harsh environments of commercial aerospace while also providing substantial weight reduction, simplified installation and minimal maintenance. Sales into the commercial aerospace market represented approximately 5% of the Company's net sales in 2019 with sales into the following primary end applications:

- aircraft and airframe power distribution
- avionics
- controls and instrumentation
- engines
- in-flight entertainment
- in-flight internet connectivity
- lighting and control systems
- wire bundling and cable management

Industrial - Amphenol is a technology leader in the design, manufacture and supply of high-performance interconnect systems, sensors and antennas for a broad range of industrial applications. Amphenol's core competencies include application-specific industrial interconnect solutions utilizing integrated assemblies, including with both cable and flexible printed circuits, as well as high-power interconnects requiring advanced engineering and system integration. In particular, our innovative solutions facilitate the increasing demands of embedded computing and power distribution.

Sales into the industrial market represented approximately 20% of the Company's net sales in 2019 with sales into the following primary end applications:

- agriculture equipment
- alternative and traditional energy generation
- batteries and hybrid drive systems
- factory and machine tool automation
- heavy equipment
- instrumentation
- internet of things
- LED lighting
- marine
- medical equipment
- oil and gas
- power distribution
- rail mass transit
- smart manufacturing
- transportation

Information Technology and Data Communications - Amphenol is a global provider of interconnect solutions to designers, manufacturers and operators of internet-enabling systems. With our industry-leading high-speed, power and fiber optic technologies, together with superior simulation and testing capability and cost effectiveness, Amphenol is a market leader in interconnect development for the information technology ("IT") and datacom market. Whether industry standard or application-specific designs are required, Amphenol provides customers with products that enable performance at the leading edge of next-generation, high-speed, power and fiber optic technologies. Sales into the IT and datacom market represented approximately 19% of the Company's net sales in 2019 with sales into the following primary end applications:

- cloud computing and data centers
- gaming systems
- internet appliances
- networking equipment
- servers
- storage systems
- transmission
- web service providers

Military - Amphenol is a world leader in the design, manufacture and supply of high-performance interconnect systems for harsh environment military applications. Such products require superior performance and reliability under conditions of stress and in hostile environments such as vibration, pressure, humidity, nuclear radiation and rapid and severe temperature changes. Amphenol provides an unparalleled product breadth, from military specification connectors to customized high-speed board level interconnects; from flexible to rigid printed circuit boards; and from backplane systems to completely integrated assemblies. Amphenol is a technology leader, participating in major programs from the earliest inception across each phase of the production cycle. Sales into the military market represented approximately 12% of the Company's net sales in 2019 with sales into the following primary end applications:

- avionics
- communications
- engines
- ground vehicles and tanks
- homeland security
- naval
- ordnance and missile systems
- radar systems
- rotorcraft
- satellite and space programs
- unmanned aerial vehicles

Mobile Devices - Amphenol designs and manufactures an extensive range of interconnect products, antennas and electromechanical components found in a wide array of mobile computing devices. Amphenol's capability for high-volume production of these technically demanding, miniaturized products, combined with our speed of new product introduction, are critical drivers of the Company's long-term success in this market. Sales into the mobile devices market represented approximately 13% of the Company's net sales in 2019 with sales into the following primary end applications:

- consumer electronics
- mobile and smart phones, including accessories
- mobile computing devices, including laptops, tablets, ultrabooks and e-readers
- production-related products
- wearable and hearable devices

Mobile Networks - Amphenol is a leading global interconnect solutions provider to the mobile networks market and offers a wide product portfolio, including antennas, connectors and interconnect systems. The Company's products are used in current and next generation wireless communications standards, including in 5G networks. In addition, the Company works with service providers around the world to offer an array of antennas and installation-related site solution interconnect products. Sales into the mobile networks market represented approximately 8% of the Company's net sales in 2019 with sales into the following primary end applications:

- antenna systems
- base stations
- combiners, filters and amplifiers
- core network controllers
- distributed antenna systems (DAS)
- mobile switches
- radio links
- small cells
- wireless routers

## **Customers and Geographies**

The Company manufactures and sells a broad portfolio of products on a global basis to customers in various industries. Our customers include many of the leaders in their respective industries, and our relationships with them typically date back many years. We believe that our diversified customer base provides us an opportunity to leverage our skills and experience across markets and reduces our exposure to particular end markets. Additionally, we believe that the diversity of our customer base is an important strength of the Company.

There has been a trend on the part of customers to consolidate their lists of qualified suppliers to companies that have the ability to meet certain technical, quality, delivery and other standards while maintaining competitive prices. The Company has positioned its global resources to compete effectively in this environment. As an industry leader, the Company has established close working relationships with many of its customers on a global basis. These relationships allow the Company to better anticipate and respond to these customer needs when designing new products and new technical solutions. By working with customers in developing new products and technologies, the Company is able to identify and act on trends and leverage knowledge about next-generation technology across our portfolio of products. In addition, the Company has concentrated its efforts on service, procurement and manufacturing improvements designed to increase product quality and performance and lower product lead-time and cost. For a discussion of certain risks related to the Company's sales, refer to the subsection titled "Risks related to our end markets" included in Part I, Item 1A. *Risk Factors* herein.

The Company's products are sold to thousands of original equipment manufacturers ("OEMs") in numerous countries throughout the world. The Company's products are also sold to electronic manufacturing services ("EMS") companies, to original design manufacturers ("ODMs") and to service providers, including telecommunications network service providers and web service providers. No single customer accounted for 10% or more of the Company's net sales for the years ended December 31, 2019 and 2017. During the year ended December 31, 2018, aggregate sales to Apple Inc., including sales of products to EMS companies that the Company believes are manufacturing products on Apple's behalf, accounted for approximately 12% of our net sales.

The Company sells its products through its own global sales force, independent representatives and a global network of electronics distributors. The Company's sales to distributors represented approximately 15% of the Company's net sales in 2019. In addition to product design teams and collaborative initiatives with customers, the Company uses key account managers to manage customer relationships on a global basis such that it can bring to bear its total resources to meet the worldwide needs of its multinational customers.

#### Manufacturing

The Company is a global manufacturer employing advanced manufacturing processes including molding, stamping, plating, turning, CNC machining, extruding, die casting and assembly operations and proprietary process technology for specialty and coaxial cable production and sensor fabrication. Outsourcing of certain manufacturing processes is used when cost-effective. Substantially all of the Company's manufacturing facilities are certified to the ISO9000 series of quality standards, and many of the Company's manufacturing facilities are certified to other quality standards, including QS9000, ISO14000 and TS16949.

The Company's manufacturing facilities are generally vertically-integrated operations from the initial design stage through final design and manufacturing. The Company has an established manufacturing presence in more than 30 countries. Our global coverage positions us near many of our customers' locations and allows us to assist them in consolidating their supply base and lowering their production and logistics costs. In addition, the Company generally relies on local general management in every region, which we believe creates a strong degree of organizational stability and deeper understanding of local markets. We believe our balanced geographic distribution lowers our exposure to any particular geography. The Company designs, manufactures and assembles its products at facilities in the Americas, Europe, Asia, Australia and Africa. The Company believes that its global presence is an important competitive advantage, as it allows the Company to provide quality products on a timely and worldwide basis to its multinational customers.

The Company employs a global manufacturing strategy to ensure proximity and good service to customers, while also lowering production and logistics costs. The Company's strategy is to maintain strong cost controls in its manufacturing and assembly operations. The Company is continually evaluating and adjusting its expense levels and workforce to reflect current business conditions and maximize the return on capital investments. The Company sources its products on a worldwide basis. To better serve certain high-volume customers, the Company has established certain facilities near these major customers. The Company seeks to position its manufacturing and assembly facilities in order to serve local markets while coordinating as appropriate product design and manufacturing responsibility with the Company's other operations around the world. For a discussion of certain risks related to the Company's foreign operations, refer to the subsection titled "Risks related to our global operations" included in Part I, Item 1A. *Risk Factors* herein.

### **Research and Development**

The Company generally implements its product development strategy through product design teams and collaborative initiatives with customers, which often results in the Company obtaining approved vendor status for its customers' new products and programs. The Company focuses its research and development efforts primarily on those product areas that it believes have the potential for broad market applications and significant sales within a one- to three-year period. The Company seeks to have its products become widely accepted within the industry for similar applications and products manufactured by other potential customers, which the Company believes will provide additional sources of future revenue. By developing application specific products, the Company is able to decrease its exposure to standard products, which are more likely to experience greater pricing pressure. At the end of 2019, our research, development, and engineering efforts, which relate to the creation of new and improved products and processes, were supported by approximately 3,100 employees and were performed primarily by individual operating units focused on specific markets and product technologies.

## **Intellectual Property**

Patents and other proprietary rights are important to our business. We own a large portfolio of patents that principally relate to electrical, optical, electronic, antenna and sensor products. We also own a portfolio of trademarks and are a licensee of various patents and trademarks. Patents for individual products extend for varying periods according to the date of patent filing or grant and the legal term of patents in the various countries where patent

protection is obtained. Trademark rights may potentially extend for longer periods of time and are dependent upon the laws of various jurisdictions and the use of the trademarks.

We also rely upon trade secrets, manufacturing know-how, continuing technological innovations and licensing opportunities to maintain and improve our competitive position. We review third-party proprietary rights, including patents and patent applications, as available, in an effort to develop an effective intellectual property strategy, avoid infringement of third-party proprietary rights, identify licensing opportunities and monitor the intellectual property claims of others.

From time to time, the Company is involved in disputes with third parties regarding the Company's or such third party's intellectual property assets, particularly patents. While we consider our patents and trademarks to be valuable assets, we do not believe that our competitive position or our operations are dependent upon or would be materially impacted by the loss of any single patent or group of related patents, or by a third party's successful enforcement of its patents against us or any of our products. For a discussion of certain risks related to the Company's intellectual property, refer to the risk factor titled "The Company relies on patent and trade secret laws, copyright, trademark, confidentiality procedures, controls and contractual commitments to protect our intellectual property rights" in Part I, Item 1A. *Risk Factors* herein.

#### Raw Materials

The Company purchases a wide variety of raw materials for the manufacture of its products, including (i) precious metals such as gold, silver and palladium, (ii) aluminum, steel, copper, titanium and metal alloy products and (iii) plastic materials. The Company also purchases a wide variety of mechanical and electronic components for the manufacturing of its products. Such raw materials and components are generally available throughout the world and are purchased locally from a variety of suppliers. The Company is generally not dependent upon any one source for raw materials or components or, if one source is used, the Company attempts to protect itself through long-term supply agreements. The Company does not anticipate any difficulties in obtaining raw materials or components necessary for production. Information regarding our purchasing obligations related to commitments to purchase certain goods and services is disclosed in Note 14 of the Notes to the Consolidated Financial Statements. For a discussion of certain risks related to raw materials and components, refer to the risk factor titled "The Company has at times experienced difficulties in obtaining a consistent supply of materials at stable pricing levels" in Part I, Item 1A. *Risk Factors* herein.

## Competition

The Company encounters competition in substantially all areas of its business. The Company competes primarily on the basis of technology innovation, product quality and performance, price, customer service and delivery time. Primary competitors within the Interconnect Products and Assemblies segment include Carlisle, Commscope, Delphi, Esterline, Foxconn, Hirose, Huber & Suhner, ICT Luxshare, JAE, Johhon, JST, Molex, Radiall, Rosenberger, Sensata, TE Connectivity, Yazaki and 3M, among others. Primary competitors within the Cable Products and Solutions segment include Belden and Commscope, among others. In addition, the Company competes with a large number of smaller companies who compete in specific geographies, markets or products. For a discussion of certain risks related to competition, refer to the risk factor titled "The Company encounters competition in substantially all areas of its business" in Part I, Item 1A. *Risk Factors* herein.

## Backlog

The Company estimates that its backlog of unfilled firm orders as of December 31, 2019 was approximately \$1.978 billion compared with backlog of approximately \$1.720 billion as of December 31, 2018. Orders typically fluctuate from quarter to quarter based on customer demand and general business conditions. Unfilled orders may generally be cancelled prior to shipment of goods. It is expected that all or a substantial portion of the backlog will be filled within the next 12 months. Significant elements of the Company's business, such as sales to the communications-related markets (including wireless communications, information technology and data communications and broadband communications) and sales to distributors, generally have short lead times. Therefore, backlog may not be indicative of future demand.

## **Employees**

As of December 31, 2019, the Company had approximately 74,000 employees worldwide. The Company believes that it has a good relationship with its unionized and non-unionized employees.

#### **Environmental Matters**

Certain operations of the Company are subject to environmental laws and regulations which govern the discharge of pollutants into the air and water, as well as the handling and disposal of solid and hazardous wastes. The Company believes that its operations are currently in substantial compliance with applicable environmental laws and regulations and that the costs of continuing compliance will not have a material adverse effect on the Company's financial condition, results of operations or cash flows. For a discussion of certain risks related to environmental matters, refer to the risk factor titled "The Company is subject to environmental laws and regulations that could adversely affect its business" in Part I, Item 1A. *Risk Factors* herein.

#### **Available Information**

The Company's annual report on Form 10-K and all of the Company's other filings with the U.S. Securities and Exchange Commission ("SEC"), such as quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports, are available to view, free of charge, on the Company's website, www.amphenol.com, as soon as reasonably practicable after they are filed electronically with, or furnished to, the SEC. Copies are also available without charge, from Amphenol Corporation, Investor Relations, 358 Hall Avenue, Wallingford, CT 06492.

#### Item 1A. Risk Factors

Investors should carefully consider the risks described below and all other information in this annual report on Form 10-K. The risks and uncertainties described below are not the only ones facing the Company. Additional risks and uncertainties not presently known to the Company or that it currently deems immaterial may also impair the Company's business, operations, liquidity and financial condition.

If actions taken by management to limit, monitor or control enterprise risk exposures are not successful, the Company's business and consolidated financial statements could be materially adversely affected. In such case, the trading price of the Company's common stock and debt securities could decline and investors may lose all or part of their investment.

## Risks related to our global operations

Non-U.S. markets form a substantial portion of the Company's business and as a result, the Company is more exposed to political, economic, military and other risks in countries outside the United States.

During 2019, non-U.S. markets constituted approximately 69% of the Company's net sales, with China constituting approximately 28% of the Company's net sales. The Company employs approximately 90% of its workforce outside the United States. The Company's customers are located throughout the world and the Company has many manufacturing, administrative and sales facilities outside the United States. As a result, our financial results and our operations, including our ability to manufacture, assemble and test, design, develop or sell products, and the demand for our products, may be adversely affected by a number of global and regional factors outside of our control. Because the Company has extensive non-U.S. operations as well as significant cash and cash investments held at institutions located outside of the United States, it is exposed to additional risks that could have a material adverse effect on the Company's business, financial condition, results of operations or cash flows, including:

- instability in political or economic conditions, including but not limited to inflation, recession or slowing growth, changes in tariff and trade barriers and import and export licensing requirements, our ability to hire and maintain qualified staff in these regions, foreign currency exchange restrictions and devaluations, restrictive governmental controls on the movement and repatriation of earnings and capital, and actual or anticipated military or political conflicts, particularly in emerging markets;
- intergovernmental conflicts or actions, including but not limited to armed conflict, trade wars and acts of terrorism or war; and
- interruptions to the Company's business with its largest customers, distributors and suppliers resulting from but not limited to, strikes, financial instabilities, computer malfunctions or cybersecurity incidents, inventory excesses, natural disasters or other disasters such as fires, floods, earthquakes, hurricanes or explosions.

International trade disputes may result in increased tariffs, trade barriers and other protectionist measures that could increase our manufacturing costs, make our products less competitive, reduce consumer demand or impede or slow the

movement of our goods across borders. Increasing protectionism and economic nationalism may lead to further changes in trade policy, domestic sourcing initiatives, or other formal and informal measures that could make it more difficult to sell our products in some markets.

Changes in general economic conditions, geopolitical conditions, U.S. trade policies and other factors beyond the Company's control may adversely impact our business and operating results.

The Company's operations and performance depend significantly on global, regional and U.S. economic and geopolitical conditions. In recent years, there has been discussion and dialogue regarding potential significant changes to U.S. trade policies, legislation, treaties and tariffs, in particular trade policies and tariffs affecting China. Some of these trade policies have been or are in the process of being renegotiated, including the U.S.'s trading relationship with China. Changes to current policies by the U.S. or other governments could affect our business, including potentially through increased import tariffs and other influences on U.S. trade relations with China and other countries. The imposition of additional tariffs or other trade barriers could increase our costs in certain markets, and may cause our customers to find alternative sourcing. In addition, other countries may change their own policies on business and foreign investment in companies in their respective countries. Additionally, it is possible that U.S. policy changes and uncertainty about such changes could increase market volatility and currency exchange rate fluctuations. Market volatility and currency exchange rate fluctuations could have a material adverse effect on our business, financial condition, results of operations or cash flows. As a result of these dynamics, we cannot predict the impact to our business of any future changes to the U.S.'s trading relationships.

In addition to changes in U.S. trade policy, a number of other economic and geopolitical factors both in the United States and abroad could have a material adverse effect on the Company's business, financial condition, results of operations or cash flows, such as:

- a global or regional economic slowdown in any of the Company's market segments;
- postponement of spending, in response to tighter credit, financial market volatility and other factors;
- effects of significant changes in economic, monetary and fiscal policies in the United States and abroad including significant income tax changes, currency fluctuations and inflationary pressures;
- rapid material escalation of the cost of regulatory compliance and litigation;
- changes in government policies and regulations affecting the Company or its significant customers or suppliers;
- employment regulations and local labor conditions, including increases in employment costs, particularly in low-cost regions in which the Company currently operates;
- industrial policies in various countries that favor domestic industries over multinationals or that restrict foreign companies altogether;
- difficulties protecting intellectual property;
- longer payment cycles;
- credit risks and other challenges in collecting accounts receivable;
- changes in assumptions, such as discount rates, along with lower than expected investment returns and performance related to the Company's benefit plans;
- the impact of each of the foregoing on outsourcing and procurement arrangements; and
- continuing uncertainty regarding social, political, immigration and tax and trade policies in the United States and abroad, including as a result of the United Kingdom's vote to withdraw from the European Union, otherwise known as "Brexit".

## We have significant international sales and operations and face risks related to health epidemics such as the coronavirus.

Any outbreaks of contagious diseases and other adverse public health developments in countries where we operate could have a material and adverse effect on our business, financial condition and results of operations. For example, the recent outbreak of a novel strain of coronavirus first identified in Wuhan, Hubei Province, China, has resulted in significant governmental measures being implemented to control the spread of the virus, including restrictions on manufacturing and the movement of employees in many regions of the country. This has affected our manufacturing facilities in China as well as the facilities of our suppliers, customers and our customers' contract manufacturers. The extent to which the coronavirus will impact our business and our financial results will depend on future developments, which are highly uncertain and cannot be predicted. In addition, the coronavirus may result in a widespread health crisis that could adversely affect the economies and financial markets of many countries, resulting in an economic downturn

that could affect demand for our end customers' products. As a result, at the time of this filing, it is impossible to predict the overall impact of the coronavirus on our business and financial results.

Our international operations require us to comply with anti-corruption laws and regulations of the U.S. government and various foreign jurisdictions and our business reputation and financial results may be impaired by improper conduct by any of our employees, customers, suppliers, distributors or any other business partners.

Doing business on a worldwide basis requires us and our subsidiaries to comply with the laws and regulations of the U.S. government and various foreign jurisdictions, and our failure to comply with these rules and regulations may expose us to significant liabilities. These laws and regulations may apply to companies, individual directors, officers, employees, subcontractors and agents, and may restrict our operations, trade practices, investment decisions and partnering activities. In particular, our international operations are subject to U.S. and foreign anti-corruption laws and regulations, such as the Foreign Corrupt Practices Act of 1977, as amended ("FCPA"). The FCPA prohibits U.S. companies and their officers, directors, employees and agents acting on their behalf from corruptly offering, promising, authorizing or providing anything of value to foreign officials for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. The FCPA also requires companies to make and keep books, records and accounts that accurately and fairly reflect transactions and dispositions of assets and to maintain a system of adequate internal accounting controls. As part of our business, we deal with state-owned business enterprises, the employees and representatives of which may be considered foreign officials for purposes of the FCPA. In addition, some of the foreign locations in which we operate lack a developed legal system and have elevated levels of corruption. As a result of the above activities, we are exposed to the risk of violating anti-corruption laws.

We have established policies and procedures designed to assist us and our personnel in complying with applicable U.S. and international laws and regulations. However, there can be no assurance that these policies will be effective in preventing our directors, officers, employees, subcontractors and agents from taking actions that violate these legal requirements. Violations of these legal requirements could subject us to criminal fines and imprisonment, civil penalties, disgorgement of profits, injunctions, debarment from government contracts and other remedial measures. In addition, any actual or alleged violations could disrupt our operations, cause reputational harm, involve significant management distraction and result in a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

## The Company's results have at times been negatively affected by foreign currency exchange rates.

The Company conducts business in many foreign currencies through its worldwide operations, and as a result is subject to foreign exchange exposure due to changes in exchange rates of the various currencies including possible currency devaluations. Changes in exchange rates can positively or negatively affect the Company's sales, operating margins and equity. The Company manages currency exposure risk in a number of ways, including producing its products in the same country or region in which the products are sold (thereby generating revenues and incurring expenses in the same currency), cost reduction and pricing actions, working capital management and hedging contracts. However, there can be no assurance that these actions will be fully effective in managing currency risk, including in the event of a significant and sudden decline in the value of any of the foreign currencies of the Company's worldwide operations, which could have an adverse effect on the Company's business, financial condition and results of operations.

## The Company has at times experienced difficulties in obtaining a consistent supply of materials at stable pricing levels.

The Company uses basic materials like aluminum, steel, copper, titanium, metal alloys, gold, silver, palladium and plastic resins in its manufacturing processes as well as a variety of components and relies on third party suppliers to secure these materials. Volatility in the prices of such materials and availability of supply may have a substantial impact on the price the Company pays for such materials. In addition, the Company may not be able to pass along increased raw material or component prices to its customers. Consequently, our results of operations and financial condition may be adversely affected.

In limited instances we depend on a single source of supply or participate in commodity markets that may be served by a limited number of suppliers. Delays in obtaining supplies may result from a number of factors affecting our suppliers, and any delay could impair our ability to deliver products to our customers and, accordingly, could have an adverse effect on our business, results of operations and financial condition.

#### Risks related to our end markets

The Company is dependent on the communications industry, including information technology and data communications, wireless communications and broadband communications.

Approximately 44% of the Company's 2019 net sales came from sales to the communications industry, including information technology and data communication, wireless communications and broadband communications, with 13% of the Company's 2019 net sales coming from sales to the mobile devices market. Demand for these products is subject to rapid technological change. These markets are dominated by several large manufacturers and operators who regularly exert significant pressure on their suppliers, including the Company. Furthermore, there has been a trend on the part of customers to consolidate their lists of qualified suppliers to companies that have the ability to meet certain technical, quality, delivery and other standards while maintaining competitive prices. There can be no assurance that the Company will be able to meet these standards or maintain competitive pricing and therefore continue to compete successfully in the communications industry. The Company's failure to do so could have a material adverse effect on the Company's business, financial condition and results of operations.

Approximately 4% and 8% of the Company's 2019 net sales came from sales to the broadband communications and mobile networks markets, respectively. Demand for the Company's products in these markets depends primarily on capital spending by operators for constructing, rebuilding or upgrading their systems. The amount of this capital spending and, therefore, the Company's sales and profitability will be affected by a variety of factors, including general economic conditions, consolidation within the communications industry, the financial condition of operators and their access to financing, competition, technological developments, new legislation and regulation of operators. There can be no assurance that existing levels of capital spending will continue or that spending will not decrease.

#### Changes in defense expenditures may reduce the Company's sales.

Approximately 12% of the Company's 2019 net sales came from sales to the military market. The Company participates in a broad spectrum of defense programs. The Company's military sales are generally to contractors and subcontractors of the U.S. or foreign governments or to distributors that in turn sell to the contractors and subcontractors. Accordingly, the Company's sales are affected by changes in the defense budgets of the U.S. and foreign governments. A significant decline in U.S. or foreign government defense expenditures could have an adverse effect on the Company's business, financial condition and results of operations. U.S. and foreign government expenditures are also subject to political and budgetary fluctuations and constraints, which may result in significant unexpected changes in levels of demand for our products.

## The Company is dependent on the acceptance of new product introductions for continued revenue growth.

The Company's long-term results of operations depend substantially upon its ability to continue to conceive, design, manufacture and market new products and upon continuing market acceptance of its existing and future product lines. In the ordinary course of business, the Company continually develops or creates new product line concepts. If the Company fails, or is significantly delayed, in introducing new product line concepts or if the Company's new products are not met with market acceptance, its business, financial condition and results of operations may be adversely affected.

#### The Company encounters competition in substantially all areas of its business.

The Company competes primarily on the basis of technology innovation, product quality and performance, price, customer service and delivery time. Competitors include large, diversified companies, some of which have greater assets and financial resources than the Company, as well as medium- to small-sized companies. In addition, rapid technological changes occurring in the communications industry could also lead to the entry of new competitors of all sizes against whom we may not be able to successfully compete. There can be no assurance that the Company will be able to compete successfully against existing or new competition, and the inability to do so may result in price reductions, reduced margins, or loss of market share, any of which could have an adverse effect on the Company's business, financial condition and results of operations.

#### Risks related to acquisitions

The Company has at times experienced difficulties and unanticipated expenses in connection with purchasing and integrating newly acquired businesses.

The Company has completed a number of acquisitions in recent years, including nine in 2019. The Company anticipates that it will continue to pursue acquisition opportunities as part of its growth strategy. From time to time, the Company experiences difficulty and unanticipated expenses associated with purchasing and integrating acquisitions, and acquisitions do not always perform as expected. The Company has also experienced challenges at times following the acquisition of a new company or business, including but not limited to: managing the operations, manufacturing facilities and technology; maintaining and increasing the customer base; or retaining key employees, suppliers and distributors. In some cases, the Company may pursue indemnification claims against the seller or sellers of an acquired business for pre-acquisition liabilities, breaches of representations, warranties or covenants or for other reasons provided for in the relevant acquisition agreement. To the extent we pursue indemnification claims against the seller or sellers of any acquired business, such seller or sellers may successfully contest such claims, such seller or sellers may not have the financial capacity to compensate us for such claims or such claims may otherwise be difficult or impractical to enforce. Although we expect to realize strategic, operational and financial benefits as a result of past or future acquisitions and investments, we cannot predict or guarantee whether and to what extent anticipated cost savings, benefits and growth prospects will be achieved.

## The Company may in the future incur goodwill and other intangible asset impairment charges.

At December 31, 2019, the total assets of the Company were \$10,815.5 million, which included \$4,867.1 million of goodwill (the excess of fair value of consideration paid over the fair value of net identifiable assets of businesses acquired) and \$442.0 million of other intangible assets, net. The Company performs annual evaluations (or more frequently, if necessary) for the potential impairment of the carrying value of goodwill and other intangible assets. Such evaluations to date have not resulted in the need to recognize an impairment. However, if the financial performance of the Company's businesses were to decline significantly, the Company could incur a material non-cash charge to its income statement for the impairment of goodwill and other intangible assets. Furthermore, we cannot provide assurance that impairment charges in the future will not be required if the expected cash flow estimates as projected by management do not occur, especially if an economic recession occurs and continues for a lengthy period or becomes severe, or if acquisitions and investments made by the Company fail to achieve expected returns.

#### Risks related to our liquidity and capital resources

The Company's credit agreements contain certain covenants, which if breached, could have a material adverse effect on the Company.

The Credit Agreement, as amended and restated effective January 15, 2019, among the Company, certain subsidiaries of the Company and a syndicate of financial institutions (the "Revolving Credit Facility"), which also backstops the Company's U.S. commercial paper program ("U.S. Commercial Paper Program") and Euro commercial paper program, contains financial and other covenants, such as a limit on the ratio of debt to earnings before interest, taxes, depreciation and amortization, a limit on priority indebtedness and limits on incurrence of liens. Although the Company believes none of these covenants is presently restrictive to the Company's operations, the ability to meet the financial covenants can be affected by events beyond the Company's control, and the Company cannot provide assurance that it will meet those tests. A breach of any of these covenants could result in a default under the Revolving Credit Facility. Upon the occurrence of an event of default under any of the Company's credit facilities, the lenders could terminate all commitments to extend further credit and elect to declare amounts outstanding thereunder to be immediately due and payable which could result in the acceleration of certain of the Company's other indebtedness and the Company not having sufficient assets to repay the Revolving Credit Facility and such other indebtedness. As of December 31, 2019, the Company had outstanding borrowings under the Revolving Credit Facility, U.S. Commercial Paper Program and Euro commercial paper program of nil, \$160.0 million and \$235.5 million, respectively.

The Company relies on the capital markets, and its inability to access those markets on favorable terms could adversely affect the Company's results.

The Company has used the capital markets to invest in its business and make strategic acquisitions. If general economic and capital market conditions deteriorate significantly, it could impact the Company's ability to access the

capital markets. While the Company has not recently encountered any financing difficulties, the capital and credit markets have experienced significant volatility in the past. Market conditions could make it more difficult to access capital to finance capital investments, acquisitions and other initiatives including dividends and share repurchases. As such, this could have a material adverse effect on the Company's business, financial condition, results of operations or cash flows. In addition, while the Company has not encountered any such issues to date, if the credit rating agencies that rate the Company's debt were to downgrade the Company's credit rating in conjunction with a deterioration of the Company's performance, it would likely increase the Company's cost of capital and make it more difficult for the Company to obtain new financing and access capital markets, which could also have a material adverse effect on the Company's business, financial condition, results of operations or cash flows.

#### The Company's results may be negatively affected by changing interest rates.

The Company is subject to interest rate volatility with regard to existing and future issuances of debt. The Company monitors its mix of fixed-rate and variable-rate debt, as well as its mix of short-term and long-term debt. As of December 31, 2019, approximately \$400 million, or 11%, of the Company's outstanding borrowings were subject to floating interest rates and were primarily comprised of commercial paper borrowings. A 10% change in the London Interbank Offered Rate ("LIBOR") or floating interest rates at December 31, 2019 would not have a material effect on the Company's interest expense. The Company does not expect changes in interest rates to have a material effect on income or cash flows in 2020, although there can be no assurance that interest rates will not change significantly.

In 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced its intent to phase out LIBOR by the end of 2021. If LIBOR ceases to exist or if the methods of calculating LIBOR change from their current form, interest rates on, and the market price for, our current or future indebtedness may be adversely affected. Refer to Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations* for further discussion and details on this development.

As of December 31, 2019, approximately 89% of the Company's outstanding borrowings were based on fixed rates and primarily related to the following unsecured Senior Notes:

Principal Amount		Fixed Interest	
(in	millions)	Rate	Maturity
\$ 400.0		2.20 %	April 2020
	227.7	3.125 %	September 2021
	295.0	4.00 %	February 2022
	350.0	3.20 %	April 2024
	500.0	4.35 %	June 2029
	900.0	2.80 %	February 2030
€	500.0	2.00 %	October 2028 (Euro Notes)

## Legal and regulatory risks

## Our business and financial results may be adversely affected by government contracting risks.

We are subject to various laws and regulations applicable to parties doing business with the U.S. government, including laws and regulations governing performance of U.S. government contracts, the use and treatment of U.S. government furnished property and the nature of materials used in our products. We may be unilaterally suspended or barred from conducting business with the U.S. government or its suppliers (both directly and indirectly), or become subject to fines or other sanctions if we are found to have violated such laws or regulations. As a result of the need to comply with these laws and regulations, we are subject to increased risks of governmental investigations, civil fraud actions, criminal prosecutions, whistleblower lawsuits and other enforcement actions. For example, in August 2018, we received a subpoena from the U.S. Department of Defense, Office of the Inspector General, requesting documents pertaining to certain products manufactured by the Company's Military and Aerospace Group that are purchased or used by the U.S. government, as noted herein in Item 3. *Legal Proceedings*. The laws and regulations to which we are subject include, but are not limited to, Export Administration Regulations, the Federal Acquisition Regulation, the False Claims Act, International Traffic in Arms Regulations and regulations from the Bureau of Alcohol, Tobacco and Firearms and the FCPA. Failure to comply with applicable requirements also could harm our reputation and our ability to compete for future government contracts or sell commercial equivalent products. Any of these outcomes could have a material adverse effect on our business, results of operations and financial condition.

In addition, U.S. government contracts are subject to modification, curtailment or termination by the U.S. government without prior written notice, either for convenience or for default as a result of our failure to perform under the applicable contract. If terminated by the U.S. government as a result of our default, we could be liable for additional costs the U.S. government incurs in acquiring undelivered goods or services from another source and any other damages it suffers. We are also prohibited from assigning prime U.S. government contracts without the prior consent of the U.S. government contracting officer. Furthermore, the U.S. government periodically audits our governmental contract costs, which could result in fines, penalties or adjustment of costs and prices under the contracts. Any such fines, penalties or payment adjustments resulting from such audits could adversely affect our reputation, business, financial condition, results of operations or cash flows.

#### The Company is subject to governmental export and import controls.

Certain of our products, including purchased components of such products, are subject to export controls and may be exported only with the required export license or through an export license exception. In addition, we are required to comply with certain U.S. and foreign sanctions and embargoes. These laws and regulations are complex, may change frequently and with limited notice, have generally become more stringent over time and have intensified under the current U.S. administration, especially in light of recent trade tensions with China. For example, in 2019, the U.S. government added certain of the Company's customers based in China to its "Entity List", which imposes additional restrictions on sales to such customers. Although such restrictions did not have a material adverse effect on the Company's business, financial condition and results of operations, the U.S. government has the power to place even greater restrictions on these and other customers, and such restrictions could prohibit the Company from selling products to such customers. If we were to fail to comply with these restrictions or applicable export licensing, customs regulations, economic sanctions and other laws, we could be subject to substantial civil and criminal penalties, including fines for us, the incarceration of responsible employees and managers, and the possible loss of export or import privileges. In addition, if our distributors fail to obtain appropriate import, export or re-export licenses or permits, we may also be adversely affected through reputational harm and penalties. Obtaining the necessary export license for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities.

Cybersecurity incidents on our information technology systems could disrupt business operations, resulting in adverse impacts to our reputation and operating results and potentially leading to litigation and/or governmental investigations.

Cybersecurity threats continue to expand and evolve globally, making it difficult to detect and prevent such threats from impacting the Company. The Company has been a target of various cybersecurity attacks, including but not limited to ransomware attacks, but the impact of such attacks has not been material. Cybersecurity threats to the Company could lead to unauthorized access to the Company's information technology systems, products, customers, suppliers and third party service providers. Cybersecurity incidents could potentially result in the disruption of our business operations and the misappropriation, destruction or corruption of critical data and confidential or proprietary technological information. Cybersecurity incidents could also result from unauthorized parties gaining access to our systems or information through fraud or other means of deceiving our employees, suppliers or third party service providers. Despite the Company's implementation of preventative security measures to prevent, detect, address and mitigate these threats, our infrastructure may still be susceptible to disruptions from cybersecurity incidents, ransomware attacks, security breaches, computer viruses, outages, systems failures or other catastrophic events, any of which could include reputational damage, loss of our intellectual property, litigation with third parties and/or governmental investigations, among other things, which could have a material adverse effect on our business, financial condition and results of operations.

The regulatory environment surrounding information security and privacy is increasingly demanding, with frequent imposition of new and changing requirements. For example, the European Union's General Data Protection Regulation ("GDPR"), which became effective in May 2018, and the state of California's California Consumer Privacy Act ("CCPA"), which became effective January 1, 2020, impose significant new requirements and additional obligations for companies on how they collect, process and transfer personal data by enhancing consumer privacy rights and imposing significant fines for non-compliance. The potential for fines and other related costs in the event of a breach of or non-compliance with the GDPR, CCPA or other existing or proposed information security or privacy laws and requirements may have an adverse effect on our financial results.

## Changes in fiscal and tax policies, audits and examinations by taxing authorities could impact the Company's results.

The Company is subject to taxes in the U.S. and numerous foreign jurisdictions. The Company is also subject to tax examinations by various tax authorities and in addition, new examinations could be initiated by tax authorities. As the Company has operations in jurisdictions throughout the world, the risk of tax examinations will continue to occur. The Company's financial condition, results of operations or cash flows may be materially impacted by the results of these tax examinations.

Any future changes in tax laws, regulations, accounting standards for income taxes and/or other tax guidance, including related interpretations, could materially impact the Company's current, non-current and deferred tax assets and liabilities, and consequently, our financial condition, results of operations or cash flows.

# The Company relies on patent and trade secret laws, copyright, trademark, confidentiality procedures, controls and contractual commitments to protect our intellectual property rights.

We rely on patent and trade secret laws, copyright, trademark, confidentiality procedures, controls and contractual commitments to protect our intellectual property rights. Despite our efforts, these protections may be limited and we may encounter difficulties in protecting our intellectual property rights, particularly in certain countries outside the U.S. We cannot provide assurance that the patents that we hold or may obtain will provide meaningful protection against our competitors. Changes in national or international laws concerning intellectual property may affect our ability to prevent or address the misappropriation of, or the unauthorized use of, our intellectual property, potentially resulting in loss of market share. Litigation may be necessary to enforce our intellectual property rights. Litigation is inherently uncertain and outcomes are often unpredictable. If we cannot protect our intellectual property rights against unauthorized copying or use, or other misappropriation, we may not remain competitive.

#### The Company is subject to customer claims, litigation and other regulatory or legal proceedings.

The Company is currently engaged in, or subject to, various customer claims, litigation and other regulatory and legal matters and may be subject to additional claims, litigation and other regulatory or legal proceedings in the future. Such matters expose the Company to risks that could be material, including but not limited to, risks related to employment disputes, tax controversies, government investigations, intellectual property infringement, compliance with environmental laws, unfair sales practices, product safety and liability, and product warranty and other contract-related claims. These matters may subject the Company to lawsuits, product recalls, government investigations and criminal liability, including claims for compensatory, punitive or consequential damages, and could result in disruptions to our business and significant legal expenses. These matters could also damage our reputation, harm our relationships with customers or negatively affect product demand. While the Company does maintain certain insurance coverages that may mitigate losses associated with some of these types of claims and proceedings, the policies may not respond in all cases and the amount of insurance coverage may not be adequate to cover the total claims and liabilities. Any current or future substantial liabilities or regulatory actions could have a material adverse effect on our business, financial condition, cash flows and reputation.

## The Company is subject to environmental laws and regulations that could adversely affect its business.

The Company operates in both the United States and various foreign jurisdictions, and we must comply with locally enacted laws and regulations addressing health, safety and environmental matters in such jurisdictions in which we manufacture and/or sell our products. Certain operations of the Company are subject to locally enacted environmental laws and regulations which govern the discharge of pollutants into the air and water, as well as the handling and disposal of solid and hazardous wastes. While the Company believes that its operations are currently in substantial compliance with applicable environmental laws and regulations, the Company and its operations may be subject to liabilities, regardless of fault, for investigative and/or remediation efforts on such matters that may arise at any of the Company's former or current properties, either owned or leased. Such liabilities could result from the use of hazardous materials in production, the disposal of products, damages associated with the use of any of our products or other related matters. We cannot be certain as to the potential impact of any changes to environmental conditions or environmental policies that may arise at any of our jurisdictions. Our failure to comply with these local environmental laws and regulations could result in fines or other punitive damages and/or modifications to our production processes as well as subject us to reputational harm, any of which could adversely impact our financial position, results of operations, or cash flows.

#### Item 1B. Unresolved Staff Comments

None.

## **Item 2. Properties**

The Company's fixed assets include plants and warehouses and a substantial quantity of machinery and equipment, most of which is general purpose machinery and equipment using tools and fixtures and in many instances having automatic control features and special adaptations. The Company's plants, warehouses and machinery and equipment are generally in good operating condition, are reasonably maintained and substantially all of its facilities are in regular use. The Company considers the present level of fixed assets along with planned capital expenditures as suitable and adequate for operations in the current business environment. At December 31, 2019, the Company operated a total of approximately 475 plants, warehouses and offices of which (a) the locations in the U.S. had approximately 4.2 million square feet, of which approximately 1.9 million square feet were leased; (b) the locations outside the U.S. had approximately 17.5 million square feet, of which approximately 13.3 million square feet were leased; and (c) the square footage by segment was approximately 20.4 million square feet and approximately 1.3 million square feet for the Interconnect Products and Assemblies segment and the Cable Products and Solutions segment, respectively.

The Company believes that its facilities are suitable and adequate for the business conducted therein and are being appropriately utilized for their intended purposes. Utilization of the facilities varies based on demand for the products. The Company continuously reviews its anticipated requirements for facilities and, based on that review, may from time to time acquire or lease additional facilities and/or dispose of existing facilities.

#### **Item 3. Legal Proceedings**

The Company has been named as a defendant in several legal actions arising from normal business activities. Although the potential liability with respect to certain of such legal actions cannot be reasonably estimated, none of such matters is expected to have a material adverse effect on the Company's financial condition, results of operations or cash flows. Refer to "Risk Factors" in Part I, Item 1A herein for additional information regarding legal risks and uncertainties.

In August 2018, the Company received a subpoena from the U.S. Department of Defense, Office of the Inspector General, requesting documents pertaining to certain products manufactured by the Company's Military and Aerospace Group that are purchased or used by the U.S. government. The Company is cooperating with the request. The Company is currently unable to estimate the timing or outcome of the matter.

## Item 4. Mine Safety Disclosures

Not applicable.

#### **PART II**

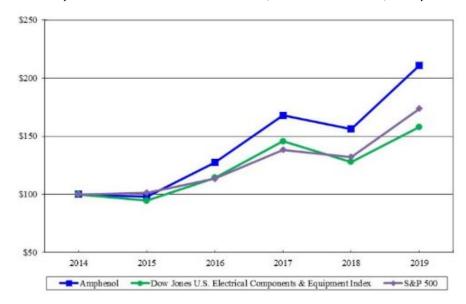
#### Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

#### **Market Information**

The Company effected the initial public offering of its Class A Common Stock ("Common Stock") in November 1991. The Company's Common Stock has been listed on the New York Stock Exchange since that time under the ticker symbol "APH". As of January 31, 2020, there were 35 holders of record of the Company's Common Stock. A significant number of outstanding shares of Common Stock are registered in the name of only one holder, which is a nominee of The Depository Trust Company, a securities depository for banks and brokerage firms. The Company believes that there are a significant number of beneficial owners of its Common Stock.

## Stock Performance Graph

The following graph compares the cumulative total shareholder return of Amphenol over a period of five years ending December 31, 2019 with the performance of the Standard & Poor's 500 ("S&P 500") Stock Index and the Dow Jones U.S. Electrical Components & Equipment Index. This graph assumes that \$100 was invested in the Common Stock of Amphenol and each index on December 31, 2014, reflects reinvested dividends and is weighted on a market capitalization basis at the time of each reported data point. Each reported data point below represents the last trading day of each calendar year. The comparisons in the graph below are based upon historical data and are not indicative of, nor intended to forecast, future performance.



#### Dividends

Contingent upon declaration by the Board of Directors, the Company generally pays a quarterly dividend on shares of its Common Stock. The following table sets forth the dividends declared per common share for each quarter of 2019 and 2018:

	 2019	2018
First Quarter	\$ 0.23	\$ 0.19
Second Quarter	0.23	0.23
Third Quarter	0.25	0.23
Fourth Quarter	0.25	0.23
Total	\$ 0.96	\$ 0.88

Dividends declared and paid for the years ended December 31, 2019 and 2018 (in millions) were as follows:

	2019	2018
Dividends declared	\$ 285.3	\$ 264.3
Dividends paid (including those declared in the prior year)	279.5	253.7

The Company's Revolving Credit Facility contains financial covenants and restrictions, some of which may limit the Company's ability to pay dividends, and any future indebtedness that the Company may incur could limit its ability to pay dividends.

## **Equity Compensation Plan Information**

The following table summarizes the Company's equity compensation plan information as of December 31, 2019:

	Equity Co	Equity Compensation Plan Information						
	Number of securities to be issued upon exercise of outstanding options,	Weighted average exercise price of outstanding options,	Number of securities remaining available					
Plan category	warrants and rights	warrants and rights	for future issuance					
Equity compensation plans approved by security holders	35,687,722	\$ 67.71	23,676,326					
Equity compensation plans not approved by security holders	_	_	_					
Total	35,687,722	\$ 67.71	23,676,326					

## Repurchase of Equity Securities

In April 2018, the Company's Board of Directors authorized a stock repurchase program under which the Company may purchase up to \$2.0 billion of the Company's Common Stock during the three-year period ending April 24, 2021 (the "2018 Stock Repurchase Program") in accordance with the requirements of Rule 10b-18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). During the year ended December 31, 2019, the Company repurchased 6.5 million shares of its Common Stock for \$601.7 million under the 2018 Stock Repurchase Program. Of the total repurchases in 2019, 5.5 million shares, or \$514.1 million, have been retired by the Company; the remaining 1.0 million shares, or \$87.6 million, were retained in Treasury stock at time of repurchase. From January 1, 2020 through January 31, 2020, the Company repurchased 0.3 million additional shares of Common Stock for \$29.0 million, leaving \$816.1 million available to purchase under the 2018 Stock Repurchase Program. The price and timing of any future purchases under the 2018 Stock Repurchase Program will depend on factors such as levels of cash generation from operations, the volume of stock option exercises by employees, cash requirements for acquisitions, dividends, economic and market conditions and stock price.

The table below reflects the Company's stock repurchases for the year ended December 31, 2019:

(dollars in millions, except price per share)  Period	Total Number Average of Shares Price Paid Purchased per Share		Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value of Shares that May Yet be Purchased Under the Plans or Programs		
First Quarter - 2019	1,773,423	\$	90.24	1,773,423	\$	1,286.7
Second Quarter - 2019	2,642,694		94.09	2,642,694		1,038.1
Third Quarter - 2019	1,695,800		88.43	1,695,800		888.1
Fourth Quarter - 2019:						
October 1 to October 31, 2019	_		_	_		888.1
November 1 to November 30, 2019	146,100		102.57	146,100		873.1
December 1 to December 31, 2019	272,269		103.04	272,269		845.1
	418,369		102.88	418,369		845.1
Total - 2019	6,530,286	\$	92.14	6,530,286	\$	845.1

#### Item 6. Selected Financial Data

The following table presents selected consolidated financial data that is derived from the Company's audited Consolidated Financial Statements and that should be read in conjunction with our "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Consolidated Financial Statements and accompanying notes included herein. The Company's acquisitions during the five-year period below may affect the comparability of results. Our consolidated financial information may not be indicative of our future performance.

(dollars and shares		2010		2010		2017		2017		2015
in millions, except per share data)	_	2019		2018	_	2017	_	2016	_	2015
Operations										
Net sales	\$	8,225.4	\$	8,202.0	\$	7,011.3	\$	6,286.4	\$	5,568.7
Net income attributable to Amphenol Corporation		1,155.0 (	1)	1,205.0	2)	650.5 <sup>(3</sup>	3)	822.9	4)	763.5 <sup>(5)</sup>
Net income per common share—Diluted		3.75 (	1)	3.85	2)	2.06	3)	2.61 (	4)	2.41 (5)
Financial Condition										
Cash, cash equivalents and short-term investments	\$	908.6	\$	1,291.7	\$	1,753.7	\$	1,173.2	\$	1,760.4
Working capital		2,078.5		2,120.3		3,076.6		1,956.0		2,841.6
Total assets		10,815.5		10,044.9		10,003.9		8,498.7		7,458.4
Long-term debt, including current portion		3,606.7		3,570.7		3,542.6		3,010.7		2,813.5
Shareholders' equity attributable to										
Amphenol Corporation		4,530.3		4,017.0		3,989.8		3,674.9		3,238.5
Weighted average shares outstanding—Diluted		307.9		312.6		316.5		315.2		316.5
Cash dividends declared per share	\$	0.96	\$	0.88	\$	0.70	\$	0.58	\$	0.53

- (1) Includes (a) excess tax benefits related to stock-based compensation of \$38.1 resulting from stock option exercises, partially offset by (b) acquisition-related expenses of \$25.4 (\$21.0 after-tax) comprised of the amortization related to the value associated with acquired backlog from two acquisitions, along with external transaction costs and (c) refinancing-related costs of \$14.3 (\$12.5 after-tax) associated with the early extinguishment of debt. These items had the aggregate effect of increasing Net income attributable to Amphenol Corporation and Net income per common share-Diluted by \$4.6 and \$0.01 per share, respectively. Excluding the effect of these items, Adjusted Net Income attributable to Amphenol Corporation and Adjusted Diluted EPS, both non-GAAP financial measures defined in Part II, Item 7 herein, were \$1,150.4 and \$3.74 per share, respectively, for the year ended December 31, 2019.
- (2) Includes (a) an income tax benefit of \$14.5 recorded in 2018 related to the completion of the accounting associated with the provisional income tax charge recorded in 2017 related to the enactment of the Tax Cuts and Jobs Act and (b) excess tax benefits related to stock-based compensation of \$19.8 resulting from stock option exercises, partially offset by (c) acquisition-related expenses of \$8.5 (\$7.2 after-tax) primarily relating to external transaction costs. These items had the aggregate effect of increasing Net income attributable to Amphenol Corporation and Net income per common share-Diluted by \$27.1 and \$0.08 per share, respectively. Excluding the effect of these items, Adjusted Net Income attributable to Amphenol Corporation and Adjusted Diluted EPS were \$1,177.9 and \$3.77 per share, respectively, for the year ended December 31, 2018.
- (3) Includes (a) an income tax charge of \$398.5 related to the enactment of the Tax Cuts and Jobs Act, which represented our estimate of taxes arising from the implementation of a modified territorial tax regime and the deemed and intended repatriation of prior unremitted earnings of foreign subsidiaries, partially offset by the tax benefit associated with the remeasurement of the Company's U.S. net deferred tax liabilities due to the U.S. federal corporate tax rate reduction and (b) acquisition-related expenses of \$4.0 (\$3.7 after-tax) primarily relating to external transaction costs associated with 2017 acquisitions, partially offset by (c) excess tax benefits related to stock-based compensation of \$66.6 resulting from stock option exercises. These items had the aggregate effect of decreasing Net income attributable to Amphenol Corporation and Net income per common share-Diluted by \$335.6 and \$1.06 per share, respectively. Excluding the effect of these items, Adjusted Net Income attributable to Amphenol Corporation and Adjusted Diluted EPS were \$986.1 and \$3.12 per share, respectively, for the year ended December 31, 2017.
- (4) Includes acquisition-related expenses of \$36.6 (\$33.1 after-tax) primarily relating to the FCI Asia Pte. Ltd. ("FCI") and other 2016 acquisitions, including external transaction costs, amortization related to the value associated with acquired backlog and restructuring charges. These items had the aggregate effect of decreasing Net income attributable to Amphenol Corporation and Net income per common share-Diluted by \$33.1 and \$0.11 per share, respectively. Excluding the effect of these items, Adjusted Net Income attributable to Amphenol Corporation and Adjusted Diluted EPS were \$856.0 and \$2.72 per share, respectively, for the year ended December 31, 2016.
- (5) Includes acquisition-related expenses of \$5.7 (\$5.7 after-tax) relating to acquisitions closed and announced in 2015. These acquisition-related expenses had the effect of decreasing Net income attributable to Amphenol Corporation and Net income per common share-Diluted by \$5.7 and \$0.02 per share, respectively. Excluding the effect of this item, Adjusted Net Income attributable to Amphenol Corporation and Adjusted Diluted EPS were \$769.2 and \$2.43 per share, respectively, for the year ended December 31, 2015.

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

(amounts in millions, except share and per share data, unless otherwise noted)

The following discussion and analysis of the results of operations and financial condition for the three years ended December 31, 2019, 2018 and 2017 has been derived from and should be read in conjunction with the Consolidated Financial Statements included in Part II, Item 8, herein. The Consolidated Financial Statements have been prepared in U.S. dollars, in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). The following discussion and analysis also includes references to certain non-GAAP financial measures, which are defined in the "Non-GAAP Financial Measures" section below, including "Constant Currency Net Sales Growth" and "Organic Net Sales Growth". For purposes of the following discussion, the terms "constant currencies" and "organically" have the same meanings, respectively, as these aforementioned non-GAAP financial measures. Refer to "Non-GAAP Financial Measures" within this Item 7 for more information, including our reasons for including non-GAAP financial measures and material limitations with respect to the usefulness of the measures.

In addition to historical information, the following discussion and analysis also contains certain forward-looking statements that are subject to risks and uncertainties, including but not limited to the risk factors described in Part I, Item 1A herein, as well as the risks and uncertainties that exist with the use of forward-looking statements as described in the "Cautionary Note Regarding Forward-Looking Statements" section included herein at the beginning of this Annual Report on Form 10-K.

#### Overview

#### General

Amphenol Corporation (together with its subsidiaries, "Amphenol", the "Company", "we", "our", or "us") is one of the world's largest designers, manufacturers and marketers of electrical, electronic and fiber optic connectors and interconnect systems, antennas, sensors and sensor-based products and coaxial and high-speed specialty cable. The Company operates through two reporting segments: (i) Interconnect Products and Assemblies and (ii) Cable Products and Solutions. In 2019, approximately 69% of the Company's sales were outside the United States. The primary end markets for our products are:

- information technology and communication devices and systems for the converging technologies of voice, video and data communications;
- a broad range of industrial applications and traditional, hybrid and electric automotive applications; and
- military and commercial aerospace applications.

The Company's products are used in a wide variety of applications by numerous customers around the world. The Company competes primarily on the basis of technology innovation, product quality and performance, price, customer service and delivery time. There has been a trend on the part of customers to consolidate their lists of qualified suppliers to companies that have the ability to meet certain technical, quality, delivery and other standards while maintaining competitive prices. The Company has focused its global resources to position itself to compete effectively in this environment. The Company believes that its global presence is an important competitive advantage as it allows the Company to provide quality products on a timely and worldwide basis to its multinational customers.

## Strategy

The Company's strategy is to provide its customers with comprehensive design capabilities, a broad selection of products and a high level of service on a worldwide basis while maintaining continuing programs of productivity improvement and cost control. The Company focuses its research and development efforts through close collaboration with its customers to develop highly-engineered products that meet customer needs and have the potential for broad market applications and significant sales within a one- to three-year period. The Company is also focused on controlling costs. The Company does this by investing in modern manufacturing technologies, controlling purchasing processes and expanding into lower cost areas.

The Company's strategic objective is to further enhance its position in its served markets by pursuing the following success factors:

- Pursue broad diversification;
- Develop high technology performance-enhancing interconnect solutions;
- Expand global presence;
- Control costs;
- Pursue strategic acquisitions and investments; and
- Foster collaborative, entrepreneurial management.

In 2019, the Company reported net sales of \$8,225.4, which was flat compared to 2018, along with operating income and net income attributable to Amphenol Corporation of \$1,619.2 and \$1,155.0, respectively, both representing a decrease of 4% from 2018. In 2019, the Company's net income attributable to Amphenol Corporation was impacted by (a) excess tax benefits related to stock-based compensation of \$38.1 resulting from stock option exercises, partially offset by (b) acquisition-related expenses of \$25.4 (\$21.0 after-tax) primarily from the amortization related to the value associated with acquired backlog as well as external transaction costs and (c) refinancing-related costs associated with the early extinguishment of debt of \$14.3 (\$12.5 after-tax), comprised primarily of the premiums and other fees incurred from the early extinguishment of redeemed amounts of our 3.125% Senior Notes and 4.00% Senior Notes resulting from the tender offers in September 2019 described herein under "Liquidity and Capital Resources - Financing Activities". In 2018, the Company's net income attributable to Amphenol Corporation was impacted by the recognition of an income tax benefit of \$14.5 related to the completion of the accounting for the Tax Act Charge (defined below) in the fourth quarter of 2018, along with excess tax benefits of \$19.8 from stock option exercises, partially offset by acquisition-related expenses incurred during the year. Excluding the effects of these items, Adjusted Operating Income and Adjusted Net Income attributable to Amphenol Corporation, as defined in the "Non-GAAP Financial Measures" section below and as reconciled in Part II, Item 7 herein, decreased by 3% and 2%, respectively, in 2019. Sales and profitability trends are discussed in detail in "Results of Operations" below. In addition, a strength of the Company has been its ability to consistently generate cash from operations. The Company uses cash generated from operations to fund capital expenditures and acquisitions, repurchase shares of its common stock, pay dividends and reduce indebtedness. In 2019, the Company generated operating cash flow of \$1,502.3, which net of capital expenditures of \$295.0, resulted in Free cash flow of \$1,207.3. Free cash flow, a non-GAAP financial measure, is defined in the "Non-GAAP Financial Measures" section below and reconciled within this Part II, Item 7 herein.

#### Tax Cuts and Jobs Act of 2017

On December 22, 2017, the United States federal government enacted the Tax Cuts and Jobs Act ("Tax Act"), marking a change from a worldwide tax system to a modified territorial tax system in the United States and a reduction of the U.S. federal corporate income tax rate from 35% to 21%. As a result of the Tax Act, in the fourth quarter of 2017, the Company recorded an income tax charge of \$398.5 ("Tax Act Charge"). The Tax Act Charge was a provisional amount recorded in accordance with SEC Staff Accounting Bulletin No. 118 ("SAB 118"), which was subsequently codified under ASU 2018-05, *Income Taxes* (Topic 740): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118. Consistent with ASU 2018-05, the Company completed its accounting of the Tax Act Charge and recorded an income tax benefit of \$14.5 in 2018, reflecting the interpretive guidance that was issued subsequent to our 2017 Form 10-K filing. While the Company completed its accounting of the Tax Act in the fourth quarter of 2018 based on the regulatory guidance issued at that time, the Department of Treasury interpretive guidance initiatives are ongoing. Refer to Note 6 of the Notes to the Consolidated Financial Statements for further discussion of the Tax Act.

## **Results of Operations**

The following table sets forth the components of net income attributable to Amphenol Corporation as a percentage of net sales for the years indicated.

Year Ended December 31,		
2019	2018	2017
100.0 %	100.0 %	100.0 %
68.2	67.6	67.1
0.3	0.1	_
11.8	11.7	12.5
19.7	20.6	20.4
(1.4)	(1.2)	(1.3)
(0.2)	_	_
0.1	_	0.2
18.2	19.4	19.3
(4.1)	(4.5)	(9.9)
14.1	14.9	9.4
(0.1)	(0.2)	(0.1)
14.0 %	14.7 %	9.3 %
	2019 100.0 % 68.2 0.3 11.8 19.7 (1.4) (0.2) 0.1 18.2 (4.1) 14.1 (0.1)	2019         2018           100.0 %         100.0 %           68.2         67.6           0.3         0.1           11.8         11.7           19.7         20.6           (1.4)         (1.2)           (0.2)         —           0.1         —           18.2         19.4           (4.1)         (4.5)           14.1         14.9           (0.1)         (0.2)

#### 2019 Compared to 2018

Net sales were \$8,225.4 for the year ended December 31, 2019 compared to \$8,202.0 for the year ended December 31, 2018, which was flat in U.S. dollars, an increase of 2% in constant currencies and a decrease of 3% organically (excluding both currency and acquisition impacts), over the prior year. Net sales in the Interconnect Products and Assemblies segment (approximately 95% of net sales) increased 1% in U.S. dollars and 2% in constant currencies, while decreasing 3% organically, in 2019 compared to 2018. The sales growth was driven by strong growth in the military and commercial aerospace markets as well as contributions from the Company's acquisition program. This sales growth was largely offset by reductions in the communications-related markets, in particular the mobile devices market, along with the negative effect of currency translation. Net sales to the military market increased (approximately \$181.0), driven by broad-based strength across essentially all segments including military vehicle, rotorcraft, and military airframe applications. Net sales to the commercial aerospace market increased (approximately \$48.7) primarily due to strength in large passenger planes. Net sales to the industrial market increased (approximately \$66.1), primarily driven by contributions from acquisitions, as well as strength in medical and factory automation applications, which were partially offset by moderations in industrial instrumentation, heavy equipment and transportation, as well as other applications. Net sales to the automotive market increased (approximately \$38.0), driven primarily by contributions from acquisitions, which were partially offset by moderations in demand due to the slowing of the worldwide automotive market. Net sales to the information technology and data communications market slightly increased (approximately \$5.6), driven primarily by contributions from acquisitions and organic growth of sales to data center customers, offset by moderations in market demand for storage and networking related products. Net sales to the mobile devices market decreased (approximately \$277.5), driven by moderations in sales of products incorporated into smartphones. Net sales to the mobile networks market decreased (approximately \$10.2), due to reduced demand from both mobile networks equipment manufacturers and mobile operators, offset in part by contributions from acquisitions. Net sales in the Cable Products and Solutions segment (approximately 5% of net sales), which primarily serves the broadband communications market, decreased 8% in U.S. dollars, 6% in constant currencies and 7% organically in 2019, compared to 2018. The decrease in the Cable Products and Solutions segment was primarily due to a reduction in demand from broadband service providers.

The table below reconciles Constant Currency Net Sales Growth and Organic Net Sales Growth to the most directly comparable U.S. GAAP financial measures, by segment and consolidated, for the year ended December 31, 2019 compared to the year ended December 31, 2018:

			Percentage Growth (relative to prior year)							
	2019	2018	Net sales growth in U.S. Dollars (1) (GAAP)	Foreign currency impact (2) (non-GAAP)	Constant Currency Net Sales Growth (3) (non-GAAP)	Acquisition impact (4) (non-GAAP)	Organic Net Sales Growth (3) (non-GAAP)			
Net sales:										
Interconnect Products and Assemblies	\$ 7,840.3	\$ 7,781.9	1 %	(1)%	2 %	5 %	(3)%			
Cable Products and Solutions	385.1	420.1	(8)%	(2)%	(6)%	1 %	(7)%			
Consolidated	\$ 8,225.4	\$ 8,202.0	— %	(2)%	2 %	5 %	(3)%			

- (1) Net sales growth in U.S. dollars is calculated based on Net sales as reported in the Consolidated Statements of Income and Note 13 of the accompanying financial statements. While the term "net sales growth in U.S. dollars" is not considered a U.S. GAAP financial measure, for purposes of this table, we derive the reported (GAAP) measure based on GAAP results, which serves as the basis for the reconciliation to its comparable non-GAAP financial measures.
- (2) Foreign currency translation impact, a non-GAAP measure, represents the impact on net sales resulting from foreign currency exchange rate changes in the current year compared to the prior year. Such amount is calculated by subtracting current year net sales translated at average foreign currency exchange rates for the respective prior year from current year reported net sales taken as a necrentage of the respective prior year's net sales
- reported net sales, taken as a percentage of the respective prior year's net sales.

  (3) Constant Currency Net Sales Growth and Organic Net Sales Growth are non-GAAP financial measures as defined in the "Non-GAAP Financial Measures" section.
- (4) Acquisition impact, a non-GAAP measure, represents the impact on net sales resulting from acquisitions closed since the beginning of the prior calendar year, which were not included in the Company's results as of the comparable prior year and which do not reflect the underlying growth of the Company on a comparative basis.

Geographically, net sales in the United States in 2019 increased approximately 13% in U.S. dollars (\$2,524.7 in 2019 versus \$2,241.4 in 2018) and 4% organically, compared to 2018. Foreign sales in 2019 decreased approximately 4% in U.S. dollars (\$5,700.7 in 2019 versus \$5,960.6 in 2018), 2% in constant currencies and 6% organically, compared to 2018, driven by moderations in Asia. The comparatively stronger U.S. dollar in 2019 had the effect of decreasing net sales by approximately \$125.8 when compared to foreign currency translation rates in 2018.

Selling, general and administrative expenses were \$971.4 or 11.8% of net sales for 2019, compared to \$959.5 or 11.7% of net sales for 2018. Administrative expenses were flat in 2019 compared to 2018, and represented approximately 4.7% of net sales in both years. Research and development expenses increased approximately \$13.3 in 2019 primarily related to increases in expenses for new product development, and represented approximately 2.8% of net sales in 2019 and 2.7% of net sales in 2018. Selling and marketing expenses were flat in 2019 compared to 2018, and represented approximately 4.3% of net sales in both years

Operating income was \$1,619.2 or 19.7% of net sales in 2019, compared to \$1,686.9 or 20.6% of net sales in 2018. Operating income for 2019 included acquisition-related expenses of \$25.4, comprising of the amortization of \$15.7 related to the value associated with acquired backlog resulting from 2019 acquisitions, with the remainder representing external transaction costs. Operating income for 2018 included acquisition-related expenses of \$8.5, related to external transaction costs. These acquisition-related expenses are separately presented in the Consolidated Statements of Income. Excluding the effect of these acquisition-related expenses, Adjusted Operating Income and Adjusted Operating Margin, as defined in the "Non-GAAP Financial Measures" section below, were \$1,644.6 or 20.0% of net sales in 2019 and \$1,695.4 or 20.7% in 2018. Operating income for the Interconnect Products and Assemblies segment in 2019 was \$1,722.7 or 22.0% of net sales, compared to \$1,752.5 or 22.5% of net sales in 2018. The slight decrease in operating margin for the Interconnect Products and Assemblies segment for 2019 compared to 2018 was primarily driven by normal downside conversion related to the organic decline in sales as well as the impact of recent acquisitions which currently have, on average, a lower operating margin than the average of the Interconnect Products and Assemblies segment. In addition, the operating income for the Cable Products and Solutions segment in 2019 was \$39.5 or 10.2% of net sales, compared to \$52.6 or 12.5% of net sales in 2018. The decrease in operating income margin for the Cable Products and Solutions segment in 2019 compared to 2018 was primarily driven by lower volumes and product mix.

Interest expense was \$117.6 in 2019 compared to \$101.7 in 2018. The increase is primarily due to higher average debt levels and the higher average interest rate associated with the 4.350% U.S. Senior Notes issuance in January 2019 (the net proceeds of which, along with commercial paper borrowings, were used to repay the Company's 2.55% U.S. Senior Notes also in January 2019).

Loss on early extinguishment of debt was \$14.3 in 2019, which related to refinancing-related costs, specifically premiums and fees incurred associated with the early extinguishment of certain redeemed principal amounts of the 3.125% Senior Notes and 4.00% Senior Notes (collectively, the "Tendered Notes") as a result of the tender offers in

September 2019. Refer to Note 4 of the accompanying Consolidated Financial Statements and the Liquidity and Capital Resources section within this Item 7 for further information related to the Tendered Notes.

Provision for income taxes was at an effective rate of 22.2% in 2019 and 23.4% in 2018. Provision for income taxes in 2019 included excess tax benefits of \$38.1 from stock option exercises, which was partially offset by the tax effects related to (i) acquisition-related expenses during the year and (ii) refinancing-related costs associated with the early extinguishment of debt. Provision for income taxes in 2018 included (i) excess tax benefits of \$19.8 from stock option exercises and (ii) an income tax benefit of \$14.5 related to the completion of the accounting for the Tax Act Charge, which were partially offset by the tax effect related to acquisition-related expenses during the year. These items had the aggregate effect of lowering the effective tax rate and increasing earnings per share by the amounts noted in the tables below. Excluding the effect of these items, the Adjusted Effective Tax Rate, a non-GAAP financial measure as defined in the "Non-GAAP Financial Measures" section below within this Item 7, was 24.5% and 25.5% for 2019 and 2018, respectively, as reconciled in the table below to the comparable effective tax rate based on GAAP results. For additional details related to the reconciliation between the U.S. statutory federal tax rate and the Company's effective tax rate for these years, refer to Note 6 of the Notes to the Consolidated Financial Statements.

Net income attributable to Amphenol Corporation and Net income per common share-Diluted ("Diluted EPS") was \$1,155.0 and \$3.75, respectively, for 2019, compared to \$1,205.0 and \$3.85, respectively, for 2018. Excluding the effect of the aforementioned items, Adjusted Net Income attributable to Amphenol Corporation and Adjusted Diluted EPS, as defined in the "Non-GAAP Financial Measures" section below within this Item 7, were \$1,150.4 and \$3.74, respectively, for 2019, compared to \$1,177.9 and \$3.77, respectively, for 2018.

The following table reconciles Adjusted Operating Income, Adjusted Operating Margin, Adjusted Net Income attributable to Amphenol Corporation, Adjusted Effective Tax Rate and Adjusted Diluted EPS (all defined in the "Non-GAAP Financial Measures" section below) to the most directly comparable U.S. GAAP financial measures for the years ended December 31, 2019 and 2018:

			2019		2018								
			Net Income attributable	Effective			Net Income attributable Effective						
	Operating Income	Operating Margin (1)	to Amphenol Corporation	Tax	Diluted EPS	Operating Income	Operating Margin (1)	to Amphenol	Tax	Diluted EPS			
Reported (GAAP)	\$ 1,619.2	19.7 %	\$ 1,155.0	22.2 %	\$ 3.75	\$ 1,686.9	20.6 %	\$ 1,205.0	23.4 %	\$ 3.85			
Acquisition-related expenses	25.4	0.3	21.0	(0.1)	0.07	8.5	0.1	7.2	-	0.02			
Loss on early extinguishment of debt	_	_	12.5	(0.1)	0.04	_	_	_	_	_			
Excess tax benefits related to stock-based compensation	_	-	(38.1)	2.5	(0.12)	_	-	(19.8)	1.2	(0.06)			
Tax Act Charge (benefit)								(14.5)	0.9	(0.04)			
Adjusted (non-GAAP)	\$ 1,644.6	20.0 %	\$ 1,150.4	24.5 %	\$ 3.74	\$ 1,695.4	20.7 %	\$ 1,177.9	25.5 %	6 <u>\$ 3.77</u>			

<sup>(1)</sup> While the terms "operating margin" and "effective tax rate" are not considered U.S. GAAP financial measures, for purposes of this table, we derive the reported (GAAP) measures based on GAAP results, which serve as the basis for the reconciliation to their comparable non-GAAP financial measure.

#### 2018 Compared to 2017

Net sales were \$8,202.0 for the year ended December 31, 2018 compared to \$7,011.3 for the year ended December 31, 2017, an increase of 17% in both U.S. dollars and constant currencies and 14% organically (excluding both currency and acquisition impacts) over the prior year. Net sales in the Interconnect Products and Assemblies segment (approximately 95% of net sales) increased 18% in U.S. dollars, 17% in constant currencies and 14% organically in 2018, compared to 2017. The sales growth was driven by growth in the mobile devices, industrial, automotive, information technology and data communications, military, mobile networks and commercial aerospace markets, partially offset by a slight decline in sales into the broadband communications market, with growth resulting primarily from organic strength, in addition to contributions from the Company's acquisitions. Net sales to the mobile devices market increased (approximately \$403.6) primarily due to growth in sales of products incorporated into smartphones and related accessories, partially offset by declining sales of products incorporated into tablets. Net sales to

the industrial market increased (approximately \$214.9), reflecting sales strength in medical, heavy equipment, electric vehicle, railway and mass transit, and oil and gas, as well as contributions from acquisitions. Net sales to the automotive market increased (approximately \$184.9), driven by growth and expansion in most regions of the global automotive market, as well as contributions from acquisitions. Net sales to the information technology and data communications market increased (approximately \$166.1), reflecting organic growth in products for data centers, including server and networking-related applications, storage, and consumer electronics. Net sales to the military market increased (approximately \$133.2), driven by broad strength across the market including increased sales into avionics, military communications and military airframe applications, as well as missile applications. Net sales to the mobile networks market increased (approximately \$56.3), due to increased sales to both mobile networks equipment manufacturers and mobile operators. Net sales to the commercial aerospace market increased (approximately \$39.6) primarily due to strength in large passenger planes. Net sales in the Cable Products and Solutions segment (approximately 5% of net sales), which primarily serves the broadband communications market, increased 4% in U.S. dollars, 6% in constant currencies and 6% organically in 2018, compared to 2017. The increase in the Cable Products and Solutions segment was primarily due to an increase in cable products sold into the mobile networks market, which was partially offset by the slight decrease in sales into the broadband communications market.

The table below reconciles Constant Currency Net Sales Growth and Organic Net Sales Growth to the most directly comparable U.S. GAAP financial measures, by segment and consolidated, for the year ended December 31, 2018 compared to the year ended December 31, 2017:

			Percentage Growth (relative to prior year)									
	2018	2017	Net sales growth in U.S. Dollars (1) (GAAP)	Foreign currency impact (2) (non-GAAP)	Constant Currency Net Sales Growth (3) (non-GAAP)	Acquisition impact (4) (non-GAAP)	Organic Net Sales Growth (3) (non-GAAP)					
Net sales:												
Interconnect Products and Assemblies Cable Products and Solutions	\$ 7,781.9 420.1	\$ 6,606.9 404.4	18 % 4 %	1 % (2)%	17 % 6 %	3 % — %	14 % 6 %					
Consolidated	\$ 8,202.0	\$ 7,011.3	17 %	— %	17 %	3 %	14 %					

(1) Net sales growth in U.S. dollars is calculated based on Net sales as reported in the Consolidated Statements of Income and Note 13 of the accompanying financial statements. While the term "net sales growth in U.S. dollars" is not considered a U.S. GAAP financial measure, for purposes of this table, we derive the reported (GAAP) measure based on GAAP results, which serves as the basis for the reconciliation to its comparable non-GAAP financial measures.

(3) Constant Currency Net Sales Growth and Organic Net Sales Growth are non-GAAP financial measures as defined in the "Non-GAAP Financial Measures" section.

Geographically, net sales in the United States in 2018 increased approximately 13% in U.S. dollars (\$2,241.4 in 2018 versus \$1,978.4 in 2017) and 9% organically, compared to 2017. Foreign sales in 2018 increased approximately 18% in U.S. dollars (\$5,960.6 in 2018 versus \$5,032.9 in 2017), 17% in constant currencies and 15% organically, compared to 2017 with strength in both Asia and Europe. The comparatively slightly weaker U.S. dollar in 2018 had an insignificant effect on net sales compared to 2017.

Selling, general and administrative expenses were \$959.5 or 11.7% of net sales for 2018, compared to \$878.3 or 12.5% of net sales for 2017. Administrative expenses increased approximately \$46.4 in 2018 primarily related to increases in employee-related benefits and stock-based compensation expense, and represented approximately 4.7% of net sales in 2018 and 4.8% of net sales in 2017. Research and development expenses increased approximately \$27.2 in 2018 primarily related to increases in expenses for new product development and represented approximately 2.7% of net sales in 2018 and 2.8% of net sales in 2017. Selling and marketing expenses increased approximately \$7.6 in 2018 primarily related to the increase in sales volume and represented approximately 4.3% of net sales in 2018 and 4.9% of net sales in 2017.

Operating income was \$1,686.9 or 20.6% of net sales in 2018, compared to \$1,427.6 or 20.4% of net sales in 2017. Operating income for 2018 and 2017 includes acquisition-related expenses of \$8.5 and \$4.0, respectively, related to external transaction costs. These acquisition-related expenses are separately presented in the Consolidated Statements of Income. Excluding the effect of these acquisition-related expenses, Adjusted Operating Income and Adjusted Operating Margin, as defined in the "Non-GAAP Financial Measures" section below, were \$1,695.4 or 20.7% of net sales in 2018

<sup>(2)</sup> Foreign currency translation impact, a non-GAAP measure, represents the impact on net sales resulting from foreign currency exchange rate changes in the current year compared to the prior year. Such amount is calculated by subtracting current year net sales translated at average foreign currency exchange rates for the respective prior year from current year reported net sales, taken as a percentage of the respective prior year's net sales.

<sup>(4)</sup> Acquisition impact, a non-GAAP measure, represents the impact on net sales resulting from acquisitions closed since the beginning of the prior calendar year, which were not included in the Company's results as of the comparable prior year and which do not reflect the underlying growth of the Company on a comparative basis.

and \$1,431.6 or 20.4% in 2017. The increase in Adjusted Operating Margin for 2018 compared to 2017 was driven primarily by an increase in operating margin for the Interconnect Products and Assemblies segment. Operating income for the Interconnect Products and Assemblies segment in 2018 was \$1,752.5 or 22.5% of net sales, compared to \$1,475.2 or 22.3% of net sales in 2017. The increase in operating income margin was driven primarily by strong operating leverage on higher sales volumes. In addition, the operating income for the Cable Products and Solutions segment in 2018 was \$52.6 or 12.5% of net sales, compared to \$54.2 or 13.4% of net sales in 2017. The decrease in operating income margin for the Cable Products and Solutions segment in 2018 compared to 2017 was primarily driven by increases in certain commodity costs.

Interest expense was \$101.7 in 2018 compared to \$92.3 in 2017. The increase was primarily due to higher average interest rates on the Company's U.S. Commercial Paper Program (as defined below in this Item 7) and the senior note issuances in April 2017.

Provision for income taxes was at an effective rate of 23.4% in 2018 and 51.1% in 2017. The lower effective tax rate in 2018 compared to 2017 resulted primarily from the Tax Act Charge of \$398.5 recorded in 2017, which was partially offset by the excess tax benefits of \$66.6 from stock option exercises. The effects of these items were significantly lower in 2018, as the Company recorded an income tax benefit of \$14.5 in 2018 related to the completion of the accounting for the Tax Act Charge, along with the excess tax benefits of \$19.8 from stock option exercises. Excluding the effect of these items along with the effect of acquisition-related expenses in each respective year, the Adjusted Effective Tax Rate, a non-GAAP financial measure defined in the "Non-GAAP Financial Measures" section below, was 25.5% and 26.5% for 2018 and 2017, respectively, as reconciled in the table below to the comparable effective tax rate based on GAAP results. For additional details related to the reconciliation between the U.S. statutory federal tax rate and the Company's effective tax rate for these years, refer to Note 6 of the Notes to the Consolidated Financial Statements.

Net income attributable to Amphenol Corporation and Net income per common share-Diluted ("Diluted EPS") was \$1,205.0 and \$3.85, respectively, for 2018, compared to \$650.5 and \$2.06, respectively, for 2017. Excluding the effect of the aforementioned items, Adjusted Net Income attributable to Amphenol Corporation and Adjusted Diluted EPS, as defined in the "Non-GAAP Financial Measures" section below within this Item 7, were \$1,177.9 and \$3.77, respectively, for 2018, compared to \$986.1 and \$3.12, respectively, for 2017.

The following table reconciles Adjusted Operating Income, Adjusted Operating Margin, Adjusted Net Income attributable to Amphenol Corporation, Adjusted Effective Tax Rate and Adjusted Diluted EPS (all defined in the "Non-GAAP Financial Measures" section below) to the most directly comparable U.S. GAAP financial measures for the years ended December 31, 2018 and 2017:

			2018										
	Operating Income	Operating Margin (1)	Net Income attributable to Amphenol Corporation	Tax	Diluted EPS	Operating Income	Operating Margin (1)	Net Income attributable to Amphenol Corporation	Tax	Diluted EPS			
Reported (GAAP)	\$ 1,686.9	20.6 %			% \$ 3.85	\$ 1,427.6	20.4 %			% \$ 2.06			
Acquisition-related expenses	8.5	0.1	7.2	_	0.02	4.0	_	3.7	_	0.01			
Excess tax benefits related to stock-based compensation	_	_	(19.8)	1.2	(0.06)	_	_	(66.6)	4.9	(0.21)			
Tax Act Charge (benefit) Adjusted (non-GAAP)	\$ 1,695.4	20.7 %	(14.5) \$ 1,177.9	0.9 25.5	(0.04)	\$ 1,431.6	20.4 %	398.5 \$ 986.1	(29.5) 26.5	1.26			

<sup>(1)</sup> While the terms "operating margin" and "effective tax rate" are not considered U.S. GAAP financial measures, for purposes of this table, we derive the reported (GAAP) measures based on GAAP results, which serve as the basis for the reconciliation to their comparable non-GAAP financial measure.

#### **Liquidity and Capital Resources**

Liquidity and Cash Requirements

At December 31, 2019 and 2018, the Company had cash, cash equivalents and short-term investments of \$908.6 and \$1,291.7, respectively. The vast majority of the Company's cash, cash equivalents and short-term investments on hand as of December 31, 2019 and 2018 is located outside of the United States.

Prior to the Tax Act, the Company asserted its intention to indefinitely reinvest outside of the United States all of its foreign earnings not otherwise distributed currently. For earnings occurring on or after January 1, 2018, the Tax Act's change to a modified territorial tax system in the United States has significantly reduced the U.S. tax expense associated with the remittance of foreign earnings, among other changes. The Tax Act also imposed a one-time transition tax ("Transition Tax") on all of the Company's pre-2018 accumulated unremitted foreign earnings. As a result, on December 31, 2017, the Company recorded a provisional U.S. tax expense for the Transition Tax, which was adjusted and finalized in 2018. This Transition Tax on the deemed repatriation of the accumulated unremitted earnings and profits of foreign subsidiaries will be paid, net of applicable tax credits and deductions, in annual installments until 2025, as permitted under the Tax Act.

As a result of the Tax Act, on December 31, 2017, the Company indicated an intention to repatriate most of its pre-2018 accumulated earnings and recorded the foreign and U.S. state and local tax costs related to the repatriation. The associated tax payments are due as the repatriations are made. On December 31, 2018, the Company indicated its intention to distribute certain 2018 foreign earnings and accrue foreign and U.S. state and local taxes, if applicable, on those earnings as appropriate and indefinitely reinvest all remaining 2018 foreign earnings. The Company intends to distribute certain 2019 foreign earnings and has accrued foreign and U.S. state and local taxes, if applicable, on those earnings as appropriate as of December 31, 2019, and intends to indefinitely reinvest all remaining 2019 foreign earnings. The Company intends to evaluate certain post-2019 earnings for distribution, and accrue for those distributions where appropriate, and to indefinitely reinvest all other foreign earnings. As of December 31, 2019, the Company has not provided for deferred income taxes on undistributed foreign earnings related to certain geographies of approximately \$900, as it is the Company's intention to permanently reinvest such earnings outside the United States. It is impracticable to calculate the amount of taxes that would be payable if these undistributed foreign earnings were to be repatriated.

The Company's primary sources of liquidity are internally generated cash flow, our cash, cash equivalents and short-term investments on hand, the U.S. Commercial Paper Program, the Euro Commercial Paper Program, and the Revolving Credit Facility (each as defined below in this Item 7). The Company believes that its cash, cash equivalents and short-term investment position on hand, ability to generate future cash flow from operations, availability under its credit facilities, and access to capital markets provide adequate liquidity to meet its obligations for at least the next twelve months.

The Company's primary ongoing cash requirements will be for operating and capital expenditures, product development activities, repurchases of its Common Stock, dividends, debt service, payments associated with the Transition Tax (which is payable in annual installments until 2025), taxes due upon the repatriation of foreign earnings (which will be payable upon the repatriation of such earnings), and funding of pension obligations. The Company's debt service requirements consist primarily of principal and interest on the Company's Senior Notes (including the 2.20% Senior Notes due in April 2020), Revolving Credit Facility, and Commercial Paper Programs (all as defined below). The Company may also use cash to fund all or part of the cost of acquisitions. The Company expects that capital expenditures in 2020 will be in a range of 3% to 4% of net sales.

#### Cash Flow Summary

The following table summarizes the Company's cash flows from operating, investing and financing activities for the years ended December 31, 2019, 2018 and 2017, as reflected in the Consolidated Statements of Cash Flow:

	Year Ended December 31,								
		2019		2018		2017			
Net cash provided by operating activities	\$	1,502.3	\$	1,112.7	\$	1,144.2			
Net cash used in investing activities		(1,228.8)		(441.8)		(380.2)			
Net cash used in financing activities		(648.4)		(1,070.1)		(140.1)			
Effect of exchange rate changes on cash and cash equivalents		(13.2)		(40.6)		60.6			
Net change in cash and cash equivalents	\$	(388.1)	\$	(439.8)	\$	684.5			

#### Operating Activities

The ability to generate cash from operating activities is one of the Company's fundamental financial strengths. Cash flow provided by operating activities ("Operating Cash Flow") was \$1,502.3 for 2019 compared to \$1,112.7 for 2018. The increase in Operating Cash Flow for 2019 is primarily related to a lower usage of cash related to the change in working capital. In addition, Operating Cash Flow in 2018 also reflected the Company's voluntary cash contribution of approximately \$81.0 in the first quarter of 2018 to fund our U.S. defined benefit pension plans ("U.S. Plans", and together with its foreign plans, the "Plans"), while no such voluntary cash contribution to the U.S. Plans was made in 2019. Operating Cash Flow was \$1,112.7 for 2018 compared to \$1,144.2 for 2017. The decrease in Operating Cash Flow for 2018 compared to 2017 was primarily related to (i) certain tax payments made, primarily in the first half of 2018, related to the Tax Act Charge of approximately \$87.0, including the first annual installment of the Transition Tax of approximately \$18 in the second quarter of 2018 and payments for foreign and U.S. state and local taxes of approximately \$69 related to foreign cash repatriated during 2018 and (ii) the Company's voluntary cash contribution of approximately \$81.0 in the first quarter of 2018 to fund our U.S. Plans. Excluding these items, Operating Cash Flow in 2018 increased compared to 2017 primarily due to the increase in net income, which was partially offset by the higher usage of cash related to the change in working capital.

In 2019, the components of working capital as presented on the accompanying Consolidated Statements of Cash Flow increased \$81.6, excluding the impact of acquisitions and foreign currency translation, primarily due to decreases in accounts receivable of \$117.3. In 2018, the components of working capital as presented on the accompanying Consolidated Statements of Cash Flow increased \$362.4, excluding the impact of acquisitions and foreign currency translation, primarily due to increases in accounts receivable, inventories and other current assets of \$237.9, \$173.3 and \$47.7, respectively, partially offset by increases in accounts payable and accrued liabilities, including income taxes, of \$48.8 and \$47.7, respectively. In 2017, the components of working capital as presented on the accompanying Consolidated Statements of Cash Flow increased \$158.1, excluding the impact of acquisitions and foreign currency translation, due primarily to increases in accounts receivable, inventories and other current assets of \$146.5, \$100.4 and \$75.9, respectively, partially offset by increases in accounts payable and accrued liabilities of \$140.5 and \$24.2, respectively.

The following describes the significant changes in the amounts as presented on the accompanying Consolidated Balance Sheets at December 31, 2019 compared to December 31, 2018. Accounts receivable decreased \$55.4 to \$1,736.4 primarily due to lower sales volumes in the fourth quarter of 2019 relative to the fourth quarter of 2018 as well as the effect of translation from exchange rate changes at December 31, 2019 compared to December 31, 2018 ("Translation"), partially offset by the impact of acquisitions. Days sales outstanding at December 31, 2019 and 2018 were approximately 73 days. Inventories increased \$76.3 to \$1,310.1, primarily due to the impact of acquisitions, partially offset by Translation. Inventory days at December 31, 2019 and 2018 were approximately 80 days and 74 days, respectively. Property, plant and equipment, net, increased \$123.2 to \$999.0, primarily due to capital expenditures of \$295.0 and the impact of acquisitions, partially offset by depreciation of \$240.0, disposals and Translation. Goodwill increased \$763.9 to \$4.867.1 primarily as a result of goodwill recognized related to nine acquisitions that closed in 2019, partially offset by Translation. Other intangible assets, net increased \$44.1 to \$442.0 primarily due to the recognition of certain identifiable intangible assets of \$111.8 related to the 2019 acquisitions, partially offset by amortization of \$67.3. Other long-term assets increased \$199.8 to \$296.2 primarily due to the adoption of the new lease standard ("Topic 842") described in Note 1 and Note 10 of the accompanying Consolidated Financial Statements, which resulted in the recognition of \$196.7 of operating lease right-of-use assets as of December 31, 2019. Accounts payable decreased \$23.7 to \$866.8, primarily due to less purchasing activity resulting from lower sales activity and Translation, partially offset by the impact of acquisitions. Payable days at December 31, 2019 and 2018 were 53 days. Total accrued expenses, including accrued income taxes, increased \$66.1 to \$862.6, primarily as a result of the adoption of Topic 842, which resulted in the recognition of \$54.0 of current operating lease liabilities as of December 31, 2019, and the impact of acquisitions, partially offset by certain tax payments. Other long-term liabilities, including deferred tax liabilities, increased \$151.6 to \$684.4, primarily as a result of the adoption of Topic 842, which resulted in the recognition of \$145.4 of long-term operating lease liabilities as of December 31,

In 2019 and 2018, the Company made aggregate cash contributions to its defined benefit pension plans of approximately \$6.6 and \$88.3, respectively, of which approximately \$81.0 of the 2018 contributions related to the January 2018 voluntary cash contribution to fund our U.S. Plans. There is no current requirement for cash contributions

to any of the U.S. Plans, and the Company plans to evaluate annually, based on actuarial calculations and the investment performance of the Plans' assets, the timing and amount of cash contributions in the future.

In addition to Operating Cash Flow, the Company also considers Free Cash Flow, a non-GAAP financial measure defined in the "Non-GAAP Financial Measures" section below, as a key metric in measuring the Company's ability to generate cash. The following table reconciles Free Cash Flow to its most directly comparable U.S. GAAP financial measure for the years ended December 31, 2019, 2018 and 2017. The increase in Free Cash Flow in 2019 compared to 2018 was driven by the increase in Operating Cash Flow, as described above. The decrease in Free Cash Flow in 2018 compared to 2017 was primarily related to an increase in capital expenditures to support certain new customer programs, along with a modest decrease in Operating Cash Flow, as described above.

	2019	2018	2017
Operating Cash Flow (GAAP)	\$ 1,502.3	\$ 1,112.7	\$ 1,144.2
Capital expenditures (GAAP)	(295.0)	(310.6)	(226.6)
Free Cash Flow (non-GAAP)	\$ 1,207.3	\$ 802.1	\$ 917.6

Investing Activities

Cash flows from investing activities consist primarily of cash flows associated with capital expenditures, proceeds from disposals of property, plant and equipment, sales and maturities (purchases) of short-term investments, net, and acquisitions.

Net cash used in investing activities was \$1,228.8 in 2019, compared to \$441.8 in 2018 and \$380.2 in 2017. In 2019, net cash used in investing activities was driven primarily by the use of \$937.4 to fund acquisitions, capital expenditures (net of disposals) of \$287.6, and net purchases of short-term investments of \$3.8. In 2018, net cash used in investing activities was driven primarily by capital expenditures (net of disposals) of \$305.6 and the use of \$158.9 to fund acquisitions, partially offset by net sales and maturities of short-term investments of \$22.7. In 2017, net cash used in investing activities was driven primarily by the use of \$265.5 to fund acquisitions, along with capital expenditures (net of disposals) of \$222.5, partially offset by net sales and maturities of short-term investments of \$107.8.

## Financing Activities

Cash flows from financing activities consist primarily of cash flows associated with borrowings and repayments of the Company's credit facilities and other long-term debt, repurchases of common stock, proceeds from the exercise of stock options, dividend payments, and distributions to and purchases of noncontrolling interests.

Net cash used in financing activities was \$648.4 in 2019, compared to \$1,070.1 in 2018 and \$140.1 in 2017. In 2019, net cash used in financing activities was driven primarily by (i) the aggregate repayments of certain of the Company's senior notes and other long-term debt (primarily the 2.55% U.S. Senior Notes due January 2019 and the early extinguishment of the Tendered Notes in September 2019) of \$1,111.5, (ii) repurchases of the Company's common stock of \$601.7, (iii) dividend payments of \$279.5, (iv) net repayments under the Company's commercial paper programs of \$229.0, (v) distributions to and purchases of noncontrolling interests of \$43.3, (vi) payments of costs of \$14.9 related to debt financing primarily associated with the 2029 Senior Notes, the Revolving Credit Facility, and the 2030 Senior Notes (each as defined below), and (vii) premiums and fees paid of \$13.4 related to the early extinguishment of the Tendered Notes, partially offset by (i) aggregate net cash proceeds from the issuances of the 2029 Senior Notes and the 2030 Senior Notes of \$1,398.8 and (ii) cash proceeds from the exercise of stock options of \$246.1. In 2018, net cash used in financing activities was driven primarily by (i) repurchases of the Company's common stock of \$935.2, (ii) net repayments of commercial paper and other debt of \$559.8, (iii) dividend payments of \$253.7, (iv) distributions to and purchases of noncontrolling interests of \$18.2 and (v) payments of costs of \$5.6 related to debt financing associated with the issuances of the Euro senior notes and Euro commercial paper program, partially offset by (i) net cash proceeds from the October 2018 issuance of the Euro senior notes of \$571.7 and (ii) cash proceeds from the exercise of stock options of \$130.7. In 2017, net cash used in financing activities was driven primarily by (i) repurchases of the Company's common stock of \$618.0, (ii) repayment of the Company's 1.55% Senior Notes due September 2017 of \$375.0, (iii) dividend payments of \$205.0, (iv) distributions to and purchases of noncontrolling interests of \$24.4, and (v) payments of costs of \$5.2 related to debt financing associated with the issuances of two series of senior notes, partially offset by (i) borrowings related to the issuances of two series of senior notes in April 2017 of \$749.3, (ii) net borrowings under the U.S. commercial paper program of \$154.1, and (iii) cash proceeds from the exercise of stock options of \$184.1.

The Company has significant flexibility to meet its financial commitments. The Company uses debt financing to lower the overall cost of capital and increase return on stockholders' equity. The Company's debt financing includes the use of the commercial paper programs, revolving credit facility and senior notes as part of its overall cash management strategy.

On January 15, 2019, the Company amended its \$2,000.0 unsecured credit facility with a \$2,500.0 unsecured credit facility ("Revolving Credit Facility"). The Revolving Credit Facility, which matures January 2024, increases the lenders' aggregate commitments by \$500.0 and gives the Company the ability to borrow at a spread over LIBOR. The Company may utilize the Revolving Credit Facility for general corporate purposes. At December 31, 2019, there were no borrowings under the Revolving Credit Facility. The Revolving Credit Facility requires payment of certain annual agency and commitment fees and requires that the Company satisfy certain financial covenants. At December 31, 2019, the Company was in compliance with the financial covenants under the Revolving Credit Facility.

The Company has a commercial paper program pursuant to which the Company issues short-term unsecured commercial paper notes in one or more private placements in the United States (the "U.S. Commercial Paper Program"). The amount of U.S. commercial paper notes outstanding ("USCP Notes") as of December 31, 2019 was \$160.0.

On July 10, 2018, the Company and one of its wholly owned European subsidiaries (the "Euro Issuer") entered into a eurocommercial paper program (the "Euro Commercial Paper Program" and, together with the U.S. Commercial Paper Program, the "Commercial Paper Programs") pursuant to which the Euro Issuer may issue short-term unsecured commercial paper notes (the "ECP Notes" and, together with the USCP Notes, the "Commercial Paper"), which are guaranteed by the Company and are to be issued outside of the United States. The ECP Notes may be issued in Euros, Sterling, U.S. Dollars or other currencies. The amount of ECP Notes outstanding as of December 31, 2019 was €210.0 (approximately \$235.5).

Amounts available under the Commercial Paper Programs may be borrowed, repaid and re-borrowed from time to time. As of December 31, 2019, the authorization from the Company's Board of Directors limits the maximum aggregate principal amount outstanding of USCP Notes, ECP Notes, and any other commercial paper, euro-commercial paper or similar programs at any time to \$2,500.0, consistent with the Revolving Credit Facility. In addition, the maximum aggregate principal amount outstanding of USCP Notes at any time is \$2,500.0, while the maximum aggregate principal amount outstanding of ECP Notes at any time is \$2,000.0. The Commercial Paper Programs are rated A-2 by Standard & Poor's and P-2 by Moody's and are currently backstopped by the Revolving Credit Facility, as amounts undrawn under the Company's Revolving Credit Facility are available to repay Commercial Paper, if necessary. Net proceeds of the issuances of Commercial Paper are expected to be used for general corporate purposes. The Company reviews its optimal mix of short-term and long-term debt regularly and may replace certain amounts of Commercial Paper, short-term debt and current maturities of long-term debt with new issuances of long-term debt in the future.

As of December 31, 2019, the Company has outstanding senior notes (the "Senior Notes") as follows:

	Principal Amount	Interest Rate	Maturity
<b>C</b>	400.0	2.20 %	
\$	400.0	2.20 %	April 2020
	227.7	3.125 %	September 2021
	295.0	4.00 %	February 2022
	350.0	3.20 %	April 2024
	500.0	4.35 %	June 2029
	900.0	2.80 %	February 2030
€	500.0	2.00 %	October 2028 (Euro Notes)

The U.S. Senior Notes are unsecured and rank equally in right of payment with the Company's other unsecured senior indebtedness. Interest on each series of the U.S. Senior Notes is payable semiannually. The Company may, at its option, redeem some or all of any series of U.S. Senior Notes, subject to certain terms and conditions. The 2.20% Senior Notes are due in April 2020 and are therefore recorded, net of the related unamortized discount and debt issuance costs, within Current portion of long-term debt in the accompanying Consolidated Balance Sheets as of December 31, 2019.

On January 9, 2019, the Company issued \$500.0 principal amount of unsecured 4.350% Senior Notes due June 1, 2029 at 99.904% of face value (the "2029 Senior Notes"), the net proceeds of which were used, along with proceeds

from borrowings under the U.S. Commercial Paper Program, to repay the \$750.0 of the Company's 2.55% Senior Notes due in January 2019.

On September 4, 2019, the Company commenced tender offers ("Tender Offers") to purchase for cash any and all of the Company's outstanding (i) \$375.0 principal amount of its 3.125% Senior Notes due September 2021 ("2021 Senior Notes") and (ii) \$500.0 principal amount of its 4.00% Senior Notes due February 2022 ("2022 Senior Notes"). On September 11, 2019, as a result of the Tender Offers, the Company accepted for payment \$147.3 aggregate principal amount of the 2021 Senior Notes and \$205.0 aggregate principal amount of the 2022 Senior Notes for 101.9% and 104.5% of par value, respectively (collectively, the "Tendered Notes"), plus accrued and unpaid interest to, but not including, the settlement date of the Tender Offers. The total consideration for the Tendered Notes was \$368.8, which in addition to the Tendered Notes, included \$13.4 of premiums and fees paid related to the early extinguishment of debt and \$3.1 of accrued interest. The remaining principal amounts associated with the 2021 Senior Notes and 2022 Senior Notes, which were not redeemed as a result of the Tender Offers, remain outstanding as of December 31, 2019.

On September 10, 2019, the Company issued \$900.0 principal amount of unsecured 2.800% Senior Notes due February 15, 2030 at 99.920% of face value (the "2030 Senior Notes"). In September 2019, the Company used the net proceeds from the 2030 Senior Notes to fund the cash consideration payable in the Tender Offers, with the remaining net proceeds being used for general corporate purposes, including to partially reduce outstanding borrowings related to the U.S. Commercial Paper Program.

On October 8, 2018, the Euro Issuer issued €500.0 (approximately \$574.6 at date of issuance) principal amount of unsecured 2.000% Senior Notes due October 8, 2028 at 99.498% of face value (the "2028 Euro Notes", and collectively with the Senior Notes in the United States, "Senior Notes"). The 2028 Euro Notes are unsecured and rank equally in right of payment with the Euro Issuer's other unsecured senior indebtedness, and are fully and unconditionally guaranteed on a senior unsecured basis by the Company. Interest on the 2028 Euro Notes is payable annually on October 8 of each year, commencing on October 8, 2019. The Company may, at its option, redeem some or all of the 2028 Euro Notes at any time, subject to certain terms and conditions. The Company used a portion of the net proceeds from the 2028 Euro Notes to repay a portion of the outstanding amounts under its Commercial Paper Programs, with the remainder of the net proceeds being used for general corporate purposes.

The Company's Senior Notes contain certain financial and non-financial covenants. At December 31, 2019, the Company was in compliance with the financial covenants under its Senior Notes. Refer to Note 4 of the Notes to the Consolidated Financial Statements for further information related to the Company's debt.

In April 2018, the Company's Board of Directors authorized a stock repurchase program under which the Company may purchase up to \$2,000.0 of the Company's Common Stock during the three-year period ending April 24, 2021 (the "2018 Stock Repurchase Program") in accordance with the requirements of Rule 10b-18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). During the years ended December 31, 2019 and 2018, the Company repurchased 6.5 million and 6.4 million shares of its Common Stock for \$601.7 and \$553.2, respectively, under the 2018 Stock Repurchase Program. Of the total repurchases in 2019, 5.5 million shares, or \$514.1, have been retired by the Company; the remaining 1.0 million shares, or \$87.6, were retained in Treasury stock at time of repurchase. Of the total repurchases in 2018, 5.7 million shares, or \$498.2, have been retired by the Company; the remaining 0.7 million shares, or \$55.0, had been retained in Treasury stock at time of repurchase. From January 1, 2020 through January 31, 2020, the Company repurchased 0.3 million additional shares of its Common Stock for \$29.0, leaving \$816.1 available to purchase under the 2018 Stock Repurchase Program. The price and timing of any future purchases under the 2018 Stock Repurchase Program will depend on factors such as levels of cash generation from operations, the volume of stock option exercises by employees, cash requirements for acquisitions, dividends, economic and market conditions and stock price.

In January 2017, the Company's Board of Directors authorized a stock repurchase program under which the Company could purchase up to \$1,000.0 of the Company's Common Stock during the two-year period ending January 24, 2019 (the "2017 Stock Repurchase Program") in accordance with the requirements of Rule 10b-18 of the Exchange Act. During the three months ended March 31, 2018, the Company repurchased 4.2 million shares of its Common Stock for \$382.0, while during the year ended December 31, 2017, the Company repurchased 8.4 million shares of its Common Stock for \$618.0. These shares have been retired by the Company. These repurchases of 12.6 million shares for \$1,000.0 completed the 2017 Stock Repurchase Program. The repurchases in the first quarter of 2018, coupled with the Company's repurchase of 6.4 million shares of its Common Stock for \$553.2 under the 2018 Stock Repurchase Program

during the nine months ended December 31, 2018, resulted in total repurchases of 10.6 million shares for \$935.2 during the year ended December 31, 2018.

Contingent upon declaration by the Board of Directors, the Company generally pays a quarterly dividend on shares of its Common Stock. On July 23, 2019, the Company's Board of Directors approved an increase to its quarterly dividend rate from \$0.23 to \$0.25 per share effective with dividends declared in the third quarter of 2019. The following table summarizes the declared quarterly dividends per share for each of the three years ended December 31, 2019, 2018 and 2017:

	2019		2018		2017
First Quarter	\$	0.23	\$	0.19	\$ 0.16
Second Quarter	(	0.23		0.23	0.16
Third Quarter	(	0.25		0.23	0.19
Fourth Quarter	(	0.25		0.23	0.19
Total	\$ (	0.96	\$	0.88	\$ 0.70

The following table summarizes the dividends declared and paid for the years ended December 31, 2019, 2018 and 2017:

	2019	2018	2017
Dividends declared	\$ 285.3	\$ 264.3	\$ 213.7
Dividends paid (including those declared in the prior year)	279.5	253.7	205.0

#### **LIBOR Transition**

In July 2017, the United Kingdom's Financial Conduct Authority, which regulates the London Interbank Offered Rate ("LIBOR"), announced its intent to phase out the use of LIBOR by the end of 2021. The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions, identified the Secured Overnight Financing Rate ("SOFR") as its preferred benchmark alternative to U.S. dollar LIBOR. Published by the Federal Reserve Bank of New York, SOFR represents a measure of the cost of borrowing cash overnight, collateralized by U.S. Treasury securities, and is calculated based on directly observable U.S. Treasury-backed repurchase transactions. The Company is evaluating the potential impact of the replacement of LIBOR (which ultimately may or may not be SOFR), from both a risk management and financial reporting perspective, including the review of potential issues that might arise in connection with this transition. Our current portfolio of debt and financial instruments tied to LIBOR consists primarily of our Commercial Paper Programs and Revolving Credit Facility, the latter of which has no outstanding borrowings as of December 31, 2019. Due to our current limited reliance on borrowings tied to LIBOR, the Company does not believe that this transition will have a material impact on our business, financial condition, results of operations or cash flows.

## Pensions

The Company and certain of its subsidiaries in the United States have defined benefit pension plans ("U.S. Plans"), which cover certain U.S. employees and which represent the majority of the plan assets and benefit obligations of the aggregate defined benefit plans of the Company. The U.S. Plans' benefits are generally based on years of service and compensation and are generally noncontributory. Certain U.S. employees not covered by the U.S. Plans are covered by defined contribution plans. Certain foreign subsidiaries also have defined benefit plans covering their employees (the "Foreign Plans" and, together with the U.S. Plans, the "Plans"). The total liability for accrued pension and postretirement benefit obligations under the Company's pension and postretirement benefit plans increased in 2019 to \$184.8 from \$178.5 in 2018 primarily due to the impact of lower discount rates on our projected benefit obligation, which was partially offset by higher actual returns on plan assets. In 2018, the Company also made a voluntary cash contribution of \$81.0 to fund the U.S. Plans. There is no current requirement for cash contributions to any of the U.S. Plans, and the Company plans to evaluate annually, based on actuarial calculations and the investment performance of the Plans' assets, the timing and amount of cash contributions in the future.

Refer to Note 9 of the Notes to the Company's Consolidated Financial Statements for further discussion of the Company's benefit plans and other postretirement benefit plans.

## Acquisitions

In January 2019, the Company acquired SSI Controls Technologies ("SSI"), the sensor manufacturing division of SSI Technologies, Inc., for approximately \$400, net of cash acquired, plus a performance-related contingent payment. The acquisition of SSI was funded by cash, cash equivalents and short-term investments on hand. SSI, which is headquartered in the state of Wisconsin in the United States, is a leading designer and manufacturer of sensors and sensing solutions for the global automotive and industrial markets.

During 2019, the Company completed nine acquisitions (including SSI) for \$937.4, net of cash acquired. All but one of the acquisitions are included in the Interconnect Products and Assemblies segment. These acquisitions were not material to the Company either individually or in the aggregate.

#### **Environmental Matters**

Certain operations of the Company are subject to environmental laws and regulations which govern the discharge of pollutants into the air and water, as well as the handling and disposal of solid and hazardous wastes. The Company believes that its operations are currently in substantial compliance with applicable environmental laws and regulations and that the costs of continuing compliance will not have a material adverse effect on the Company's financial condition, results of operations or cash flows

## **Inflation and Costs**

The cost of the Company's products is influenced by the cost of a wide variety of raw materials. The Company strives to offset the impact of increases in the cost of raw materials, labor and services through price increases, productivity improvements and cost saving programs. However, in certain markets, particularly in communications related markets, implementing price increases can be difficult and there is no guarantee that the Company will be successful. For a discussion of certain risks related to inflation and costs, refer to the risk factor titled "The Company has at times experienced difficulties in obtaining a consistent supply of materials at stable pricing levels" in Part I, Item 1A herein.

# Foreign Exchange

The Company conducts business in many foreign currencies through its worldwide operations, and as a result is subject to foreign exchange exposure due to changes in exchange rates of the various currencies including possible currency devaluations. Changes in exchange rates can positively or negatively affect the Company's sales, operating margins and equity. The Company attempts to minimize currency exposure risk in a number of ways including producing its products in the same country or region in which the products are sold, thereby generating revenues and incurring expenses in the same currency, cost reduction and pricing actions, working capital management and hedging contracts. However, there can be no assurance that these actions will be fully effective in managing currency risk, including in the event of a significant and sudden decline in the value of any of the foreign currencies of the Company's worldwide operations. For further discussion of foreign exchange exposures, risks and uncertainties, refer to the risk factor titled "The Company's results have at times been negatively affected by foreign currency exchange rates" in Part I, Item 1A herein.

## **Non-GAAP Financial Measures**

In addition to assessing the Company's financial condition, results of operations, liquidity and cash flows in accordance with U.S. GAAP, management utilizes certain non-GAAP financial measures defined below as part of its internal reviews for purposes of monitoring, evaluating and forecasting the Company's financial performance, communicating operating results to the Company's Board of Directors and assessing related employee compensation measures. Management believes that these non-GAAP financial measures may be helpful to investors in assessing the Company's overall financial performance, trends and year-over-year comparative results, in addition to the reasons noted below. Non-GAAP financial measures related to operating income, operating margin, net income attributable to Amphenol Corporation, effective tax rate and diluted EPS exclude income and expenses that are not directly related to the Company's operating performance during the years presented. Items excluded in such non-GAAP financial measures in any period may consist of, without limitation, acquisition-related expenses, refinancing-related costs, and certain discrete tax items including but not limited to (i) the excess tax benefits related to stock-based compensation and (ii) the impact of significant changes in tax law (including the Tax Act Charge recorded in 2017 and the subsequent adjustment

recorded in 2018 related to this charge). Non-GAAP financial measures related to net sales exclude the impact related to foreign currency exchange and acquisitions. The non-GAAP financial information contained herein is included for supplemental purposes only and should not be considered in isolation, as a substitute for or superior to the related U.S. GAAP financial measures. In addition, these non-GAAP financial measures are not necessarily the same or comparable to similar measures presented by other companies, as such measures may be calculated differently or may exclude different items.

The non-GAAP financial measures defined below should be read in conjunction with the Company's financial statements presented in accordance with U.S. GAAP. The reconciliations of these non-GAAP financial measures to the most directly comparable U.S. GAAP financial measures for the years ended December 31, 2019, 2018 and 2017 are included in "Results of Operations" and "Liquidity and Capital Resources" within this Item 7:

- Adjusted Diluted EPS is defined as diluted earnings per share (as reported in accordance with U.S. GAAP), excluding
  income and expenses and their specific tax effects that are not directly related to the Company's operating performance
  during the years presented. Adjusted Diluted EPS is calculated as Adjusted Net Income attributable to Amphenol
  Corporation, as defined below, divided by the weighted average outstanding diluted shares as reported in the
  Consolidated Statements of Income.
- Adjusted Effective Tax Rate is defined as Provision for income taxes, as reported in the Consolidated Statements of
  Income, expressed as a percentage of Income before income taxes, as reported in the Consolidated Statements of
  Income, each excluding the income and expenses and their specific tax effects that are not directly related to the
  Company's operating performance during the years presented.
- Adjusted Net Income attributable to Amphenol Corporation is defined as Net income attributable to Amphenol
  Corporation, as reported in the Consolidated Statements of Income, excluding income and expenses and their specific
  tax effects that are not directly related to the Company's operating performance during the years presented.
- Adjusted Operating Income is defined as Operating income, as reported in the Consolidated Statements of Income, excluding income and expenses that are not directly related to the Company's operating performance during the years presented.
- Adjusted Operating Margin is defined as Adjusted Operating Income (as defined above) expressed as a percentage of Net sales (as reported in the Consolidated Statements of Income).
- Constant Currency Net Sales Growth is defined as the year-over-year percentage change in net sales growth, excluding
  the impact of changes in foreign currency exchange rates. Amphenol's results are subject to volatility related to foreign
  currency translation fluctuations. As such, management evaluates the Company's sales performance based on actual
  sales growth in U.S. dollars, as well as Organic Net Sales Growth (defined below) and Constant Currency Net Sales
  Growth, and believes that such information is useful to investors to assess the underlying sales trends.
- Free Cash Flow is defined as Net cash provided by operating activities ("Operating Cash Flow" as reported in accordance with U.S. GAAP) less capital expenditures (as reported in accordance with U.S. GAAP), both of which are derived from the Consolidated Statements of Cash Flow. Free Cash Flow is an important liquidity measure for the Company, as we believe it is useful for management and investors to assess our ability to generate cash, as well as to assess how much cash can be used to reinvest in the growth of the Company or to return to shareholders through either stock repurchases or dividends.
- Organic Net Sales Growth is defined as the year-over-year percentage change in net sales growth resulting from operating volume and pricing changes, and excludes the impact of 1) changes in foreign currency exchange rates, which directly impact the Company's operating results and are outside the control of the Company and 2) acquisitions closed since the beginning of the prior calendar year, which were not included in the Company's results as of the comparable prior year periods and which do not reflect the underlying growth of the Company on a comparative basis. Management evaluates the Company's sales performance based on actual sales growth in U.S. dollars, as well as Constant Currency Net Sales Growth (defined above) and Organic Net Sales Growth, and believes that such information is useful to investors to assess the underlying sales trends.

## **Recent Accounting Pronouncements**

Refer to Note 1 of the Notes to the Company's Consolidated Financial Statements for a discussion of recently issued accounting pronouncements.

## **Critical Accounting Policies and Estimates**

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Management bases its estimates on historical experience along with other assumptions that we believe are reasonable in formulating our bases for making judgements regarding the carrying amounts of assets and liabilities that are not readily apparent elsewhere. Estimates are adjusted as new information becomes available. Actual results could differ from those estimates. The Company believes that the most significant areas involving critical accounting policies are set forth below. The significant accounting policies are more fully described in Note 1 of the Notes to the Company's Consolidated Financial Statements.

## Revenue Recognition

Topic 606

The Company's net sales in the Consolidated Statements of Income for the years ended December 31, 2019 and 2018 are presented under Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* (collectively with its related subsequent amendments, "Topic 606"), resulting from the modified retrospective adoption of Topic 606 applied to those contracts which were not completed as of January 1, 2018. The comparative results for the year ended December 31, 2017 were recognized in accordance with the Company's revenue recognition policy then in effect under ASC Topic 605, *Revenue Recognition* ("Topic 605"), as discussed below. The adoption of Topic 606 resulted in accounting policy changes surrounding revenue recognition which replaced previous revenue guidance under Topic 605.

The Company's primary source of revenues consist of product sales to either end customers and their appointed contract manufacturers (including original equipment manufacturers) or to distributors. Our revenues are derived from contracts with customers, which in most cases are customer purchase orders that may be governed by master sales agreements. For each contract, the promise to transfer the control of the products, each of which is individually distinct, is considered to be the identified performance obligation. As part of the consideration promised in each contract, the Company evaluates the customer's credit risk. Our contracts do not have any significant financing components, as payment terms are generally due net 30 to 120 days after delivery. Although products are almost always sold at fixed prices, in determining the transaction price, we evaluate whether the price is subject to refund (due to returns) or adjustment (due to volume discounts, rebates, or price concessions) to determine the net consideration we expect to be entitled to. We allocate the transaction price to each distinct product based on its relative standalone selling price. Taxes assessed by governmental authorities and collected from the customer, including but not limited to sales and use taxes and value-added taxes, are not included in the transaction price.

The vast majority of our sales are recognized at a point-in-time under the core principle of recognizing revenue when control transfers to the customer, which generally occurs when we ship or deliver the product from our manufacturing facility to our customers, when our customer accepts and has legal title of the goods, and where the Company has a present right to payment for such goods. Based on the respective contract terms, most of our contracts' revenues are recognized either (i) upon shipment based on free on board ("FOB") shipping point, (ii) when the product arrives at its destination or (iii) when the products are pulled from consignment inventory. For the years ended December 31, 2019 and 2018, less than 5% of our net sales were recognized over time, where the associated contracts relate to the sale of goods with no alternative use as they are only sold to a single customer and whose underlying contract terms provide the Company with an enforceable right to payment, including a reasonable profit margin, for performance completed to date, in the event of customer termination. For the contracts recognized over time, we typically record revenue using the input method, based on the materials and labor costs incurred to date relative to the contract's total estimated costs. This method reasonably depicts when and as control of the goods transfers to the customer, since it measures our progress in producing the goods which is generally commensurate with this transfer of

control. Since we typically invoice our customers at the same time that we satisfy our performance obligations, contract assets and contract liabilities related to our contracts with customers recorded in the Consolidated Balance Sheets were not material as of December 31, 2019 and 2018.

#### Pre-adoption of Topic 606

For the year ended December 31, 2017, revenue from sales of the Company's products was recognized at the time the goods were delivered, title passed and the risks and rewards of ownership passed to the customer, provided the earnings process was complete and revenue was measurable. Such recognition generally occurred when the products reached the shipping point, the sales price was fixed and determinable, and collection was reasonably assured. Delivery was determined by the Company's shipping terms, which was primarily freight on board shipping point. Revenue was recorded at the net amount to be received after deductions for estimated discounts, allowances and returns. These estimates and reserves were determined and adjusted as needed based upon historical experience, contract terms and other related factors.

#### Income Taxes

Deferred income taxes are provided for revenue and expenses which are recognized in different periods for income tax and financial statement reporting purposes. The Company recognizes the effects of changes in tax laws and rates on deferred income taxes in the period in which legislation is enacted. Deferred income taxes are provided on undistributed earnings of foreign subsidiaries in the period in which the Company determines it no longer intends to permanently reinvest such earnings outside the United States. As of December 31, 2019, the Company has not provided for deferred income taxes on undistributed foreign earnings related to certain geographies of approximately \$900, as it is the Company's intention to permanently reinvest such earnings outside the United States. It is impracticable to calculate the amount of taxes that would be payable if these undistributed foreign earnings were to be repatriated. In addition, the Company remains indefinitely reinvested with respect to its financial statement basis in excess of tax basis of its investments in foreign subsidiaries. It is not practicable to determine the deferred tax liability with respect to such basis differences. Deferred tax assets are regularly assessed for recoverability based on both historical and anticipated earnings levels and a valuation allowance is recorded when it is more likely than not that these amounts will not be recovered. The tax effects of an uncertain tax position taken or expected to be taken in income tax returns are recognized only if it is "more likely than not" to be sustained on examination by the taxing authorities, based on its technical merits as of the reporting date. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. The Company includes estimated interest and penalties related to unrecognized tax benefits in the provision for income taxes.

As a result of the Tax Act, in 2017, the Company recorded (i) a provisional income tax charge related to the deemed repatriation of the accumulated unremitted earnings and profits of foreign subsidiaries, (ii) a provisional income tax charge related to changes in the Company's permanent reinvestment assertion with regards to prior accumulated unremitted earnings from certain foreign subsidiaries, partially offset by (iii) a provisional income tax benefit associated with the remeasurement of its net deferred tax liabilities due to the U.S. federal corporate tax rate reduction, and included these amounts in its consolidated financial statements for the year ended December 31, 2017. Beginning in 2018, the global intangible low-taxed income ("GILTI") provision imposed a tax on certain earnings of foreign subsidiaries. The Company elected an accounting policy to account for GILTI as a period cost. The U.S. Treasury Department has issued final interpretive guidance relating to certain provisions of the Tax Act and proposed additional guidance related to the same provisions. The Company will account for the impact of additional guidance in the period in which any new guidance is released, if appropriate.

In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which was codified under ASU 2018-05, to address the application of U.S. GAAP in situations where a registrant does not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. In 2017, the Company recorded a provisional income tax charge as a result of the Tax Act. Consistent with ASU 2018-05, the Company completed its accounting and recorded an income tax benefit in 2018.

## Disclosures about contractual obligations and commitments

The following table summarizes the Company's known obligations to make future payments pursuant to certain contracts as of December 31, 2019, as well as an estimate of the timing in which such obligations are expected to be satisfied.

	Payment Due By Period							
Contractual Obligations (dollars in millions)	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years			
Debt (1)	\$ 3,630.3	\$ 403.5	\$ 523.4	\$ 745.8	\$ 1,957.6			
Interest related to senior notes (1)	670.7	92.7	163.6	133.1	281.3			
Operating leases (2)	219.4	58.8	73.3	39.9	47.4			
Purchase obligations (3)	431.1	398.4	25.6	4.6	2.5			
Accrued pension and postretirement benefit obligations (4)	58.7	7.5	11.5	11.8	27.9			
Transition tax (5)	133.4	11.4	31.6	69.1	21.3			
Total (6)	\$ 5,143.6	\$ 972.3	\$ 829.0	\$ 1,004.3	\$ 2,338.0			

- (1) The Company has excluded expected interest payments on the Revolving Credit Facility, U.S. Commercial Paper Program and Euro Commercial Paper Program from the above table, as this calculation is largely dependent on average debt levels the Company expects to have during each of the years presented. The actual interest payments made related to the Company's Revolving Credit Facility and both Commercial Paper Programs combined, in 2019, were approximately \$22.1. Expected debt levels, and therefore expected interest payments, are difficult to predict, as they are significantly impacted by such items as future acquisitions, repurchases of common stock, dividend payments as well as payments or additional borrowings made to reduce or increase the underlying revolver balance.
- (2) The Company's operating lease payments included in this table reflect the future minimum undiscounted fixed lease payments, which serve as the basis for calculating the Company's operating lease liabilities as of December 31, 2019. The table above excludes any variable lease payments not included in the measurement of the Company's right-of-use assets and operating lease liabilities in accordance with ASC Topic 842, due to their uncertainty. Finance leases are not material to the Company individually or in the aggregate and as such, have been excluded from the table above.
- (3) Purchase obligations relate primarily to open purchase orders for goods and services, including but not limited to, raw materials and components to be used in production.
- (4) Included in this table are estimated benefit payments expected to be made under the Company's unfunded pension and postretirement benefit plans, as well as the anticipated minimum required contributions under the Company's funded pension plans, the most significant funded plan of which covers its U.S. employees. Over the past several years, there has been no minimum requirement for Company contributions to the U.S. Plans due to prior contributions made in excess of minimum requirements and as a result, there was no anticipated minimum required contribution included in the table above related to the U.S. Plans for 2020. However, the Company did make a voluntary contribution of approximately \$81.0 in 2018 to fund the U.S. Plans, while no such voluntary contribution was made in 2019. It is not possible to reasonably estimate expected required contributions in the above table after 2020 since several assumptions are required to calculate minimum required contributions, such as the discount rate and expected returns on pension assets.
- (5) As a result of the enactment of the Tax Act in December 2017, the Company recorded a provisional tax charge on the deemed repatriation of the accumulated unremitted earnings and profits of foreign subsidiaries ("Transition Tax") for the year ended December 31, 2017, based on certain assumptions made upon the Company's then current interpretation of the Tax Act. The Company analyzed guidance and technical interpretations issued in 2018 related to the provisions of the Tax Act, and refined, analyzed and updated the underlying data, computations and assumptions used to prepare the provisional amount, and consequently completed its accounting and recorded an adjustment related to the Transition Tax. The amounts noted in the table above reflect the final Transition Tax, which is net of applicable tax credits and deductions, and in accordance with the Tax Act, is to be paid over the eight year period starting in 2018. The second installment of the Transition Tax was paid in the second quarter of 2019.
- (6) As of December 31, 2019, the Company has recorded net liabilities of approximately \$183.5 related to unrecognized tax benefits. These liabilities have been excluded from the above table due to the high degree of uncertainty regarding the timing of potential future cash flows; it is difficult to make a reasonably reliable estimate of the amount and period in which all of these liabilities might be paid.

## Item 7A. Quantitative and Qualitative Disclosures About Market Risk

(amounts in millions)

The Company, in the normal course of doing business, is exposed to a variety of risks, including market risks associated with foreign currency exchange rates and changes in interest rates. The Company does not have any significant concentration with any one counterparty.

#### Foreign Currency Exchange Rate Risk

The Company conducts business in many foreign currencies through its worldwide operations, and as a result is subject to foreign exchange exposure due to changes in exchange rates of the various currencies. Changes in exchange rates can positively or negatively affect the Company's sales, operating margins and equity. The Company attempts to manage currency exposure risk in a number of ways including producing its products in the same country or region in which the products are sold (thereby generating revenues and incurring expenses in the same currency), cost reduction and pricing actions, working capital management and hedging contracts. However, there can be no assurance that these actions will be fully effective in managing currency risk, including in the event of a significant and sudden decline in the value of any of the foreign currencies of the Company's worldwide operations.

In July 2018, the Company and one of its wholly owned European subsidiaries (collectively, the "Euro Issuer") entered into a Euro Commercial Paper Program, and then in October 2018, issued €500.0 (approximately \$574.6) of unsecured 2.000% senior notes ("2028 Euro Notes") due October 8, 2028. While the 2028 Euro Notes are denominated in Euros, any borrowings under the Company's Euro Commercial Paper Program may be denominated in various foreign currencies, including the Euro. When borrowing in foreign currencies, there can be no assurance that the Company can successfully manage these changes in exchange rates, including in the event of a significant and sudden decline in the value of any of the foreign currencies for which such borrowings are made. Refer to Note 4 of the Notes to the Consolidated Financial Statements for a discussion of debt.

The Company utilizes foreign exchange forward contracts to hedge exposure to foreign currency exchange rate fluctuations for certain transactions denominated in foreign currencies. As of December 31, 2019, the fair value of such contracts was not material. A 10% change in foreign currency exchange rates would not have a material effect on the value of the hedges as of December 31, 2019 and 2018. The Company does not engage in purchasing forward contracts for trading or speculative purposes. Refer to Note 1 and Note 5 of the Notes to the Consolidated Financial Statements for a discussion of derivative financial instruments.

## Interest Rate Risk

The Company is subject to market risk from exposure to changes in interest rates based on the Company's financing activities. The Company manages its exposure to interest rate risk through a mix of fixed and variable rate debt. The Company currently has outstanding various fixed rate series of senior notes over various maturity dates, two of which were issued in 2019. In January 2019, the Company issued \$500.0 of unsecured 4.350% Senior Notes due June 2029, the net proceeds of which, along with borrowings under the U.S. Commercial Paper Program, were used to repay \$750.0 of 2.55% Senior Notes due January 30, 2019. In September 2019, the Company issued \$900.0 of unsecured 2.80% Senior Notes due February 2030, the net proceeds of which were used to repay the cash consideration payable as a result of the tender offers associated with the 3.125% Senior Notes and 4.00% Senior Notes, with the remaining net proceeds being used for general corporate purposes, including to partially reduce outstanding borrowings related to the U.S. Commercial Paper Program.

While there were no such borrowings as of December 31, 2019, any borrowings under the Revolving Credit Facility either bear interest at or trade at rates that fluctuate with a spread over LIBOR. Any borrowings under the Commercial Paper Programs are subject to floating interest rates. Therefore, when the Company borrows under these debt instruments, the Company is exposed to market risk related to changes in interest rates. As of December 31, 2019, approximately \$400, or 11% of the Company's outstanding borrowings, which related primarily to the Company's Commercial Paper Programs, were subject to floating interest rates. At December 31, 2019 and 2018, the Company's average floating rate on borrowings under the U.S. Commercial Paper Program was 1.85% and 2.88%, respectively. At December 31, 2019 and 2018, the Company's average floating rate on borrowings under the Euro Commercial Paper Program was (0.13)% and (0.10)%, respectively. A 10% change in the interest rate at December 31, 2019 and 2018 for either or both Commercial Paper Programs would not have a material effect on interest expense. The Company does not expect changes in interest rates to have a material effect on income or cash flows in 2020, although there can be no assurances that interest rates will not change significantly.

## Item 8. Financial Statements and Supplementary Data

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Amphenol Corporation

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

We have audited the accompanying consolidated balance sheets of Amphenol Corporation and subsidiaries (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, changes in equity, and cash flow, for each of the three years in the period ended December 31, 2019, and the related notes and the schedule listed in the Index at Item 15 (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, 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 financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America (generally accepted accounting principles). Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

## **Change in Accounting Principle**

As discussed in Note 1 to the financial statements, the Company has changed its method of accounting for leases in 2019 due to the adoption of Accounting Standards Update No. 2016-02, *Leases (Topic 842)*, as amended, using the modified retrospective approach.

# **Basis for Opinions**

The Company's management is responsible for these 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 Report on Internal Control. Our responsibility is to express an opinion on these financial statements and an opinion 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 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 financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the 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 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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

#### Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

# Income Taxes — Unrecognized Tax Benefits — Refer to Notes 1 and 6 to the financial statements

## **Critical Audit Matter Description**

The Company operates in the U.S. and numerous foreign taxable jurisdictions, and at any point in time has numerous audits underway at various stages of completion. The Company evaluates its tax positions and establishes liabilities for uncertain tax positions that may be challenged by tax authorities and may not be fully sustained, despite the Company's belief that the underlying tax positions are fully supportable. The tax effects of an uncertain tax position taken or expected to be taken in income tax returns are recognized only if it is "more likely than not" to be sustained on examination by the taxing authorities, based on its technical merits as of the reporting date. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement.

Management judgment is required to identify and evaluate each uncertain tax position to determine whether the more likely than not recognition thresholds have been met. Further, the evaluation of each uncertain tax position requires management to apply specialized skill and knowledge related to the identified position. The Company has unrecognized tax benefits of \$201.3 million, including penalties and interest, as of December 31, 2019.

We identified the liabilities for uncertain tax positions as a critical audit matter because of the complexity created by the multiple jurisdictions in which the Company files its tax returns, each of which has differing and complex tax laws and regulations. This required a high degree of auditor judgment and an increased extent of effort, including the need to involve our income tax specialists, when performing audit procedures to evaluate management's identification of uncertain tax positions, the estimates of the amounts to be realized and whether it is more likely than not that the tax position will be sustained.

#### How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to uncertain tax positions included the following, among others:

- We tested the effectiveness of controls over the uncertain tax positions for income taxes, including management's
  controls over the identification and recording of uncertain tax positions as well as the determination of whether it is
  more likely than not that the tax position will be sustained.
- With the assistance of our income tax specialists, we evaluated management's significant judgements regarding uncertain tax positions including:
  - Assessing the reasonableness of the methods and assumptions used by management to identify uncertain tax positions including but not limited to:
    - Evaluating former, ongoing and anticipated tax audits by tax authorities
    - Evaluating transactions for which third-party tax advice or tax opinions were received
    - Determining if there's any additional information available to us that was not identified and considered in management's assessment.
  - Assessing the technical merits of a sample of positions identified and the reasonableness of the methodology used to determine the uncertain tax liability.
  - Evaluating management's conclusion with respect to whether uncertain tax positions accounted for in prior
    periods have been effectively settled and/or whether the statute of limitations has expired and, if so, whether
    the resolution of the tax position has been appropriately accounted for in the financial statements.
  - Evaluating tax positions that have not yet settled or are within statute to determine whether any new
    information regarding the sustainability of these tax positions or measurement of tax benefit is present such
    that a previously unrecognized uncertain tax position is recognized.

/s/ Deloitte & Touche LLP

Hartford, Connecticut February 12, 2020

We have served as the Company's auditor since 1997.

# Table of Contents

# AMPHENOL CORPORATION

# **Consolidated Statements of Income**

(dollars and shares in millions, except per share data)

	Year Ended December 31,					
		2019		2018		2017
Net sales	\$	8,225.4	\$	8,202.0	\$	7,011.3
Cost of sales		5,609.4		5,547.1		4,701.4
Gross profit		2,616.0		2,654.9		2,309.9
Acquisition-related expenses		25.4		8.5		4.0
Selling, general and administrative expenses		971.4		959.5		878.3
Operating income		1,619.2		1,686.9		1,427.6
Interest expense		(117.6)		(101.7)		(92.3)
Loss on early extinguishment of debt		(14.3)		_		_
Other income, net		8.6		3.2		17.1
Income before income taxes		1,495.9		1,588.4		1,352.4
Provision for income taxes		(331.9)		(371.5)		(691.7)
Net income		1,164.0		1,216.9		660.7
Less: Net income attributable to noncontrolling interests		(9.0)		(11.9)		(10.2)
Net income attributable to Amphenol Corporation	\$	1,155.0	\$	1,205.0	\$	650.5
·					_	
Net income per common share — Basic	\$	3.88	\$	4.00	\$	2.13
	÷		÷		÷	
Weighted average common shares outstanding — Basic		297.5		301.2		305.7
Weighted average common shares outstanding. Busic		277.5		301.2		303.1
Net income per common share — Diluted	\$	3.75	\$	3.85	\$	2.06
The mome per common share. Diracca	Ť		_		_	
Weighted average common shares outstanding — Diluted		307.9		312.6		316.5
meighted average common shares outstanding — Diruted		301.9		312.0		310.3
Dividends declared per common share	\$	0.96	\$	0.88	\$	0.70
Dividends deciared per common share	Φ	0.90	Ф	0.00	Φ	0.70

 $See\ accompanying\ notes\ to\ consolidated\ financial\ statements.$ 

# Table of Contents

# AMPHENOL CORPORATION

# **Consolidated Statements of Comprehensive Income**

(dollars in millions)

	Year E	nded Decembe	r 31,
	2019	2018	2017
Net income	\$ 1,164.0	\$ 1,216.9	\$ 660.7
Total other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustments	(40.8)	(167.0)	243.3
Unrealized gain (loss) on cash flow hedges	0.1	0.4	(0.1)
Pension and postretirement benefit plan adjustment	(0.4)	(1.8)	27.8
Total other comprehensive (loss) income, net of tax	(41.1)	(168.4)	271.0
Total comprehensive income	1,122.9	1,048.5	931.7
Less: Comprehensive income attributable to noncontrolling interests	(8.6)	(9.2)	(13.2)
Comprehensive income attributable to Amphenol Corporation	\$ 1,114.3	\$ 1,039.3	\$ 918.5

See accompanying notes to consolidated financial statements.

# **Consolidated Balance Sheets**

(dollars and shares in millions, except per share data)

		2019		2018
Assets				
Current Assets:				
Cash and cash equivalents	\$	891.2	\$	1,279.3
Short-term investments		17.4		12.4
Total cash, cash equivalents and short-term investments		908.6		1,291.7
Accounts receivable, less allowance for doubtful accounts of \$33.6 and \$33.5,				
respectively		1,736.4		1,791.8
Inventories		1,310.1		1,233.8
Prepaid expenses and other current assets		256.1		254.3
Total current assets		4,211.2		4,571.6
Property, plant and equipment, net		999.0		875.8
Goodwill		4,867.1		4,103.2
Other intangible assets, net		442.0		397.9
Other long-term assets		296.2		96.4
Ç	\$	10,815.5	\$	10,044.9
Liabilities & Equity				
Current Liabilities:	Ф	066.0	Φ	000.5
Accounts payable	\$	866.8	\$	890.5
Accrued salaries, wages and employee benefits		171.8		157.2
Accrued income taxes		127.9		203.5
Accrued dividends		74.4		68.7
Other accrued expenses		488.5		367.1
Current portion of long-term debt		403.3		764.3
Total current liabilities		2,132.7		2,451.3
Long-term debt, less current portion		3,203.4		2,806.4
Accrued pension and postretirement benefit obligations		198.8		190.2
Deferred income taxes		260.4		255.6
Other long-term liabilities		424.0		277.2
Commitments and contingent liabilities (Note 14)				
Equity:				
Class A Common Stock, \$0.001 par value; 1,000.0 shares authorized; 298.7 shares				
issued and 297.9 shares outstanding as of December 31, 2019; 299.2 shares issued		0.0		
and 298.5 shares outstanding as of December 31, 2018		0.3		0.3
Additional paid-in capital		1,683.3		1,433.2
Retained earnings		3,348.4		3,028.7
Treasury stock, at cost; 0.8 and 0.7 shares as of December 31, 2019 and 2018,				
respectively		(70.8)		(55.0)
Accumulated other comprehensive loss		(430.9)	_	(390.2)
Total shareholders' equity attributable to Amphenol Corporation		4,530.3		4,017.0
Noncontrolling interests		65.9		47.2
Total equity	_	4,596.2		4,064.2
	\$	10,815.5	\$	10,044.9
	=	,	_	-,

See accompanying notes to consolidated financial statements.

# **Consolidated Statements of Changes in Equity**

(dollars and shares in millions, except per share data)

	Commo	on Stock Amount	Treasu Shares	iry Stock Amount	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Noncontrolling Interests	Total Equity
Balance January 1, 2017 Net income	308	\$ 0.3		\$ —	\$ 1,020.9	\$ 3,122.7 650.5	\$ (469.0)	\$ 48.2 10.2	\$ 3,723.1 660.7
Other comprehensive income (loss)						000.0	268.0	3.0	271.0
Acquisitions resulting in noncontrolling interests								11.1	11.1
Purchase of noncontrolling interest					(5.5)			(10.3)	(15.8)
Distributions to shareholders of noncontrolling interests								(8.6)	(8.6)
Purchase of treasury stock			(8)	(618.0)					(618.0)
Retirement of treasury stock	(8)		8	618.0	1000	(618.0)			
Stock options exercised Dividends declared (\$0.70 per	6	_			183.9				183.9
common share) Stock-based compensation						(213.7)			(213.7)
expense					49.7				49.7
Balance December 31, 2017	306	0.3			1,249.0	2,941.5	(201.0)	53.6	4,043.4
Cumulative effect of adoption of					-,	ĺ	(2000)		.,
revenue recognition standard						3.2			3.2
Reclassification of income tax									
effects resulting from the Tax						23.5	(23.5)		
Act (ASU 2018-02) Net income						1,205.0	(23.3)	11.9	1,216.9
Other comprehensive income						1,203.0		11.7	1,210.7
(loss)							(165.7)	(2.7)	(168.4)
Acquisitions resulting in noncontrolling interests								0.3	0.3
Purchase of noncontrolling									
interest					(2.3)			(5.4)	(7.7)
Distributions to shareholders of noncontrolling interests								(10.5)	(10.5)
Purchase of treasury stock			(11)	(935.2)				(10.3)	(935.2)
Retirement of treasury stock	(10)	_	10	880.2		(880.2)			()33.2)
Stock options exercised	3	_			130.9	()			130.9
Dividends declared (\$0.88 per									
common share)						(264.3)			(264.3)
Stock-based compensation					55.6				55.6
expense  Balance December 31, 2018	299	0.3	(1)	(55.0)	55.6 1,433.2	3,028.7	(390.2)	47.2	55.6 4,064.2
Net income	2))	0.5	(1)	(33.0)	1,433.2	1,155.0	(370.2)	9.0	1,164.0
Other comprehensive income						1,100.0		7.0	1,101.0
(loss)							(40.7)	(0.4)	(41.1)
Acquisitions resulting in								20.0	20.0
noncontrolling interests								30.0	30.0
Purchase of noncontrolling interest					(23.4)			(14.6)	(38.0)
Distributions to shareholders of					(23.1)			(11.0)	(50.0)
noncontrolling interests								(5.3)	(5.3)
Purchase of treasury stock			(7)	(601.7)					(601.7)
Retirement of treasury stock	(6)	_	6	514.1	210.5	(514.1)			246.4
Stock options exercised Dividends declared (\$0.96 per	b		I	71.8	210.5	(35.9)			246.4
common share)						(285.3)			(285.3)
Stock-based compensation						(200.0)			(=00.0)
expense		Ļ.			63.0				63.0
Balance December 31, 2019	299	\$ 0.3	(1)	\$ (70.8)	\$ 1,683.3	\$ 3,348.4	\$ (430.9)	\$ 65.9	\$ 4,596.2

 $See\ accompanying\ notes\ to\ consolidated\ financial\ statements.$ 

# **Consolidated Statements of Cash Flow**

(dollars in millions)

		2017				
Cash from operating activities:		2019		2018	-	2017
Net income	\$	1,164.0	\$	1,216.9	\$	660.7
Adjustments to reconcile net income to cash provided by operating activities:						
Depreciation and amortization		312.1		299.7		226.8
Stock-based compensation expense		63.0		55.6		49.7
Loss on early extinguishment of debt		14.3		_		_
Deferred income tax provision (benefit)		15.2		(12.0)		186.3
Net change in operating assets and liabilities, excluding effects of acquisitions:				, ,		
Accounts receivable, net		117.3		(237.9)		(146.5)
Inventories		(3.4)		(173.3)		(100.4)
Prepaid expenses and other current assets		(6.0)		(47.7)		(75.9)
Accounts payable		(60.2)		48.8		140.5
Accrued income taxes		(91.7)		(9.7)		11.2
Other accrued liabilities		(37.6)		57.4		13.0
Accrued pension and postretirement benefits		7.2		(76.6)		5.0
Other long-term assets and liabilities		8.1		(8.5)		173.8
Net cash provided by operating activities	_	1,502.3		1,112.7		1,144.2
The state of the s	_	,	_		_	, .
Cash from investing activities:						
Capital expenditures		(295.0)		(310.6)		(226.6)
Proceeds from disposals of property, plant and equipment		7.4		5.0		4.1
Purchases of short-term investments		(65.4)		(44.5)		(40.2)
Sales and maturities of short-term investments		61.6		67.2		148.0
Acquisitions, net of cash acquired		(937.4)		(158.9)		(265.5)
Net cash used in investing activities		(1,228.8)	_	(441.8)	_	(380.2)
Cash from financing activities:						
Proceeds from issuance of senior notes		1,398.8		571.7		749.3
Repayments of long-term debt		(1,111.5)		(15.2)		(375.0)
(Repayments) borrowings under commercial paper programs, net		(229.0)		(544.6)		154.1
Payment of costs related to debt financing		(14.9)		(5.6)		(5.2)
Payment of premiums and fees related to early extinguishment of debt		(13.4)		_		_
Purchase of treasury stock		(601.7)		(935.2)		(618.0)
Proceeds from exercise of stock options		246.1		130.7		184.1
Distributions to and purchases of noncontrolling interests		(43.3)		(18.2)		(24.4)
Dividend payments		(279.5)		(253.7)		(205.0)
Net cash used in financing activities		(648.4)		(1,070.1)		(140.1)
Effect of exchange rate changes on cash and cash equivalents		(13.2)		(40.6)		60.6
Net change in cash and cash equivalents		(388.1)		(439.8)		684.5
Cash and cash equivalents balance, beginning of year		1,279.3		1,719.1		1,034.6
Cash and cash equivalents balance, end of year	\$	891.2	\$	1,279.3	\$	1,719.1
	-		Ė		÷	
Cash paid during the year for:						
Interest	\$	116.6	\$	94.2	\$	84.3
Income taxes, net		408.3		393.2		325.2

See accompanying notes to consolidated financial statements.

#### **Notes to Consolidated Financial Statements**

(All amounts included in the following Notes to Consolidated Financial Statements are presented in millions, except share and per share data, unless otherwise noted)

#### Note 1—Summary of Significant Accounting Policies

#### Business

Amphenol Corporation (together with its subsidiaries, "Amphenol", the "Company", "we", "our", or "us") is one of the world's largest designers, manufacturers and marketers of electrical, electronic and fiber optic connectors and interconnect systems, antennas, sensors and sensor-based products and coaxial and high-speed specialty cable. The Company sells its products to customers worldwide.

The Company operates through two reportable business segments:

- Interconnect Products and Assemblies The Interconnect Products and Assemblies segment primarily designs, manufactures and markets a broad range of connector and connector systems, value-add products and other products, including antennas and sensors, used in a broad range of applications in a diverse set of end markets.
- Cable Products and Solutions The Cable Products and Solutions segment primarily designs, manufactures and
  markets cable, value-add products and components for use primarily in the broadband communications and information
  technology markets as well as certain applications in other markets.

## Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. The Company's management evaluates these significant estimates and assumptions that affect the consolidated financial statements and related disclosures. Estimates used in calculating certain accounts, including but not limited to, the allowance for doubtful accounts, provisions for slow-moving or obsolete inventory, revenue recognition, income taxes and related valuation allowances, goodwill and intangible assets from acquisitions, and pensions, are developed based on historical experience or other assumptions that the Company believes to be reasonable. Actual results could differ from those estimates.

## **Principles of Consolidation**

The consolidated financial statements are prepared in U.S. dollars and include the accounts of the Company and its whollyowned and majority-owned subsidiaries. Intercompany account balances and transactions have been eliminated in consolidation. The results of companies acquired are included in the Consolidated Financial Statements from the effective date of acquisition.

## Change in Presentation

Certain reclassifications of prior period amounts have been made to conform to the current period presentation, which had no impact on our consolidated results of operations, financial position or cash flows. Such reclassifications included separating, as its own line item, other intangible assets, net from other long-term assets, on the Consolidated Balance Sheets, as well as separating office equipment and other fixed assets from machinery and equipment, in the table detailing the components of property, plant and equipment in Note 3 herein.

# Cash and Cash Equivalents

Cash and cash equivalents consist of cash and liquid investments with an original maturity of less than three months. The carrying amounts approximate fair values of those instruments, the vast majority of which are in non-U.S. bank accounts.

#### Short-term Investments

Short-term investments consist primarily of certificates of deposit with original maturities of twelve months or less. The carrying amounts approximate fair values of those instruments, the vast majority of which are in non-U.S. bank accounts.

#### Accounts Receivable

Accounts receivable is stated at net realizable value. The Company regularly reviews accounts receivable balances and adjusts the receivable reserves as necessary whenever events or circumstances indicate the carrying value may not be recoverable.

#### Inventories

Inventories are stated at the lower of cost or net realizable value. The principal components of cost included in inventories are materials, direct labor and manufacturing overhead. The Company regularly reviews inventory quantities on hand, evaluates the realizability of inventories and adjusts the carrying value as necessary based on forecasted product demand. Provisions for slow-moving and obsolete inventory are made based on historical experience and product demand.

## Depreciable Assets

Property, plant and equipment are carried at cost less accumulated depreciation. Depreciation is recorded on a straight-line basis over the respective asset lives determined on a composite basis by asset group or on a specific item basis using the estimated useful lives of such assets, which generally range from 3 to 12 years for machinery and equipment and office equipment and 20 to 40 years for buildings. Leasehold building improvements are amortized over the shorter of the remaining lease term or estimated useful life of such improvements. The Company periodically reviews fixed asset lives. Depreciation expense is included in both Cost of sales and Selling, general and administrative expenses in the Consolidated Statements of Income, dependent upon the specific categorization and use of the underlying asset being depreciated. The Company assesses the impairment of property and equipment subject to depreciation, whenever events or changes in circumstances indicate the carrying value may not be recoverable. Factors the Company considers important, which could trigger an impairment review, include significant changes in the manner of the use of the asset, significant changes in historical trends in operating performance, significant changes in projected operating performance, and significant negative economic trends. There have been no impairments recorded in 2019, 2018 or 2017 as a result of such reviews.

#### Leases

As a result of the adoption of Accounting Standards Update No. 2016-02, *Leases (Topic 842)* ("Topic 842"), the Company established accounting policies and procedures surrounding the financial reporting of the Company's right-of-use assets and related lease liabilities. Refer to *Recent Accounting Pronouncements* within this Note 1, as well as Note 10 herein for further details regarding the adoption of Topic 842, along with the policies and additional information related to our lease portfolio.

## Goodwill

Goodwill represents the excess purchase cost over the fair value of net assets acquired in business combinations. The Company performs its evaluation for the impairment of goodwill for the Company's two reporting units on an annual basis as of each July 1 or more frequently if an event occurs or circumstances change that would indicate that a reporting unit's carrying amount may be impaired. The Company has defined its reporting units as the two reportable business segments "Interconnect Products and Assemblies" and "Cable Products and Solutions", as the components of these reportable business segments have similar economic characteristics.

In 2019 and 2018 as part of our annual evaluations, the Company utilized the option to first assess qualitative factors to determine whether it was necessary to perform the quantitative goodwill impairment assessment. As part of this assessment, the Company reviews qualitative factors which include, but are not limited to, economic, market and industry conditions, as well as the financial performance of each reporting unit. In accordance with applicable guidance, an entity is not required to calculate the fair value of a reporting unit if, after assessing these qualitative factors, the Company determines that it is more likely than not that the fair value of each of its reporting units is greater than its

respective carrying amount. As of July 1, 2019 and 2018, the Company determined that it was more likely than not that the fair value of its reporting units exceeded their respective carrying amounts and therefore, a quantitative assessment was not required. There has been no goodwill impairment in 2019, 2018 or 2017 in connection with our impairment tests.

# Intangible Assets

Intangible assets consist primarily of customer relationships, proprietary technology and license agreements and are generally amortized over the estimated periods of benefit. The fair value associated with acquired identifiable intangible assets are generally valued based on discounted cash flow analyses, independent appraisals and certain estimates made by management. The Company assesses and reviews its long-lived intangible assets, other than goodwill, for potential impairment including identifiable intangible assets subject to amortization whenever events or changes in circumstances indicate the carrying amount may not be recoverable. Factors the Company considers important, which could trigger an impairment review, include significant changes in the manner of the use of the asset, changes in historical trends in operating performance, significant changes in projected operating performance, anticipated future cash flows and significant negative economic trends. Indefinite-lived intangible assets that are not subject to amortization, which is comprised of certain trade names, are reviewed at least annually for impairment. In the third quarter of 2019, the Company performed its annual assessment of these identifiable indefinite-lived intangible assets. Based on our qualitative assessment, the Company determined that it was more likely than not that the fair value of the indefinite-lived intangible assets exceeded their respective carrying amounts. There has been no intangible asset impairment in 2019, 2018 or 2017 as a result of such reviews.

#### Acquisitions

The Company accounts for acquisitions using the acquisition method of accounting, which requires that assets acquired and liabilities assumed be recognized at fair value as of the acquisition date. The purchase price of acquisitions is allocated to the tangible and identifiable intangible assets acquired and liabilities assumed based on estimated fair values, and any excess purchase price over the identifiable assets acquired and liabilities assumed is recorded as goodwill. Any subsequent adjustments to the purchase price allocation prior to the completion of the measurement period will be reflected as an adjustment to goodwill in the period in which the adjustments are identified. The Company may use independent valuation specialists to assist in determining the estimated fair values of assets acquired and liabilities assumed, which could require certain significant management assumptions and estimates.

# Revenue Recognition

Topic 606

The Company's net sales in the Consolidated Statements of Income for the years ended December 31, 2019 and 2018 are presented under Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606) (collectively with its related subsequent amendments, "Topic 606"), resulting from the modified retrospective adoption of Topic 606 applied to those contracts which were not completed as of January 1, 2018. The comparative results for the year ended December 31, 2017 were recognized in accordance with the Company's revenue recognition policy then in effect under ASC Topic 605, Revenue Recognition ("Topic 605"), as discussed below. The adoption of Topic 606 resulted in accounting policy changes surrounding revenue recognition which replaced previous revenue guidance under Topic 605. In accordance with Topic 606, the Company recognizes revenue upon the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for such goods or services. The vast majority of our sales are recognized when products are shipped from our facilities or delivered to our customers, depending on the respective contractual terms. For a nominal portion of our contracts where the accounting did change, the adoption of Topic 606 resulted in an increase to the opening balance of retained earnings of approximately \$3.2 as of January 1, 2018. This impact was primarily due to the acceleration of net sales and associated net income related to certain uncompleted contracts for the manufacture of goods with no alternative use and for which we have an enforceable right to payment, including a reasonable profit margin, from the customer for performance completed to date. For these contracts, we recognize revenue over time as control of the goods transfers, rather than when the goods are delivered, and title, risk and reward of ownership are passed to the customer, as under previous guidance. Refer to Note 13 herein for further discussion regarding the Company's disaggregation of net sales.

The Company's primary source of revenues consist of product sales to either end customers and their appointed contract manufacturers (including original equipment manufacturers) or to distributors, and the vast majority of our sales

are recognized at a point-in-time under the core principle of recognizing revenue when control transfers to the customer. Revenues are derived from contracts with customers, which in most cases are customer purchase orders that may be governed by master sales agreements. For each contract, the promise to transfer the control of the products, each of which is individually distinct, is considered to be the identified performance obligation. As part of the consideration promised in each contract, the Company evaluates the customer's credit risk. Our contracts do not have any significant financing components, as payment terms are generally due net 30 to 120 days after delivery. Although products are almost always sold at fixed prices, in determining the transaction price, we evaluate whether the price is subject to refund (due to returns) or adjustment (due to volume discounts, rebates, or price concessions) to determine the net consideration we expect to be entitled to. We allocate the transaction price to each distinct product based on its relative standalone selling price. Taxes assessed by governmental authorities and collected from the customer, including but not limited to sales and use taxes and value-added taxes, are not included in the transaction price.

The vast majority of our sales are recognized at a point-in-time under the core principle of recognizing revenue when control transfers to the customer. With limited exceptions, the Company recognizes revenue at the point in time when we ship or deliver the product from our manufacturing facility to our customer, when our customer accepts and has legal title of the goods, and where the Company has a present right to payment for such goods. Based on the respective contract terms, most of our contracts' revenues are recognized either (i) upon shipment based on free on board ("FOB") shipping point, (ii) when the product arrives at its destination or (iii) when the product is pulled from consignment inventory. For the years ended December 31, 2019 and 2018, less than 5% of our net sales were recognized over time, where the associated contracts relate to the sale of goods with no alternative use as they are only sold to a single customer and whose underlying contract terms provide the Company with an enforceable right to payment, including a reasonable profit margin, for performance completed to date, in the event of customer termination. For the contracts recognized over time, we typically record revenue using the input method, based on the materials and labor costs incurred to date relative to the contract's total estimated costs. This method reasonably depicts when and as control of the goods transfers to the customer, since it measures our progress in producing the goods, which is generally commensurate with this transfer of control. Since we typically invoice our customers at the same time that we satisfy our performance obligations, contract assets and contract liabilities related to our contracts with customers recorded in the Consolidated Balance Sheets were not material as of December 31, 2019 and 2018.

The Company receives customer orders negotiated with multiple delivery dates that may extend across more than one reporting period until the contract is fulfilled, the end of the order period is reached, or a pre-determined maximum order value has been reached. Orders typically fluctuate from quarter to quarter based on customer demand and general business conditions. It is generally expected that a substantial portion of our remaining performance obligations will be fulfilled within three months. Nearly all of our performance obligations are fulfilled within one year. Since our performance obligations are part of contracts that generally have original durations of one year or less, we have not disclosed the aggregate amount of transaction prices associated with unsatisfied or partially unsatisfied performance obligations as of December 31, 2019 and 2018.

#### Sales to Distributors and Resellers

Sales to certain distributors and resellers are made under terms allowing certain price adjustments and limited rights of return of the Company's products held in their inventory or upon sale to their end customers. The Company maintains a reserve for unprocessed and estimated future price adjustment claims and returns as a refund liability. The reserve is recorded as a reduction to revenue in the same period that the related revenue is recorded and is calculated based on an analysis of historical claims and returns over a period of time to appropriately account for current pricing and business trends. Similarly, sales returns and allowances are recorded based on historical return rates, as a reduction to revenue with a corresponding reduction to cost of sales for the estimated cost of inventory that is expected to be returned. These reserves were not material to the Consolidated Balance Sheets as of December 31, 2019 and 2018.

## Warranty

Standard product warranty coverage which provides assurance that our products will conform to the contractually agreed-upon specifications for a limited period from the date of shipment is typically offered, while extended or separately-priced warranty coverage is typically not offered. The warranty claim is generally limited to a credit equal to the purchase price or a promise to repair or replace the product for a specified period of time at no additional charge. We estimate our warranty liability based on historical experience, product history, and current trends, and record warranty expense in Cost of sales in the Consolidated Statements of Income. Warranty liabilities and related warranty expense have not been and were not material in the accompanying Consolidated Financial Statements as of and for the years ended December 31, 2019, 2018 and 2017.

#### Shipping and Handling Costs

The Company accounts for shipping and handling activities related to contracts with customers as a cost to fulfill our promise to transfer control of the related product, including any such costs incurred after the customer has obtained control of the goods. Shipping and handling costs are generally charged to and paid by the majority of our customers as part of the contract. For a nominal portion of our customer contracts, primarily for certain customers in the broadband communications market (a market primarily in the Cable Products and Solutions segment), such costs are not separately charged to the customers. Shipping and handling costs are included in Cost of sales in the accompanying Consolidated Statements of Income.

## Contract Assets and Contract Liabilities

The Company records contract assets or contract liabilities depending on the timing of revenue recognition, billings and cash collections on a contract-by-contract basis. Contract assets represent unbilled receivables, which generally arise when revenue recognized over time exceed amounts billed to customers. Contract liabilities represent billings or advanced consideration received from customers in excess of revenue recognized to date. As the Company's performance obligations are typically less than one year, these amounts are generally recorded as current in the accompanying Consolidated Balance Sheets within Prepaid expenses and other current assets or Other accrued expenses as of December 31, 2019 and 2018. Contract assets and contract liabilities recorded in the Consolidated Balance Sheets were not material as of December 31, 2019 and 2018.

#### Contract Costs

The Company's policy is to capitalize any incremental costs incurred to obtain a customer contract, only to the extent that such costs are explicitly chargeable to the customer and the benefit associated with the costs is expected to be longer than one year. Otherwise, such costs are expensed as incurred and recorded within Selling, general and administrative expenses in the accompanying Consolidated Statements of Income. Incremental costs to fulfill customer orders, which are mostly comprised of pre-production and set-up costs, are generally capitalized to the extent such costs are contractually guaranteed to be reimbursed by the customer. Otherwise, such costs are expensed as incurred. Capitalized contract costs to obtain a contract or to fulfill a contract that are not accounted for under other existing accounting standards are recorded as either other current or long-term assets on the accompanying Consolidated Balance Sheets, depending on the timing of when the Company expects to recognize the expense, and are generally amortized consistent with the timing of when transfer of control of the related goods occurs. Such capitalized contract costs were not material as of December 31, 2019 and 2018, and the related amortization expense was not material for the years ended December 31, 2019 and 2018.

# Pre-adoption of Topic 606

The Company adopted Topic 606 using the modified retrospective method and as such, comparative results for the year ended December 31, 2017 were not retrospectively adjusted. For the year ended December 31, 2017, revenue from sales of the Company's products was recognized at the time the goods were delivered, title passed and the risks and rewards of ownership passed to the customer, provided the earnings process was complete and revenue was measurable. Such recognition generally occurred when the products reached the shipping point, the sales price was fixed and determinable, and collection was reasonably assured. Delivery was determined by the Company's shipping terms, which was primarily freight on board shipping point. Revenue was recorded at the net amount to be received after deductions for estimated discounts, allowances and returns. These estimates and reserves were determined and adjusted as needed based upon historical experience, contract terms and other related factors. The shipping costs for the majority of the Company's sales were paid directly by the Company's customers. In the broadband communications market (approximately 6% of net sales in 2017), the Company paid for shipping costs to the majority of its customers. Shipping costs were also paid by the Company for certain customers in the Interconnect Products and Assemblies segment.

# Retirement Pension Plans

Costs for retirement pension plans include current service costs and amortization of prior service costs over the average working life expectancy. It is the Company's policy to fund current pension costs taking into consideration minimum funding requirements and maximum tax deductible limitations. The expense of retiree medical benefit programs is recognized during the employees' service with the Company. The recognition of expense for retirement pension plans and medical benefit programs is significantly impacted by estimates made by management such as

discount rates used to value certain liabilities, expected return on assets, mortality projections and future health care costs. The Company uses third-party specialists to assist management in appropriately measuring the expense and obligations associated with pension and other postretirement plan benefits. The defined benefit plan obligation is based on significant assumptions such as mortality rates and discount rates, as determined by the Company in consultation with the respective benefit plan actuaries and investment advisors.

## Stock-Based Compensation

The Company accounts for its stock option and restricted share awards based on the fair value of the award at the date of grant and recognizes compensation expense over the service period that the awards are expected to vest. The Company recognizes expense for stock-based compensation with graded vesting on a straight-line basis over the vesting period of the entire award. Stock-based compensation expense includes the estimated effects of forfeitures, which are adjusted over the requisite service period to the extent actual forfeitures differ or are expected to differ from such estimates. Changes in estimated forfeitures are recognized in the period of change and impact the amount of expense to be recognized in future periods.

## **Income Taxes**

Deferred income taxes are provided for revenue and expenses which are recognized in different periods for income tax and financial statement reporting purposes. The Company recognizes the effects of changes in tax laws and rates on deferred income taxes in the period in which legislation is enacted. Deferred income taxes are provided on undistributed earnings of foreign subsidiaries in the period in which the Company determines it no longer intends to permanently reinvest such earnings outside the United States. As of December 31, 2019, the Company has not provided for deferred income taxes on undistributed foreign earnings related to certain geographies of approximately \$900, as it is the Company's intention to permanently reinvest such earnings outside the United States. It is impracticable to calculate the amount of taxes that would be payable if these undistributed foreign earnings were to be repatriated. In addition, the Company remains indefinitely reinvested with respect to its financial statement basis in excess of tax basis of its investments in foreign subsidiaries. It is not practicable to determine the deferred tax liability with respect to such basis differences. Deferred tax assets are regularly assessed for recoverability based on both historical and anticipated earnings levels and a valuation allowance is recorded when it is more likely than not that these amounts will not be recovered. The tax effects of an uncertain tax position taken or expected to be taken in income tax returns are recognized only if it is "more likely than not" to be sustained on examination by the taxing authorities, based on its technical merits as of the reporting date. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. The Company includes estimated interest and penalties related to unrecognized tax benefits in the provision for income taxes.

As previously discussed, for the year ended December 31, 2017, as a result of the Tax Cuts and Jobs Act ("Tax Act"), the Company recorded (i) a provisional income tax charge related to the deemed repatriation of the accumulated unremitted earnings and profits of foreign subsidiaries, (ii) a provisional income tax charge related to changes in the Company's permanent reinvestment assertion with regards to prior accumulated unremitted earnings from certain foreign subsidiaries, partially offset by (iii) a provisional income tax benefit associated with the remeasurement of its net deferred tax liabilities due to the U.S. federal corporate tax rate reduction, and included these amounts in its consolidated financial statements. Beginning in 2018, the global intangible low-taxed income ("GILTI") provision imposed a tax on certain earnings of foreign subsidiaries. The Company has elected an accounting policy to account for GILTI as a period cost. The U.S. Treasury Department has issued final interpretive guidance relating to certain provisions of the Tax Act and proposed additional guidance related to the same provisions. The Company will account for the impact of additional guidance in the period in which any new guidance is released, if appropriate.

In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which was codified under ASU 2018-05, to address the application of U.S. GAAP in situations where a registrant does not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. In 2017, the Company recorded a provisional income tax charge of \$398.5 as a result of the Tax Act. Consistent with ASU 2018-05, the Company completed its accounting and recorded an income tax benefit of \$14.5 in 2018.

## Foreign Currency Translation

The financial position and results of operations of the Company's foreign subsidiaries are measured using local currency as the functional currency. Assets and liabilities of such subsidiaries have been translated into U.S. dollars at

current exchange rates and related revenues and expenses have been translated at weighted average exchange rates. The aggregate effect of translation adjustments is included as a component of Accumulated other comprehensive income (loss) within equity. Transaction gains and losses related to operating assets and liabilities are included in Cost of sales.

## Research and Development

Costs incurred in connection with the development of new products and applications are expensed as incurred. Research and development expenses for the creation of new and improved products and processes were \$234.2, \$220.9, and \$193.7, for the years 2019, 2018 and 2017, respectively, and are included in Selling, general and administrative expenses.

# **Environmental Obligations**

The Company recognizes the potential cost for environmental remediation activities when site assessments are made, remediation efforts are probable and related amounts can be reasonably estimated; potential insurance reimbursements are not recorded. The Company assesses its environmental liabilities as necessary and appropriate through regular reviews of contractual commitments, site assessments, feasibility studies and formal remedial design and action plans.

#### Net Income per Common Share

Basic income per common share is based on the net income attributable to Amphenol Corporation for the year divided by the weighted average number of common shares outstanding. Diluted income per common share assumes the exercise of outstanding dilutive stock options using the treasury stock method.

## Treasury Stock

Treasury stock purchases are recorded at cost. Any issuances from treasury shares are recorded using the weighted-average cost method.

## **Derivative Financial Instruments**

Derivative financial instruments, which are periodically used by the Company in the management of interest rate and foreign currency exposures, are accounted for as cash flow hedges. Gains and losses on derivatives designated as cash flow hedges resulting from changes in fair value are recorded in Accumulated other comprehensive income (loss), and subsequently reflected in Cost of sales in the Consolidated Statements of Income in a manner that matches the timing of the actual income or expense of such instruments with that of the hedged transaction. Any ineffective portion of the change in the fair value of designated hedging instruments is included in the Consolidated Statements of Income. Cash flows from derivatives are classified and reported consistent with the cash flows associated with the underlying hedged item. We do not enter into such derivative financial instruments for trading or speculative purposes. Refer to Note 5 herein for further discussion of our derivative financial instruments.

# Recent Accounting Pronouncements

Recently Adopted Accounting Standards

Leases

In February 2016, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2016-02, Leases (Topic 842) ("Topic 842"), which amended, among other things, the existing guidance by requiring lessees to recognize lease right-of-use assets ("ROU assets") and liabilities arising from operating leases on the balance sheet. Since issuing Topic 842, the FASB has issued various subsequent ASUs, including but not limited to, ASU 2018-10, Codification Improvements to Topic 842, Leases, which clarified various aspects of the guidance under Topic 842, as well as ASU 2018-11, Leases (Topic 842): Targeted Improvements, which allows entities the option of recognizing the cumulative effect of applying Topic 842 as an adjustment to the opening balance of retained earnings in the year of adoption while continuing to present all prior periods under previous lease accounting guidance.

Prior to adoption, the Company evaluated Topic 842, including the initial review of any necessary changes to existing processes and systems that would be required to implement this standard, in order to determine its impact on our

consolidated financial statements and related disclosures. In 2018, the Company implemented a new lease management system that facilitated the adoption of this standard and enabled the Company to fulfill its requirements for both reporting and disclosure purposes, as well as to better manage and monitor the Company's ongoing lease portfolio.

On January 1, 2019, we adopted Topic 842 using the updated modified retrospective transition approach allowed under ASU 2018-11 and did not restate prior periods. The Company recognized ROU assets and related lease liabilities on our Consolidated Balance Sheets as of January 1, 2019 of approximately \$180 related to our operating lease commitments, and there was no cumulative impact on retained earnings as of January 1, 2019. Topic 842 did not have a material impact on our Consolidated Statements of Income and Consolidated Statements of Cash Flow for the year ended December 31, 2019, nor did it have any impact on our compliance with debt covenants. The adoption of Topic 842 provided various optional practical expedients in transition, some of which we have elected. As part of the adoption, the Company elected the "package of 3" practical expedient, which among other things, permitted us not to reassess the historical lease classifications for existing or expired leases. Going forward, the impact of Topic 842 on the Company's consolidated financial statements will be dependent upon the Company's lease portfolio. The accounting for finance leases (formerly referred to as "capital leases") remains substantially unchanged. Refer to Note 10 herein for further details regarding the impact of the adoption of Topic 842 and other information related to our lease portfolio.

## Other Recently Issued Accounting Standards

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"), which introduces an approach to estimate credit losses on certain types of financial instruments, including trade receivables, based on expected losses, as well as modifying the impairment model for available-for-sale debt securities. ASU 2016-13, which is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019, requires companies to make a cumulative-effect adjustment to retained earnings as of January 1, 2020. The Company has evaluated ASU 2016-13 and will adopt the standard effective January 1, 2020, which is not expected to have a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement ("ASU 2018-13"), which adds, amends and removes certain disclosure requirements related to fair value measurements. Among other changes, this standard requires certain additional disclosure surrounding Level 3 assets, including changes in unrealized gains or losses in other comprehensive income and certain inputs in those measurements. ASU 2018-13 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Certain amended or eliminated disclosures in this standard may be adopted early, while certain additional disclosure requirements in this standard can be adopted on its effective date. In addition, certain changes in the standard require retrospective adoption, while other changes must be adopted prospectively. The Company has evaluated ASU 2018-13 and will adopt the standard on January 1, 2020, which is not expected to have a material impact on our consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"), which simplifies income tax accounting in various areas including, but not limited to, the accounting for hybrid tax regimes, tax implications related to business combinations, and interim period accounting for enacted changes in tax law, along with some codification improvements. ASU 2019-12 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. Certain changes in the standard require retrospective or modified retrospective adoption, while other changes must be adopted prospectively. The Company is currently evaluating ASU 2019-12 and its impact on our consolidated financial statements.

#### Note 2—Inventories

The components of Inventories are comprised of:

	Decem	ber .	31,
	2019		2018
Raw materials and supplies	\$ 509.6	\$	463.6
Work in process	395.2		371.1
Finished goods	405.3		399.1
	\$ 1,310.1	\$	1,233.8

# Note 3—Property, Plant and Equipment, Net

The components of Property, plant and equipment, net are summarized as follows:

	Decemb	December 31,				
	2019	2018				
Land and improvements	\$ 34.8	\$ 29.3				
Buildings and improvements	347.4	325.7				
Machinery and equipment	1,800.4	1,553.2				
Office equipment and other	303.6	282.4				
	2,486.2	2,190.6				
Accumulated depreciation	(1,487.2)	(1,314.8)				
	\$ 999.0	\$ 875.8				

Depreciation expense for the years ended December 31, 2019, 2018 and 2017 was \$240.0, \$247.6 and \$173.0, respectively.

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# Note 4—Long-Term Debt

Long-term debt consists of the following:

			er 31, 2019	December 31, 2018			
			Approximate		Approximate		
Davalving Cradit Facility	Maturity January 2024		Fair Value (1)		Fair Value (1)		
Revolving Credit Facility	January 2024	<b>5</b> —	<b>5</b> —	<b>5</b> —	<b>5</b> —		
U.S. Commercial Paper Program (less unamortized discount of nil	1	160.0	160.0	5545	5545		
and \$0.5 at December 31, 2019 and 2018, respectively)	January 2024	160.0	160.0	554.5	554.5		
Euro Commercial Paper Program (plus unamortized premium of nil	I 2024	225.5	225.5	(0.0	60.0		
and nil at December 31, 2019 and 2018, respectively)	January 2024	235.5	235.5	68.8	68.8		
2.55% Senior Notes (less unamortized discount of nil at				7500	740.4		
December 31, 2018)	January 2019	_		750.0	749.4		
2.20% Senior Notes (less unamortized discount of nil and \$0.1 at							
December 31, 2019 and 2018, respectively)	April 2020	400.0	400.0	399.9	395.5		
3.125% Senior Notes (less unamortized discount of \$0.1 and \$0.1 at							
December 31, 2019 and 2018, respectively)	September 2021	227.6	231.0	374.9	374.2		
4.00% Senior Notes (less unamortized discount of \$0.2 and \$0.4 at							
December 31, 2019 and 2018, respectively)	February 2022	294.8	304.0	499.6	508.8		
3.20% Senior Notes (less unamortized discount of \$0.2 and \$0.3 at							
December 31, 2019 and 2018, respectively)	April 2024	349.8	363.7	349.7	334.5		
2.000% Euro Senior Notes (less unamortized discount of \$2.5 and							
\$2.8 at December 31, 2019 and 2018, respectively)	October 2028	558.2	622.8	570.5	572.8		
4.350% Senior Notes (less unamortized discount of \$0.4 at							
December 31, 2019)	June 2029	499.6	562.9	_	_		
2.800% Senior Notes (less unamortized discount of \$0.7 at							
December 31, 2019)	February 2030	899.3	897.3	_	_		
Notes payable to foreign banks and other debt	2020-2032	5.5	5.5	16.6	16.6		
Less unamortized deferred debt issuance costs		(23.6)	_	(13.8)	_		
Total debt		3,606.7	3,782.7	3,570.7	3,575.1		
Less current portion		403.3	403.3	764.3	763.7		
Total long-term debt		\$ 3,203.4	\$ 3,379.4	\$ 2,806.4			
		,	,	- ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

<sup>(1)</sup> The fair value of each series of the Company's Senior Notes is based on recent bid prices in an active market and is therefore classified as Level 1 in the fair value hierarchy (Note 5).

# Revolving Credit Facility

On January 15, 2019, the Company amended its \$2,000.0 unsecured credit facility with a \$2,500.0 unsecured credit facility ("Revolving Credit Facility"). The Revolving Credit Facility, which matures January 2024, gives the Company the ability to borrow at a spread over LIBOR. The Company may utilize the Revolving Credit Facility for general corporate purposes. The carrying value of any borrowings under the Revolving Credit Facility would approximate their fair value due primarily to their market interest rates and would be classified as Level 2 in the fair value hierarchy (Note 5). At December 31, 2019 and 2018, there were no borrowings under the Revolving Credit Facility. The Revolving

Credit Facility requires payment of certain annual agency and commitment fees and requires that the Company satisfy certain financial covenants.

## Commercial Paper

The Company has a commercial paper program pursuant to which the Company issues short-term unsecured commercial paper notes ("U.S. Commercial Paper" or "USCP Notes") in one or more private placements in the United States (the "U.S. Commercial Paper Program"). The maturities of the USCP Notes vary, but may not exceed 397 days from the date of issue. The USCP Notes are sold under customary terms in the commercial paper market and may be issued at par or a discount therefrom, and bear varying interest rates on a fixed or floating basis. The average interest rate on the U.S. Commercial Paper as of December 31, 2019 and 2018 was 1.85% and 2.88%, respectively.

On July 10, 2018, the Company and one of its wholly owned European subsidiaries (the "Euro Issuer") entered into a eurocommercial paper program (the "Euro Commercial Paper Program" and, together with the U.S. Commercial Paper Program, the "Commercial Paper Programs") pursuant to which the Euro Issuer may issue short-term unsecured commercial paper notes (the "ECP Notes" and, together with the USCP Notes, "Commercial Paper"), which are guaranteed by the Company and are to be issued outside of the United States. The maturities of the ECP Notes will vary, but may not exceed 183 days from the date of issue. The ECP Notes are sold under customary terms in the euro-commercial paper market and may be issued at par or a discount therefrom or a premium thereto and bear varying interest rates on a fixed or floating basis. The ECP Notes may be issued in Euros, Sterling, U.S. Dollars or other currencies. As of December 31, 2019 and 2018, the amount of ECP Notes outstanding was &210.0 (approximately &235.5) and &60.0 (approximately &68.8), respectively. The average interest rate on the ECP Notes outstanding as of December 31, 2019 and 2018 was (0.13)% and (0.10)%, respectively.

Amounts available under the Commercial Paper Programs may be borrowed, repaid and re-borrowed from time to time. As of December 31, 2019, the authorization from the Company's Board of Directors limits the maximum aggregate principal amount outstanding of USCP Notes, ECP Notes, and any other commercial paper, euro-commercial paper or similar programs at any time to \$2,500.0, consistent with the Revolving Credit Facility. In addition, the maximum aggregate principal amount outstanding of USCP Notes at any time is \$2,500.0, while the maximum aggregate principal amount outstanding of ECP Notes at any time is \$2,000.0. The Commercial Paper Programs are rated A-2 by Standard & Poor's and P-2 by Moody's and are currently backstopped by the Revolving Credit Facility, as amounts undrawn under the Company's Revolving Credit Facility are available to repay Commercial Paper, if necessary. Net proceeds of the issuances of Commercial Paper are expected to be used for general corporate purposes. The Commercial Paper is classified as long-term debt in the accompanying Consolidated Balance Sheets since the Company has the intent and ability to refinance the Commercial Paper on a long-term basis using the Company's Revolving Credit Facility. The Commercial Paper is actively traded and is therefore classified as Level 1 in the fair value hierarchy (Note 5). The carrying value of Commercial Paper borrowings approximates their fair value.

# U.S. Senior Notes

On January 9, 2019, the Company issued \$500.0 principal amount of unsecured 4.350% Senior Notes due June 1, 2029 at 99.904% of face value (the "2029 Senior Notes"). The 2029 Senior Notes are unsecured and rank equally in right of payment with the Company's other unsecured senior indebtedness. Interest on the 2029 Senior Notes is payable semiannually on June 1 and December 1 of each year, commencing on June 1, 2019. Prior to March 1, 2029, the Company may, at its option, redeem some or all of the 2029 Senior Notes at any time by paying the redemption price (which may include a make-whole premium), plus accrued and unpaid interest, if any, to, but not including, the date of redemption. If redeemed on or after March 1, 2029, the Company may, at its option, redeem some or all of the 2029 Senior Notes at any time by paying the redemption price equal to 100% of the principal amount thereof plus accrued and unpaid interest, if any, to, but not including, the date of redemption. The Company used the net proceeds from the 2029 Senior Notes, along with proceeds from borrowings under the U.S. Commercial Paper Program, to repay the \$750.0 of 2.55% Senior Notes due in January 2019.

On September 4, 2019, the Company commenced tender offers ("Tender Offers") to purchase for cash any and all of the Company's outstanding (i) \$375.0 principal amount of its 3.125% Senior Notes due September 2021 ("2021 Senior Notes") and (ii) \$500.0 principal amount of its 4.00% Senior Notes due February 2022 ("2022 Senior Notes"). On September 11, 2019, as a result of the Tender Offers, the Company accepted for payment \$147.3 aggregate principal amount of the 2021 Senior Notes and \$205.0 aggregate principal amount of the 2022 Senior Notes for 101.9% and 104.5% of par value, respectively (collectively, the "Tendered Notes"), plus accrued and unpaid interest to, but not

including, the settlement date of the Tender Offers. The total consideration for the Tendered Notes was \$368.8, which in addition to the Tendered Notes, included \$13.4 of premiums and fees paid related to the early extinguishment of debt and \$3.1 of accrued interest. For the year ended December 31, 2019, the Company recorded a loss on early debt extinguishment of \$14.3 (\$12.5 after-tax, or \$0.04 per diluted share) within Loss on early extinguishment of debt on the accompanying Consolidated Statements of Income. This charge is primarily comprised of the premiums and fees incurred related to the Tendered Notes, along with the non-cash charge associated with the write-off of the remaining unamortized deferred debt issuance costs associated with the Tendered Notes. The remaining principal amounts associated with the 2021 Senior Notes and 2022 Senior Notes, which were not redeemed as a result of the Tender Offers, remain outstanding as of December 31, 2019, as noted in the table above.

On September 10, 2019, the Company issued \$900.0 principal amount of unsecured 2.800% Senior Notes due February 15, 2030 at 99.920% of face value (the "2030 Senior Notes"). The 2030 Senior Notes are unsecured and rank equally in right of payment with the Company's other unsecured senior indebtedness. Interest on the 2030 Senior Notes is payable semiannually on February 15 and August 15 of each year, commencing on February 15, 2020. Prior to November 15, 2029, the Company may, at its option, redeem some or all of the 2030 Senior Notes at any time by paying the redemption price (which may include a makewhole premium), plus accrued and unpaid interest, if any, to, but not including, the date of redemption. If redeemed on or after November 15, 2029, the Company may, at its option, redeem some or all of the 2030 Senior Notes at any time by paying the redemption price equal to 100% of the principal amount thereof plus accrued and unpaid interest, if any, to, but not including, the date of redemption. In September 2019, the Company used the net proceeds from the 2030 Senior Notes to fund the cash consideration payable in the Tender Offers, with the remaining net proceeds being used for general corporate purposes, including to partially reduce outstanding borrowings related to the U.S. Commercial Paper Program.

On April 5, 2017, the Company issued \$400.0 principal amount of unsecured 2.20% Senior Notes due April 1, 2020 at 99.922% of face value (the "2020 Senior Notes") and \$350.0 principal amount of unsecured 3.20% Senior Notes due April 1, 2024 at 99.888% of face value (the "2024 Senior Notes" and, together with the 2020 Senior Notes, the "2020 and 2024 Notes"). Interest on each of the 2020 Senior Notes and 2024 Senior Notes is payable semiannually on April 1 and October 1 of each year, commencing on October 1, 2017. Prior to maturity, the Company may, at its option, redeem some or all of the 2020 Senior Notes at any time by paying the redemption price (which may include a make-whole premium), plus accrued and unpaid interest, if any, to, but not including, the date of redemption. Prior to February 1, 2024, the Company may, at its option, redeem some or all of the 2024 Senior Notes at any time by paying the redemption price (which may include a make-whole premium), plus accrued and unpaid interest, if any, to, but not including, the date of redemption. If redeemed on or after February 1, 2024, the Company may, at its option, redeem some or all of the 2024 Senior Notes at any time by paying the redemption price equal to 100% of the principal amount thereof plus accrued and unpaid interest, if any, to, but not including, the date of redemption. In September 2017, the Company used the net proceeds from the 2020 and 2024 Notes to repay all of its outstanding \$375.0 principal amount of 1.55% Senior Notes due September 15, 2017, with the remainder of the net proceeds being used for general corporate purposes.

All of the Company's outstanding senior notes in the United States ("U.S. Senior Notes") are unsecured and rank equally in right of payment with the Company's other unsecured senior indebtedness. Interest on each series of U.S. Senior Notes is payable semiannually. The Company may, at its option, redeem some or all of any series of U.S. Senior Notes at any time subject to certain terms and conditions, which include paying 100% of the principal amount, plus accrued and unpaid interest, if any, to the date of redemption, and, with certain exceptions, a make-whole premium. The Company's 2.20% Senior Notes are due in April 2020 and are therefore recorded, net of the related unamortized discount and debt issuance costs, within Current portion of long-term debt in the accompanying Consolidated Balance Sheets as of December 31, 2019.

## **Euro Senior Notes**

On October 8, 2018, the Euro Issuer issued €500.0 (approximately \$574.6 at date of issuance) principal amount of unsecured 2.000% Senior Notes due October 8, 2028 at 99.498% of face value (the "2028 Euro Notes" or "2.000% Euro Senior Notes", and collectively with the U.S. Senior Notes, "Senior Notes"). The 2028 Euro Notes are unsecured and rank equally in right of payment with the Euro Issuer's other unsecured senior indebtedness, and are fully and unconditionally guaranteed on a senior unsecured basis by the Company. Interest on the 2028 Euro Notes is payable annually on October 8 of each year, commencing on October 8, 2019. Prior to July 8, 2028, the Company may, at its option, redeem some or all of the 2028 Euro Notes at any time by paying the redemption price (which may include a make-whole premium), plus accrued and unpaid interest, if any, to, but not including, the date of redemption. If

redeemed on or after July 8, 2028, the Company may, at its option, redeem some or all of the 2028 Euro Notes at any time by paying the redemption price equal to 100% of the principal amount thereof plus accrued and unpaid interest, if any, to, but not including, the date of redemption. The Company used a portion of the net proceeds from the 2028 Euro Notes to repay a portion of the outstanding amounts under its Commercial Paper Programs, with the remainder of the net proceeds being used for general corporate purposes.

The Company's Senior Notes contain certain financial and non-financial covenants.

The maturity of the Company's debt (exclusive of unamortized deferred debt issuance costs as of December 31, 2019) over each of the next five years ending December 31 and thereafter, is as follows:

2020	\$ 403.5
2021	228.2
2022	295.2
2023	0.3
2024	745.5
Thereafter	1,957.6
	\$ 3,630.3

At December 31, 2019, the Company had approximately \$70.8 of uncommitted standby letter of credit facilities, of which \$30.0 were issued.

#### Note 5—Fair Value Measurements

Fair value is determined based on the exchange price that would be received for 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. These requirements establish market or observable inputs as the preferred source of values. Assumptions based on hypothetical transactions are used in the absence of market inputs. The Company does not have any non-financial instruments accounted for at fair value on a recurring basis.

The valuation techniques required are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. These two types of inputs create the following fair value hierarchy:

- Level 1 Quoted prices for identical instruments in active markets.
- Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable.
- Level 3 Significant inputs to the valuation model are unobservable.

The Company believes that the assets or liabilities subject to such standards with fair value disclosure requirements are primarily debt instruments, pension plan assets, short-term investments, derivative instruments and contingent consideration payments. Each of these assets and liabilities is discussed below, with the exception of debt instruments and pension plan assets, which are covered in Note 4 and Note 9, respectively, herein. Substantially all of the Company's short-term investments consist of certificates of deposit with original maturities of twelve months or less and as such, are considered as Level 1 in the fair value hierarchy as they are traded in active markets for identical assets. The carrying amounts of these instruments, the majority of which are in non-U.S. bank accounts, approximate their fair value. The Company's derivative instruments represent foreign exchange forward contracts, which are valued using bank quotations based on market observable inputs such as forward and spot rates and are therefore classified as Level 2 in the fair value hierarchy. The contingent consideration payment related to the SSI acquisition is valued using Level 3 unobservable inputs, such as probability weighted payout projections, within the fair value hierarchy. The impact of the

credit risk related to these financial assets is immaterial. The fair values of the Company's financial and non-financial assets and liabilities subject to such standards at December 31, 2019 and December 31, 2018 are as follows:

	Fair Value Measurements										
<u>2019</u>	<u> </u>		Acti for	ted Prices in ive Markets r Identical ets (Level 1)	Ob:	nificant servable nputs evel 2)	Uno	mificant bservable nputs Level 3)			
Short-term investments	\$	17.4	\$	17.4	\$	_	\$	_			
Forward contracts		(1.3)				(1.3)		_			
Contingent consideration		(75.0)		_		_		(75.0)			
Total	\$	(58.9)	\$	17.4	\$	(1.3)	\$	(75.0)			
2018											
Short-term investments	\$	12.4	\$	12.4	\$	_	\$	_			
Forward contracts		2.4				2.4		_			
Total	\$	14.8	\$	12.4	\$	2.4	\$				

With the exception of the fair value of the assets acquired and liabilities assumed in connection with acquisition accounting, the Company does not have any other significant financial or non-financial assets and liabilities that are measured at fair value on a non-recurring basis.

The Company utilizes foreign exchange forward contracts to hedge exposure to foreign currency exchange rate fluctuations for certain transactions denominated in foreign currencies. As of December 31, 2019, the fair value of such contracts in the table above consisted primarily of two outstanding forward contracts, which fixed intercompany Korean Won and Great Britain Pound exposures into Hong Kong Dollar, with each expiring in 2020. These forward contracts are designated hedging instruments accounted for as cash flow hedges. For the years ended December 31, 2019 and 2018, the amounts recognized in Accumulated other comprehensive loss associated with foreign exchange forward contracts were not material. For the years ended December 31, 2019, 2018 and 2017, the amounts reclassified from Accumulated other comprehensive loss to foreign exchange gain (loss), included within Cost of sales in the accompanying Consolidated Statements of Income, were not material. The amount included in Accumulated other comprehensive loss as of December 31, 2019 associated with these forward contracts is expected to be reclassified into earnings within the next twelve months. As of December 31, 2019 and 2018, the fair values of the Company's forward contracts are recorded within Prepaid expenses and other current assets, Other long-term assets, Other accrued expenses and Other long-term liabilities in the accompanying Consolidated Balance Sheets, depending on their value and remaining contractual period.

# Note 6—Income Taxes

The components of income before income taxes and the provision for income taxes are as follows:

	Year Ended December 31,							
		2019		2018		2017		
Income before income taxes:								
United States	\$	318.6	\$	194.1	\$	153.0		
Foreign	1	1,177.3		1,394.3		1,199.4		
	\$	1,495.9	\$	1,588.4	\$	1,352.4		
Current tax provision:								
United States	\$	22.9	\$	37.8	\$	200.0		
Foreign		293.8		345.7		305.4		
		316.7		383.5		505.4		
Deferred tax provision (benefit):								
United States		35.8		27.8		51.0		
Foreign		(20.6)		(39.8)		135.3		
		15.2		(12.0)		186.3		
Total provision for income taxes	\$	331.9	\$	371.5	\$	691.7		

As described in Note 1 herein, the United States federal government enacted the Tax Act in 2017. The Tax Act provides for a transition tax on the accumulated unremitted foreign earnings and profits of the Company's foreign subsidiaries ("Transition Tax") and a reduction of the U.S. federal corporate income tax rate from 35% to 21%, among other changes. In 2017, the Company recorded a provisional income tax charge of \$398.5 ("Tax Act Charge") that was comprised of (i) the Transition Tax of \$259.4, (ii) a charge of \$176.6 related to changes in the Company's permanent reinvestment assertion with regards to prior accumulated unremitted earnings from certain foreign subsidiaries, partially offset by (iii) a tax benefit of \$37.5 associated with the remeasurement of the Company's U.S. net deferred tax liabilities due to the U.S. federal corporate tax rate reduction, all of which was included in the 2017 provision and reflected the then estimated impacts of the Tax Act as previously disclosed. The Company analyzed guidance and technical interpretations issued in 2018 related to the provisions of the Tax Act, and refined, analyzed and updated the underlying data, computations and assumptions used to prepare the Tax Act Charge. As a result, the Company completed its accounting within the one-year measurement period and recorded an income tax benefit of \$14.5 in 2018.

The Company paid its second annual installment of the Transition Tax in the second quarter of 2019. The Company will pay the Transition Tax, net of applicable tax credits and deductions, over an eight-year period until 2025, as permitted under the Tax Act. The current and long-term portions of the Transition Tax are recorded in Accrued income taxes and Other long-term liabilities, respectively, on the Consolidated Balance Sheets as of December 31, 2019 and 2018. The Company also recorded a tax charge, related to changes in the Company's permanent reinvestment assertion, in 2017 due to our intention to repatriate prior accumulated unremitted earnings from certain foreign subsidiaries over time. We will pay such taxes when those respective earnings are repatriated.

At December 31, 2019, the Company had \$146.4 of foreign tax loss carryforwards, \$56.0 of U.S. state tax loss carryforwards and \$0.7 of U.S. federal tax loss carryforwards, of which \$95.8, \$56.0 and \$0.7, respectively, will either expire or be refunded at various dates through 2039 and the balance can be carried forward indefinitely. The Company had \$3.8 of foreign tax credit carryforwards and \$13.7 of U.S. state tax credit carryforwards, of which \$3.8 and \$7.9, respectively, will either expire or be refunded at various dates through 2039 and the balance can be carried forward indefinitely.

A valuation allowance of \$35.2 and \$34.7 at December 31, 2019 and 2018, respectively, has been recorded which relates primarily to the U.S. federal and state and foreign net operating loss carryforwards and U.S. state tax credits. The net change in the valuation allowance for deferred tax assets in both 2019 and 2018 was not material.

Differences between the U.S. statutory federal tax rate and the Company's effective income tax rate are analyzed below:

	Year Ended December 31,						
	2019	2018	2017				
U.S. statutory federal tax rate	21.0 %	21.0 %	35.0 %				
State and local taxes	0.7	0.6	0.2				
Foreign earnings and dividends taxed at different rates	1.4	2.3	(9.1)				
U.S. tax on foreign income	1.2	1.8					
Tax Act - transition tax	<del>-</del>	0.7	19.2				
Tax Act - remeasurement of deferred tax liabilities, net	_	_	(2.8)				
Tax Act - change in indefinite reinvestment assertion	_	(1.6)	13.1				
Excess tax benefits related to stock-based compensation	(2.5)	(1.2)	(4.9)				
Other, net	0.4	(0.2)	0.4				
Effective tax rate	22.2 %	23.4 %	51.1 %				

The components of the Company's deferred tax assets and liabilities are comprised of the following:

		2019		2018
Deferred tax assets relating to:				
Accrued liabilities and reserves	\$	41.8	\$	39.1
Operating lease liabilities		45.7		_
Operating loss and tax credit carryforwards		81.3		81.5
Pensions		26.2		29.0
Inventories		39.3		40.4
Employee benefits		36.0		34.0
Total deferred tax assets		270.3		224.0
Valuation allowance		(35.2)		(34.7)
Total deferred tax assets, net of valuation allowances		235.1		189.3
Deferred tax liabilities relating to:				
Goodwill		175.2		152.2
Depreciation and amortization		74.1		68.5
Operating lease right-of-use assets		45.7		_
Unremitted foreign earnings		115.8		141.3
Contingent consideration		4.3		4.3
Total deferred tax liabilities		415.1		366.3
		_		
Net deferred tax liability	\$	180.0	\$	177.0
Classification of deformed toy exacts and liabilities, as reflected on the Consolidated				
Classification of deferred tax assets and liabilities, as reflected on the Consolidated				
Balance Sheets:	Φ	00.4	ď.	70.6
Other long-term assets	\$	80.4	\$	78.6
Deferred income taxes	<u> </u>	260.4	_	255.6
Net deferred tax liability, long-term	\$	180.0	\$	177.0

A tabular reconciliation of the gross amounts of unrecognized tax benefits excluding interest and penalties at the beginning and end of the year for 2019, 2018 and 2017 is shown below.

	 2019		2018		2017
Unrecognized tax benefits as of January 1	\$ 130.5	\$	127.3	\$	106.2
Gross increases for tax positions in prior periods	20.9		18.9		32.7
Gross increases for tax positions in current period	9.0		2.0		2.4
Settlements	_		(14.1)		(11.0)
Lapse of statutes of limitations	(1.3)		(3.6)		(3.0)
Unrecognized tax benefits as of December 31	\$ 159.1	\$	130.5	\$	127.3

The Company includes estimated interest and penalties related to unrecognized tax benefits in the provision for income taxes. During the years ended December 31, 2019, 2018 and 2017, the provision for income taxes included a net expense of \$4.4, \$1.1 and \$3.7, respectively, in estimated interest and penalties. As of December 31, 2019, 2018 and 2017, the liability for unrecognized tax benefits included \$42.2, \$40.5 and \$39.3, respectively, for tax-related interest and penalties.

The Company operates in the U.S. and numerous foreign taxable jurisdictions, and at any point in time has numerous audits underway at various stages of completion. With few exceptions, the Company is subject to income tax examinations by tax authorities for the years 2014 and after. The Company is generally not able to precisely estimate the ultimate settlement amounts or timing until the close of an audit. The Company evaluates its tax positions and establishes liabilities for uncertain tax positions that may be challenged by tax authorities and may not be fully sustained, despite the Company's belief that the underlying tax positions are fully supportable. As of December 31, 2019 and 2018, the amount of unrecognized tax benefits, including penalties and interest, which if recognized would impact the effective tax rate, was approximately \$171.0 and \$141.8, respectively. Unrecognized tax benefits are reviewed on an ongoing basis and are adjusted for changing facts and circumstances, including progress of tax audits and the closing of statutes of limitations. Based on information currently available, management anticipates that over the next twelve-month

period, audit activity could be completed and statutes of limitations may close relating to existing unrecognized tax benefits of approximately \$42.3.

# Note 7—Equity

Stock-Based Compensation:

The Company's income before income taxes was reduced by \$63.0, \$55.6 and \$49.7 for the years ended December 31, 2019, 2018 and 2017, respectively, related to the expense incurred for stock-based compensation plans, which is included in Selling, general and administrative expenses in the accompanying Consolidated Statements of Income. In addition, for the years ended December 31, 2019, 2018 and 2017, the Company recognized aggregate income tax benefits of \$46.0, \$27.5 and \$78.3, respectively, in the provision for income taxes in the accompanying Consolidated Statements of Income associated with stock-based compensation. These aggregate income tax benefits during the years ended December 31, 2019, 2018 and 2017 include excess tax benefits of \$38.1, \$19.8 and \$66.6, respectively, from option exercises during these years.

# Stock Options

In May 2017, the Company adopted the 2017 Stock Purchase and Option Plan for Key Employees of Amphenol and Subsidiaries (the "2017 Employee Option Plan"). A committee of the Company's Board of Directors has been authorized to grant stock options pursuant to the 2017 Employee Option Plan. The number of shares of the Company's Class A Common Stock ("Common Stock") reserved for issuance under the 2017 Employee Option Plan is 30,000,000 shares. As of December 31, 2019, there were 10,977,050 shares of Common Stock available for the granting of additional stock options under the 2017 Employee Option Plan. The Company also continues to maintain the 2009 Stock Purchase and Option Plan for Key Employees of Amphenol and Subsidiaries, as amended (the "2009 Employee Option Plan"). No additional stock options will be granted under the 2009 Employee Option Plan. Options granted under the 2017 Employee Option Plan and the 2009 Employee Option Plan generally vest ratably over a period of five years from the date of grant and are generally exercisable over a period of ten years from the date of grant.

In 2004, the Company adopted the 2004 Stock Option Plan for Directors of Amphenol Corporation (the "2004 Directors Option Plan"). The 2004 Directors Option Plan is administered by the Company's Board of Directors. The 2004 Directors Option Plan expired in May 2014, except that its terms continue with respect to any outstanding options granted thereunder. Options were last granted under the 2004 Directors Option Plan in May 2011. Options granted under the 2004 Directors Option Plan are fully vested and are generally exercisable over a period of ten years from the date of grant.

Weighted

Stock option activity for 2017, 2018 and 2019 was as follows:

		Options	A	eighted verage cise Price	Average Remaining Contractual Term (in years)	]	aggregate Intrinsic Value I millions)
Options outstanding at January 1, 2017		32,266,391	\$	44.14	7.03		
Options granted		7,029,600		72.98			
Options exercised		(5,773,287)		31.87			
Options forfeited		(300,340)		55.16			
Options outstanding at December 31, 2017		33,222,364		52.27	7.05		
Options granted		6,302,100		87.95			
Options exercised		(3,464,876)		37.81			
Options forfeited		(508,920)		69.03			
Options outstanding at December 31, 2018		35,550,668		59.77	6.81		
Options granted		6,181,700		89.52			
Options exercised		(5,847,252)		42.14			
Options forfeited		(209,910)		78.17			
Options outstanding at December 31, 2019		35,675,206	\$	67.70	6.75	\$	1,445.9
Vested and non-vested options expected to vest at							
December 31, 2019		33,577,637	\$	67.05	6.67	\$	1,382.7
Exercisable options at December 31, 2019		16,658,376	\$	54.79	5.30	\$	890.2
	63						

A summary of the status of the Company's non-vested options as of December 31, 2019 and changes during the year then ended is as follows:

		Weighted .	Average
	Options	Fair V at Gran	
Non-vested options at January 1, 2019	19,289,500	\$	9.73
Options granted	6,181,700		12.26
Options vested	(6,244,460)		9.18
Options forfeited	(209,910)		10.62
Non-vested options at December 31, 2019	19,016,830	\$	10.72

The weighted average fair value at the grant date of options granted during 2018 and 2017 was \$12.82 and \$8.78, respectively.

During the years ended December 31, 2019, 2018 and 2017, the following activity occurred under the Company's option plans:

	2019	2018	2017
Total intrinsic value of stock options exercised	\$ 329.6	\$ 188.1	\$ 268.7
Total fair value of stock options vested	57.3	51.0	46.3

As of December 31, 2019, the total compensation cost related to non-vested options not yet recognized was approximately \$152.2, with a weighted average expected amortization period of 3.36 years.

The grant date fair value of each option grant under the 2009 Employee Option Plan, the 2017 Employee Option Plan and the 2004 Directors Option Plan is estimated using the Black-Scholes option pricing model. The grant-date fair value of each share grant is determined based on the closing share price of the Company's Common Stock on the date of the grant. The fair value is then amortized on a straight-line basis over the requisite service period of the awards, which is generally the vesting period. Use of a valuation model for option grants requires management to make certain assumptions with respect to selected model inputs. Expected share price volatility is calculated based on the historical volatility of the Common Stock and implied volatility derived from related exchange traded options. The average expected life is based on the contractual term of the option and expected exercise and historical experience. The risk-free interest rate is based on U.S. Treasury zero-coupon issuances with a remaining term equal to the expected life assumed at the date of grant. The expected annual dividend per share is based on the Company's dividend rate.

The fair value of stock options has been estimated at the date of grant using the Black-Scholes option-pricing model with the following weighted average assumptions:

	2019	2018	2017
Risk free interest rate	2.1 %	2.9 %	1.7 %
Expected life	4.7 years	4.7 years	4.6 years
Expected volatility	14.0 %	13.0 %	13.0 %
Expected dividend yield	1.0 %	1.0 %	1.0 %

#### Restricted Stock

In 2012, the Company adopted the 2012 Restricted Stock Plan for Directors of Amphenol Corporation (the "2012 Directors Restricted Stock Plan"). The 2012 Directors Restricted Stock Plan is administered by the Company's Board of Directors. As of December 31, 2019, the number of restricted shares available for grant under the 2012 Directors Restricted Stock Plan was 94,846. Restricted shares granted under the 2012 Directors Restricted Stock Plan generally vest on the first anniversary of the grant date. Grants under the 2012 Directors Restricted Stock Plan entitle the holder to receive shares of the Company's Common Stock without payment.

Restricted share activity for 2017, 2018 and 2019 was as follows:

	Restricted Shares	_	air Value at Grant Date	Weighted Average Remaining Amortization Term (in years)
Restricted shares outstanding at January 1, 2017	16,905	\$	57.99	0.38
Restricted shares granted	12,905		73.25	
Shares vested and issued	(16,905)		57.99	
Restricted shares outstanding at December 31, 2017	12,905		73.25	0.37
Restricted shares granted	15,014		87.84	
Shares vested and issued	(13,046)		73.35	
Restricted shares outstanding at December 31, 2018	14,873		87.89	0.39
Restricted shares granted	14,304		89.49	
Shares vested and issued	(16,661)		88.07	
Restricted shares outstanding at December 31, 2019	12,516	\$	89.49	0.39

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The total fair value of restricted share awards that vested during 2019, 2018, and 2017 was \$1.5, \$1.0 and \$1.0, respectively. As of December 31, 2019, the total compensation cost related to non-vested restricted shares not yet recognized was approximately \$0.4 with a weighted average expected amortization period of 0.39 years.

## Stock Repurchase Program:

On April 24, 2018, the Company's Board of Directors authorized a stock repurchase program under which the Company may purchase up to \$2,000.0 of the Company's Common Stock during the three-year period ending April 24, 2021 (the "2018 Stock Repurchase Program") in accordance with the requirements of Rule 10b-18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). During the years ended December 31, 2019 and 2018, the Company repurchased 6.5 million and 6.4 million shares of its Common Stock for \$601.7 and \$553.2, respectively, under the 2018 Stock Repurchase Program. Of the total repurchases in 2019, 5.5 million shares, or \$514.1, have been retired by the Company; the remaining 1.0 million shares, or \$87.6, were retained in Treasury stock at time of repurchase. Of the total repurchases in 2018, 5.7 million shares, or \$498.2, have been retired by the Company; the remaining 0.7 million shares, or \$55.0, had been retained in Treasury stock at time of repurchase. From January 1, 2020 through January 31, 2020, the Company repurchased 0.3 million additional shares of its Common Stock for \$29.0, leaving \$816.1 available to purchase under the 2018 Stock Repurchase Program. The price and timing of any future purchases under the 2018 Stock Repurchase Program will depend on factors such as levels of cash generation from operations, the volume of stock option exercises by employees, cash requirements for acquisitions, dividends, economic and market conditions and stock price.

On January 24, 2017, the Company's Board of Directors authorized a stock repurchase program under which the Company could purchase up to \$1,000.0 of the Company's Common Stock during the two-year period ending January 24, 2019 (the "2017 Stock Repurchase Program") in accordance with the requirements of Rule 10b-18 of the Exchange Act. During the three months ended March 31, 2018, the Company repurchased 4.2 million shares of its Common Stock for \$382.0, while during the year ended December 31, 2017, the Company repurchased 8.4 million shares of its Common Stock for \$618.0. These shares have been retired by the Company. These repurchases of 12.6 million shares for \$1,000.0 completed the 2017 Stock Repurchase Program. The repurchases in the first quarter of 2018, coupled with the Company's repurchase of 6.4 million shares of its Common Stock for \$553.2 under the 2018 Stock Repurchase Program during the nine months ended December 31, 2018, resulted in total repurchases of 10.6 million shares for \$935.2 during the year ended December 31, 2018.

## Dividends:

Contingent upon declaration by the Board of Directors, the Company generally pays a quarterly dividend on shares of its Common Stock. The following table summarizes the declared quarterly dividends per share for each of the three years ended December 31, 2019, 2018 and 2017:

	2019		2018	2017
First Quarter	\$ 0.23	\$	0.19	\$ 0.16
Second Quarter	0.23		0.23	0.16
Third Quarter	0.25		0.23	0.19
Fourth Quarter	0.25		0.23	0.19
Total	\$ 0.96	\$	0.88	\$ 0.70

Dividends declared and paid for the years ended December 31, 2019, 2018 and 2017 were as follows:

	2019			2018	2017
Dividends declared	\$	285.3	\$	264.3	\$ 213.7
Dividends paid (including those declared in the prior year)		279.5		253.7	205.0

Accumulated Other Comprehensive Income (Loss):

Balances of related after-tax components comprising Accumulated other comprehensive income (loss) included in equity at December 31, 2019, 2018 and 2017 are as follows:

	Cu Tra	oreign rrency nslation istments	Unrea Gain (l on Ca Flow H	Loss) ash	Postr Ben	sion and etirement efit Plan ustment	Com	umulated Other prehensive ome (Loss)
Balance at January 1, 2017	\$	(273.5)	\$	(0.1)	\$	(195.4)	\$	(469.0)
Other comprehensive income (loss) before reclassifications, net of tax								
of nil, \$0.1 and (\$3.4), respectively		240.3		(0.1)		10.7		250.9
Amounts reclassified from Accumulated other comprehensive income								
(loss) to earnings, net of tax of (\$9.1)						17.1		17.1
Balance at December 31, 2017		(33.2)		(0.2)		(167.6)		(201.0)
Other comprehensive income (loss) before reclassifications, net of tax								
of nil, (\$0.1) and \$6.6, respectively		(164.3)		0.4		(22.0)		(185.9)
Amounts reclassified from Accumulated other comprehensive income								
(loss) to earnings, net of tax of (\$6.4)		_		_		20.2		20.2
Amounts reclassified from Accumulated other comprehensive income								
(loss) to retained earnings, resulting from income tax effects of the								
Tax Act (ASU 2018-02)						(23.5)		(23.5)
Balance at December 31, 2018		(197.5)		0.2		(192.9)		(390.2)
Other comprehensive income (loss) before reclassifications, net of tax								
of nil, nil and \$5.3, respectively		(40.4)		0.1		(15.7)		(56.0)
Amounts reclassified from Accumulated other comprehensive income								
(loss) to earnings, net of tax of (\$4.9)		_		_		15.3		15.3
Balance at December 31, 2019	\$	(237.9)	\$	0.3	\$	(193.3)	\$	(430.9)

The amounts reclassified from Accumulated other comprehensive income (loss) for unrealized gain (loss) on cash flow hedges, which comprised of foreign exchange forward contracts, are included in Cost of sales in the Consolidated Statements of Income. The amounts reclassified from Accumulated other comprehensive income (loss) to earnings, related to pension and other postretirement benefit plans in the table above, are reported within Other income, net in the Consolidated Statements of Income, the vast majority of which is related to the amortization of actuarial losses associated with our defined benefit plans. The amortization of actuarial losses are included in the computation of net pension expense discussed in more detail within Note 9 herein.

## Note 8—Earnings Per Share

Basic earnings per share ("EPS") is computed by dividing net income attributable to Amphenol Corporation by the weighted average number of common shares outstanding. Diluted EPS is computed by dividing net income attributable to Amphenol Corporation by the weighted average number of common shares and dilutive common shares outstanding, which relates to stock options. A reconciliation of the basic weighted average common shares outstanding to diluted weighted average common shares outstanding for the years ended December 31, 2019, 2018 and 2017 is as follows:

(dollars and shares in millions, except per share data)	2019			2018		2017
Net income attributable to Amphenol Corporation shareholders	\$ 1	\$ 1,155.0		1,205.0	\$	650.5
Basic weighted average common shares outstanding		297.5		301.2		305.7
Effect of dilutive stock options		10.4		11.4		10.8
Diluted weighted average common shares outstanding	307.9			312.6		316.5
Earnings per share attributable to Amphenol Corporation shareholders:						
Basic	\$	3.88	\$	4.00	\$	2.13
Diluted	\$	3.75	\$	3.85	\$	2.06

Excluded from the computations above were anti-dilutive common shares (primarily related to outstanding stock options) of 7.1 million, 3.3 million and 1.6 million for the years ended December 31, 2019, 2018 and 2017, respectively.

# Note 9—Benefit Plans and Other Postretirement Benefits

#### Defined Benefit Plans

The Company and certain of its domestic subsidiaries have defined benefit pension plans (the "U.S. Plans"), which cover certain U.S. employees and which represent the majority of the plan assets and benefit obligations of the aggregate defined benefit plans of the Company. The U.S. Plans' benefits are generally based on years of service and compensation and are generally noncontributory. Certain U.S. employees not covered by the U.S. Plans are covered by defined contribution plans. Certain foreign subsidiaries have defined benefit plans covering their employees (the "Foreign Plans" and together with the U.S. Plans, the "Plans"). The largest foreign pension plan, in accordance with local regulations, is unfunded and had a projected benefit obligation of approximately \$103.6 and \$92.7 at December 31, 2019 and 2018, respectively. Total required contributions to be made during 2020 for the unfunded Foreign Plans are included in Other accrued expenses in the accompanying Consolidated Balance Sheets and in the tables below.

The following is a summary of the Company's defined benefit plans' funded status as of the most recent actuarial valuations as of December 31 of each year.

	U.S. Plans		Foreign Plans			Total						
		2019		2018		2019		2018		2019		2018
Change in projected benefit obligation:				,								
Projected benefit obligation at beginning of year	\$	448.9	\$	486.7	\$	235.3	\$	255.0	\$	684.2	\$	741.7
Service cost		5.4		4.5		2.6		2.8		8.0		7.3
Interest cost		16.8		14.9		4.7		4.7		21.5		19.6
Plan amendments		4.8		0.2		_		0.8		4.8		1.0
Actuarial (gain) loss		47.1		(33.1)		24.8		(3.1)		71.9		(36.2)
Foreign exchange translation		_		_		1.6		(13.0)		1.6		(13.0)
Benefits paid		(26.5)		(24.3)		(7.6)		(11.9)		(34.1)		(36.2)
Projected benefit obligation at end of year		496.5		448.9		261.4		235.3		757.9		684.2
Change in plan assets:												
Fair value of plan assets at beginning of year		418.2		389.6		95.9		108.3		514.1		497.9
Actual return on plan assets		80.5		(28.8)		11.4		(0.9)		91.9		(29.7)
Employer contributions		1.0		81.7		5.6		6.6		6.6		88.3
Foreign exchange translation		_		_		2.5		(6.2)		2.5		(6.2)
Benefits paid		(26.5)		(24.3)		(7.6)		(11.9)		(34.1)		(36.2)
Fair value of plan assets at end of year	_	473.2	_	418.2	_	107.8	_	95.9	_	581.0	_	514.1
Underfunded status at end of year	\$	23.3	\$	30.7	\$	153.6	\$	139.4	\$	176.9	\$	170.1
Amounts recognized on the balance sheet as of December 31:												
Other accrued expenses	\$	1.0	\$	1.0	\$	3.2	\$	2.9	\$	4.2	\$	3.9
Accrued pension and postretirement benefit obligations		22.3		29.7		150.4		136.5		172.7		166.2
Underfunded status at end of year	\$	23.3	\$	30.7	\$	153.6	\$	139.4	\$	176.9	\$	170.1
Accumulated other comprehensive loss, net	\$	(131.5)	\$	(140.2)	\$	(62.0)	\$	(52.7)	\$	(193.5)	\$	(192.9)
Weighted average assumptions used to determine projected												
benefit obligations:												
Discount rate		3.11 %	6	4.14 %	6	1.59 %	6	2.28 %	ó			
Rate of compensation increase		2.60 %	6	3.00 %	6	1.78 %	6	1.77 %	ó			

The projected benefit obligation increased in 2019 primarily due to higher actuarial losses in 2019, primarily resulting from the impact of lower discount rates on our projected benefit obligation. The projected benefit obligation decreased in 2018 primarily due to actuarial gains in 2018 resulting from the impact of higher discount rates on our projected benefit obligation. The accumulated benefit obligation for the Company's defined benefit pension plans was \$748.4 and \$674.5 at December 31, 2019 and 2018, respectively. As of December 31, 2019 and 2018, the accumulated benefit obligation for the U.S. Plans was \$495.0 and \$446.4, respectively, and for the Foreign Plans was \$253.4 and \$228.1, respectively. All of the Company's U.S. Plans and Foreign Plans have accumulated benefit obligations (and projected benefit obligations) in excess of plan assets as of December 31, 2019 and 2018.

The amounts, before tax, included in Accumulated other comprehensive loss at December 31, 2019 and 2018 that have not yet been recognized as expense were as follows:

	U.S. Plans	Foreign Plans	Total		
	2019 201	8 2019 2018	2019 2018		
Actuarial losses, net	\$ 164.3 \$ 178	\$ 76.9 \$ 63.4	\$ 241.2 \$ 242.2		
Prior service cost	8.7 5	0.8 0.8	9.5 6.5		

The following is a summary of the components of net pension expense for the Company's defined benefit plans for the years ended December 31, 2019, 2018 and 2017:

		U.S. Plans		Fo	reign Plans	<u> </u>		Total	
	2019	2018	2017	2019	2018	2017	2019	2018	2017
Components of net pension expense:									
Service cost	\$ 5.4	\$ 4.5	\$ 6.7	\$ 2.6	\$ 2.8 \$	2.9	\$ 8.0	\$ 7.3	\$ 9.6
Interest cost	16.8	14.9	15.3	4.7	4.7	4.7	21.5	19.6	20.0
Expected return on plan assets	(33.2)	(34.5)	(27.2)	(3.7)	(3.8)	(3.5)	(36.9)	(38.3)	(30.7)
Amortization of prior service cost	1.7	2.3	2.7	0.1	_	_	1.8	2.3	2.7
Settlements	_	_	_	_	0.6	_	_	0.6	_
Amortization of actuarial losses	14.4	19.0	18.3	4.1	4.2	4.6	18.5	23.2	22.9
Net pension expense	\$ 5.1	\$ 6.2	\$ 15.8	\$ 7.8	\$ 8.5	8.7	\$ 12.9	\$ 14.7	\$ 24.5
Weighted average assumptions used to determine net periodic benefit cost:									
Discount rate	4.14 %	3.48 %	6 3.93 %	2.28 %	6 2.21 %	2.28 %			
Expected long-term return on assets	7.50 %	7.75 %	6 7.75 %	3.75 %	6 3.69 %	3.80 %			
Rate of compensation increase	3.00 %	3.00 %	6 3.00 %	1.77 %	6 1.70 %	1.63 %			

The pension expense for the Plans is calculated based upon a number of actuarial assumptions established on January 1 of the applicable year, including mortality projections as well as a weighted average discount rate, rate of increase in future compensation levels and an expected long-term rate of return on the respective Plans' assets which are detailed in the table above. The Company records service costs in the same line item as the respective employee compensation costs and within operating income, while all other pension-related costs including interest cost, expected return on plan assets, amortization of prior service cost and amortization of net actuarial losses are reported separately within Other income, net in the Consolidated Statements of Income.

The discount rate used by the Company for valuing pension liabilities is based on a review of high quality corporate bond yields with maturities approximating the remaining life of the projected benefit obligations. The weighted average discount rate for the U.S. Plans on this basis was 3.11% and 4.14% at December 31, 2019 and 2018, respectively. The decrease in the discount rate for the U.S. Plans resulted in an increase in the benefit obligation of approximately \$50 at December 31, 2019. The weighted average discount rate for the Foreign Plans was 1.59% and 2.28% at December 31, 2019 and 2018, respectively. The increase in the benefit obligation associated with our Foreign Plans at December 31, 2019 was primarily driven by the decrease in the discount rate. The Company calculates its service and interest costs by applying a split discount rate approach under which specific spot rates along the selected yield curve are applied to the relevant projected cash flows as the Company believes this method more precisely measures its obligations. The mortality assumptions used by the Company reflect commonly used mortality tables and improvement scales for each plan and increased life expectancies for plan participants.

The primary investment objective of the Plans is to build and ensure an adequate pool of assets to support the benefit obligations to participants, retirees and beneficiaries. To meet this objective, the Plans seek to earn a rate of return on assets greater than the liability discount rate, with a prudent level of risk and diversification. The current investment policy includes a strategy to maintain an adequate level of diversification, subject to portfolio risks. The target allocations for the U.S. Plans are generally 60% equity and 40% fixed income. Short-term strategic ranges for investments are established within these long term target percentages. The Company invests in a diversified investment portfolio through various investment managers and evaluates its plan assets for the existence of concentration risks. As of December 31, 2019, there were no significant concentrations of risks in the Company's defined benefit plan assets. The Company does not invest nor instruct investment managers to invest pension assets in Amphenol securities. The Plans may indirectly hold the Company's securities as a result of external investment management in certain commingled funds. Such holdings would not be material relative to the Plans' total assets. The Company's Foreign Plans primarily invest in equity and debt securities and insurance contracts, as determined by each Plans' Trustees or investment managers.

In developing the expected long-term rate of return assumption for the U.S. Plans, the Company evaluated input from its external actuaries and investment consultants as well as consideration of long-term inflation assumptions. Projected returns by such consultants are based on broad equity and bond indices. The Company also considered its historical compounded return of approximately 8.6%, which has been in excess of these broad equity and bond benchmark indices. As described above, the expected long-term rate of return on the U.S. Plans' assets is based on an asset allocation assumption of approximately 60% with equity managers (with an expected long-term rate of return of approximately 8%) and 40% with fixed income managers (with an expected long-term rate of return of approximately 6%). The Company believes that the long-term asset allocation on average will approximate 60% with equity managers and 40% with fixed income managers. The Company regularly reviews the actual asset allocation and periodically rebalances investments to its targeted allocation when considered appropriate.

The Company's Plan assets, the vast majority of which relate to the U.S. Plans, are reported at fair value and classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The process requires judgment and may have an effect on the placement of the Plan assets within the fair value measurement hierarchy. The fair values of the Company's pension Plans' assets at December 31, 2019 and 2018 by asset category are as follows (refer to Note 5 for definitions of Level 1, 2 and 3 inputs):

Asset Category	 Total	I	Level 1	1	Level 2	I	Level 3	Measured at sset Value (a)
December 31, 2019								
Equity securities:								
U.S. equities — large cap	\$ 112.0	\$	56.9	\$	55.1	\$	_	\$ _
U.S. equities — small/mid cap and other	36.4		_		36.4		_	
International equities — growth	56.9		51.8		5.1		_	_
International equities — other	74.9		_		41.0		_	33.9
Alternative investment funds	21.1		_		_		_	21.1
Fixed income securities:								
U.S. fixed income securities — short term	18.1		_		18.1		_	_
U.S. fixed income securities — intermediate term	26.8		26.8		_		_	_
U.S. fixed income securities — long term	118.6		_		118.6		_	_
U.S. fixed income securities — high yield	14.2		_		14.2		_	_
International fixed income securities — other	24.0		_		24.0		_	_
Insurance contracts	37.0		_		_		37.0	_
Real estate funds	10.7		_		_		10.7	_
Cash and cash equivalents (b)	30.3		30.3					_
Total	\$ 581.0	\$	165.8	\$	312.5	\$	47.7	\$ 55.0
December 31, 2018								
Equity securities:								
U.S. equities — large cap	\$ 139.3	\$	104.9	\$	34.4	\$	_	\$ _
U.S. equities — small/mid cap and other	27.5		_		27.5		_	_
International equities — growth	32.7		28.0		4.7		_	_
International equities — other	84.9		_		34.0		_	50.9
Alternative investment funds	19.9		_		_		_	19.9
Fixed income securities:								
U.S. fixed income securities — short term	11.2		_		_		_	11.2
U.S. fixed income securities — intermediate term	77.7		77.7		_		_	_
U.S. fixed income securities — high yield	26.4		_		26.4		_	_
International fixed income securities — other	45.9		_		45.9		_	_
Insurance contracts	35.1				_		35.1	_
Real estate funds	10.2		_		_		10.2	_
Cash and cash equivalents	 3.3	_	3.3	_				
Total	\$ 514.1	\$	213.9	\$	172.9	\$	45.3	\$ 82.0

<sup>(</sup>a) Certain investments measured at fair value using the net asset value (NAV) practical expedient have been removed from the fair value hierarchy but included in the table above in order to permit the reconciliation of the fair value hierarchy to total plan assets.

<sup>(</sup>b) The majority of the cash and cash equivalents on hand at December 31, 2019, which is primarily within the U.S. Plans, was subsequently invested, in early January 2020, in certain equity securities within the *International equities-other* category.

Equity securities consist primarily of publicly traded U.S. and non-U.S. equities. Publicly traded securities are valued at the last trade or closing price reported in the active market in which the individual securities are traded. Certain equity securities held in commingled funds are valued at unitized net asset value ("NAV") based on the fair value of the underlying net assets owned by the funds. Alternative investment funds include investments in hedge funds including fund of fund products.

Fixed income securities consist primarily of government securities and corporate bonds. They are valued at the closing price in the active market or at quotes obtained from brokers/dealers or pricing services. Certain fixed income securities held within commingled funds are valued based on the fair value of the underlying net assets of the funds, as determined by the custodian of the funds.

The Level 2 pension plan assets are primarily comprised of pooled funds valued using published prices based off of observable market data.

The Level 3 pension plan assets as of December 31, 2019 and 2018 included in the table above consist primarily of contracts with insurance companies related to certain foreign plans. The insurance contracts generally include guarantees in accordance with the policy purchased. Our valuation of Level 3 assets is based on insurance company or third-party actuarial valuations, representing an estimation of the surrender or market values of the insurance contract between the Company and the insurance companies. Our Level 3 pension plan assets also include certain investments in commingled real estate funds which are valued based on unobservable market price inputs. The following table sets forth a summary of changes of the fair value of the Level 3 pension plan assets for the years ended December 31, 2019 and 2018:

	2019	2018
Balance on January 1	\$ 45.3	\$ 44.9
Unrealized gains (losses), net	4.0	1.2
Purchases, sales and settlements, net	(1.2)	0.9
Foreign currency translation	(0.4)	(1.7)
Balance on December 31	\$ 47.7	\$ 45.3

The Company made cash contributions to the Plans of \$6.6, \$88.3, and \$22.5 in 2019, 2018, and 2017, respectively. In January 2018, the Company made voluntary cash contributions of approximately \$81.0 to fund the U.S. Plans. There is no current requirement for cash contributions to any of the U.S. Plans, and the Company plans to evaluate annually, based on actuarial calculations and the investment performance of the Plans' assets, the timing and amount of cash contributions in the future.

Benefit payments related to the Plans above, including those amounts to be paid out of Company assets and reflecting future expected service as appropriate, are expected to be as follows:

Year	U.S. Plans	Foreign Plans	Total
2020	\$ 26.7	\$ 6.9	\$ 33.6
2021	27.9	7.3	35.2
2022	28.9	8.6	37.5
2023	29.8	8.4	38.2
2024	30.5	9.6	40.1
2025-2029	152.7	53.1	205.8

The Company also has an unfunded Supplemental Employee Retirement Plan ("SERP"), which provides for the payment of the portion of annual pension which cannot be paid from the retirement plan as a result of regulatory limitations on average compensation for purposes of the benefit computation. The obligation related to the SERP is included in the accompanying Consolidated Balance Sheets and in the tables above.

Certain foreign subsidiaries of the Company offer certain benefits under local statutory plans which are excluded from the tables above. The net liability for such plans was \$15.1 and \$13.7 as of December 31, 2019 and 2018, respectively, the majority of which is included within Accrued pension and postretirement benefit obligations in the accompanying Consolidated Balance Sheets.

#### Other Postretirement Benefit Plans

The Company maintains self-insurance programs for that portion of its health care and workers compensation costs not covered by insurance. The Company also provides certain health care and life insurance benefits to certain eligible retirees in the U.S. through postretirement benefit ("OPEB") programs. The Company's share of the cost of such plans for most participants is fixed, and any increase in the cost of such plans will be the responsibility of the retirees. The Company funds the benefit costs for such plans on a pay-as-you-go basis. As of December 31, 2019 and 2018, the total liability associated with postretirement benefit obligations was approximately \$7.9 and \$8.4, respectively, the majority of which is included in Accrued pension and postretirement benefit obligations on the accompanying Consolidated Balance Sheets. The weighted average discount rate used to determine the projected benefit obligation as of December 31, 2019 and 2018 was 3.10% and 4.06%, respectively. Net postretirement benefit expense on the accompanying Consolidated Statements of Income for the years ended December 31, 2019, 2018 and 2017 were \$0.3, \$0.8 and \$0.9, respectively. Since the Company's obligation for postretirement medical plans is fixed and since the benefit obligation and the net postretirement benefit expense are not material in relation to the Company's financial condition or results of operations, the Company believes any change in medical costs from that estimated will not have a significant impact on the Company.

#### Defined Contribution Plans

The Company offers various defined contribution plans for certain U.S. and foreign employees. Participation in these plans is based on certain eligibility requirements. Through 2018, the Company matched the majority of employee contributions to the U.S. defined contribution plans with cash contributions up to a maximum of 5% of eligible compensation. Effective January 1, 2019, the Company increased its matching of employee contributions to the U.S. defined contribution plans to a maximum of 6% of eligible compensation. The Company provided matching contributions to the U.S. defined contribution plans of approximately \$13.1, \$8.6 and \$6.9 in 2019, 2018 and 2017, respectively.

#### Note 10—Leases

Amphenol is a lessee of buildings, office space, automobiles and equipment throughout the world, nearly all of which are classified as operating leases expiring at various dates. The Company determines if an arrangement qualifies as a lease at lease inception. The Company adopted Topic 842 effective January 1, 2019. Operating lease liabilities are recorded based on the present value of the future lease payments over the lease term, assessed as of the commencement date. The Company's real estate leases, which are comprised primarily of manufacturing facilities, warehouses and sales offices, represent the vast majority of our operating lease liabilities and generally have a lease term between 2 and 12 years. The remaining leases consist primarily of machinery and equipment used in production, office equipment and vehicles, each with various lease terms. The vast majority of our leases are comprised of fixed lease payments, with a small percentage of the Company's real estate leases including lease payments tied to a rate or index which may be subject to variability. Certain real estate leases also include executory costs such as common area maintenance (non-lease component), as well as property insurance and property taxes (non-components). As a practical expedient permitted under Topic 842, we have elected to account for the lease and non-lease components as a single lease component for our real estate leases. Lease payments, which may include lease components, non-lease components and non-components, are included in the measurement of the Company's lease liabilities to the extent that such payments are either fixed amounts or variable amounts based on a rate or index (fixed in substance) as stipulated in the lease contract. Any actual costs in excess of such amounts are expensed as incurred as variable lease cost.

Substantially all of our lease agreements do not specify an implicit borrowing rate, and as such, the Company utilizes its incremental borrowing rate by lease term, in order to calculate the present value of our future lease payments. The discount rate represents a risk-adjusted rate on a secured basis, and is the rate at which the Company would borrow funds to satisfy the scheduled lease liability payment streams commensurate with the lease term. On January 1, 2019, the discount rate used on existing leases at adoption was determined based on the remaining lease term using available data as of that date. For new or renewed leases starting in 2019, the discount rate is determined using available data at lease commencement and based on the lease term including any reasonably certain renewal periods.

Some of our lease agreements, primarily related to real estate, include options for the Company to either renew (extend) or early terminate the lease. Leases with renewal options allow the Company to extend the lease term typically between 1 and 6 years. Renewal options are reviewed at lease commencement to determine if such options are reasonably certain of being exercised, which could impact the lease term. When determining if a renewal option is

reasonably certain of being exercised, the Company considers several factors, including but not limited to, the significance of leasehold improvements incurred on the property, whether the asset is difficult to replace, or specific characteristics unique to the particular lease that would make it reasonably certain that we would exercise such option. In most cases, the Company has concluded that renewal and early termination options are not reasonably certain of being exercised by the Company (and thus not included in our ROU asset and lease liability) unless there is an economic, financial or business reason to do so.

#### Operating Leases

For the year ended December 31, 2019, total operating lease cost was \$97.6, which includes an immaterial amount of variable lease cost, and is recorded in Cost of sales and Selling, general and administrative expenses, dependent on the nature of the leased asset. Other than variable lease cost, operating lease cost is recognized on a straight-line basis over the lease term. The following summarizes: (i) the future minimum undiscounted lease payments under non-cancelable leases for each of the next five years and thereafter, incorporating the practical expedient to account for lease and non-lease components as a single lease component for our existing real estate leases, (ii) a reconciliation of the undiscounted lease payments to the present value of the lease liabilities recognized, and (iii) the lease-related account balances on our Consolidated Balance Sheets, all as of December 31, 2019:

	O	perating
Year Ending December 31,		Leases
2020	\$	58.8
2021		43.0
2022		30.3
2023		22.6
2024		17.3
Thereafter		47.4
Total future minimum lease payments	\$	219.4
Less imputed interest		(20.0)
Total present value of future minimum lease payments	\$	199.4
As of December 31, 2019:		
Operating lease right-of-use assets (included in Other long-term assets)	\$	196.7
Other accrued expenses	\$	54.0
Other long-term liabilities		145.4
Total operating lease liabilities	\$	199.4

The following summarizes additional supplemental data related to our operating leases:

Year Ended December 31, 2019:	erating Leases
Supplemental Cash Flow Information:	 <u> </u>
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	\$ 86.0
Right-of-use assets obtained in exchange for lease liabilities	\$ 98.6
As of December 31, 2019:	
Weighted Average Remaining Lease Term	6 years
Weighted Average Discount Rate	3.2 %

Lease contracts that we have executed but which have not yet commenced as of December 31, 2019 were not material, and are excluded from the tables above. The Company does not generally enter into leases involving the construction or design of the underlying asset, and nearly all of the assets we lease are not specialized in nature. Our lease agreements generally do not include residual value guarantees nor do we enter into sublease arrangements with external parties.

Prior to January 1, 2019, the Company accounted for its leases in accordance with *Topic 840, Leases*. Total rent expense under operating leases for the years ended December 31, 2018 and 2017 was approximately \$87.2 and \$58.5,

respectively, which was recorded in Cost of sales and Selling, general and administrative expenses, dependent on the nature of the leased asset. At December 31, 2018, the Company was committed under operating leases for buildings, office space, automobiles and equipment, which expired at various dates. As previously disclosed in our 2018 Annual Report and under previous lease accounting guidance, future minimum lease payments (undiscounted) under non-cancelable operating leases as of December 31, 2018 was as follows:

2019	\$ 70.5
2020	39.0
2021	25.9
2022	16.5
2023	11.9
Beyond 2023	33.5
Total minimum obligation	\$ 197.3

#### Finance Leases

In rare circumstances, the Company may enter into finance leases (formerly referred to as "capital leases") for specific equipment used in manufacturing, in which the Company takes ownership of the asset upon the end of the lease. The Company records its finance leases within Property, plant and equipment, net, Current portion of long-term debt and Long-term debt on the accompanying Consolidated Balance Sheets. The Company's finance leases and related depreciation and interest expense, cash flows and impact on the Company's consolidated financial statements were not material individually or in the aggregate as of and for the years ended December 31, 2019, 2018 and 2017.

#### Note 11—Acquisitions

In January 2019, the Company acquired SSI Controls Technologies ("SSI"), the sensor manufacturing division of SSI Technologies, Inc., for approximately \$400, net of cash acquired, plus a performance-related contingent payment. SSI, which is headquartered in the United States (Wisconsin), is a leading designer and manufacturer of sensors and sensing solutions for the global automotive and industrial markets. The acquisition of SSI is not material to the Company. The contingent consideration payment is based on certain 2019 revenue and profitability levels of SSI. The Company determined the fair value of this liability using Level 3 unobservable inputs, such as probability weighted payout projections, and is classified as Level 3 in the fair value hierarchy (Note 5). The contingent consideration is payable in 2020 and recorded in Other accrued expenses on the accompanying Consolidated Balance Sheets as of December 31, 2019.

During the twelve months ended December 31, 2019, the Company completed nine acquisitions, including SSI, for \$937.4, net of cash acquired. All but one of the acquisitions are in the Interconnect Products and Assemblies segment. In 2019, acquisitions resulted in the recognition of \$784.6 of goodwill and \$111.8 of definite-lived intangible assets, primarily related to customer relationships and proprietary technology, with the remainder of the purchase price being allocated to other identifiable assets acquired and liabilities and noncontrolling interests assumed. These definite-lived intangible assets are being amortized based upon the underlying pattern of economic benefit as reflected by the future net cash inflows, with the vast majority having useful lives ranging from 5 to 10 years. The excess purchase price over the fair value of the underlying net assets acquired was allocated to goodwill, which primarily represents the value of the assembled workforce along with other intangible assets acquired that do not qualify for separate recognition. The Company expects that approximately \$455 of the goodwill recognized from acquisitions in 2019 will be deductible for tax purposes. The Company is in the process of completing its analyses of the fair value of the assets acquired and liabilities assumed. The Company anticipates that the final assessments of values will not differ materially from the preliminary assessments. The operating results of the 2019 acquisitions have been included in the Consolidated Statements of Income for the year ended December 31, 2019, since their respective dates of acquisition. Pro forma financial information related to these acquisitions has not been presented, since these acquisitions were not material, either individually or in the aggregate, to the Company's financial results.

During the twelve months ended December 31, 2018, the Company completed three acquisitions, all in the Interconnect Products and Assemblies segment, for \$158.9, net of cash acquired. The Company has completed its analyses of the fair value of the assets acquired and liabilities assumed for all 2018 acquisitions. The acquisitions in 2018 were not material, either individually or in the aggregate, to the Company's financial results, and therefore, pro forma financial information related to these acquisitions has not been presented.

#### Acquisition-related Expenses

In 2019, the Company incurred approximately \$25.4 (\$21.0 after-tax) of acquisition-related expenses primarily related to the amortization of \$15.7 related to the value associated with acquired backlog (primarily related to the SSI acquisition), with the remainder representing external transaction costs. In 2018, the Company incurred approximately \$8.5 (\$7.2 after-tax) of acquisition-related expenses in the fourth quarter related to external transaction costs. In 2017, the Company incurred approximately \$4.0 (\$3.7 after-tax) of acquisition-related expenses in the second quarter related to external transaction costs. Such acquisition-related expenses are separately presented in the accompanying Consolidated Statements of Income.

#### Note 12—Goodwill and Other Intangible Assets

The changes in the carrying amount of goodwill by segment were as follows:

	Pro	erconnect ducts and semblies	Pro	Cable ducts and olutions	 Total
Goodwill at December 31, 2017	\$	3,896.1	\$	146.5	\$ 4,042.6
Acquisition-related		126.7		_	126.7
Foreign currency translation		(66.1)		_	(66.1)
Goodwill at December 31, 2018	\$	3,956.7	\$	146.5	\$ 4,103.2
Acquisition-related		774.0		10.6	784.6
Foreign currency translation		(20.7)		_	(20.7)
Goodwill at December 31, 2019	\$	4,710.0	\$	157.1	\$ 4,867.1

Other than goodwill noted above, the following is a summary of the Company's intangible assets as of December 31, 2019 and 2018:

		December 31, 2019					December 31, 2018						
	Weighted Average Life (years)		Gross Carrying Amount		cumulated ortization		Net Carrying Amount	C	Gross arrying Amount		umulated ortization		Net Carrying Amount
Customer relationships	9	\$	446.2	\$	272.2	\$	174.0	\$	399.2	\$	234.7	\$	164.5
Proprietary technology	11		156.0		74.4		81.6		107.5		60.5		47.0
Backlog and other	2		49.7		49.4		0.3		34.0		33.7		0.3
Total intangible assets (definite-lived)	9		651.9		396.0		255.9		540.7		328.9		211.8
Trade names (indefinite-lived)			186.1				186.1		186.1				186.1
		\$	838.0	\$	396.0	\$	442.0	\$	726.8	\$	328.9	\$	397.9

The increase in the carrying amounts of intangible assets in 2019 was primarily due to intangible assets acquired as a result of the SSI acquisition, along with the other acquisitions closed during the year. The amortization expense for the years ended December 31, 2019, 2018 and 2017 was approximately \$67.3, \$46.9 and \$48.6, respectively. The amortization expense in 2019 includes \$15.7 related to the amortization of acquired backlog, primarily from the SSI acquisition. As of December 31, 2019, amortization expense relating to the Company's current intangible assets estimated for each of the next five fiscal years is approximately \$49.3 in 2020, \$44.7 in 2021, \$37.4 in 2022, \$34.7 in 2023, and \$29.3 in 2024.

#### Note 13—Reportable Business Segments and International Operations

The Company has two reportable business segments: (i) Interconnect Products and Assemblies and (ii) Cable Products and Solutions. The Company organizes its reportable business segments based upon similar economic characteristics and business groupings of products, services, and customers. These reportable business segments are determined based upon how the Company reviews its businesses, assesses operating performance and makes investing and resource allocation decisions. The Interconnect Products and Assemblies segment primarily designs, manufactures and markets a broad range of connector and connector systems, value-add products and other products, including antennas and sensors, used in a broad range of applications in a diverse set of end markets. The Cable Products and Solutions segment primarily designs, manufactures and markets cable, value-add products and components for use primarily in the broadband communications and information technology markets as well as certain applications in other markets. The accounting policies of the segments are the same as those for the Company as a whole and are described in Note 1 herein. The Company evaluates the performance of business units and allocates resources to them based on,

among other things, profit or loss from operations before interest, headquarters' expense allocations, stock-based compensation expense, income taxes, amortization related to certain intangible assets and nonrecurring gains and losses.

		Interconnect Products and Assemblies			Cable Products and Solutions			Corporate / Other (1)			tal Consolid	ated
	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017
Net sales:						· ·						
External	\$ 7,840.3	\$ 7,781.9	\$ 6,606.9	\$ 385.1	\$ 420.1	\$ 404.4	\$ —	\$ —	\$ —	\$ 8,225.4	\$ 8,202.0	\$ 7,011.3
Intersegment	35.3	12.8	9.7	51.6	34.0	40.7	_	_	_	86.9	46.8	50.4
Depreciation and												
amortization	300.1	287.2	214.7	6.4	6.6	6.3	5.6	5.9	5.8	312.1	299.7	226.8
Capital expenditures	289.6	305.0	220.4	4.1	5.2	5.6	1.3	0.4	0.6	295.0	310.6	226.6
Segment operating												
income	1,722.7	1,752.5	1,475.2	39.5	52.6	54.2				1,762.2	1,805.1	1,529.4
Segment assets												
(excluding goodwill)	5,666.4	5,678.6	5,732.6	209.2	208.1	200.3				5,875.6	5,886.7	5,932.9

<sup>(1)</sup> Corporate / Other is not a reportable business segment, but has been included above for purposes of reconciling between segment data and total consolidated data. The reconciliation of segment operating income and segment assets (excluding goodwill) to consolidated results is included in the tables below.

Reconciliation of segment operating income to consolidated income before income taxes:

	2019	2018	2017
Segment operating income	\$ 1,762.2	\$ 1,805.1	\$ 1,529.4
Stock-based compensation expense	(63.0)	(55.6)	(49.7)
Acquisition-related expenses	(25.4)	(8.5)	(4.0)
Other operating expenses	(54.6)	(54.1)	(48.1)
Interest expense	(117.6)	(101.7)	(92.3)
Loss on early extinguishment of debt	(14.3)		_
Other income, net	8.6	3.2	17.1
Income before income taxes	\$ 1,495.9	\$ 1,588.4	\$ 1,352.4

Reconciliation of segment assets to consolidated total assets:

	2019	2018
Segment assets, excluding goodwill	\$ 5,875.6	\$ 5,886.7
Goodwill	4,867.1	4,103.2
Other assets	72.8	55.0
Consolidated total assets	\$ 10,815.5	\$ 10,044.9

Other assets are comprised primarily of corporate identifiable assets such as cash and cash equivalents.

Net sales by geographic area for the years ended December 31, 2019, 2018 and 2017 and property, plant and equipment, net by geographic area as of December 31 were as follows:

	2019	2018	2017
Net sales			
United States	\$ 2,524.7	\$ 2,241.4	\$ 1,978.4
China	2,306.4	2,594.0	2,067.3
Other foreign locations	3,394.3	3,366.6	2,965.6
Total	\$ 8,225.4	\$ 8,202.0	\$ 7,011.3
Long-lived assets(1)			
United States	\$ 355.0	\$ 225.1	\$ 212.7
China	343.1	273.8	244.7
Other foreign locations	497.6	376.9	359.4
Total	\$ 1,195.7	\$ 875.8	\$ 816.8

Long-lived assets in this table are comprised of property, plant and equipment, net, for all years presented. In addition, for 2019, operating lease right-of-use assets are also included, as a result of the Company's adoption of Topic 842 effective January 1, 2019. Refer to Note 10 herein for further details on the impact of Topic 842.

#### Disaggregation of Net Sales

The following table shows our net sales disaggregated into categories the Company considers meaningful to depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors for the years ended December 31, 2019 and 2018:

		Interconnect Products and Assemblies		Products olutions	Total Reportable Business Segments		
Year ended December 31,	2019	2018	2019	2018	2019	2018	
Net sales by:							
Sales channel:							
End customers and contract manufacturers	\$ 6,684.0	\$ 6,667.9	\$ 301.4	\$ 322.3	\$ 6,985.4	\$ 6,990.2	
Distributors and resellers	1,156.3	1,114.0	83.7	97.8	1,240.0	1,211.8	
	\$ 7,840.3	\$ 7,781.9	\$ 385.1	\$ 420.1	\$ 8,225.4	\$ 8,202.0	
Geography:							
United States	\$ 2,323.5	\$ 2,038.0	\$ 201.2	\$ 203.4	\$ 2,524.7	\$ 2,241.4	
China	2,300.6	2,589.9	5.8	4.1	2,306.4	2,594.0	
Other foreign locations	3,216.2	3,154.0	178.1	212.6	3,394.3	3,366.6	
	\$ 7,840.3	\$ 7,781.9	\$ 385.1	\$ 420.1	\$ 8,225.4	\$ 8,202.0	

Net sales by geographic area are based on the customer location to which the product is shipped. No single customer represented 10% or more of the Company's net sales for the year ended December 31, 2019. During the year ended December 31, 2018, aggregate sales to the Company's largest customer, including sales of products to EMS companies that the Company believes are manufacturing products on their behalf, represented approximately 12% of the Company's net sales. No single customer represented 10% or more of the Company's net sales for the year ended December 31, 2017. It is impracticable to disclose net sales by product or group of products.

For further discussion related to the Company's policies surrounding revenue recognition, refer to Note 1 herein.

#### Note 14—Commitments and Contingencies

The Company has been named as a defendant in several legal actions arising from normal business activities. The Company records a loss contingency liability when a loss is considered probable and the amount can be reasonably estimated. Although the potential liability with respect to certain of such legal actions cannot be reasonably estimated, none of such matters is expected to have a material adverse effect on the Company's financial condition, results of operations or cash flows. The Company's legal costs associated with defending itself are recorded to expense as incurred.

In August 2018, the Company received a subpoena from the U.S. Department of Defense, Office of the Inspector General, requesting documents pertaining to certain products manufactured by the Company's Military and Aerospace Group that are purchased or used by the U.S. government. The Company is cooperating with the request. The Company is currently unable to estimate the timing or outcome of the matter.

Certain operations of the Company are subject to environmental laws and regulations which govern the discharge of pollutants into the air and water, as well as the handling and disposal of solid and hazardous wastes. The Company believes that its operations are currently in substantial compliance with applicable environmental laws and regulations and that the costs of continuing compliance will not have a material adverse effect on the Company's financial condition, results of operations or cash flows.

The Company also has purchase obligations related to commitments to purchase certain goods and services. At December 31, 2019, the Company had purchase commitments of \$398.4 in 2020, \$25.6 in 2021 and 2022, combined, and \$7.1 beyond 2022.

Note 15—Selected Quarterly Financial Data (Unaudited)

		Three Months Ended						
	N	March 31,		June 30,	Sep	tember 30,	De	cember 31,
<u>2019</u>								
Net sales	\$	1,958.5	\$	2,015.3	\$	2,100.6	\$	2,151.0
Gross profit		627.8		647.6		661.9		678.7
Operating income		376.2 (	1)	399.5	2)	413.6		429.8
Net income		269.9 (	1)	290.9	2)	282.3 (3	5)	320.8 (4)
Net income attributable to Amphenol Corporation		267.5 (	1)	288.4	2)	280.3 (3	5)	318.7 (4)
Net income per common share—Basic		0.90 (	1)	0.97	2)	0.95 (3	5)	1.07 (4)
Net income per common share—Diluted		0.87 (	1)	0.93	2)	0.92 (3	5)	1.03 (4)
<u>2018</u>								
Net sales	\$	1,866.9	\$	1,981.4	\$	2,129.0	\$	2,224.7
Gross profit		606.9		644.8		688.2		715.0
Operating income		376.9		408.2		444.2		457.6 (8)
Net income		268.3 (	(5)	287.8 (	5)	319.6 (7	")	341.2 (8)
Net income attributable to Amphenol Corporation		265.6 (	5)	284.8 (	5)	316.6 (7	")	338.1 (8)
Net income per common share—Basic		0.87 (	5)	0.95 (	5)	1.05 (7	')	1.13 (8)
Net income per common share—Diluted		0.84 (	(5)	0.91 (	5)	1.01 (7	")	1.09 (8)

- (1) Operating income, net income and net income per common share includes acquisition-related expenses of \$16.5 (\$13.2 after-tax, or \$0.04 per diluted share) primarily comprised of amortization related to the value associated with acquired backlog from the SSI acquisition, along with external transaction costs. Net income and net income per common share also includes excess tax benefits related to stock-based compensation of \$6.8 (\$0.02 per diluted share). These items had the aggregate effect of decreasing Operating income, Net income, Net income attributable to Amphenol Corporation, and Net income per common share-Diluted by \$16.5, \$6.4, \$6.4, and \$0.02 per share, respectively, for the three months ended March 31, 2019.
- (2) Operating income, net income and net income per common share includes acquisition-related expenses of \$8.9 (\$7.8 after-tax, or \$0.03 per diluted share) primarily related to external transaction costs, as well as amortization related to the value associated with acquired backlog from an acquisition closed in the second quarter of 2019. Net income and net income per common share also includes excess tax benefits related to stock-based compensation of \$12.9 (\$0.04 per diluted share). These items had the aggregate effect of decreasing Operating income by \$8.9, while increasing Net income, Net income attributable to Amphenol Corporation, and Net income per common share-Diluted by \$5.1, \$5.1, and \$0.01 per share, respectively, for the three months ended June 30, 2019.
- (3) Net income and net income per common share includes the excess tax benefits related to stock-based compensation of \$1.6 (\$0.01 per diluted share) and the refinancing-related costs associated with the early extinguishment of debt of \$14.3 (\$12.5 after-tax, or \$0.04 per diluted share). These items had the aggregate effect of decreasing Net income, Net income attributable to Amphenol Corporation, and Net income per common share-Diluted by \$10.9, \$10.9, and \$0.03 per share, respectively, for the three months ended September 30, 2019.
- (4) Net income and net income per common share includes the excess tax benefits related to stock-based compensation of \$16.8. The excess tax benefits had the effect of increasing Net income, Net income attributable to Amphenol Corporation, and Net income per common share-Diluted by \$16.8, \$16.8, and \$0.05 per share, respectively, for the three months ended December 31, 2019.
- (5) Net income and net income per common share includes excess tax benefits related to stock-based compensation of \$4.1. The excess tax benefits had the effect of increasing Net income, Net income attributable to Amphenol Corporation, and Net income per common share-Diluted by \$4.1, \$4.1, and \$0.01 per share, respectively, for the three months ended March 31, 2018.
- (6) Net income and net income per common share includes excess tax benefits related to stock-based compensation of \$3.0. The excess tax benefits had the effect of increasing Net income, Net income attributable to Amphenol Corporation, and Net income per common share-Diluted by \$3.0, \$3.0, and \$0.01 per share, respectively, for the three months ended June 30, 2018.
- (7) Net income and net income per common share includes excess tax benefits related to stock-based compensation of \$7.0. The excess tax benefits had the effect of increasing Net income, Net income attributable to Amphenol Corporation, and Net income per common share-Diluted by \$7.0, \$7.0, and \$0.02 per share, respectively, for the three months ended September 30, 2018.
- (8) Operating income, net income and net income per common share includes acquisition-related expenses of \$8.5 (\$7.2 after-tax, or \$0.02 per diluted share) primarily related to external transaction costs. Net income and net income per common share also includes an income tax benefit of \$14.5 (\$0.04 per diluted share) recorded in 2018 related to the completion of its accounting for the provisional Tax Act Charge from 2017 resulting from the enactment of the Tax Cuts and Jobs Act, and the excess tax benefits related to stock-based compensation of \$5.7 (\$0.02 per diluted share). These items had the aggregate effect of decreasing Operating income by \$8.5, while increasing Net income, Net income attributable to Amphenol Corporation, and Net income per common share-Diluted by \$13.0, \$13.0, and \$0.04 per share, respectively, for the three months ended December 31, 2018.

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

None.

#### Item 9A. Controls and Procedures

The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures, pursuant to Rules 13a-15(e) or 15d-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as of December 31, 2019. These controls and procedures are designed to provide reasonable assurance that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms, and such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Based on their evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures were effective as of December 31, 2019.

There has been no change in our internal control over financial reporting during the Company's most recent fiscal quarter ended December 31, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Beginning January 1, 2019, the Company adopted ASU 2016-02, *Leases (Topic 842)* and its related subsequent amendments (collectively, "Topic 842"). Although the adoption of Topic 842 did not have a material impact on our Consolidated Statements of Income and Consolidated Statements of Cash Flow for the year ended December 31, 2019, the Company implemented changes to our processes related to our lease commitments and the related control activities, including the implementation of a new lease management system and certain controls over financial reporting necessary for the required disclosures, as well as the implementation of new policies and any necessary changes to existing related policies. Refer to Note 1 and Note 10 of the accompanying Consolidated Financial Statements for further discussion on the adoption of Topic 842.

#### **Management Report on Internal Control**

Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with accounting principles generally accepted in the United States of America. Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Management is responsible for establishing and maintaining adequate internal control over financial reporting of Amphenol Corporation and its subsidiaries (the "Company"), pursuant to Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, the Company conducted an evaluation of the effectiveness of the internal control over financial reporting based on criteria established in the *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on that evaluation, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2019.

Deloitte & Touche LLP, an independent registered public accounting firm, has audited the Company's internal control over financial reporting as of December 31, 2019 in accordance with the standards of the Public Company Accounting Oversight Board (PCAOB). Those standards require that Deloitte & Touche LLP plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Deloitte & Touche LLP has issued an attestation report on the Company's internal control over financial reporting as of December 31, 2019, which is included in Item 8 of this Annual Report on Form 10-K.

Item	9R	Other	Infor	mation
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None.

#### PART III

The Company intends to file a definitive proxy statement (the "Proxy Statement") pursuant to Regulation 14A under the Securities Exchange Act within 120 days following the end of the fiscal year ended December 31, 2019, and certain information included therein is incorporated herein by reference.

#### Item 10. Directors, Executive Officers and Corporate Governance

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 10 with respect to the Directors of the Registrant is incorporated herein by reference to the Proxy Statement.

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 10 with respect to the Executive Officers of the Registrant is incorporated herein by reference to the Proxy Statement.

To the extent disclosure for delinquent reports is being made, it can be found under the caption "Delinquent Section 16(a) Reports" in the Proxy Statement and is incorporated herein by reference to the Proxy Statement.

Information regarding the Company's Code of Business Conduct and Ethics is available on the Company's website at www.amphenol.com. The Company will post all amendments to its Code of Business Conduct and Ethics on its website. In addition, a current copy may be requested by writing to the Company's World Headquarters at:

358 Hall Avenue P.O. Box 5030 Wallingford, CT 06492 Attention: Investor Relations

#### **Item 11. Executive Compensation**

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 11 is incorporated herein by reference to the Proxy Statement.

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

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 12 is incorporated herein by reference to the Proxy Statement.

For information required under Item 201(d) of Regulation S-K, refer to Item 5 of this Annual Report on Form 10-K.

#### Item 13. Certain Relationships and Related Transactions, and Director Independence

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 13 is incorporated herein by reference to the Proxy Statement.

#### Item 14. Principal Accounting Fees and Services

Pursuant to Instruction G(3) to Form 10-K, the information required by Item 14 is incorporated herein by reference to the Proxy Statement.

#### PART IV

#### Item 15. Exhibits, Financial Statement Schedules

#### (a)(1) Consolidated Financial Statements

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Report of Independent Registered Public Accounting Firm	4
Consolidated Statements of Income—Years Ended December 31, 2019, 2018 and 2017	43
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Consolidated Balance Sheets—December 31, 2019 and 2018	4:
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(a)(2) Financial Statement Schedules for the Three Years Ended December 31, 2019	
Schedule	
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Schedules other than the above have been omitted because they are either not applicable or the required information has been disclosed in the consolidated financial statements or notes thereto.

#### (a)(3) Listing of Exhibits

The following exhibits are filed as part of, or incorporated by reference into, this Annual Report on Form 10-K:

- 3.1 Restated Certificate of Incorporation of Amphenol Corporation, dated August 3, 2016 (filed as Exhibit 3.1 to the June 30, 2016 10-O).\*
- 3.2 Amphenol Corporation, Third Amended and Restated By-Laws dated March 21, 2016 (filed as Exhibit 3.1 to the Form 8-K filed on March 22, 2016).\*
- 4.1 Indenture, dated as of November 5, 2009, between Amphenol Corporation and The Bank of New York Mellon, as trustee (filed as Exhibit 4.1 to the Form 8-K filed on November 5, 2009).\*
- 4.2 Indenture, dated as of October 8, 2018, between Amphenol Technologies Holding GmbH, Amphenol Corporation and The Bank of New York Mellon, as trustee (filed as Exhibit 4.1 to the Form 8-K filed on October 9, 2018).\*
- 4.3 Officers' Certificate, dated January 26, 2012, establishing the 4.00% Senior Notes due 2022 pursuant to the Indenture (filed as Exhibit 4.2 to the Form 8-K filed on January 26, 2012).\*
- 4.4 Officer's Certificate, dated September 12, 2014, establishing both the 1.550% Senior Notes due 2017 and the 3.125% Senior Notes due 2021 pursuant to the Indenture (filed as Exhibit 4.2 to the Form 8-K filed on September 12, 2014).\*
- 4.5 Officer's Certificate, dated April 5, 2017, establishing both the 2.200% Senior Notes due 2020 and the 3,200% Senior Notes due 2024 pursuant to the Indenture (filed as Exhibit 4.2 to the Form 8-K filed on April 5, 2017).\*
- 4.6 Officer's Certificate, dated January 9, 2019, establishing the 4.350% Senior Notes due 2029 pursuant to the Indenture (filed as Exhibit 4.2 to the Form 8-K filed on January 10, 2019).\*
- 4.7 Officer's Certificate, dated September 10, 2019, establishing the 2.800% Senior Notes due 2030 pursuant to the Indenture (filed as Exhibit 4.2 to the Form 8-K filed on September 10, 2019).\*

- 4.8 Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (filed as Exhibit 4.8 to the December 31, 2019 10-K).\*\*
- 10.1 2017 Stock Purchase and Option Plan for Key Employees of Amphenol and Subsidiaries (filed as Annex A to the Company's Definitive Proxy Statement on Schedule 14A for its 2017 Annual Meeting of Stockholders, filed on April 17, 2017).†\*
- 10.2 Form of 2017 Stock Option Agreement (filed as Exhibit 10.1 to the Form 8-K filed on May 19, 2017). †\*\*
- 10.3 2009 Stock Purchase and Option Plan for Key Employees of Amphenol and Subsidiaries (filed as Exhibit 10.7 to the June 30, 2009 10-Q).†\*
- 10.4 The First Amendment to the 2009 Stock Purchase and Option Plan for Key Employees of Amphenol and Subsidiaries (filed as Exhibit 10.2 to the Form 8-K filed on May 23, 2014).†\*
- 10.5 Form of 2009 Non-Qualified Stock Option Grant Agreement dated as of May 20, 2009 (filed as Exhibit 10.8 to the June 30, 2009 10-Q).†\*
- 10.6 Form of 2009 Management Stockholders' Agreement dated as of May 20, 2009 (filed as Exhibit 10.9 to the June 30, 2009 10-Q).†\*
- Pension Plan for Employees of Amphenol Corporation as amended and restated effective January 1, 2016 (filed as Exhibit 10.6 to the December 31, 2016 10-K),†\*
- 10.8 First Amendment to Pension Plan for Employees of Amphenol Corporation as amended and restated effective January 1, 2016, dated November 10, 2016 (filed as Exhibit 10.7 to the December 31, 2016 10-K).†\*
- 10.9 Second Amendment to Pension Plan for Employees of Amphenol Corporation as amended and restated effective January 1, 2016, dated October 1, 2016 (filed as Exhibit 10.8 to the December 31, 2016 10-K).†\*
- 10.10 Third Amendment to Pension Plan for Employees of Amphenol Corporation as amended and restated effective January 1, 2016, dated December 13, 2016 (filed as Exhibit 10.9 to the December 31, 2016 10-K).†\*
- Fourth Amendment to Pension Plan for Employees of Amphenol Corporation as amended and restated effective January 1, 2016, dated May 2, 2017 (filed as Exhibit 10.12 to the June 30, 2017 10-Q), †\*
- 10.12 Fifth Amendment to Pension Plan for Employees of Amphenol Corporation as amended and restated effective January 1, 2016, dated October 29, 2018 (filed as Exhibit 10.12 to the December 31, 2018 10-K).†\*
- 10.13 Sixth Amendment to Pension Plan for Employees of Amphenol Corporation as amended and restated effective January 1, 2016, dated October 4, 2019 (filed as Exhibit 10.13 to the December 31, 2019 10-K).†\*\*
- Seventh Amendment to Pension Plan for Employees of Amphenol Corporation as amended and restated effective January 1, 2016, dated December 2, 2019 (filed as Exhibit 10.14 to the December 31, 2019 10-K).†\*\*
- 10.15 Amended and Restated Amphenol Corporation Supplemental Employee Retirement Plan (filed as Exhibit 10.24 to the December 31, 2008 10-K).†\*
- 10.16 First Amendment to the Amended and Restated Amphenol Corporation Supplemental Employee Retirement Plan, dated October 29, 2018 (filed as Exhibit 10.14 to the December 31, 2018 10-K).†\*
- 10.17 <u>Amphenol Corporation Directors' Deferred Compensation Plan (filed as Exhibit 10.11 to the December 31, 1997 10-K).†\*</u>
- 10.18 The 2004 Stock Option Plan for Directors of Amphenol Corporation (filed as Exhibit 10.44 to the June 30, 2004 10-Q).†\*
- 10.19 The Amended 2004 Stock Option Plan for Directors of Amphenol Corporation (filed as Exhibit 10.29 to the June 30, 2008 10-O).†\*
- 10.20 The 2012 Restricted Stock Plan for Directors of Amphenol Corporation dated May 24, 2012 (filed as Exhibit 10.15 to the June 30, 2012 10-Q).†\*
- 10.21 2012 Restricted Stock Plan for Directors of Amphenol Corporation Restricted Share Award Agreement dated May 24, 2012 (filed as Exhibit 10.16 to the June 30, 2012 10-Q).†\*
- 10.22 2020 Amphenol Corporation Management Incentive Plan (filed as Exhibit 10.22 to the December 31, 2019 10-K) †\*\*
- Amended and Restated Credit Agreement, dated as of January 15, 2019, among the Company, certain subsidiaries of the Company, a syndicate of financial institutions and JPMorgan Chase Bank, N.A. acting as the administrative agent (filed as Exhibit 10.1 to the Form 8-K filed on January 18, 2019).\*
- 10.24 Continuing Agreement for Standby Letters of Credit between the Company and Deutsche Bank dated March 4, 2009 (filed as Exhibit 10.36 to the March 31, 2009 10-Q).\*
- 10.25 The Amphenol Corporation Employee Savings/401(K) Plan Adoption Agreement as amended and restated effective January 1, 2019, dated December 21, 2018 (filed as Exhibit 10.25 to the December 31, 2018 10-K).†\*
- Amendment to The Amphenol Corporation Employee Savings/401(K) Plan Adoption Agreement, effective January 1, 2020, dated December 23, 2019 (filed as Exhibit 10.26 to the December 31, 2019 10-K),†\*\*
- 10.27 Amended and Restated Amphenol Corporation Supplemental Defined Contribution Plan (filed as Exhibit 10.30 to the September 30, 2011 10-Q).†\*

10.28	Amphenol Corporation Supplemental Defined Contribution Plan as amended effective January 1, 2012 (filed as
	Exhibit 10.34 to the December 31, 2011 10-K).†*
10.29	Amphenol Corporation Supplemental Defined Contribution Plan as amended effective January 1, 2019 (filed as
	Exhibit 10.28 to the December 31, 2018 10-K),†*
10.30	Commercial Paper Program form of Dealer Agreement dated as of August 29, 2014 between the Company, Citibank
	Global Markets and JP Morgan Securities LLC (filed as Exhibit 10.1 to the Form 8-K filed on September 5, 2014).*
10.31	Commercial Paper Program Dealer Agreement dated as of July 10, 2018 between Amphenol Technologies Holding
	GmbH (as issuer), Amphenol Corporation (as guarantor), Barclays Bank PLC (as Arranger), and Barclays Bank PLC
	and Commerzbank Aktiengesellschaft (as Original Dealers) (filed as Exhibit 10.1 to the Form 8-K filed on July 11,
	2018).*
10.32	Form of Indemnification Agreement for Directors and Executive Officers (filed as Exhibit 10.27 to the December 31,
	2016 10-K),†*
21.1	Subsidiaries of the Company.**
23.1	Consent of Deloitte & Touche LLP.**
31.1	Certification pursuant to Exchange Act Rules 13a-14 and 15d-14, as adopted pursuant to Section 302 of the Sarbanes-
	Oxley Act of 2002.**
31.2	Certification pursuant to Exchange Act Rules 13a-14 and 15d-14, as adopted pursuant to Section 302 of the Sarbanes-
	Oxley Act of 2002.**
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of
	2002.***
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of
	2002 ***
101.INS	Inline XBRL Instance Document – the Instance Document does not appear in the Interactive Data File because its
	XBRL tags are embedded within the Inline XBRL document.**
101.SCH	Inline XBRL Taxonomy Extension Schema Document.**
	Inline XBRL Taxonomy Extension Calculation Linkbase Document.**
	Inline XBRL Taxonomy Extension Definition Linkbase Document.**
	Inline XBRL Taxonomy Extension Label Linkbase Document.**
	Inline XBRL Taxonomy Extension Presentation Linkbase Document.**
101.1 KE	minic ADKL Taxonomy Extension Fresentation Linkbase Document.

Management contract or compensatory plan or arrangement.

(included in Exhibit 101).\*\*

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## Item 16. Form 10-K Summary

Not applicable.

Cover Page Interactive Data File – the cover page XBRL tags are embedded within the Inline XBRL document

<sup>†</sup> \* Incorporated herein by reference as stated.

Filed herewith.

Furnished with this report.

# SCHEDULE II AMPHENOL CORPORATION AND SUBSIDIARIES VALUATION AND QUALIFYING ACCOUNTS For the years ended December 31, 2019, 2018 and 2017 (Dollars in millions)

	beg	ance at ginning period	co	orged to st and penses	 lditions ductions)	 alance at end of period
Allowance for doubtful accounts:						
Year ended December 31, 2019	\$	33.5	\$	1.2	\$ (1.1)	\$ 33.6
Year ended December 31, 2018		23.0		13.0	(2.5)	33.5
Year ended December 31, 2017		23.6		1.8	(2.4)	23.0
Valuation allowance on deferred tax assets:						
Year ended December 31, 2019	\$	34.7	\$	0.2	\$ 0.3	\$ 35.2
Year ended December 31, 2018		39.6		(3.8)	(1.1)	34.7
Year ended December 31, 2017		37.2		2.5	(0.1)	39.6

### **Signatures**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized in the Town of Wallingford, State of Connecticut on the 12th day of February, 2020.

#### AMPHENOL CORPORATION

/s/ R. Adam Norwitt

R. Adam Norwitt

President and Chief Executive Officer

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

Signature	Title	Date
/s/ R. Adam Norwitt R. Adam Norwitt	President, Chief Executive Officer and Director (Principal Executive Officer)	February 12, 2020
/s/ Craig A. Lampo Craig A. Lampo	Senior Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 12, 2020
/s/ Martin H. Loeffler Martin H. Loeffler	Chairman of the Board of Directors	February 12, 2020
/s/ Stanley L. Clark Stanley L. Clark	Director	February 12, 2020
/s/ John D. Craig John D. Craig	Director	February 12, 2020
/s/ David P. Falck David P. Falck	Director	February 12, 2020
/s/ Edward G. Jepsen Edward G. Jepsen	Director	February 12, 2020
/s/ Robert A. Livingston Robert A. Livingston	Director	February 12, 2020
/s/ Anne Clarke Wolff Anne Clarke Wolff	Director	February 12, 2020

# DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

The following description of the capital stock of Amphenol Corporation (the "Company," "us" or "we") is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to the Company's Restated Certificate of Incorporation (the "Certificate of Incorporation") and Third Amended and Restated By-laws (the "By-laws"), each of which is incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.8 is a part. We encourage you to read the Certificate of Incorporation, the By-laws and the applicable provisions of Delaware General Corporation Law (the "DGCL") for additional information.

### **Authorized Shares of Capital Stock**

The Company is authorized to issue 1,000,000,000 shares of Class A Common Stock, par value \$0.001 per share, and no other shares of common stock or preferred stock.

#### Listing

The Company's Class A Common Stock is listed and principally traded on the New York Stock Exchange under the symbol "APH."

#### **Dividends**

Subject to the rights of holders of outstanding shares of preferred stock, if any, holders of the Class A Common Stock are entitled to participate in dividends as and when declared by the board of directors out of funds legally available therefor. The Company's unsecured credit facility contains financial covenants and restrictions, some of which may limit the Company's ability to pay dividends, and any future indebtedness that the Company may incur could limit its ability to pay dividends.

#### **Voting rights**

Holders of the Class A Common Stock are entitled to one vote per share on all matters submitted to a vote of stockholders, including the election of directors. Approval of matters brought before the stockholders requires the affirmative vote of the holders of record, present in person or by proxy, of a majority of the issued and outstanding Class A Common Stock, except as otherwise required by law. Our Class A Common Stock does not have cumulative voting rights.

#### **Liquidation Rights**

Subject to the rights of creditors and holders of preferred stock, if any, holders of Class A Common Stock are entitled to share ratably in a distribution of the Company's assets upon any liquidation, dissolution or winding-up of the Company.

#### **Preemptive or Similar Rights**

Our Class A Common Stock has no sinking fund, redemption provisions or preemptive, conversion or exchange rights.

#### **Certain Anti-Takeover Matters**

Advance Notice Requirements

The Company's By-laws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of stockholders. These procedures provide that notice of such stockholder proposals must be timely given in writing to the Secretary of the Company prior to the meeting at which the action is to be taken. The notice must contain certain information specified in the Company's By-laws.

Additional Authorized Shares of Capital Stock.

The additional shares of authorized common stock available for issuance under our Certificate of Incorporation could be issued at such times, under such circumstances and with such terms and conditions as to impede a change in control.

Delaware General Corporation Law Section 203

As a corporation organized under the laws of the State of Delaware, the Company is subject to Section 203 of the DGCL which restricts certain "business combinations" between the Company and an "interested stockholder" or that stockholder's affiliates or associates for a period of three years following the date on which the stockholder becomes an "interested stockholder." The restrictions do not apply if:

- prior to an interested stockholder becoming such, the board of directors of the Company approves either the business combination or the transaction in which the stockholder becomes an interested stockholder;
- upon consummation of the transaction in which the stockholder becomes an interested stockholder, the interested stockholder owns at least 85% of the outstanding voting stock of the Company at the time the transaction commenced, subject to certain exceptions; or
- on or after the date an interested stockholder becomes such, the business combination is both approved by the board of directors of the Company and authorized at an annual or special meeting of the Company's stockholders (and not by written consent) by the affirmative vote of at least 66 2/3% of the outstanding voting stock not owned by the interested stockholder.

For purposes of Section 203 of the DGCL, a "business combination" includes mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns (or within three years did own) 15% or more of a corporation's voting stock. The statute could have the effect of delaying, deferring or preventing a change in control of the Company's or reducing the price that some investors might be willing to pay in the future for the Class A Common Stock.

# **Transfer Agent and Registrar**

The transfer agent and registrar for the Company's Class A Common Stock is Computershare Trust Company, N.A.

# SIXTH AMENDMENT (2019-1) TO THE PENSION PLAN FOR EMPLOYEES OF AMPHENOL CORPORATION AS AMENDED AND RESTATED EFFECTIVE JANUARY 1, 2016

Pursuant to Section 12.1 of the Pension Plan for Employees of Amphenol Corporation as amended and restated effective January 1, 2016 (the "Plan"), the Plan is hereby amended as follows, effective December 31, 2018, to add an additional accrued benefit for 2018 for certain identified participants, as follows:

- 1. A new subsection (k) shall be added to Section 4.1 to read as follows:
  - (k) The Participants identified in Appendix I shall accrue the following benefit as of December 31, 2018, which shall be an "Additional Benefit". On or after January 1, 2019, the accrued benefit of such Participants shall be the sum of (i) the accrued benefit calculated as of such date pursuant to the Plan without regard to the Additional Benefit, plus (ii) the Additional Benefit.
- 2. Exhibit A: Salaried Employees' Pension Plan of the Amphenol Corporation, is amended by adding the following Note to the end of the cover pages thereof:
  - (4) Additional Benefit for Certain Participants. Certain Participants shall be entitled to an Additional Benefit see Section 4.1(k) of, and Appendix I to, the Plan.
- 3. Exhibit C: LPL Technologies Inc. Retirement Plan is amended by adding the following Note to the end of the cover pages thereof:
  - (4) Additional Benefit for Certain Participants. Certain Participants shall be entitled to an Additional Benefit see Section 4.1(k) of, and Appendix I to, the Plan.
- 4. The first page of Exhibit G: Pension Plan for Salaried Employees of the Sidney Division, Amphenol Corporation, is amended by adding the following Note to the end thereof:
  - (4) Additional Benefit for Certain Participants. Certain Participants shall be entitled to an Additional Benefit see Section 4.1(k) of, and Appendix I to, the Plan.

			AMPHENOL CORPORATION
Dated:	October 4, 2019	By:	/s/ David Silverman
		Its:	Vice President, Human Resources

# SEVENTH AMENDMENT (2019-2) TO THE PENSION PLAN FOR EMPLOYEES OF AMPHENOL CORPORATION AS AMENDED AND RESTATED EFFECTIVE JANUARY 1, 2016

Pursuant to Section 12.1 of the Pension Plan for Employees of Amphenol Corporation as amended and restated effective January 1, 2016 (the "Plan"), the Plan is hereby amended as follows, effective January 1, 2020:

- 1. Exhibit D (*Chatham Cable*) is amended such that Section 4.1(a)(1)(xvi) shall read as follows: (xvi) \$24.00, for Participants terminating employment on or after January 1, 2017 and prior to January 1, 2020; or.
- 2. Exhibit D (Chatham Cable) is amended by the addition of a new Section 4.1(a)(1)(xvii) to read as follows:
  - (xvii) \$25.00 for Participants terminating employment on or after January 1, 2020.
- 3. Exhibit H (*SidneyHourly*) is amended by restating Section 4.1(a) to read as follows:
  - (a) Accrued Benefit. The amount of the monthly retirement benefit in the Normal Form to be provided for each Participant who retires on his Normal Retirement Date shall be equal to such Participant's monthly Accrued Benefit as of any date, subject to modifications set out below, equal to the product of (1) and (2):

- (1) an amount equal to
- (i) \$45.00 for Participants terminating employment in the Eligible Class on or after January 1, 2020;
- (ii) \$42.50 for Participants terminating employment in the Eligible Class on or after January 1, 2017, but prior to January 1, 2020;
- (iii) \$40.00 for Participants terminating employment in the Eligible Class on or after January 1, 2014, but prior to January 1, 2017;
- (iv) \$37.00 for Participants terminating employment in the Eligible Class on or after December 1, 2010, but prior to January 1, 2014;
- (v) \$34.00 for Participants terminating employment in the Eligible Class on or after January 1, 2008, but prior to December 1, 2010;
- (vi) \$30.00 for Participants terminating employment in the Eligible Class on or after January 1, 2005, but prior to January 1, 2008;
- (vii) \$26.50 for Participants terminating employment in the Eligible Class on or after January 1, 2002, but prior to January 1, 2005;
- (viii) \$23.50 for Participants terminating employment in the Eligible Class on or after January 1, 1999 but prior to January 1, 2002;
- (ix) \$20.50 for Participants terminating employment in the Eligible Class on or after November 1, 1997 but prior to January 1, 1999;
- (x) \$20.00 for Participants terminating employment in the Eligible Class on or after November 1, 1996, but prior to November 1, 1997;
- (xi) \$19.00 for Participants terminating employment in the Eligible Class subsequent to October 31, 1993 but prior to November 1, 1996;
- (xii) \$18.50 for Participants terminating employment in the Eligible Class subsequent to October 31, 1990 but prior to November 1, 1993; or
- (xiii) \$18.00 for Participants terminating employment in the Eligible Class subsequent to November 4, 1989 but prior to November 1, 1990; or
- (xiv) \$17.00 for Participants terminating employment in the Eligible Class subsequent to October 31 1987 but prior to November 5, 1989.

(2) such Participant's Years of Accrual Service.

The Accrued Benefit for a Participant terminating employment prior to November 1, 1987 shall be calculated in accordance with the provisions of the Plan in effect on the date of such Participant's termination of employment.

#### AMPHENOL CORPORATION

BY: <u>/s/ David Silverman</u> David Silverman

DATED: December 2, 2019

Its: Sr. Vice President, Human Resources

#### 2020 AMPHENOL MANAGEMENT INCENTIVE PLAN

#### I. **Purpose**

The purpose of the 2020 Management Incentive Plan (the "2020 Incentive Plan") is to reward eligible key employees of Amphenol Corporation and affiliated operations with performance-based cash bonus payments provided certain individual, operating unit and/or Company goals are achieved.

#### II. Eligibility

Key management personnel and target bonuses are as recommended by the CEO. Generally, participation includes senior management positions, corporate staff managers, general managers and their designated direct reports. Participation, target bonuses and bonus payments are as approved by the Compensation Committee of the Board of Directors.

#### III. **Plan Components**

Payments under the 2020 Incentive Plan are based primarily on performance against quantitative measures established at the beginning of each year. In addition, consideration will be given, when appropriate, to certain qualitative factors considered relevant or appropriate as determined by the Compensation Committee.

The quantitative portion of the 2020 Incentive Plan is contingent upon the Company's achievement and/or each Group's achievement, and/or each operating unit's achievement and/or each individual's achievement of performance targets and/or goals. For 2020, quantitative performance criteria are based primarily on sales and income growth in 2020 over 2019 and actual performance in 2020 as compared to 2020 budget.

Performance based payments pursuant to the 2020 Incentive Plan may be adjusted if unusual and unanticipated market conditions materially impact the Company's, a Group's, an operating unit's, or an individual's growth and/or performance.

#### IV. **Administration**

- Payments are based upon average base salary during the 2020 Incentive Plan year (new hires will be prorated accordingly if hired after February 1, 2020). Targets and payments may be adjusted for special situations (for example, the participant moves to a new position during the year).

  The maximum allowable payout under the 2020 Incentive Plan is 2x the target bonus as applied to average base salary.
- The Committee may adjust the payout of any or all participants in consideration of (i) whether the payout to all participants as a percentage of the Company's operating income falls within certain historical parameters, (ii) how the multiplier for the current year compares with the prior year, (iii) reasonableness and consistency and (iv) internal pay
- To be eligible for the bonus payment, a participant must be an active employee on the payroll and in good standing as of December 31, 2020. Exceptions must be recommended by the CEO and be approved by the Compensation Committee.
- Payments will not be made later than March 15, 2021. All payments are subject to the recommendation of the CEO and the approval of the Compensation Committee.
- The Compensation Committee will interpret and administer the 2020 Incentive Plan at its discretion.
- The 2020 Incentive Plan is intended to be exempt from the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations and other applicable guidance issued thereunder ("Section 409A") or if not exempt, to satisfy the requirements of Section 409A, and the provisions of the 2020 Incentive Plan shall be construed in a manner consistent therewith.

#### AMENDMENT EXECUTION PAGE

Plan Name: Amphenol Corporation Employee Savings/401(k) Plan (the "Plan")

**Employer**: Amphenol Corporation

[Note: These execution pages are to be completed in the event the Employer modifies any prior election(s) or makes a new election(s) in this Adoption Agreement. Attach the amended page(s) of the Adoption Agreement to these execution pages.]

The following section(s) of the Plan are hereby amended effective as of the date(s) set forth below:

Section Amended	Effective Date
ADDITIONAL PROVISIONS ADDENDUM	01/01/2020

IN WITNESS WHEREOF, the Employer has caused this Amendment to be executed on the date given below.

Employer:	Amphenol Corporation	Employer:	Amphenol Corporation
Ву:	/s/ Lily Mao	By:	
Γitle:	Corporate Sr. HR Director	Title:	
Date:	December 21, 2019	Date:	
	Only one authorized signature is required to execute this Adopted signatures.	ption Agreem	ent unless the Employer's corporate policy mandates two
Accepted by	y: Fidelity Management Trust Company, as Trustee	_	
Ву:	/s/ Joan M. Berning	Date:	December 23, 2019
Γitle:	Authorized Signatory	_	
Volume Sub	omitter Defined Contribution Plan – 10/2014		PS Plan
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#### ADDITIONAL PROVISIONS ADDENDUM

for

#### Plan Name: Amphenol Corporation Employee Savings/401(k) Plan

(a) Additional Provision(s) – The following provisions supplement and/or, to the degree described herein, supersede other provisions of this Adoption Agreement and the Basic Plan Document in the following manner:

#### (1) The following replaces Subsection 1.05(a):

- (a) *Compensation Exclusions* Compensation shall exclude the following item(s):
  - (1) Reimbursements or other expense allowances.
  - (2) Fringe benefits (cash and non-cash).
  - (3) Moving expenses.
  - (4) Deferred compensation.
  - (5) Welfare benefits.
  - The value of restricted stock or of a qualified or a non-qualified stock option granted to an Employee by the Employer to the extent such value is includable in the Employee's taxable income.
  - (7) Severance pay received prior to termination of employment. (Severance pay received following termination of employment is a severance amount as described in Subsection 2.01(k) which is always excluded.)
  - (8) The following other items are excluded from Compensation (List separately any items excluded from Compensation only for a particular group of employees and provide a description of that group.):

#### Sign on Bonus, Referral Bonus

**Note**: The Participant group(s) identified above must be clearly defined in a manner that will not violate the definite predetermined allocation formula requirement of Treasury Regulation Section 1.401-1(b)(1)(ii).

**Note:** If the Employer has selected Safe Harbor Matching Employer Contributions or 401(k) Safe Harbor Formula any exclusion listed above must be a permitted exclusion under Section 1.414(s)-1(d)(2) of the Treasury Regulations. If the Employer has selected Safe Harbor Matching Employer Contributions, a Participant must also be permitted to make Deferral Contributions under the Plan sufficient to receive the full 401(k) Safe Harbor Matching Employer Contribution, determined as a percentage of Compensation meeting the requirements of Code Section 414(s).

**Note**: Compensation must be tested to show that it meets the requirements of Code Section 414(s) or, unless 401(k) Safe Harbor Formula has been selected, the allocations must be tested to show that they meet the general test under regulations issued under Code Section 401(a)(4). With respect to Matching Employer Contributions (other than 401(k) Safe Harbor Matching Employer Contributions), Compensation for purposes of applying the limitations on Matching Employer Contributions described in Section 6.10 of the Basic Plan Document (for deemed satisfaction of the "ACP" test), must be tested to show that it meets the requirements of Code Section 414(s).

#### (2) The following shall be added as Section 1.07(b):

**(b)** Additional Automatic Enrollment Provisions – Except as provided in (c) below, automatic enrollment made in accordance with Section 5.03(c) of the Basic Plan Document is subject to the following:

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- (1) An initial pre-tax Deferral Contribution of 3.00% will be made for:
  - (A) Newly-eligible Employees <u>35</u> days after such Employee's date of hire, but no sooner than such Employee's Entry Date.
  - (B) Active Participants (who are not suspended from making Deferral Contributions), beginning on 03/03/2018 if they meet any of the following criteria:
    - (i) They are without a deferral election or have a zero election on file.
  - (C) Each Eligible Employee having a Reemployment Commencement Date will be treated as follows for purposes of the above-described automatic enrollment contributions:
    - (i) Shall be automatically enrolled later of 30 days from date of rehire or Entry Date.

**Note:** If the Employer has elected a QACA in Option 1.07(a)(6)(D), then after the effective date of this election, any Participant automatically enrolled pursuant to this subparagraph (C) who was automatically enrolled under the QACA at the time of leaving employment shall be automatically enrolled at the same rate in effect immediately prior to his leaving employment plus any increases missed in accordance with paragraph (2) below (if applicable) prior to his Reemployment.

(c) Exceptions to Automatic Deferral Provisions— The provisions of Subsection 1.07(b) shall be applied differently to the groups of Eligible Employees as specified below.

**Note**: The Participant group(s) identified below must be clearly defined in a manner that will not violate the definite predetermined allocation formula requirement of Treasury Regulation Section 1.401- 1(b)(1)(ii).

(1) The following group of Eligible Employees shall have automatic enrollment apply differently to them according to the provisions in (A) and (B) below:

#### Employees of the AAOH Division.

- (A) An initial pre-tax Deferral Contribution of  $\underline{0}$ % will be made for:
  - (i) Newly-eligible Employees <u>35</u> days after such Employee's date of hire, but no sooner than such Employee's Entry Date.
  - (ii) Active Participants (who are not suspended from making Deferral Contributions), beginning on <u>03/03/2018</u> if they meet any of the following criteria:
    - (I) They are without a deferral election or have a zero election on file.
  - (iii) Each Eligible Employee having a Reemployment Commencement Date will be treated as follows for purposes of the above-described automatic enrollment contributions:
    - (I) Shall be automatically enrolled later of 30 days from date of rehire or Entry Date.

**Note:** If the Employer has elected a QACA in Option 1.07(a)(6)(D), then after the effective date of this election, any Participant automatically enrolled under the Plan who was automatically enrolled under the QACA at the time of leaving employment shall be automatically enrolled at the same rate in effect immediately prior to his leaving employment plus any increases missed in accordance with paragraph (B) below (if applicable) prior to his Reemployment.

(3) The following replaces Subsection 1.11(a)(1):

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(1) Non-Discretionary Matching Employer Contributions - As indicated within the following for each group of "eligible" Participants, the Employer shall make a Matching Employer Contribution on behalf of each "eligible" Participant in an amount equal to the percentage, of the eligible contributions made by the "eligible" Participant during the Contribution Period:

#### (A) Flat Percentage Match

(i) Flat percentage match of <u>50.00</u>% shall be allocated only to the "eligible" Participants described below:

All participants except employees covered by a collective bargaining agreement (International Association of Machinists and Aerospace Workers, Sidney Lodge No. 1529 (Amphenol Sidney Union); International Brotherhood of Electrical Workers, Local 2015 (Amphenol RF union); The United Steelworkers, Local Union #9428 (TFC Union)...

Limit on Non-Discretionary Matching Employer Contributions for the group of "eligible" Participants described above:

- (I) Contributions in excess of <u>6.00</u>% of the "eligible" Participant's Compensation for the Contribution Period shall not be considered for non-discretionary Matching Employer Contributions.
- (II) Matching Employer Contributions for each "eligible" Participant for each Plan Year shall be limited to \$ .

#### (B) Flat Percentage Match

(i) Flat percentage match of <u>50.00</u>% shall be allocated only to the "eligible" Participants described below:

1). Effective 1/1/2020, a union employee at International Association of Machinists and Aerospace Workers, Sidney Lodge No. 1529 (Amphenol Sidney Union), hired or rehired on or after January 1, 2014.

Limit on Non-Discretionary Matching Employer Contributions for the group of "eligible" Participants described above:

- (I) Contributions in excess of 3.00% of the "eligible" Participant's Compensation for the Contribution Period shall not be considered for non-discretionary Matching Employer Contributions.
- (II) Matching Employer Contributions for each "eligible" Participant for each Plan Year shall be limited to \$ .

#### (C) Flat Percentage Match

(i) Flat percentage match of <u>50.00</u>% shall be allocated only to the "eligible" Participants described below:

1). Effective 1/1/2019, a union employee at International Brotherhood of Electrical Workers, Local 2015 (Amphenol RF union) hired or rehired on or after January 1, 2016; 2). Effective 1/1/2020, a union employee at The United Steelworkers, Local Union #9428 (TFC Union) hired or rehired on or after 9/1/2013.

Limit on Non-Discretionary Matching Employer Contributions for the group of "eligible" Participants described above:

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- (I) Contributions in excess of 2.00% of the "eligible" Participant's Compensation for the Contribution Period shall not be considered for non-discretionary Matching Employer Contributions.
- (II) Matching Employer Contributions for each "eligible" Participant for each Plan Year shall be limited to \$ .

Note: The Employer may be required to satisfy the nondiscriminatory benefits requirement of Code Section 401(a)(4).

- (4) The following replaces Subsection 1.12(a):
  - (a) Fixed Formula:
    - (1) Fixed Percentage Employer Contribution For each Contribution Period, the Employer shall contribute for each "eligible" Participant (except as otherwise provided in (A)(i) below) a percentage of such "eligible" Participant's Compensation equal to:
      - (A) <u>0.00</u>% (not to exceed 25%) to all "eligible" Participants, except as provided in (i) below.

**Note**: The eligible group(s) defined below must be definitely determinable and cannot be subject to the discretion of the Employer. In addition, the design of the classifications cannot be such that the only Non-Highly Compensated Employees benefiting under the Plan are those with the lowest compensation and/or the shortest periods of service and who may represent the minimum number of such employees necessary to satisfy coverage under Code Section 410(b).

- (i) Different percentages for different groups of "eligible" Participants as follows:
  - (I) For each Plan Year, the Employer shall contribute for the following "eligible" Participant(s) an amount equal to 3.00% (not to exceed 25%) of each such "eligible" Participant's Compensation:
    - 1). Effective 1/1/2020, a union employee at International Association of Machinists and Aerospace Workers, Sidney Lodge No. 1529 (Amphenol Sidney Union), hired or rehired on or after January 1, 2014.
  - (II) For each Plan Year, the Employer shall contribute for the following "eligible" Participant(s) an amount equal to 2.00% (not to exceed 25%) of each such "eligible" Participant's Compensation:
    - 1). Effective 1/1/2016, a union employee at International Brotherhood of Electrical Workers, Local 2015 (Amphenol RF union) hired or rehired on or after 1/1/2016 2). Effective 1/1/2017, a union employee at The United Steelworkers, Local Union #9428 (TFC Union) hired or rehired on or after 9/1/2013.
- (ii) To the extent the allocation formula does not apply to all Participants under the Plan, the Employer may be required to restructure the Plan, as permitted by the regulations under Code Section 401(a)(4), to satisfy the nondiscriminatory benefits requirement of that Code Section. If the Plan can be restructured to satisfy the nondiscriminatory benefits requirements, then the Plan will generally satisfy a design-based safe harbor pursuant to the regulations under Code Section 401(a)(4). If the Plan cannot be restructured to satisfy the nondiscriminatory benefits requirements, the Plan shall be required to satisfy the nondiscriminatory amount requirement by testing in accordance with Section 1.401(a)(4)-2(a) of the Treasury Regulations. If the Plan is required to pass

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cross-testing in accordance with Section 1.401(a)(4)-8 of the Treasury Regulations to satisfy the nondiscriminatory amount requirement and the Plan does not meet the exception found in Section 1.401(a)(4)-8(b)(1)(i)(B)(1) or (2), the Plan shall provide a gateway contribution to Participants required to benefit under this allocation to the extent described in Section 1.401(a)(4)-8(b)(1)(vi). All Participants not included in an allocation group above shall be considered as not benefiting under this allocation for the Contribution Period unless otherwise is required to pass the nondiscriminatory amount testing pursuant to Section 1.401(a)(4)-8 of the Treasury Regulations. The Employer shall notify the Plan Administrator of the amount allocable to each group.

- (2) 401(k) Safe Harbor Formula The Nonelective Employer Contribution specified in the 401(k) Safe Harbor Nonelective Employer Contributions Addendum is intended to satisfy the safe harbor contribution requirements under Sections 401(k) and 401(m) of the Code such that the "ADP" test (and, under certain circumstances, the "ACP" test) is deemed satisfied. Please complete the 401(k) Safe Harbor Nonelective Employer Contributions Addendum to the Adoption Agreement. (Choose only if Option 1.07(a), Deferral Contributions, is checked.)
- (5) The following replaces Subsection 1.12(b):
  - (b) *Discretionary Formula* The Employer may decide each Contribution Period whether to make a discretionary Nonelective Employer Contribution on behalf of "eligible" Participants in accordance with Section 5.10 of the Basic Plan Document.
    - (4) Participant Group Allocation Method The Nonelective Employer Contribution is allocated first at the Employer's discretion among the employee groups with the same allocation rate, as identified below. The amount allocated to each such group shall then be allocated among the "eligible" Participants within such group in the ratio that each "eligible" Participant's Compensation for the Plan Year bears to the total Compensation paid to all "eligible" Participants within the group.
      - (A) *Employee Groups* Allocation groups will be determined in the following manner:
        - (1) Each "eligible" Participant will be considered his own allocation group.

**Note:** The specific categories of "eligible" Participants should be such that resulting allocations are provided pursuant to a definite predetermined formula that complies with Treasury Regulations Section 1.401-1(b)(1)(ii).

Unless the Plan can be restructured in accordance with regulations under Code Section 401(a)(4) to provide uniform percentages of Compensation to "eligible Participants", the Plan will not satisfy a design-based safe harbor pursuant to the regulations under Code Section 401(a)(4). If the Plan cannot be restructured, the Plan shall be required to satisfy the nondiscriminatory amount requirement by testing in accordance with Section 1.401(a)(4)-2(a) of the Treasury Regulations. If the Plan is required to pass cross-testing in accordance with Section 1.401(a)(4)-8 of the Treasury Regulations to satisfy the nondiscriminatory amount requirement and the Plan does not meet the exception found in Section 1.401(a)(4)-8(b)(1)(i)(B)(1) or (2), the Plan shall provide a gateway contribution to Participants required to benefit under this allocation to the extent described in Section 1.401(a)(4)-8(b)(1)(vi). All Participants not included in an allocation group above shall be considered as not benefiting under this allocation for the Contribution Period unless otherwise is required to pass the nondiscriminatory amount testing pursuant to Section 1.401(a)(4)-8 of the Treasury Regulations. The Employer shall notify the Plan Administrator of the amount allocable to each group.

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Note: The requirements of Treasury Regulations Section 1.401(k)-1(a)(6) (describing what constitutes a cash or deferred arrangement with respect to Self-Employed Individuals) applies to the allocation formula under this Option. Therefore, the allocation formula should be structured so that application of the formula does not create a cash or deferred arrangement with respect to a Self-Employed Individual (e.g., by permitting partners to directly or indirectly vary the amount of contribution made on their behalf).

- (6) The following is added at the end of Subsection 1.18(a) as a new Subsection 1.18(a)(1) and supersedes Article 9 to the extent required:
  - **(1)** Loan not Due on Termination. If a Participant with an outstanding loan balance terminates employment with the Employer and all Related Employers, the outstanding principal and accrued interest on such loan shall not be immediately due and payable as provided in Section 9.11 of the Basic Plan Document. Instead, such loan shall continue to be payable in accordance with the provisions of the loan note and Article 9 of the Basic Plan Document.
- (7) The following replaces Section 19.05:

19.05. Costs of Administration. All reasonable costs and expenses (including legal, accounting, and employee communication fees) incurred by the Administrator and the Trustee in administering the Plan and Trust may be paid from the forfeitures (if any) resulting under Section 11.08, from the suspense account described in this Section, if any, or from the remaining Trust Fund. All such costs and expenses paid from the remaining Trust Fund shall, unless allocable to the Accounts of particular Participants, be charged against the Accounts of all Participants as provided in the Service Agreement.

Amounts a service provider agrees to credit to the Plan in recognition of the service provider's compensation for Plan services will be allocated to a suspense account from which the Administrator may pay Plan expenses and/or allocate amounts to the Accounts of Participants and Beneficiaries pro rata based on their Account balances in the Trust excluding amounts invested in a loan pursuant to Article 9. Any amounts so allocated shall not constitute "annual additions" (as defined in Subsection 6.01(a)) under the Plan.

Volume Submitter Defined Contribution Plan – 10/2014

PS Plan 85085-1576113141AA

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**Amphenol Corporation**Listing of Subsidiaries as of December 31, 2019

Name of Subsidiary	State / Country of Incorporation
Ivalie of Subsidiary	incorporation
Air LB International Development S.A.	Luxembourg
All Sensors Corporation	California, U.S.A.
All Systems Broadband, Inc.	California, U.S.A.
American Conec Corporation	North Carolina, U.S.A.
Amphenol Adronics, Inc.	Delaware, U.S.A.
Amphenol Advanced Sensors Germany GmbH	Germany
Amphenol Advanced Sensors Puerto Rico, LLC	Puerto Rico
Amphenol Air LB GmbH	Germany
Amphenol Air LB North America Inc.	Canada
Amphenol Air LB SAS	France
Amphenol Airwave (Haiyan) Communication Electronics Co., Ltd.	China
Amphenol Alden Products Company	Delaware, U.S.A.
Amphenol Alden Products Mexico, S.A. de C.V.	Mexico
Amphenol Antenna Solutions, Inc.	Illinois, U.S.A.
Amphenol Aorora Technology (Huizhou) Co., Ltd.	China
	China
Amphenol Assemble Tech (Xiamen) Co., Ltd.	
Amphenol Australia Pty Ltd	Australia
Amphenol Automotive Connection Systems (Changzhou) Co., Ltd.	China
Amphenol Automotive Technology d.o.o.	Serbia
Amphenol Bar-Tec, LTD	Israel
Amphenol Benelux B.V.	Netherlands
Amphenol-Borg Limited	U.K.
Amphenol-Borg Pension Trustees Limited	U.K.
Amphenol Borisch Technologies, Inc.	Delaware, U.S.A.
Amphenol Cables On Demand Corp.	Delaware, U.S.A.
Amphenol Canada Acquisition Corporation	Canada
Amphenol Canada Corp.	Canada
Amphenol (Changzhou) Advanced Connector Co., Ltd.	China
Amphenol (Changzhou) Connector Systems Co., Ltd.	China
Amphenol (Changzhou) Electronics Co., Ltd.	China
Amphenol CNT (Xian) Technology Co., Ltd.	China
Amphenol Comercial, S.A. de C.V.	Mexico
Amphenol Commercial and Industrial UK, Limited	U.K.
Amphenol Commercial Interconnect Korea Co., Ltd.	South Korea
Amphenol Commercial Products (Chengdu) Co. Ltd.	China
Amphenol Connexus AB	Sweden
Amphenol ConneXus Ou	Estonia
Amphenol Custom Cable, Inc.	Florida, U.S.A.
Amphenol-Daeshin Electronics and Precision Co. Ltd	South Korea
Amphenol DC Electronics, Inc.	California, U.S.A.
Amphenol East Asia Electronic Technology (Shenzhen) Co. Ltd.	China
Amphenol East Asia Limited	Hong Kong
Amphenol EEC, Inc.	Illinois, U.S.A.
Amphenol FCI Asia Pte. Ltd.	Singapore
Amphenol FCI Besancon SA	France
Amphenol FCI Connectors Singapore Pte. Ltd.	Singapore
Amphenol Fiber Optic Technology (Shenzhen) Co., Ltd.	China
Amphenol Finland Oy	Finland
Amphenol France Acquisition SAS	France
Amphenol France SAS	France
Amphenol Germany GmbH	Germany
Amphenol Gesellschaft m.b.H.	Austria
Amphenol Goldstar Electronic Systems (Baicheng) Co. Ltd.	China

Name of Subsidiary	State / Country of Incorporation
Amphenol Goldstar Electronic Systems (Yulin) Co., Ltd.	China
Amphenol Holding UK, Limited	U.K.
Amphenol Indemnity Inc.	Connecticut, U.S.A.
Amphenol Intercon Systems, Inc.	Delaware, U.S.A.
Amphenol Interconnect India Private Limited	India
Amphenol Interconnect Products Corporation	Delaware, U.S.A.
Amphenol Interconnect South Africa (Proprietary) Limited	South Africa
Amphenol International Ltd.	Delaware, U.S.A.
	U.K.
Amphenol Invotec Limited	
Amphenol Italia S.r.l.	Italy
Amphenol Japan Ltd.	Japan
Amphenol JET (Haiyan) Interconnect Technology Co., Ltd.	China
Amphenol Kai-Jack (Shenzhen) Inc.	China
Amphenol Kopek Holdings Company Limited	Hong Kong
Amphenol Kopek Trading Company Limited	Hong Kong
Amphenol Limited	U.K.
Amphenol LTW Technology Co., Ltd.	Taiwan
Amphenol Malaysia Sdn. Bhd.	Malaysia
Amphenol (Maryland), Inc.	Maryland, U.S.A.
Amphenol MCP Korea Limited	South Korea
Amphenol Middle East Enterprises FZE	U.A.E.
Amphenol Mobile Connector Solutions (Changzhou) Co., Ltd.	China
Amphenol Nelson Dunn Technologies, Inc.	California, U.S.A.
Amphenol Netherlands Holdings 1 B.V.	Netherlands
Amphenol Netherlands Holdings 2 B.V.	Netherlands
Amphenol (Ningde) Electronics Co., Ltd	China
Amphenol Offset Interconnect Solutions Private Limited	India
Amphenol Omniconnect India Private Limited	India
Amphenol Optimize Manufacturing Co.	Arizona, U.S.A.
Amphenol Optimize Mexico S.A. de C.V.	Mexico
Amphenol PCD, Inc.	Delaware, U.S.A.
Amphenol PCD (Shenzhen) Co., Ltd.	China
Amphenol Phitek Limited	New Zealand
Amphenol Phoenix (Anji) Telecom Parts Co., Ltd.	China
Amphenol Printed Circuits, Inc.	Delaware, U.S.A.
Amphenol Procom, Inc.	Delaware, U.S.A.
Amphenol Provens SAS	France
Amphenol (Qujing) Technology Co., Ltd.	China
Amphenol RF Asia Limited	Hong Kong
Amphenol Sensing Korea Company Limited	South Korea
Amphenol Shouh Min Industry (Shenzhen) Co., Ltd.	China
Amphenol Sincere Industrial Product Gyarto. Kft	Hungary
Amphenol Singapore Pte. Ltd.	Singapore
Amphenol Socapex SAS	France
Amphenol Sunpool (Liaoning) Automotive Electronics Co., Ltd.	China
Amphenol T&M Antennas, Inc.	Delaware, U.S.A.
Amphenol Taiwan Corporation	Taiwan
Amphenol TCS de Mexico S.A. de C.V.	Mexico
Amphenol TCS Ireland Limited	Ireland
Amphenol TCS (Malaysia) Sdn. Bhd.	Malaysia
Amphenol Technical Products International Co.	Canada
Amphenol Technologies Holding GmbH	Germany
Amphenol Technology Macedonia Dooel Kocani	Macedonia
Amphenol Technology (Shenzhen) Co., Ltd.	China
Amphenol Technology Vietnam Co., Ltd.	Vietnam
Amphenol Technology (Zhuhai) Co., Ltd.	China
Amphenol Tecvox LLC	Delaware, U.S.A.

Name of Subsidiary	State / Country of Incorporation
Amphenol Tel-Ad Ltd.	Israel
Amphenol-TFC (Changzhou) Communication Equipment Co., Ltd.	China
Amphenol TFC do Brasil Ltda.	Brazil
Amphenol TFC Fios e Cabos do Brasil Ltda.	Brazil
Amphenol TFC MDE Participacoes Ltda.	Brazil
Amphenol Thermometrics, Inc.	Pennsylvania, U.S.A.
Amphenol Thermometrics (UK) Limited	U.K.
Amphenol (Tianjin) Electronics Co., Ltd.	China
Amphenol Times Microwave Electronics (Shanghai) Limited	China
Amphenol Tuchel Electronics GmbH	Germany
Amphenol Tuchel Industrial GmbH	Germany
Amphenol Tunisia LLC	Tunisia
Amphenol Turkey Teknoloji Limited Sirketi	Turkey
Amphenol USHoldco Inc.	Delaware, U.S.A.
Amphenol (Xiamen) High Speed Cable Co., Ltd.	China
Anytek Electronic Technology (Shenzhen) Co. Ltd	China
Anytek International Co. Ltd.	Mauritius
Anytek International (Shanghai) Co. Ltd.	China
Anytek Technology Corporation Ltd	Taiwan
ARCAS Automotive Group (Luxco 1) S.a.r.l.	Luxembourg
Ardent Concepts, Inc.	New Hampshire, U.S.A.
Asia Connector Services, Ltd.	Delaware, U.S.A.
Auxel FTG India Pvt Ltd.	India
	China
Auxel FTG Shanghai Co., Ltd. Auxel S.A.S.	France
	U.K.
Berg UK Ltd. Bernd Richter GmbH	
	Germany Minneagte U.S.A
Bernd Richter U.S.A., Inc.	Minnesota, U.S.A.
C&S Antennas, Inc.	Delaware, U.S.A.
Cablescan B.V.	Netherlands
Cases Automotive Singapore Pts. Ltd.	U.K.
Casco Automotive Singapore Pte., Ltd.	Singapore
Casco Automotive (Suzhou) Co., Ltd.	China
Casco Automotive Tunisia S.a.r.l.	Tunisia
Casco do Brasil Ltda.	Brazil
Casco Holdings Co. Limited	Hong Kong
Casco Holdings GmbH	Germany
Casco Imos Italia S.r.l.	Italy
Casco Logistics GmbH	Germany Deleviore II S. A.
Casco Products Corporation	Delaware, U.S.A.
Casco Schoeller GmbH	Germany
Cemm-Mex, S.A. de C.V.	Mexico
Cemm Thome Corp.	Delaware, U.S.A.
Cemm Thome SK, spol s.r.o.	Slovakia
Changzhou Amphenol Fuyang Communication Equipment Co., Ltd.	China
Charles Industries, LLC	Illinois, U.S.A.
Conec Corporation	Canada
Conec Elektronische Bauelemente GmbH	Germany
Conec Polska Sp. Z.o.o.	Poland
Conec s.r.o.	Czech Republic
Conec Shanghai International Co., Ltd.	China
Conec UK Limited	U.K.
Contactserve (Proprietary) Limited	South Africa
CTI (Barbados) Inc.	Barbados
CTI Industries Inc.	Canada
East Asia Connector Services, Ltd.	China
ED Products Ltd.	Canada

Name of Subsidiary	State / Country of Incorporation
Edwin Deutgen Kunstofftechnik GmbH	Commony
	Germany
Ehrlich Werkzeug & Geratebau GmbH	Germany
FCI Connectors Canada, Inc.	Canada
FCI Connectors Dongguan Ltd	China
FCI Connectors Hong Kong Limited	Hong Kong
FCI Connectors Korea Ltd.	South Korea
FCI Connectors Malaysia Sdn Bhd	Malaysia
FCI Connectors (Shanghai) Ltd.	China
FCI Connectors Sweden A.B.	Sweden
FCI Connectors UK Limited	U.K.
FCI Deutschland GmbH	Germany
FCI Electronics Hungary Kft	Hungary
FCI GBS India Private Limited	India
FCI Japan K.K.	Japan
FCI Nantong Ltd	China
FCI OEN Connectors Limited	India
FCI PRC Limited	Hong Kong
FCI's-Hertogenbosch B.V.	Netherlands
FCI Taiwan Limited	Taiwan
FCI USA LLC	New York, U.S.A.
FEP Fahrzeugelektrik Pirna GmbH & Co. KG	Germany
FEP Fahrzeugelektrik Pirna Verwaltungs GmbH	Germany
Fiber Systems International, Inc.	Texas, U.S.A.
Filec Production SAS	France
Filec SAS	France
Filtec GmbH	Germany
Flexus Electronic Inc.	Canada
Flexus USA Inc.	New York, U.S.A.
Friedrich Gohringer Elektrotechnik GmbH	Germany
Genasco S.A. de C.V.	Mexico
General Assembly Corporation	Texas, U.S.A.
GIC & GJM Automotive Harnesses S.R.L.	Romania
GJM Components MX, S. de R.L. de C.V.	Mexico
GJM Components N.A., Inc.	Texas, U.S.A.
GJM Components S.R.L.	Romania
GJM S.A.	Spain
Guangzhou Amphenol Electronics Co., Ltd.	China
Guangzhou Amphenol Sincere Flex Circuits Co., Ltd.	China
Guangzhou FEP Automotive Electric Co., Ltd.	China
Hangzhou Amphenol JET Interconnect Technology Co., Ltd.	China
Hangzhou Amphenol Phoenix Hong Kong Company Limited	Hong Kong
	China
Hangzhou Amphenol Phoenix Telecom Parts Co., Ltd.	
Holland Electronics, LLC	California, U.S.A.
Intelligente Sensorsysteme Dresden GmbH	Germany
Ionix Aerospace Limited	U.K.
Ionix Holdings Limited	U.K.
Ionix Systems Limited	U.K.
Ionix Systems Ou	Estonia
Jaybeam Limited	U.K.
Jaybeam Wireless SAS	France
KE Elektronik GmbH	Germany
KE Ostrov-Elektrik s.r.o.	Czech Republic
KE Presov Elektrik, s.r.o.	Slovakia
KonneKtech, Ltd.	Delaware, U.S.A.
Kunshan Amphenol Zhengri Electronics Co., Ltd.	China
Lectric SARL	Tunisia
LTW Technology (Samoa) Co., Ltd.	Samoa
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Name of Subsidiary	State / Country of Incorporation
ITW Ton Took (Samos) Co. Itd	Samoa
LTW Top Tech (Samoa) Co., Ltd. Martec Limited	U.K.
Mocorp Holding A/S	Denmark
Nantong Docharm Amphenol Electronics Co., Ltd.	China
	Germany
PerLoga Personal und Logistik GmbH Piezotech, LLC	Indiana, U.S.A.
Piher Sensors & Controls S.A.	Spain Spain
Precision Cable Manufacturing Corporation de Mexico, S.A. de C.V.	Mexico
Procom A/S	Denmark
Procom Antennas AB	Sweden
Procom Deutschland GmbH	Germany
Procom France SARL	France
PT Casco SEA	Indonesia
Pyle-National Limited	I K
Sarl Conec France	France
S.C.I. Palin	France
	Poland
SGX Europe SP z.o.o.	2 22 22
SGX Sensortech China Holdco Limited SGX Sensortech China Limited	U.K. China
SGX Sensortech GmbH	Germany
SGX Sensortech (IS) Limited	U.K.
SGX Sensortech SA	Switzerland
Shanghai Amphenol Airwave Communication Electronics Co., Ltd.	China
Shanghai Amphenol Airwave Communication Electronics (Hong Kong) Limited	Hong Kong
Shanghai Tecvox Trading Co., Ltd.	China
Shenyang Amphenol Sunpool Automotive Electronics Co., Ltd.	China
Shenzhen Amp Metal and Electronics Co., Ltd.	China
Sine Systems Corporation	Delaware, U.S.A.
Skymasts Antennas Limited	U.K.
Societe d'Etudes et de Fabrications Electroniques et Electriques	France
Spectra Strip Limited	U.K.
SSI Technologies GmbH	Germany
SSI Technologies LLC	Wisconsin, U.S.A.
SSI Technologies s.r.o	Czech Republic
Staku Stanz und Kunstsoff Technik GmbH	Germany
Stemfi S.A.S.	France
SV Microwave, Inc.	Florida, U.S.A.
TCS Japan K.K.	Japan
Tecvox Europe S.r.l.	Italy
Telect de Mexico S. de R.L. de C.V.	Mexico
Telect, Inc.	Washington, U.S.A.
Telect Mfg., LLC	Washington, U.S.A.
TFC South America S.A.	Argentina
Thermometrics Mexico, S.A. de C.V.	Mexico
Tianjin Amphenol KAE Co., Ltd.	China
Times Fiber Canada Limited	Canada
Times Fiber Communications, Inc.	Delaware, U.S.A.
Times Microwave Systems, Inc.	Delaware, U.S.A.
Times Wire and Cable Company	Delaware, U.S.A.
U-Jin Cable Industry Co., Ltd.	South Korea
Xgiga Communication Technology Co., Ltd.	China
Zhongshan Feisaide Electromechanical Co., Ltd.	China

#### CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-216789 on Form S-3 and Registration Statement Nos. 333-163017, 333-86618, 333-184698, 333-198402 and 333-218107 on Form S-8 of our report dated February 12, 2020, relating to the financial statements of Amphenol Corporation and subsidiaries (the "Company") and the effectiveness of the Company's internal control over financial reporting, appearing in this Annual Report on Form 10-K for the year ended December 31, 2019.

/s/ Deloitte & Touche LLP

Hartford, Connecticut February 12, 2020

#### Amphenol Corporation Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 Certification

- I, R. Adam Norwitt, as the principal executive officer of the registrant, certify that:
- 1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2019 of Amphenol Corporation;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 12, 2020
/s/ R. Adam Norwitt
R. Adam Norwitt
President and Chief Executive Officer

#### Amphenol Corporation Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 Certification

I, Craig A. Lampo, as the principal financial officer of the registrant, certify that:

- 1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2019 of Amphenol Corporation;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(f)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 12, 2020
/s/ Craig A. Lampo
Craig A. Lampo
Senior Vice President and Chief Financial Officer

#### CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report of Amphenol Corporation (the "Company") on Form 10-K for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, R. Adam Norwitt, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 12, 2020

/s/ R. Adam Norwitt

R. Adam Norwitt

President and Chief Executive Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Amphenol Corporation and will be retained by Amphenol Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

#### **CERTIFICATION PURSUANT TO** 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report of Amphenol Corporation (the "Company") on Form 10-K for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Craig A. Lampo, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 12, 2020

/s/ Craig A. Lampo
Craig A. Lampo
Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Amphenol Corporation and will be retained by Amphenol Corporation and furnished to the Securities and Exchange Commission or its staff upon request.