

FORM 10-K

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

For the fiscal year ended December 31, 2020

OR

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

For the transition period from _____ to _____

Commission file number 1-4482

ARROW ELECTRONICS INC

(Exact name of registrant as specified in its charter)

New York

(State or other jurisdiction of
incorporation or organization)

9201 East Dry Creek Road

Centennial CO

(Address of principal executive offices)

11-1806155

(I.R.S. Employer
Identification Number)

80112

(Zip Code)

(303) 824-4000

(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
Common Stock, \$1 par value	ARW	New York Stock Exchange

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

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

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

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

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

Indicate by 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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262 (b)) by the registered public accounting firm that prepared or issued its audit report.

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

The aggregate market value of voting stock held by non-affiliates of the registrant as of the last business day of the registrant's most recently completed second fiscal quarter was \$4,982,704,597.

There were 74,603,233 shares of Common Stock outstanding as of February 4, 2021.

DOCUMENTS INCORPORATED BY REFERENCE

The definitive proxy statement related to the registrant's Annual Meeting of Shareholders, to be held May 12, 2021 is incorporated by reference in Part III to the extent described therein.

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PART I

Item 1. Business.

Arrow Electronics, Inc. (the “company” or “Arrow”) is a global provider of products, services, and solutions to industrial and commercial users of electronic components and enterprise computing solutions. The company has one of the world's broadest portfolios of product offerings available from leading electronic components and enterprise computing solutions suppliers, coupled with a range of services, solutions, and software that help industrial and commercial customers introduce innovative products, reduce their time to market, and enhance their overall competitiveness. Arrow was incorporated in New York in 1946 and serves over 180,000 customers worldwide.

Arrow's diverse worldwide customer base consists of original equipment manufacturers (“OEMs”), value-added resellers (“VARs”), Managed Service Providers (“MSPs”), contract manufacturers (“CMs”), and other commercial customers. These customers include manufacturers of industrial equipment (such as machine tools, factory automation, and robotic equipment) and consumer products serving industries ranging from aerospace and defense, alternative energy, automotive and transportation, medical, professional services, and telecommunications, among others.

The company has two business segments, the global components business and the global enterprise computing solutions (“ECS”) business. The company distributes electronic components to OEMs and CMs through its global components business segment and provides enterprise computing solutions to VARs and MSPs through its global ECS business segment. For 2020, approximately 72% of the company's sales were from the global components business segment, and approximately 28% of the company's sales were from the global ECS business segment. The financial information about the company's business segments and geographic operations is found in Note 16 to the Consolidated Financial Statements.

The company maintains over 260 sales facilities and 42 distribution and value-added centers, serving over 85 countries. Both business segments have operations in each of the three largest electronics markets; the Americas; Europe, Middle East, and Africa (“EMEA”); and Asia-Pacific regions. Arrow's business strategy is to be the world's foremost technology solutions provider. The company guides innovation forward by helping its customers in the areas of industrial automation, edge computing, cloud computing, smart and connected devices, homes, cities, and transportation to deliver new technologies, new materials, new ideas, and new electronics that improve businesses' performance and consumers' lives. Arrow aggregates disparate sources of electronics components, infrastructure software, and IT hardware to increasingly provide complete solutions for customers on behalf of its suppliers. Arrow's goal is to leave no segment of the market underserved in terms of the products offered and services provided. The company aims to accelerate its customers' time to market, enable secure and consistent supply chains, and drive growth on behalf of its suppliers.

The company's financial objectives are to grow sales faster than the market, increase the markets served, grow profits faster than sales, generate earnings per share growth in excess of competitors' earnings per share growth and market expectations, grow earnings per share at a rate that provides the capital necessary to support the company's business strategy, allocate and deploy capital effectively so that return on invested capital exceeds the company's cost of capital, and increase return on invested capital. To achieve its objectives, the company seeks to capture significant opportunities to grow across products, markets, and geographies. To supplement its organic growth strategy, the company continually evaluates strategic acquisitions to broaden its product and value-added service offerings, increase its market penetration, and expand its geographic reach.

Global Components

Global components markets and distributes electronic components enabled by a comprehensive range of value-added capabilities. The company provides customers with the ability to deliver the latest technologies to the market through design engineering, global marketing and integration, global logistics, and supply chain management. The company offers the convenience of accessing, from a single source, multiple technologies and products from its suppliers with rapid or scheduled deliveries. Most of the company's customers require delivery of their orders on schedules or volumes that are generally not available on direct purchases from manufacturers.

Within the global components business segment, net sales of approximately 76% consist of semiconductor products and related services; approximately 14% consist of passive, electro-mechanical, and interconnect products, such as capacitors, resistors, potentiometers, power supplies, relays, switches, and connectors; approximately 8% consist of computing and memory; and approximately 2% consist of other products and services.

Over the past three years, the global components business segment completed one strategic acquisition to broaden its portfolio of products and services offerings for new Internet of Things based business models.

In 2019, the company committed to a plan to dispose of its personal computer and mobility asset disposition business, whose results have been included as part of the global components business.

Global ECS

The company's global ECS business segment is a leading value-added provider of comprehensive computing solutions and services. Global ECS' portfolio of computing solutions includes data-center, cloud, security, and analytics solutions. Global ECS brings broad market access, extensive supplier relationships, scale, and resources to help its VARs and MSPs meet the needs of their end-users. Global ECS works with VARs and MSPs to tailor complex IT solutions for their end-users. Customers have access to various services including engineering and integration support, warehousing and logistics, marketing resources, and authorized hardware and software training. Global ECS' suppliers benefit from demand creation, speed to market, and efficient supply chain management.

Within the global ECS business segment, net sales of approximately 35% consist of software, 43% consist of storage, 9% consist of industry standard servers, 5% consist of proprietary servers, and 8% consist of other products and services.

Over the past three years, the global ECS business segment completed one strategic acquisition to further expand its portfolio of products. Aligned with the vision of guiding innovation forward in the IT channel, the company is investing in emerging and adjacent markets, such as managed services, software-defined architectures, hybrid and public cloud, and unified computing, within the ECS business.

Customers and Suppliers

The company and its affiliates serve over 180,000 industrial and commercial customers. Industrial customers range from major OEMs and CMs to small engineering firms, while commercial customers primarily include VARs, MSPs, and OEMs. No single customer accounted for more than 2% of the company's 2020 consolidated sales.

The company's sales teams focus on an extensive portfolio of products and services to support customers' material management and production needs, including connecting customers to the company's field application engineers that provide technical support and serve as a gateway to the company's supplier partners. The company's sales representatives generally focus on a specific customer segment, particular product lines or a specific geography, and provide end-to-end product offerings and solutions with an emphasis on helping customers introduce innovative products, reduce their time to market, and enhance their overall competitiveness.

Substantially all of the company's sales are made on an order-by-order basis, rather than through long-term sales contracts. As such, the nature of the company's business does not provide visibility of material forward-looking information from its customers and suppliers beyond a few months.

One supplier accounted for approximately 14% of the company's consolidated sales in 2020. No other single supplier accounted for more than 7% of the company's consolidated sales in 2020. The company believes that many of the products it sells are available from other sources at competitive prices. However, certain parts of the company's business, such as the company's global ECS business segment, rely on a limited number of suppliers with the strategy of providing focused support, extensive product knowledge, and customized service to suppliers, MSPs, and VARs. Most of the company's purchases are pursuant to distributor agreements, which are typically non-exclusive and cancelable by either party at any time or on short notice.

Distribution Agreements

Certain agreements with suppliers protect the company against the potential write-down of inventories due to technological change or suppliers' price reductions. These contractual provisions typically provide certain protections to the company for product obsolescence and price erosion in the form of return privileges, scrap allowances, and price protection. Under the terms of the related distributor agreements and assuming the company complies with certain conditions, such suppliers are required to credit the company for reductions in suppliers' list prices. As of December 31, 2020, this type of arrangement covered approximately 48% of the company's consolidated inventories. In addition, under the terms of many such agreements, the company has the right to return to the supplier, for credit, a defined portion of those inventory items purchased within a designated period of time.

A supplier, which elects to terminate a distribution agreement, may be required to purchase from the company the total amount of its products carried in inventory. As of December 31, 2020, this type of repurchase arrangement covered approximately 48% of the company's consolidated inventories.

While these inventory practices do not wholly protect the company from inventory losses, the company believes that they currently provide substantial protection from such losses.

Competition

The company operates in a highly competitive environment, both in the United States and internationally. The company competes with other large multinational and national electronic components and enterprise computing solutions distributors, as well as numerous other smaller, specialized competitors who generally focus on narrower markets, products, or particular sectors. The company also competes for customers with its suppliers. The size of the company's competitors vary across market sectors, as do the resources the company has allocated to the sectors in which it does business. Therefore, some of the company's competitors may have a more extensive customer and/or supplier base than the company in one or more of its market sectors. There is significant competition within each market sector and geography served that creates pricing pressure and the need to continually improve services. Other competitive factors include rapid technological changes, product availability, credit availability, speed of delivery, ability to tailor solutions to customer needs, quality and depth of product lines and training, as well as service and support provided by the distributor to the customer.

The company also faces competition from companies entering or expanding into the logistics and product fulfillment, electronic catalog distribution, and e-commerce supply chain services markets. As the company seeks to expand its business into new areas in order to stay competitive in the market, the company may encounter increased competition from its current and/or new competitors.

The company believes that it is well equipped to compete effectively with its competitors in all of these areas due to its comprehensive product and service offerings, highly-skilled work force, and global distribution network.

Government Regulation

The company is subject to and endeavors to comply with various government regulations in the United States as well as various jurisdictions where it operates. These regulations cover several diverse areas including trade compliance, anti-bribery, anti-corruption, money laundering, and data and privacy protection. Regulatory or government authorities where the company operates may have enforcement powers that can subject the company to legal penalties or other measures and can impose changes or conditions in the way it conducts business. For example, local authorities may disagree with how the company classifies its products for trade and taxation purposes, and the company may be required to change its classifications, which could increase the company's operating costs or subject it to increased taxes or fines and penalties. Increased government scrutiny of the company's actions or enforcement could materially and adversely affect its business or damage its reputation. In addition, the company may conduct, or it may be required to conduct, internal investigations or face audits or investigations by one or more domestic or foreign government or regulatory agencies, which could be costly and time-consuming, and could divert management and key personnel from the company's business operations. See Risk Factors in Part I, Item 1A.

Human Capital

The company's business strategy is to be the world's foremost technology solutions provider, and the company's talent strategy powers that business strategy through its people. The company's talent ecosystem, with all of its multi-cultural diversity, spans 53 countries. The tie that binds the company together is its purpose. The company is more than 19,600 employees around the world rallying behind a common greater good: to make the benefits of technology accessible to all.

Customers are attracted to the company's deep capabilities and broad services. The company believes this is driven by a broad group of professionals who understand their problems from numerous perspectives and curate forward-looking, comprehensive solutions. The company's employees' diverse backgrounds have melded into rich perspectives that sharpen the company, frame how its global network of engineers, suppliers, and manufacturers work together, and enhance value for customers.

The company and its affiliates employed approximately 19,600 employees worldwide as of December 31, 2020. The following table shows the company's headcount by region:

	Americas	EMEA	Asia-Pacific
Headcount	6,000	6,500	7,100

Gender and Racial/Ethnic Diversity by Employee Population

In 2015, the company set a multi-year growth goal to increase gender diversity globally and racial/ethnic diversity in the United States. Arrow's commitment to inclusion and diversity is evident in the representation growth results over the last five years. The company plans to continue expanding our capability, by growing talent share via gender diversity globally and racial/ethnic diversity representation in the United States.

Employee Population	Gender Diversity (Globally) (% female) (a)			Racial/Ethnic Diversity (United States) (% ethnic minority) (a)		
	2015	2020	Change	2015	2020	Change
Executive Leadership	22%	36%	14%	0%	18%	18%
People Managers	32%	35%	3%	16%	24%	8%
Individual Contributors	43%	46%	3%	30%	35%	5%
Early Career Talent	44%	52%	8%	41%	42%	1%

- (a) 2015 and 2020 data as of 12/31; Executive Leadership includes executive and non-executive officers who are members of the executive committee; Early Career Talent represents employees under 30; Employees not declaring gender or ethnicity for the respective metric are excluded from the chart.

Development and job skilling, reskilling, and upskilling are an important part of the employee experience at Arrow, enabling employees to maximize their career capital. The company supports employees through curriculum and inventory focused on work essentials. Arrow also offers a suite of enterprise leadership development programs. These programs create value by empowering employee commitment and business growth.

The company believes in work that elevates career opportunity for all and that employees as career investors allocate their career capital with the expectation of a future return. In 2020, 2019, and 2018, nearly three quarters of manager-level and above positions were filled internally.

Attracting and retaining early career talent enables Arrow to build on capability growth. Through the company's university intern and graduate programs, apprenticeship programs, and management trainee programs, Arrow aims to fortify a diverse talent pipeline.

The company believes in rewards that improve performance outcomes for all and endorses a pay-for-performance philosophy via performance differentiation and rewarding employees through compensation and benefits. Arrow's compensation and benefits programs are aligned with the local external market to attract, grow, and retain talent. Arrow's commitment to rewarding employees fairly based on skills, experience, contribution/performance, internal equity, and the external market enables us to maximize employees' return on their career capital. The company reviews our compensation and benefits programs and practices regularly to ensure they remain competitive and equitable.

Arrow's Response to COVID

Arrow has protected its global workforce during the COVID-19 pandemic by following the guidelines of the world's leading health authorities, as well as local government directives, at all locations around the globe to safely continue working as allowed, while providing exemptions and tools for extended remote work and enhanced benefits where necessary. When employees are working from home, Arrow has implemented plans and online collaboration capabilities to ensure consistent communication within Arrow, and with customers and suppliers.

Expanded Human Capital Disclosure

Additional information regarding human capital information is included in the company's Proxy Statement filed in connection with the Annual Meeting of Shareholders scheduled to be held on May 12, 2021.

Available Information

The company files its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, Proxy Statements, and other documents with the U.S. Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The company's SEC filings are available to the public on the SEC's Web site at www.sec.gov and through the New York Stock Exchange ("NYSE"), 11 Wall Street, New York, New York 10005, on which the company's common stock is listed.

A copy of any of the company's filings with the SEC, or any of the agreements or other documents that constitute exhibits to those filings, can be obtained by request directed to the company at the following address and telephone number:

Arrow Electronics, Inc.
9201 East Dry Creek Road
Centennial, Colorado 80112
(303) 824-4000
Attention: Corporate Secretary

The company also makes these filings available, free of charge, through its Investor Relations website (investor.arrow.com/investors) as soon as reasonably practicable after the company files such materials with the SEC. The company does not intend this internet address to be an active link or to otherwise incorporate the contents of the website into this Annual Report on Form 10-K.

Executive Officers

The following table sets forth the names, ages, and the positions held by each of the executive officers of the company as of February 11, 2021:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Michael J. Long	62	Chairman, President, and Chief Executive Officer
W. Victor Gao	41	Senior Vice President, Chief Marketing Officer
Sean J. Kerins	58	Chief Operating Officer
Chuck Kostalnick	55	Senior Vice President, Chief Supply Chain Officer
Vincent P. Melvin	57	Senior Vice President, Chief Information Officer
M. Catherine Morris	62	Senior Vice President, Chief Strategy Officer
Kristin D. Russell	50	President, Arrow Global Enterprise Computing Solutions
Chris D. Stansbury	55	Senior Vice President, Chief Financial Officer
David West	60	President, Arrow Global Components
Gretchen K. Zech	51	Senior Vice President, Chief Human Resources Officer

Set forth below is a brief account of the business experience during the past five years of each executive officer of the company.

Michael J. Long has been Chairman of the Board of Directors, President, and Chief Executive Officer of the company for more than five years.

W. Victor Gao was appointed Senior Vice President, Chief Marketing Officer effective September 2019. Prior thereto he served as Vice President, Chief Marketing Officer from April 2018 to September 2019. Prior thereto, he served as Vice President, Digital from January 2015 to April 2018.

Sean J. Kerins was appointed Chief Operating Officer effective December 2020. Prior thereto, he served as President of Arrow Global Enterprise Computing Solutions for more than five years.

Chuck Kostalnick was appointed Senior Vice President, Chief Supply Chain Officer in July 2017. Prior thereto he served as President, Arrow Sustainable Technology Solutions from August 2016 to July 2017. Before joining Arrow, he served as Executive Vice President and Chief Business Officer at Sanmina from September 2013 to July 2016.

Vincent P. Melvin has been Senior Vice President and Chief Information Officer of the company for more than five years.

M. Catherine Morris has been Senior Vice President and Chief Strategy Officer of the company for more than five years.

Kristin D. Russell was appointed President, Arrow Global Enterprise Computing Solutions in December 2020. Prior thereto she served as President, Arrow Global Services from May 2016 to December 2020. Before joining Arrow, she served as Managing Director at Deloitte Consulting from June 2014 to May 2016.

Chris D. Stansbury was appointed Senior Vice President and Chief Financial Officer in May 2016. Prior thereto, he served as Vice President, Finance and Chief Accounting Officer from August 2014 to May 2016.

David West was appointed President of Arrow Global Components effective December 2020. Prior thereto, he served as Senior Vice President of Worldwide Supplier Marketing and Engineering for more than five years.

Gretchen K. Zech has been Senior Vice President and Chief Human Resources Officer of the company for more than five years.

Item 1A. Risk Factors

Described below and throughout this report are certain risks that the company's management believes are applicable to the company's business and the industries in which it operates. If any of the described events occur, the company's business, results of operations, financial condition, liquidity, or access to the capital markets could be materially adversely affected. When stated below that a risk may have a material adverse effect on the company's business, it means that such risk may have one or more of these effects. There may be additional risks that are not presently material or known. There are also risks within the economy, the industry, and the capital markets that could materially adversely affect the company, including those associated with an economic recession, inflation, a global economic slowdown, political instability, government regulation (including tax regulation), employee attraction and retention, and customers' inability or refusal to pay for the products and services provided by the company. There are also risks associated with the occurrence of extraordinary events, such as terrorist attacks or natural disasters (such as tsunamis, hurricanes, tornadoes, and floods). These factors affect businesses generally, including the company, its customers and suppliers and, as a result, are not discussed in detail below, but are applicable to the company.

Operational Risks

If the company is unable to maintain its relationships with its suppliers or if the suppliers materially change the terms of their existing agreements with the company, the company's business could be materially adversely affected.

A substantial portion of the company's inventory is purchased from suppliers with which the company has entered into non-exclusive distribution agreements. These agreements are typically cancellable on short notice (generally 30 to 90 days). Some of the company's businesses rely on a limited number of suppliers to provide a high percentage of their revenues. For example, sales of products from one of the company's suppliers accounted for approximately 14% of the company's consolidated sales. To the extent that the company's significant suppliers reduce the number of products they sell through distribution, cease to continue doing business with the company, or are unable to continue to meet or significantly alter their obligations, the company's business could be materially adversely affected. In addition, to the extent that the company's suppliers modify the terms of their contracts to the detriment of the company, limit supplies due to capacity constraints, or other factors, there could be a material adverse effect on the company's business. Further, the supplier landscape has continued to experience a consolidation, which could negatively impact the company if the surviving, consolidated suppliers decide to exclude the company from their supply chain efforts, and which could expose the company to increased risks, including increased pricing and dependence on a smaller number of suppliers. Increasing consolidation in the industries where the company's suppliers operate may occur as companies combine to achieve further economies of scale and other synergies, which could result in reduced supplies, as companies seek to eliminate duplicative product lines, and increased prices, which could have a material adverse effect on the company's business.

The competitive pressures the company faces, such as pricing and margin reductions, could have a material adverse effect on the company's business.

The company operates in a highly competitive international environment. The company competes with other large multinational and national electronic components and enterprise computing solutions distributors, as well as numerous other smaller, specialized competitors who generally focus on narrower market sectors, products, or industries. The company also competes for customers with its suppliers. The size of the company's competitors varies across market sectors, as do the resources the company has allocated to the sectors in which it does business. Therefore, some of the company's competitors may have a more extensive customer and/or supplier base than the company in one or more of its market sectors. There is significant competition within each market sector and geography that creates pricing and margin pressure and the need for constant attention to improve service and product offerings and increase market share. Other competitive factors include rapid technological changes, product availability, credit availability, speed of delivery, ability to tailor solutions to changing customer needs, and quality and depth of product lines and training, as well as service and support provided by the distributor to the customer. The company also faces competition from companies in the logistics and product fulfillment, catalog distribution, and e-commerce supply chain services markets. As the company continues to expand its business into new areas in order to stay competitive in the market, the company may encounter increased competition from its current and/or new competitors, making it difficult to retain its market share. Further, the enterprise computing distributors industry has recently experienced increased consolidation, resulting in companies with greater scale, market presence and purchasing power than before. As a result, competition among enterprise computing distributors has increased. In addition, there is no guarantee that the company's response to and growth in emerging technologies will be successful. The company's failure to maintain and enhance its competitive position could have a material adverse effect on its business.

Declines in value of the company's inventory could materially adversely affect its business.

The market for the company's products and services is subject to rapid technological change, evolving industry standards, changes in end-market demand, evolving customer expectations, oversupply of product, and regulatory requirements, which can contribute to the decline in value or obsolescence of inventory. Although many of the company's suppliers provide the company with certain protections from the loss in value of inventory (such as price protection and certain rights of return), the company cannot be sure that such protections will fully compensate it for the loss in value, or that the suppliers will choose to, or be able to, honor such agreements. For example, many of the company's suppliers will not allow products to be returned after they have been held in inventory beyond a certain amount of time, and, in most instances, the return rights are limited to a certain percentage of the amount of products the company purchased in a particular time frame. Therefore, the company is not fully protected from declines in the value of the company's inventory, and such decline could have a material adverse effect on the company's business.

The company's lack of long-term sales contracts may have a material adverse effect on its business.

Most of the company's sales are made on an order-by-order basis, rather than through long-term sales contracts. The company generally works with its customers to develop non-binding forecasts for future orders. Based on such non-binding forecasts, the company makes commitments regarding the level of business that it will seek and accept, the inventory that it purchases, and the levels of utilization of personnel and other resources. A variety of conditions, both specific to each customer and generally affecting each customer's industry may cause customers to cancel, reduce, or delay orders that were either previously made or anticipated, file for bankruptcy protection, or default on their payments. Significant or numerous cancellations, reductions, delays in orders by customers, loss of customers, and/or customer defaults on payments could materially adversely affect the company's business.

The company's revenues originate primarily from the sales of semiconductor, PEMCO (passive, electro-mechanical and connector), and IT hardware and software products, the sales of which are traditionally cyclical.

The semiconductor industry historically has experienced fluctuations in product supply and demand, often associated with changes in technology and manufacturing capacity and subject to significant economic market upturns and downturns. Sales of semiconductor products and related services represented approximately 54%, 49%, and 45%, of the company's consolidated sales in 2020, 2019, and 2018, respectively. The sale of the company's PEMCO products closely tracks the semiconductor market. Accordingly, the company's revenues and profitability, particularly in its global components business segment, tend to closely follow the strength or weakness of the semiconductor market. Further, economic weakness could cause a decline in spending in information technology, which could have a negative impact on the company's ECS business. A cyclical downturn in the technology industry could have a material adverse effect on the company's business and negatively impact its ability to maintain historical profitability levels.

The company's non-U.S. sales represent a significant portion of its revenues, and consequently, the company is exposed to risks associated with operating internationally.

In 2020, 2019, and 2018, approximately 65%, 60%, and 59%, respectively, of the company's sales came from its operations outside the United States. As a result of the company's international sales and locations, its operations are subject to a variety of risks that are specific to international operations, including the following:

- import and export regulations that could erode profit margins or restrict exports;
- the burden and cost of compliance with international laws, treaties, and technical standards and changes in those regulations;
- potential restrictions on transfers of funds;
- import and export tariffs, duties and value-added taxes;
- transportation delays and interruptions;
- the burden and cost of compliance with complex multi-national tax laws and regulations;
- uncertainties arising from local business practices and cultural considerations;
- foreign laws that potentially discriminate against companies which are headquartered outside that jurisdiction;
- stringent antitrust regulations in local jurisdictions;
- volatility associated with sovereign debt of certain international economies;

- the uncertainty surrounding the implementation and effects of Brexit;
- potential military conflicts and political risks; and
- currency fluctuations, which the company attempts to minimize through traditional hedging instruments.

Also, the company's gross margins in the components business in the Asia-Pacific region tend to be lower than those in other markets in which the company sells products and services. If sales in this market increases as a percentage of overall sales, consolidated gross margins will be lower. While the company has and will continue to adopt measures to reduce the potential impact of losses resulting from the risks of doing business abroad, it cannot ensure that such measures will be adequate and, therefore, such risks could have a material adverse effect on its business.

Moreover, the company's effective tax rate may be adversely impacted by, among other things, changes in the mix of earnings among countries having different statutory tax rates, changes in the valuation of deferred tax assets, and certain international tax policy efforts, including the Organization for Economic Co-operation and Development's Base Erosion and Profit Shifting Project, the European Commission's state aid investigations, and other initiatives adversely affecting taxation of international businesses. Furthermore, many of the countries where the company is subject to taxes are independently evaluating their tax policy and some have already passed tax legislation which affect international businesses. For instance, on December 22, 2017, the U.S. federal government enacted tax legislation ("Tax Act"), which significantly changed the tax laws by favorably reducing the corporate federal tax rate (35% to 21%) and moving to a territorial system, while simultaneously imposing an unfavorable one-time tax on accumulated foreign earnings, limiting deductibility of certain import related costs, including interest expense, and creating a new tax on certain international activities. Additionally, tax returns are subject to periodic audits by U.S. and foreign tax authorities, and these audits may result in allocations of income and/or deductions that may result in tax assessments different from amounts that have been estimated. The company regularly assesses the likelihood of adverse outcomes resulting from these audits to determine the adequacy of the company's provision for taxes. Such tax changes, to the extent they are brought against the company, could increase the effective tax rates in many of the countries where the company has operations and ultimately could have an adverse effect on overall tax liability, along with increasing the complexity, burden and cost of tax compliance, all of which could impact the company's operating results, cash flows, and financial condition.

When the company makes acquisitions, it may take on additional liabilities or not be able to successfully integrate such acquisitions.

As part of the company's history and growth strategy, it has acquired other businesses. Acquisitions involve numerous risks, including the following:

- effectively combining the acquired operations, technologies, or products;
- unanticipated costs or assumed liabilities, including those associated with regulatory actions or investigations;
- not realizing the anticipated financial benefit from the acquired companies;
- diversion of management's attention;
- negative effects on existing customer and supplier relationships; and
- potential loss of key employees of the acquired companies.

Further, the company has made, and may continue to make acquisitions of, or investments in new services, businesses or technologies to expand its current service offerings and product lines. Some of these may involve risks that may differ from those traditionally associated with the company's core distribution business, including undertaking product or service warranty responsibilities that in its traditional core business would generally reside primarily with its suppliers. If the company is not successful in mitigating or insuring against such risks, it could have a material adverse effect on the company's business.

If the company fails to maintain an effective system of internal controls or discovers material weaknesses in its internal controls over financial reporting, it may not be able to report its financial results accurately or timely or detect fraud, which could have a material adverse effect on its business.

An effective internal control environment is necessary for the company to produce reliable financial reports, safeguard assets, and is an important part of its effort to prevent financial fraud. The company is required to annually evaluate the effectiveness of the design and operation of its internal controls over financial reporting. Based on these evaluations, the company may conclude that enhancements, modifications, or changes to internal controls are necessary or desirable. While management evaluates the effectiveness of the company's internal controls on a regular basis, these controls may not always be effective.

There are inherent limitations on the effectiveness of internal controls, including collusion, management override, and failure in human judgment. In addition, control procedures are designed to reduce rather than eliminate financial statement risk. If the company fails to maintain an effective system of internal controls, or if management or the company's independent registered public accounting firm discovers material weaknesses in the company's internal controls, it may be unable to produce reliable financial reports or prevent fraud, which could have a material adverse effect on the company's business. In addition, the company may be subject to sanctions or investigation by regulatory authorities, such as the SEC or the NYSE. Any such actions could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of the company's financial statements, which could cause the market price of its common stock to decline or limit the company's access to capital.

The company relies heavily on its internal information systems, which, if not properly functioning, could materially adversely affect the company's business.

The company's current global operations reside on multiple technology platforms. The size and complexity of the company's computer systems make them potentially vulnerable to breakdown, malicious intrusion, and random attack. The company relies on a global enterprise resource planning ("ERP") system to standardize its global components processes worldwide and adopt best-in-class capabilities. The company committed significant resources to this new ERP system, which replaced multiple legacy systems of the company. Such conversion was extremely complex, in part, because of the wide range of processes and the multiple legacy systems that must be integrated globally. Failure to properly or adequately address any unaccounted for or unforeseen issues could impact the company's ability to perform necessary business operations, which could materially adversely affect the company's business.

Regulatory and Legal Risks

Products sold by the company may be found to be defective and, as a result, warranty and/or product liability claims may be asserted against the company, which may have a material adverse effect on the company.

The company sells its components at prices that are significantly lower than the cost of the equipment or other goods in which they are incorporated. As a result, the company may face claims for damages (such as consequential damages) that are disproportionate to the revenues and profits it receives from the components involved in the claims. While the company typically has provisions in its supplier agreements that hold the supplier accountable for defective products, and the company and its suppliers generally exclude consequential damages in their standard terms and conditions, the company's ability to avoid such liabilities may be limited as a result of differing factors, such as the inability to exclude such damages due to the laws of some of the countries where the company does business. The company's business could be materially adversely affected as a result of a significant quality or performance issue in the products sold by the company, if it is required to pay for the associated damages. Although the company currently has product liability insurance, such insurance is limited in coverage and amount and may not be sufficient to cover all possible claims. Further, when relying on contractual liability exclusions, the company could lose customers if their claims are not addressed to their satisfaction.

Tariffs may result in increased prices and could adversely affect the company's business and results of operations.

In recent years, the U.S. government imposed tariffs on certain products imported into the United States and the Chinese government imposed tariffs on certain products imported into China, which have increased the prices of many of the products that the company purchases from its suppliers. The tariffs, along with any additional tariffs or trade restrictions that may be implemented by the U.S., China or other countries, could result in further increased prices. While the company intends to pass price increases on to its customers, the effect of tariffs on prices may impact sales and results of operations. Retaliatory tariffs imposed by other countries on U.S. goods have not yet had a significant impact, but the company cannot predict further developments. The tariffs and the additional operational costs incurred in minimizing the number of products subject to the tariffs could adversely affect the operating profits for certain of the company's businesses and customer demand for certain products which could have an adverse effect on its business and results of operations.

In addition, in the event that the company pays tariffs for products it imports from China which are then re-exported to other locations outside of the United States, the company may be eligible for refunds of certain tariffs. In order to qualify for these tariff drawbacks, the company must provide data and documentation to the U.S. government that it must obtain from third-party sources, such as its suppliers. There is no guarantee the company will be able to obtain this additional data and documentation from those other sources, which could result in the U.S. government rejecting the drawback requests. Further, there are additional administrative costs expended by the company in furtherance of these efforts. Finally, due to the backlog of drawback applications, the U.S. government has been slow in issuing the associated drawback refunds. The company's inability

to obtain the drawback refunds or significant delays in receiving them could result in a material adverse effect on the company's business.

The company is subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws, anti-bribery laws, and anti-money laundering laws and regulations. In the event of non-compliance, the company can face serious consequences, which can harm its business.

The company is subject to export control and import laws and regulations, including the U.S. Export Administration Regulations ("EAR"), U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls ("OFAC"). Products the company sells which are either manufactured in the United States or based on U.S. technology ("U.S. Products") are subject to the EAR when exported and re-exported to and from all international jurisdictions, in addition to the local jurisdiction's export regulations applicable to individual shipments. Licenses or proper license exemptions may be required by local jurisdictions' export regulations, including EAR, for the shipment of certain U.S. Products to certain countries, including China, India, Russia, and other countries in which the company operates. Non-compliance with the EAR, OFAC regulations, or other applicable export regulations can result in a wide range of penalties including the denial of export privileges, fines, criminal penalties, and the seizure of inventories. In the event that any export regulatory body determines that any shipments made by the company violate the applicable export regulations, the company could be fined significant sums and/or its export capabilities could be restricted, which could have a material adverse effect on the company's business. For example, in 2019, the company determined that from 2015 to 2019 a limited number of non-executive employees, without first obtaining required authorization from the company or the United States government, had facilitated product shipments with an aggregate total invoiced value of approximately \$4.8 million, to resellers for reexports to persons covered by the Iran Threat Reduction and Syria Human Rights Act of 2012 or other United States sanctions and export control laws. The company has voluntarily reported these activities to OFAC and the United States Department of Commerce's Bureau of Industry and Security ("BIS"), conducted an internal investigation and terminated or disciplined the employees involved. BIS has closed its investigation and issued the company a warning letter without referring the matter for further proceedings. No penalties have been imposed by BIS. The company has cooperated fully and intends to continue to cooperate fully with OFAC with respect to its review, which may result in the imposition of penalties, which we are currently not able to estimate.

Further, the company is also subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. domestic bribery statute contained in 18 U.S.C. §201, and other state and national anti-bribery and anti-money laundering laws in the countries in which it conducts business. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors, and other collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. The company engages third parties to provide services. The company can be held liable for the corrupt or other illegal activities of its employees, agents, and contractors, even if it does not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences.

The company is subject to environmental laws and regulations that could materially adversely affect its business.

A number of jurisdictions in which the company's products are sold have enacted laws addressing environmental and other impacts from product disposal, use of hazardous materials in products, use of chemicals in manufacturing, recycling of products at the end of their useful life, and other related matters. These laws prohibit the use of certain substances in the manufacture of the company's products and impose a variety of requirements for modification of manufacturing processes, registration, chemical testing, labeling, and other matters. Failure to comply with these laws or any other applicable environmental regulations could result in fines or suspension of sales. Additionally, these directives and regulations may result in the company having non-compliant inventory that may be less readily salable or have to be written off.

Some environmental laws impose liability, sometimes without fault, for investigating or cleaning up contamination on or emanating from the company's currently or formerly owned, leased, or operated property, as well as for damages to property or natural resources and for personal injury arising out of such contamination. As the distribution business, in general, does not involve the manufacture of products, it is typically not subject to significant liability in this area. However, there may be occasions, including through acquisitions, where environmental liability arises. Two sites for which the company assumed responsibility as part of the Wyle Electronics ("Wyle") acquisition are known to have environmental issues, one at Norco, California and the other at Huntsville, Alabama. The company was also named as a defendant in a private lawsuit filed in connection with alleged contamination at a small industrial building formerly leased by Wyle Laboratories in El Segundo, California. That lawsuit was ultimately settled, but the possibility remains that government entities or others may attempt to

involve the company in further characterization or remediation of groundwater issues in the area. The presence of environmental contamination could also interfere with ongoing operations or adversely affect the company's ability to sell or lease its properties. The discovery of contamination for which the company is responsible, the enactment of new laws and regulations, or changes in how existing regulations are enforced, could require the company to incur costs for compliance or subject it to unexpected liabilities.

The company may be subject to intellectual property rights claims, which are costly to defend, could require payment of damages or licensing fees and could limit the company's ability to use certain technologies in the future.

Certain of the company's products and services include intellectual property owned primarily by the company's third party suppliers and, to a lesser extent, the company itself. Substantial litigation and threats of litigation regarding intellectual property rights exist in the semiconductor/integrated circuit, software and some service industries. From time to time, third parties (including certain companies in the business of acquiring patents not for the purpose of developing technology but with the intention of aggressively seeking licensing revenue from purported infringers) may assert patent, copyright and/or other intellectual property rights to technologies that are important to the company's business. Depending on the nature of the claim, the company may be able to seek indemnification from its suppliers for itself and its customers against such claims, but there is no assurance that it will be successful in obtaining such indemnification or that the company is fully protected against such claims. In addition, the company is exposed to potential liability for technology that it develops itself or when it combines multiple technologies of its suppliers for which it may have limited or no indemnification protections. In any dispute involving products or services that incorporate intellectual property from multiple sources or is developed, licensed by the company, or obtained through acquisition, the company's customers could also become the targets of litigation. The company may be obligated to indemnify and defend its customers if the products or services the company sells are alleged to infringe any third party's intellectual property rights. Any infringement or indemnification claim brought against the company, regardless of the duration, outcome, or size of damage award, could:

- result in substantial cost to the company;
- divert management's attention and resources;
- be time consuming to defend;
- result in substantial damage awards; or
- cause product shipment delays.

Additionally, if an infringement claim against the company or its customers is successful, the company may be required to pay damages or seek royalty or license arrangements, which may not be available on commercially reasonable terms. The payment of any such damages or royalties may significantly increase the company's operating expenses and materially harm the company's operating results and financial condition. Further, royalty or license arrangements may not be available at all, which would then require the company to stop selling certain products or using certain technologies, which could negatively affect the company's ability to compete effectively.

Restrictions on immigration or changes in immigration laws could limit the company's access to qualified and skilled professionals, increase the cost of doing business, or otherwise disrupt operations.

Restrictions on immigration or changes in immigration laws could limit the company's access to qualified and skilled professionals, increase the cost of doing business, or otherwise disrupt operations. The success of portions of the company's business is dependent on its ability to recruit engineers and other professionals. Immigration laws in the United States and other countries in which the company operates are subject to legislative changes, as well as variations in the standards of application and enforcement due to political forces and economic conditions. It is difficult to predict the political and economic events that could affect immigration laws, or the restrictive impact they could have on obtaining or renewing work visas. If immigration laws change or if more restrictive government regulations are enacted, the company's access to qualified and skilled professionals may be limited, the costs of doing business may increase, operations may be disrupted, and the company's business may be materially negatively impacted.

The company may not be able to adequately anticipate, prevent, or mitigate damage resulting from criminal and other illegal or fraudulent activities committed against it or as a result of misconduct or other improper activities by its employees or contractors.

Global businesses are facing increasing risks of criminal, illegal, and other fraudulent acts. The evolving nature of such threats, considering new and sophisticated methods used by criminals, including phishing, misrepresentation, social engineering and

forgery, is making it increasingly difficult for the company to anticipate and adequately mitigate these risks. In addition, designing and implementing measures to defend against, prevent, and detect these types of activities are increasingly costly and invasive into the operations of the business. In addition, misconduct or failure of its employees or contractors to adhere to company policy may further heighten such risks. As a result, the company could experience a material loss to the extent that controls and other measures implemented to address these threats fail to prevent or detect such acts.

In addition, misconduct by its employees or contracts may include intentional failures to comply with the applicable laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to the company. Such misconduct could result in legal or regulatory sanctions and cause serious harm to the company's reputation.

It is not always possible to identify and deter employee misconduct, and any other precautions the company takes to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses, or in protecting the company from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against the company, and it is not successful in defending itself or asserting its rights, those actions could result in the imposition of significant civil, criminal and administrative penalties, which could have a significant impact on the company's business. Whether or not the company is successful in defending against such actions or investigations, it could incur substantial costs, including legal fees, and divert the attention of management in defending itself against any of these claims or investigations.

Cyber security and privacy breaches may hurt the company's business, damage its reputation, increase its costs, and cause losses.

The company's information technology systems could be subject to invasion, cyber-attack, or data privacy breaches by employees, others with authorized access, and unauthorized persons. Such attacks could result in disruption to the company's operations and/or loss or disclosure of, or damage to, the company's or any of its customer's or supplier's data, confidential information, or reputation. The company's information technology systems security measures may also be breached due to employee error, malfeasance, or otherwise. Additionally, outside parties may attempt to fraudulently induce employees, customers, or suppliers to disclose sensitive information in order to gain access to the company's data and information technology systems. Any such breach could result in significant legal and financial exposure, damage to the company's reputation, loss of competitive advantage, and a loss of confidence in the security of the company's information technology systems that could potentially have an impact on the company's business. Because the techniques used to obtain unauthorized access, disable or degrade, or sabotage the company's information technology systems change frequently and often are not recognized until launched, the company may be unable to anticipate these techniques or to implement adequate preventive measures. Further, third parties, such as hosted solution providers, that provide services for the company's operations, could also be a source of security risk in the event of a failure of their own security systems and infrastructure.

The company makes investments seeking to address risks and vulnerabilities, including ongoing monitoring, updating networks and systems, and personnel awareness training of potential cyber security threats to help ensure employees remain diligent in identifying potential risks. In addition, the company has deployed monitoring capabilities to support early detection, internal and external escalation, and effective responses to potential anomalies. As part of the company's regular review of potential risks, the company analyzes emerging cyber security threats as well as the company's plan and strategies to address them and presents them to senior management. Although the company has developed systems and processes that are designed to protect information and prevent data loss and other security breaches, including systems and processes designed to reduce the impact of a security breach, such measures cannot provide absolute security. Such breaches, whether successful or unsuccessful, could result in the company incurring costs related to, for example, rebuilding internal systems, defending against litigation, responding to regulatory inquiries or actions, paying damages, or taking other remedial steps.

Also, global privacy legislation, enforcement, and policy activity are rapidly expanding and creating a complex compliance environment. The company's failure to comply with federal, state, or international privacy related or data protection laws and regulations could result in proceedings against the company by governmental entities or others. Although the company has insurance coverage for protecting against loss from cyber security and privacy risks, it may not be sufficient to cover all possible claims, and the company may suffer losses that could have a material adverse effect on its business.

Financial Risks

The company may not have adequate or cost-effective liquidity or capital resources.

The company requires cash or committed liquidity facilities for general corporate purposes, such as funding its ongoing working capital, acquisitions, and capital expenditure needs, as well as to refinance indebtedness. At December 31, 2020, the company had cash and cash equivalents of \$373.6 million. In addition, the company currently has access to committed credit lines of \$2.0 billion and a committed North America asset securitization program of \$1.2 billion, of which the company had no outstanding borrowings at December 31, 2020. The company's ability to satisfy its cash needs depends on its ability to generate cash from operations and to access the financial markets, both of which are subject to general economic, financial, competitive, legislative, regulatory, and other factors that are beyond its control.

The company may, in the future, need to access the financial markets to satisfy its cash needs. The company's ability to obtain external financing is affected by various factors, including general financial market conditions and the company's debt ratings. Further, any increase in the company's level of debt or deterioration of its operating results may cause a reduction in its current debt ratings. Any downgrade in the company's current debt rating or tightening of credit availability could impair the company's ability to obtain additional financing or renew existing credit facilities on acceptable terms, if at all, negatively impact the price of the company's common stock, increase its interest payments under existing debt agreements and have other negative implications on its business, many of which are beyond the company's control. Under the terms of any additional external financing, the company may incur higher financing expenses and become subject to additional restrictions and covenants. For example, the company's existing debt agreements contain restrictive covenants, including covenants requiring compliance with specified financial ratios, and a failure to comply with these or any other covenants may result in an event of default. An increase in the company's financing costs or loss of access to cost-effective capital resources could have a material adverse effect on the company's business.

The agreements governing some of the company's financing arrangements contain various covenants and restrictions that limit some of management's discretion in operating the business and could prevent the company from engaging in some activities that may be beneficial to its business.

The agreements governing the company's financings contain various covenants and restrictions that, in certain circumstances, could limit its ability to:

- grant liens on assets;
- make investments or certain acquisitions;
- merge, consolidate, or transfer all or substantially all of its assets;
- incur additional debt; or
- engage in certain transactions with affiliates.

As a result of these covenants and restrictions, the company may be limited in how it conducts its business and may be unable to raise additional debt, compete effectively, or make investments.

Further, if an event of default under any of the company's existing debt agreements occurred or became imminent, while it could explore alternative sources of capital, whether debt or equity, such alternative sources would likely be more expensive than the costs it incurs under its existing credit facility. Further, it would be unable to borrow additional amounts under the existing credit facility, and as a result would be unable to make acquisitions or fund share repurchases, and the lenders thereunder could accelerate the company's obligations under the debt agreement. This circumstance would have a material adverse effect on the company's financial position and results of operations.

The company's goodwill and identifiable intangible assets could become impaired, which could reduce the value of its assets and reduce its net income in the year in which the write-off occurs.

Goodwill represents the excess of the cost of an acquisition over the fair value of the assets acquired. The company also ascribes value to certain identifiable intangible assets, which consist primarily of customer relationships and trade names, among others, as a result of acquisitions. The company may incur impairment charges on goodwill or identifiable intangible assets if it determines that the fair values of the goodwill or identifiable intangible assets are less than their current carrying values. The company evaluates, on a regular basis, whether events or circumstances have occurred that indicate all, or a portion,

of the carrying amount of goodwill or identifiable intangible assets may no longer be recoverable, in which case an impairment charge to earnings would become necessary.

For example, during the second quarter of 2019, based in part on the company's downward revision of forecasted future earnings and the decision to wind down its personal computer and mobility asset disposition business, the company conducted an interim goodwill impairment analysis related to the Americas components and Asia-Pacific components reporting units. As a result of the impairment analysis, the company recorded a non-cash goodwill impairment charge of approximately \$570.2 million. Additionally, the company recorded a non-cash trade name impairment charge of \$46.0 million in connection with an initiative to further integrate two global components businesses.

Refer to Notes 1 and 3 of the Notes to the Consolidated Financial Statements and "Critical Accounting Policies" in Management's Discussion and Analysis of Financial Condition and Results of Operations for further discussion of the impairment testing of goodwill and identifiable intangible assets.

A decline in general economic conditions, a substantial increase in market interest rates, and increase in income tax rates, or the company's inability to meet long-term working capital or operating income projections could impact future valuations of the company's reporting units, and the company could be required to record an impairment charge in the future, which could impact the company's consolidated balance sheets, as well as the company's consolidated statements of operations. If the company were required to recognize an impairment charge in the future, the charge would not impact the company's consolidated cash flows, current liquidity, capital resources, and covenants under its existing revolving credit facility, North America asset securitization program, and other outstanding borrowings.

General Risks

The company's success depends upon its ability to attract, retain, motivate and develop key executives and the strategies they develop.

Any failure to attract, retain, motivate and develop key talent may materially and adversely affect the company's business, prospects, financial condition, and results of operations. The company's success depends, to a significant extent, on the capability, expertise, and continued services of its key executives. The company relies on the expertise and experience of certain key executives in developing business strategies, business operations, and maintaining relationships with customers and suppliers. If the company were to lose any of its key executives, it may not be able to find a suitable replacement with comparable knowledge and experience in a timely manner, or if at all, at similar level of remuneration and other benefits.

General business conditions are vulnerable to the effects of epidemics and pandemics, such as the COVID-19 pandemic, which could materially disrupt the company's business and have a negative impact on the company's financial results and financial condition.

The company is vulnerable to the general economic effects of epidemics, pandemics and other public health crises, such as the COVID-19 pandemic. Due to the recent outbreak of COVID-19, there has been a substantial curtailment of travel and business activities, which is causing significant disruptions to the U.S. and global economy. The extent to which COVID-19 impacts the company's results will depend primarily on future developments, which are highly uncertain and cannot be predicted with confidence, including the severity and duration of the crisis, the speed and effectiveness of vaccine and treatment developments and deployment, potential mutations of COVID-19, and the impact of actions taken and that will be taken to contain COVID-19 or treat its impact, among others. For example, if COVID-19 continues to spread, the company may need to limit operations or implement additional restrictions as a result of widespread government restrictions. The company's increased reliance on personnel working from home may negatively impact productivity or disrupt, delay or otherwise adversely impact its business. In addition, remote working could increase the company's cyber security risk. In addition, a U.S. or global recession or a banking crisis triggered by the COVID-19 pandemic could have a material adverse effect on the company's business, financial results and financial condition, including by reducing the demand for its products and services, reducing the access to its supplies, increasing customer defaults, reducing its access to capital, and reducing the value of its common stock.

To date, the company has experienced limitations in employee resources resulting from travel restrictions and "stay at home" orders.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

The company has executive offices located in Centennial, Colorado under a long-term lease expiring in 2033. The company leases six major warehouses and logistics centers with approximately 2.4 million square feet of space located in Reno, Nevada, Phoenix, Arizona, Hong Kong, Shenzhen, China, and two warehouses in Venlo, Netherlands. The company has 36 smaller distribution centers with approximately 848 thousand square feet of space located throughout the Americas, EMEA, and Asia-Pacific regions. The company believes its facilities are well maintained and suitable for company operations. We do not anticipate significant difficulty in renewing our leases as they expire or securing replacement facilities.

Item 3. Legal Proceedings.

See [Note 15](#), Contingencies, to the consolidated financial statements included in Item 8 of Part II of this 10-K for information regarding certain legal proceedings in which we are involved.

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's common stock is listed on the NYSE (trading symbol: "ARW").

Record Holders

On February 4, 2021, there were approximately 1,365 shareholders of record of the company's common stock.

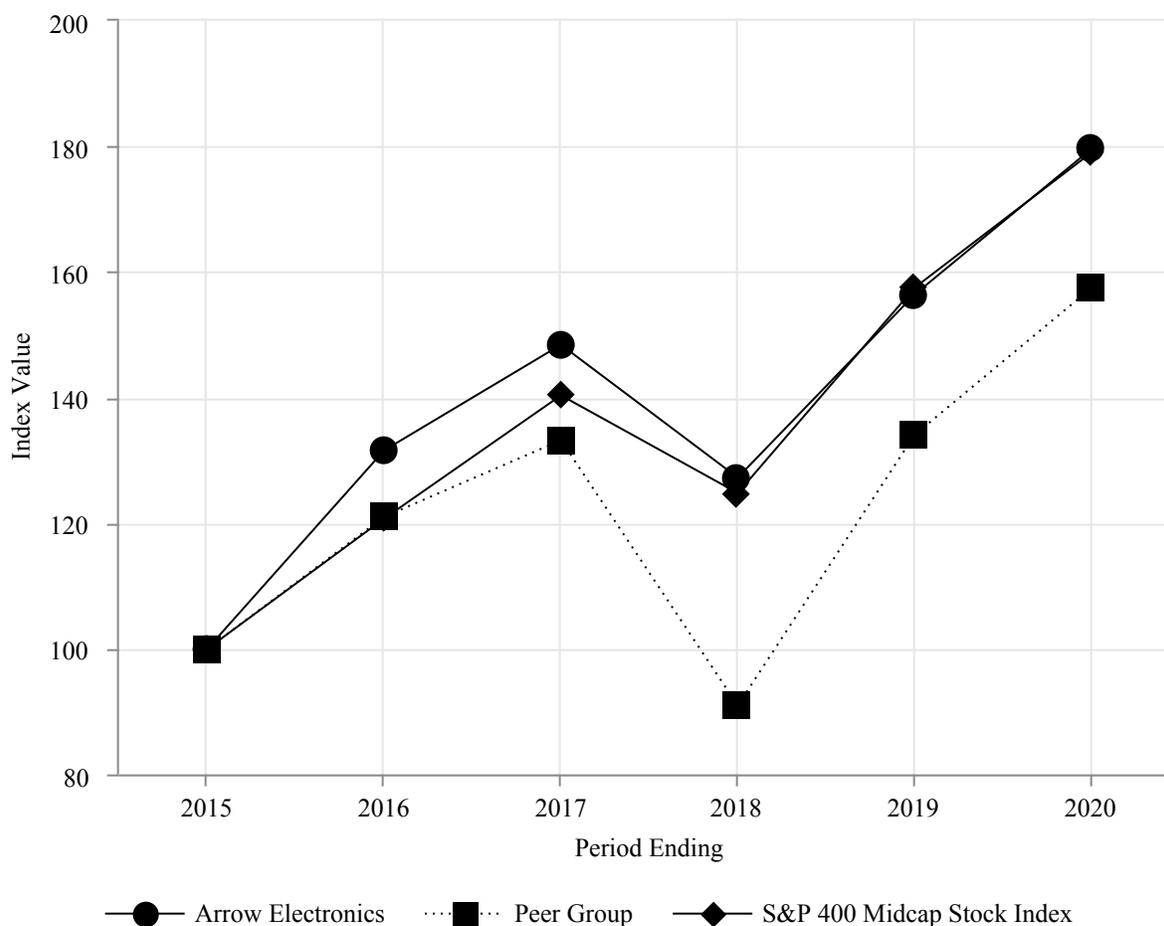
Equity Compensation Plan Information

The following table summarizes information, as of December 31, 2020, relating to the Omnibus Incentive Plan, which was approved by the company's shareholders and under which cash-based awards, non-qualified stock options, incentive stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, performance share units, covered employee annual incentive awards, and other stock-based awards may be granted.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance
Equity compensation plans approved by security holders	2,714,063	\$ 74.17	6,777,309
Total	2,714,063	\$ 74.17	6,777,309

Performance Graph

The following graph compares the performance of the company's common stock for the periods indicated with the performance of the Standard & Poor's MidCap 400 Index ("S&P 400 Stock Index") and the average performance of a group consisting of the company's peer companies ("Peer Group") on a line-of-business basis. During 2020, the companies included in the Peer Group are Avnet, Inc., Celestica Inc., Flex Ltd., Jabil, Inc., and WESCO International, Inc. During 2020, Anixter International Inc. completed a merger with WESCO International, Inc. and Tech Data Corporation was acquired by Apollo Global Management Inc. As a result, sufficient financial data was no longer available, and these companies were removed from the Peer Group. The graph assumes \$100 invested on December 31, 2015 in the company, the S&P 400 MidCap Stock Index, and the Peer Group. Total return indices reflect reinvestment of dividends and are weighted on the basis of market capitalization at the time of each reported data point.



	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
Arrow Electronics	100	132	148	127	156	180
Peer Group	100	121	133	91	134	157
S&P 400 Midcap Stock Index	100	121	140	125	157	179

Issuer Purchases of Equity Securities

The following table shows the share-repurchase activity for the quarter ended December 31, 2020 (in thousands except share and per share data):

Month	Total Number of Shares Purchased (a)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program (b)	Approximate Dollar Value of Shares that May Yet be Purchased Under the Program
September 27 through October 24, 2020	242,171	\$ 82.52	242,171	\$ 543,470
October 25 through November 21, 2020	399,236	86.18	399,236	509,062
November 22 through December 31, 2020	483,185	94.41	483,068	463,457
Total	<u>1,124,592</u>		<u>1,124,475</u>	

- (a) Includes share repurchases under the Share-Repurchase Programs and those associated with shares withheld from employees for stock-based awards, as permitted by the Omnibus Incentive Plan, in order to satisfy the required tax withholding obligations.
- (b) The difference between the “total number of shares purchased” and the “total number of shares purchased as part of publicly announced program” for the quarter ended December 31, 2020 is 117 shares, which relate to shares withheld from employees for stock-based awards, as permitted by the Omnibus Incentive Plan, in order to satisfy the required tax withholding obligations. The purchase of these shares were not made pursuant to any publicly announced repurchase plan.

Item 6. Selected Financial Data.

The following table sets forth certain selected consolidated financial data and must be read in conjunction with the company's consolidated financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K (dollars in thousands except per share data).

For the years ended December 31:	2020 (a)	2019 (b)	2018 (c)	2017 (d)	2016 (e)
Sales	\$ 28,673,363	\$ 28,916,847	\$ 29,676,768	\$ 26,554,563	\$ 23,487,872
Gross profit	3,191,130	3,298,381	3,700,912	3,356,968	3,144,322
Operating income	894,511	107,696	1,147,512	945,736	876,826
Net income (loss) attributable to shareholders	584,438	(204,087)	716,195	402,176	522,815
Net income (loss) per share:					
Basic	\$ 7.49	\$ (2.44)	\$ 8.19	\$ 4.54	\$ 5.75
Diluted	\$ 7.43	\$ (2.44)	\$ 8.10	\$ 4.48	\$ 5.68

At December 31:

Accounts receivable, net and inventories	\$ 12,492,651	\$ 11,959,807	\$ 12,824,141	\$ 11,428,106	\$ 9,566,080
Total assets	17,053,911	16,400,796	17,784,445	16,459,267	14,203,479
Long-term debt	2,097,940	2,640,129	3,239,115	2,933,045	2,696,334
Shareholders' equity	5,089,319	4,811,919	5,324,990	4,949,255	4,411,136

Amounts discussed below are before tax except for amounts related to the effects of certain tax items.

- (a) Operating income and net income attributable to shareholders include identifiable intangible asset amortization of \$38.4 million, impairments of \$7.2 million, and restructuring, integration and other charges of \$13.3 million. Net income attributable to shareholders also includes a net gain on investment of \$5.3 million, pension settlement gain \$1.8 million and approximately \$32.7 million, net of tax, primarily related to foreign tax and other loss contingencies.
- (b) Operating income and net income attributable to shareholders include identifiable intangible asset amortization of \$48.1 million, loss on disposition of businesses, net of \$21.3 million, impairments of \$698.2 million, and restructuring, integration, and other charges of \$89.8 million. Net income attributable to shareholders also includes a net gain on investment of \$11.8 million, pension settlement loss of \$20.1 million, and tax expense of \$21.7 million related to the repatriation of foreign earnings, the wind down of the personal computer and mobility asset disposition business, and the Tax Act.
- (c) Operating income and net income attributable to shareholders include identifiable intangible asset amortization of \$49.4 million, loss on disposition of businesses, net of \$3.6 million, and restructuring, integration, and other charges of \$60.4 million. Net income attributable to shareholders also includes a net loss on investment of \$14.2 million, impact of Tax Act of \$28.3 million, and pension settlement loss of \$1.7 million.
- (d) Operating income and net income attributable to shareholders include identifiable intangible asset amortization of \$50.1 million, loss on disposition of businesses, net of \$21.0 million, and restructuring, integration, and other charges of \$74.6 million. Net income attributable to shareholders also includes a net loss on investment of \$6.6 million, pension settlement loss of \$16.7 million, loss on extinguishment of debt of \$59.5 million, and the impact of the Tax Act of \$124.7 million.
- (e) Operating income and net income attributable to shareholders include identifiable intangible asset amortization of \$54.9 million and restructuring, integration, and other charges of \$61.4 million. Net income attributable to shareholders also includes a net gain on investment of \$2.9 million, and a pension settlement loss of \$12.2 million.

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

This section of the Form 10-K generally discusses 2020 and 2019 items and year-to-year comparisons between 2020 and 2019. Discussions of 2018 items and year-to-year comparisons between 2019 and 2018 that are not included in this Form 10-K can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Overview

Arrow Electronics, Inc. (the "company") is a global provider of products, services, and solutions to industrial and commercial users of electronic components and enterprise computing solutions. The company has one of the world's broadest portfolios of product offerings available from leading electronic components and enterprise computing solutions suppliers, coupled with a range of services, solutions and tools that help industrial and commercial customers introduce innovative products, reduce their time to market, and enhance their overall competitiveness. The company has two business segments, the global components business segment and the global enterprise computing solutions ("ECS") business segment. The company distributes electronic components to original equipment manufacturers ("OEMs") and contract manufacturers ("CMs") through its global components business segment and provides enterprise computing solutions to value-added resellers ("VARs") and managed service providers ("MSPs") through its global ECS business segment. For 2020, approximately 72% of the company's sales were from the global components business segment and approximately 28% of the company's sales were from the global ECS business segment.

The company's financial objectives are to grow sales faster than the market, increase the markets served, grow profits faster than sales, and increase return on invested capital. To achieve its objectives, the company seeks to capture significant opportunities to grow across products, markets, and geographies. To supplement its organic growth strategy, the company continually evaluates strategic acquisitions to broaden its product and value-added service offerings, increase its market penetration, and expand its geographic reach.

Executive Summary

Consolidated sales for 2020 decreased by 0.8% compared with the year-earlier period. The decrease for 2020 was driven by a 5.7% decrease in global ECS business segment sales offset by a 1.2% increase in the global components business segment sales. Adjusted for the change in foreign currencies, dispositions, and the closure of the company's personal computer and mobility asset disposition business (referred to as "impact of wind down"), non-GAAP consolidated sales decreased 0.4% in 2020 compared with the year-earlier period.

The company reported net income attributable to shareholders of \$584.4 million in 2020 compared with a net loss of \$204.1 million in the year-earlier period. The following items impacted the comparability of the company's results for the years ended December 31, 2020 and 2019 (all amounts are before tax except for amounts related to the effects of tax changes):

- restructuring, integration, and other charges of \$13.3 million in 2020 and \$78.4 million in 2019;
- identifiable intangible asset amortization of \$38.4 million in 2020 and \$42.4 million in 2019;
- impairments of long-lived assets of \$7.2 million in 2020 and impairments of goodwill and other long-lived assets of \$623.8 million in 2019;
- income from wind down of business of \$14.7 million in 2020 and losses from wind down of business of \$162.4 million, inclusive of \$74.9 million of impairments of long-lived assets in 2019;
- Arrow Financing Solutions ("AFS") notes receivable recoveries of \$1.8 million in 2020 and AFS notes receivable reserves and inventory write-downs of \$18.0 million in 2019;
- net gain on investments of \$5.3 million in 2020 and \$11.8 million in 2019;
- tax benefit of \$1.3 million in 2020 and tax expense of \$1.7 million in 2019 related to legislation changes and other non-recurring tax adjustments;
- pension settlement gain of \$1.8 million in 2020 and pension settlement loss of \$20.1 million in 2019;
- Digital inventory write-downs, net of \$22.3 million in 2019;
- loss on disposition of businesses, net of \$1.9 million in 2019;
- income tax expense of \$20.0 million in 2019 related to the wind down of business; and
- interest expense of \$0.7 million in 2019 related to an uncertain tax position related to legislation changes.

Excluding the aforementioned items, non-GAAP net income attributable to shareholders decreased to \$609.7 million in 2020 compared with \$636.5 million in the year-earlier period. Net income in 2020 also included charges of approximately \$32.7 million, net of tax, primarily related to foreign tax and other loss contingencies within the Global ECS business.

Impact of the COVID-19 Pandemic

On March 10, 2020, the World Health Organization declared the outbreak of the COVID-19 coronavirus to be a pandemic. COVID-19 has caused substantial disruption to travel, business activities, and global supply chains, significant volatility in global financial markets, and has resulted in a dramatic increase in unemployment, particularly in the U.S.

To date, the company has experienced some limitations in employee resources resulting from travel restrictions and “stay at home” orders. Despite these restrictions, the company continues to efficiently manage the global supply chain requirements of our customers and suppliers. Throughout 2020, the company experienced strong demand for solutions that enable business continuity and work from home capabilities. Management is actively monitoring the impact of the global situation on its financial condition, liquidity, operations, suppliers, industry and workforce.

The extent to which COVID-19 will continue to impact the company’s results will depend primarily on future developments, including the severity and duration of the crisis, the speed and effectiveness of vaccine and treatment developments and deployment, potential mutations of COVID-19, and the impact of actions taken and that will be taken to contain COVID-19 or treat its impact, among others. These future developments are highly uncertain and cannot be predicted with confidence. The global economic impact from COVID-19 may adversely affect the company's results of operations in the future and may affect the credit condition of some of our customers, which could increase delays in customer payments and credit losses.

Certain Non-GAAP Financial Information

In addition to disclosing financial results that are determined in accordance with accounting principles generally accepted in the United States (“GAAP”), the company also discloses certain non-GAAP financial information, including:

- Non-GAAP sales for the consolidated company, global components, and global ECS, non-GAAP gross profit, and non-GAAP operating expenses exclude the impact of changes in foreign currencies (referred to as "changes in foreign currencies") by re-translating prior period results at current period foreign exchange rates, the impact of dispositions by adjusting the company's operating results for businesses disposed, as if the dispositions had occurred at the beginning of the earliest period presented (referred to as "dispositions"), the impact of the company's personal computer and mobility asset disposition business (referred to as "wind down"), the impact of inventory write-downs and recoveries related to the digital business (referred to as “digital inventory write-downs, net”), and the impact of notes receivable reserves and recoveries and inventory write-downs related to the AFS business (referred to as “AFS notes receivable reserves and recoveries” and “AFS inventory write-downs”, respectively).
- Non-GAAP operating income excludes identifiable intangible asset amortization, restructuring, integration, and other charges (credits), loss on disposition of businesses, net, AFS notes receivable reserves and recoveries and inventory write-downs, digital inventory write-downs, net, the impact of non-cash charges related to goodwill, trade names, and long-lived assets, and the impact of wind down.
- Non-GAAP net income attributable to shareholders excludes identifiable intangible asset amortization, restructuring, integration, and other charges (credits), loss on disposition of businesses, net, AFS notes receivable reserves and recoveries and inventory write-downs, digital inventory write-downs, net, gains and losses on investments, net, the impact of non-cash charges related to goodwill, trade names, and long-lived assets, certain tax adjustments, pension settlement (gain) loss, and the impact of wind down.

Management believes that providing this additional information is useful to the reader, as a supplement to the GAAP measures, to better assess and understand the company's operating performance, especially when comparing results with previous periods. Management typically monitors these non-GAAP measures in addition to GAAP results to understand and compare operating results across accounting periods for forecasting purposes, operating plans, and evaluating our financial performance. However, analysis of results on a non-GAAP basis should be used as a complement to, and in conjunction with, data presented in accordance with GAAP.

Sales

Substantially all of the company's sales are made on an order-by-order basis, rather than through long-term sales contracts. As such, the nature of the company's business does not provide for the visibility of material forward-looking information from its customers and suppliers beyond a few months.

Following is an analysis of net sales by reportable segment for the years ended December 31 (in millions):

	2020	2019	Change
Consolidated sales, as reported*	\$ 28,673	\$ 28,917	(0.8)%
Impact of changes in foreign currencies	—	119	
Impact of dispositions and wind down	—	(252)	
Non-GAAP consolidated sales*	\$ 28,673	\$ 28,784	(0.4)%
Global components sales, as reported	\$ 20,503	\$ 20,251	1.2 %
Impact of changes in foreign currencies	—	70	
Impact of wind down	—	(240)	
Non-GAAP global components sales	\$ 20,503	\$ 20,081	2.1 %
Global ECS sales, as reported	\$ 8,171	\$ 8,666	(5.7)%
Impact of changes in foreign currencies	—	49	
Impact of dispositions	—	(11)	
Non-GAAP global ECS sales*	\$ 8,171	\$ 8,703	(6.1)%

* The sum of the components for sales, as reported, and non-GAAP sales may not agree to totals, as presented, due to rounding.

Consolidated sales for 2020 decreased by \$243.5 million, or 0.8%, compared with the year-earlier period. The decrease in 2020 was driven by a decrease in global ECS business segment sales of \$495.4 million, or 5.7%, partially offset by an increase in global components business segment sales of \$252.0 million, or 1.2%, compared with the year-earlier period. Non-GAAP consolidated sales decreased 0.4% in 2020, compared with the year-earlier period.

Compared with the year-earlier period, global components business segment sales for 2020 increased \$252.0 million, or 1.2%, as reported. Increases were primarily due to stronger demand in the Asia-Pacific region, offset by lower sales volumes in the Americas and Europe, the Middle East, and Africa ("EMEA") regions, as well as the impact of wind down. Non-GAAP global components sales increased 2.1% in 2020, compared with the year-earlier period.

Compared with the year-earlier period, global ECS business segment sales for 2020 decreased \$495.4 million, or 5.7%, as reported. Decreases in sales were primarily due to lower sales volumes driven by softer demand for proprietary server solutions and networking, offset partially by stronger demand in the infrastructure software, industry standard servers, security and storage verticals. Non-GAAP global components sales decreased 6.1% in 2020, compared with the year-earlier period.

Gross Profit

Following is an analysis of gross profit for the years ended December 31 (in millions):

	2020	2019	Change
Consolidated gross profit, as reported	\$ 3,191	\$ 3,298	(3.3)%
Impact of changes in foreign currencies	—	16	
Impact of dispositions and wind down	(11)	(3)	
Digital and AFS inventory write-downs, net	—	24	
Non-GAAP consolidated gross profit*	\$ 3,180	\$ 3,336	(4.7)%
Consolidated gross profit as a percentage of sales, as reported	11.1 %	11.4 %	(30) bps
Non-GAAP consolidated gross profit as a percentage of non-GAAP sales	11.1 %	11.6 %	(50) bps

* The sum of the components for non-GAAP gross profit may not agree to totals, as presented, due to rounding.

The company recorded gross profit of \$3.2 billion for 2020 compared with \$3.3 billion in the year-earlier period. Non-GAAP gross profit decreased 4.7% in 2020 compared with the year-earlier period. Non-GAAP gross profit margins in 2020 decreased by approximately 50 bps compared with the year-earlier period primarily due to regional mix with Asia-Pacific components contributing 46% of global components sales for 2020 compared with 38% of global components sales for the year-earlier period. These decreases were offset partially by growing demand in services offerings globally.

Selling, General, and Administrative Expenses and Depreciation and Amortization

Following is an analysis of operating expenses for the years ended December 31 (in millions):

	2020	2019	Change
Selling, general, and administrative expenses, as reported	\$ 2,087	\$ 2,192	(4.8)%
Depreciation and amortization, as reported	189	190	flat
Operating expenses, as reported*	\$ 2,276	\$ 2,381	(4.4)%
Impact of changes in foreign currencies	—	3	
Impact of dispositions and wind down	4	(60)	
AFS notes receivable (reserves) and recoveries	2	(16)	
Non-GAAP operating expenses*	\$ 2,281	\$ 2,309	(1.2)%
Operating expenses as a percentage of sales, as reported	7.9 %	8.2 %	(30) bps
Non-GAAP operating expenses as a percentage of non-GAAP sales	8.0 %	8.0 %	flat

* The sum of the components for selling, general, and administrative expenses and depreciation and amortization, as reported, and non-GAAP operating expenses may not agree to totals, as presented, due to rounding.

Selling, general, and administrative expenses decreased by \$104.6 million, or 4.8%, in 2020, on a sales decrease of 0.8%, compared with the year-earlier period, primarily due to cost savings related to the operating expense reduction program (see Note 9), the impact of dispositions and wind down and decreases in travel related expenses. Selling, general, and administrative expenses, as a percentage of sales, was 7.3% and 7.6% for 2020 and 2019, respectively. Depreciation and amortization expense as a percentage of operating expenses was 8.3% for 2020 compared with 8.0% in the year-earlier period. Included in depreciation and amortization expense is identifiable intangible asset amortization of \$38.4 million for 2020 compared to \$48.1 million for the year earlier period.

Non-GAAP operating expenses decreased 1.2% compared with the year-earlier period. Non-GAAP operating expense, as a percentage of non-GAAP sales, remained flat for 2020 compared with the year-earlier periods.

Impairments

During the second quarter of 2019, the company committed to a plan to close its personal computer and mobility asset disposition business within the global components business segment. In light of the plan, the company performed an impairment analysis of the long-lived assets of the personal computer and mobility asset disposition business in accordance

with Accounting Standards Codification ("ASC") topic 360 and recorded a pre-tax impairment charge of \$74.9 million to write-down certain assets of the personal computer and mobility asset disposition business to estimated fair value in the second quarter of 2019.

During the second quarter of 2019, as a result of the company's downward revision of forecasted future earnings and the decision to wind down the company's personal computer and mobility asset disposition business, the company determined that it was more likely than not that an impairment may exist within the Americas components and Asia-Pacific components reporting units. The company evaluated its other four reporting units and concluded an interim impairment analysis was not required based on the results of those reporting units and historical levels of headroom in each of those reporting units. The interim goodwill impairment analysis resulted in a partial goodwill impairment charge of \$509.0 million (\$457.8 million net of tax) with approximately \$600.0 million of goodwill remaining within the Americas components reporting unit and a full impairment charge of \$61.2 million (\$61.2 million net of tax) within the Asia-Pacific components reporting unit.

The company estimated the fair value of these reporting units using the income approach. For the purposes of the income approach, fair value was determined based on the present value of estimated future cash flows, discounted at an appropriate risk adjusted rate. The fair value conclusion as of June 29, 2019 for the Americas components reporting unit is highly sensitive to changes in the assumptions used in the income approach which include forecasted revenues, gross profit margins, operating income margins, working capital cash flow, perpetual growth rates, and long-term discount rates, among others, all of which require significant judgments by management.

During the second quarter of 2019, the company initiated actions to further integrate two global components businesses. These businesses held indefinite-lived trade names with a carrying value of \$101.0 million. As a result of the company's decision to integrate these brands, we determined the useful lives of the trade names were no longer indefinite. The company began amortizing these trade names over their estimated remaining useful life. The trade names were tested for impairment during the second quarter of 2019 as a result of the change in estimated useful lives. The company estimated the fair value of the trade names to be \$55.0 million using the relief from royalty method and recorded a non-cash impairment charge of \$46.0 million (\$34.7 million net of tax). The drivers of the impairment were primarily due to the shortened useful lives of the asset and a decline of the forecasted revenues attributable to the trade name as integration to the Arrow brand occurs over the estimated remaining useful life.

Restructuring, Integration, and Other Charges

2020 Charges

The company recorded restructuring, integration, and other charges of \$13.3 million, which includes \$13.4 million related to initiatives taken by the company during 2020 to improve operating efficiencies and personnel charges of \$3.4 million related to the operating expense reduction program previously disclosed in July 2019.

2019 Charges

The company recorded restructuring, integration, and other charges of \$89.8 million, which includes \$22.3 million related to initiatives taken by the company during 2019 to improve operating efficiencies and personnel charges of \$46.0 million related to the operating expense reduction program previously disclosed in July 2019.

As of December 31, 2020, the company does not anticipate there will be any material adjustments relating to the aforementioned restructuring and integration plans. Refer to Note 9, "Restructuring, Integration, and Other Charges" of the Notes to the Consolidated Financial Statements for further discussion of the company's restructuring and integration activities.

Loss on Disposition of Businesses, Net

During 2019, the company recorded a loss on disposition of businesses, net of \$21.3 million primarily related to the reclassification of cumulative translation adjustment to earnings upon the sale of three businesses which were part of the company's personal computer and mobility asset disposition business.

Operating Income

Following is an analysis of operating income for the years ended December 31 (in millions):

	2020	2019	Change
Consolidated operating income, as reported	\$ 895	\$ 108	730.6 %
Identifiable intangible asset amortization*	38	42	
Restructuring, integration, and other charges*	13	78	
Loss on disposition of businesses, net*	—	2	
AFS notes receivable reserve (recoveries) and inventory write-downs	(2)	18	
Digital inventory write-downs, net	—	22	
Goodwill and other impairments*	7	624	
Impact of wind down*	(15)	162	
Non-GAAP consolidated operating income**	\$ 937	\$ 1,057	(11.3)%
Consolidated operating income as a percentage of sales, as reported	3.1 %	0.4 %	270 bps
Non-GAAP consolidated operating income, as a percentage of sales, excluding wind down	3.3 %	3.7 %	(40) bps

* Amounts presented for restructuring, integration, and other charges, goodwill and other impairments, loss on disposition of businesses, net, and identifiable intangible amortization exclude amounts related to the personal computer and mobility asset disposition business, which are reported within the impact of wind down.

** The sum of the components for non-GAAP consolidated operating income may not agree to totals, as presented, due to rounding.

The company recorded operating income of \$894.5 million, or 3.1% of sales, in 2020 compared with operating income of \$107.7 million, or 0.4% of sales, in the year-earlier period. Non-GAAP operating income was \$936.9 million, or 3.3% of sales, in 2020 compared with non-GAAP operating income of \$1.1 billion, or 3.7% of sales, in the year-earlier period. Non-GAAP operating income decreased 11.3% compared with the year-earlier period, on a sales decrease of 0.8%. Non-GAAP operating income, as a percentage of sales, decreased 40 bps for 2020 primarily due to the decreases in sales across both the global components and global ECS businesses, the impact to gross profit resulting from a shift in regional mix, and reserves and other adjustments related to foreign tax and other loss contingencies within the global ECS business. These reserves are principally associated with transactional taxes on activity from several prior years, not significant to any one year. These operating margin declines were partially offset by a reduction in operating costs and corporate overhead due to the operating expense reduction program (refer to Note 9), as well as a reduction in travel related expenses in 2020.

Pension Settlements

In 2019, the company entered into a settlement for the remaining portion of its Wyle defined benefit plan under which participants received benefits through lump sum payments and an insurance annuity contract. The settlement of \$59.3 million was completed during October 2019, at which time the company recorded settlement expense of \$20.1 million in the “Employee benefit plan expense, net” line item in the company's consolidated statements of operations.

Prior to terminating the plan, the company adopted an amendment to the plan that provided eligible plan participants with the option to receive an early distribution of their pension benefits. The company has terminated the plan to reduce administrative burdens.

Interest and Other Financing Expense, Net

The company recorded net interest and other financing expense of \$137.2 million for 2020, compared with \$203.7 million in the year-earlier period. The decrease for 2020 primarily relates to lower borrowings and interest rates on short term credit facilities, offset partially by decreased interest income. The decrease in interest income is primarily attributable to lower average cash balances and lower interest rates within the company's cash pooling arrangements.

Income Tax

For the year ended December 31, 2020, the company recorded provision for income taxes of \$172.8 million, an effective tax rate of 22.8%. The company's provision for income taxes and effective tax rates are impacted by the previously discussed identifiable intangible asset amortization, restructuring, integration, and other charges, gain on investment, net, AFS notes receivable recoveries, impairments of long-lived assets, the impact of wind down, pension settlement gain, and the impact of

tax legislation changes and other non-recurring tax adjustments. Excluding the impact of the aforementioned items, the company's non-GAAP effective tax rate for 2020 was 22.9%. Included in the 2020 effective tax rate are approximately \$7.4 million in discrete tax items related to the foreign tax and other loss contingencies.

For the year ended December 31, 2019, the company recorded provision for income taxes of \$88.3 million, equivalent to an effective tax rate of (79.0)%. The company's provision for income taxes and effective tax rates are impacted by the previously discussed restructuring, integration, and other charges, identifiable intangible asset amortization, loss on disposition of businesses, net, the impact of tax legislation changes and other non-recurring tax adjustments, gain on investments, net, AFS reserves and recoveries, digital inventory write-downs, net, impairments of goodwill and other long-lived assets, pension settlement loss, certain other tax adjustments, and the impact of the wind down. Excluding the impact of the aforementioned items, the company's non-GAAP effective tax rate for 2019 was 24.3%.

The company's effective tax rate deviates from the statutory U.S. federal income tax rate mainly due to the mix of foreign taxing jurisdictions in which the company operates and where its foreign subsidiaries generate taxable income, among other things. The increase in the effective tax rate from (79.0)% for 2019 to 22.8% for 2020 is primarily driven by discrete items such as the nondeductible portion of goodwill impairments and changes in U.S. tax rules, as well as changes in the mix of tax jurisdictions where taxable income is generated.

Net Income (Loss) Attributable to Shareholders

Following is an analysis of net income attributable to shareholders for the years ended December 31 (in millions):

	2020	2019
Net income (loss) attributable to shareholders, as reported	\$ 584	\$ (204)
Identifiable intangible asset amortization*	38	42
Restructuring, integration, and other charges*	13	78
Loss on disposition of businesses, net*	—	2
Gain on investments, net	(5)	(12)
AFS notes receivable reserves (recoveries) and inventory write-downs	(2)	18
Digital inventory write-downs, net	—	22
Goodwill and other impairments*	7	624
Impact of wind down*	(15)	162
Interest expense related to tax adjustments	—	1
Pension settlement (gain) loss	(2)	20
Tax effect of adjustments above	(8)	(139)
Impact of tax legislation changes and other tax adjustments	(1)	22
Non-GAAP net income attributable to shareholders	<u>\$ 610</u>	<u>\$ 636</u>

* Amounts presented for restructuring, integration, and other charges, goodwill and other impairments, loss on disposition of businesses, net, and identifiable intangible amortization exclude amounts related to the personal computer and mobility asset disposition business, which are reported within the impact of wind down. Identifiable intangible asset amortization also excludes amortization related to the noncontrolling interest.

The company recorded net income (loss) attributable to shareholders of \$584.4 million for 2020, compared with \$(204.1) million in the year-earlier period. Non-GAAP net income attributable to shareholders was \$609.7 million for 2020, compared with \$636.5 million in the year-earlier period.

Liquidity and Capital Resources

At December 31, 2020 and 2019, the company had cash and cash equivalents of \$373.6 million and \$300.1 million, respectively, of which \$140.1 million and \$277.7 million, respectively, were held outside the United States. Liquidity is affected by many factors, some of which are based on normal ongoing operations of the company's business and some of which arise from fluctuations related to global economics and markets. Cash balances are generated and held in many locations throughout the world.

To achieve greater cash management agility and to further advance business objectives, during the fourth quarter of 2019, the

company reversed its assertion to indefinitely reinvest a certain portion of its foreign earnings, of which approximately \$2.4 billion are available for distribution in future periods as of December 31, 2020, after distributions of \$349.0 million and \$761.0 million during 2020 and 2019, respectively. The company continues to indefinitely reinvest the residual \$1.6 billion of undistributed earnings of its foreign subsidiaries. If the indefinitely reinvested earnings were to be distributed to the United States, the company would be required to pay withholding and other taxes. Additionally, local government regulations may restrict the company's ability to move cash balances to meet cash needs under certain circumstances. However, the company currently does not expect such regulations and restrictions to impact its ability to make acquisitions or to conduct operations throughout the global organization.

During 2020, the net amount of cash provided by the company's operating activities was \$1.4 billion, the net amount of cash used for investing activities was \$138.8 million, and the net amount of cash used for financing activities was \$1.2 billion. The effect of exchange rate changes on cash was an increase of \$79.6 million.

During 2019, the net amount of cash provided by the company's operating activities was \$858.0 million, the net amount of cash used for investing activities was \$173.6 million, and the net amount of cash used for financing activities was \$906.4 million. The effect of exchange rate changes on cash was an increase of \$12.7 million.

Cash Flows from Operating Activities

The company maintains a significant investment in accounts receivable and inventories. As a percentage of total assets, accounts receivable and inventories were approximately 73.3% and 72.9% at December 31, 2020 and 2019, respectively.

The net amount of cash provided by the company's operating activities during 2020 was \$1.4 billion and was primarily due to earnings from operations adjusted for non-cash items. The net amount of cash provided by the company's operating activities during 2019 was \$858.0 million and was primarily due to earnings from operations adjusted for non-cash items and a reduction in working capital.

The change in cash provided by operating activities during 2020, compared to the year earlier period, relates primarily to the timing of payments, slowing growth in customer demand in certain regions, and a corresponding reduction in working capital, including inventory, which is consistent with the company's historical counter-cyclical cash flow in which the company generates strong cash flow in periods of decreased demand. Sales of accounts receivables under the EMEA asset securitization program, entered into by the company in the first quarter of 2020, was another contributor to the reduction in working capital and corresponding increase in operating net cash inflow. During 2020, sales of accounts receivables under the EMEA asset securitization program resulted in a \$397.9 million operating net cash inflow (see Note 5).

Working capital, as a percentage of sales, which the company defines as accounts receivable, net, plus inventory, net, less accounts payable, divided by annualized sales, was 13.5% and 16.7% in 2020 and 2019, respectively.

Cash Flows from Investing Activities

The net amount of cash used for investing activities during 2020 was \$138.8 million. The primary use of cash for investing activities included \$123.6 million for capital expenditures which primarily related to the build out of the company's distribution centers and investments in internally developed software.

The net amount of cash used for investing activities during 2019 was \$173.6 million. The primary use of cash for investing activities included \$143.2 million for capital expenditures, \$13.1 million of cash payments related to the disposition of businesses, and \$7.6 million related to the acquisition of a customer relationship intangible asset. Capital expenditures for 2019 are primarily related to investments in internally developed software and website functionality related to the digital business and the build out of a new distribution center within the EMEA region.

Cash Flows from Financing Activities

The net amount of cash used for financing activities during 2020 was \$1.2 billion. The uses of cash from financing activities included \$483.7 million of repurchases of common stock, \$411.5 million of net payments for long-term borrowings, \$209.4 million of repayments of the principal amount of the company's 6.00% notes due April 2020, \$95.0 million of net payments for short-term borrowings, and \$48.4 million of payments upon the settlement of forward starting interest rate swaps. The primary source of cash from financing activities during 2020 was \$21.0 million of proceeds from the exercise of stock options.

The net amount of cash used for financing activities during 2019 was \$906.4 million. The uses of cash from financing activities included \$405.0 million of net payments for long-term borrowings, \$404.2 million of repurchases of common stock, and \$113.9 million of net payments for short-term borrowings. The primary source of cash from financing activities during 2019 was \$16.9 million of proceeds from the exercise of stock options.

The company has a \$2.0 billion revolving credit facility maturing in December 2023. This facility may be used by the company for general corporate purposes including working capital in the ordinary course of business, letters of credit, repayment, prepayment or purchase of long-term indebtedness, acquisitions, and as support for the company's commercial paper program, as applicable. Interest on borrowings under the revolving credit facility is calculated using a base rate or a Eurocurrency rate plus a spread (1.18% at December 31, 2020), which is based on the company's credit ratings, or an effective interest rate of 1.26% at December 31, 2020. The facility fee, which is based on the company's credit ratings, was .20% of the total borrowing capacity at December 31, 2020. The company had no outstanding borrowings under the revolving credit facility at December 31, 2020 and \$10.0 million in outstanding borrowings under the revolving credit facility at December 31, 2019. During the years ended December 31, 2020 and 2019, the average daily balance outstanding under the revolving credit facility was \$20.6 million and \$32.1 million, respectively.

The company has a commercial paper program and the maximum aggregate balance of commercial paper outstanding may not exceed the borrowing capacity of \$1.2 billion. The company had no outstanding borrowings under this program as of December 31, 2020 and 2019. During the years ended December 31, 2020 and 2019, the average daily balance outstanding under the commercial paper program was \$47.9 million and \$690.2 million, respectively. The program had a weighted-average effective interest rate of 0.30% for the year ended December 31, 2020.

The company has a North American asset securitization program collateralized by accounts receivable of certain of its subsidiaries, which matures in June 2021. The company has the intent and ability to refinance the North American asset securitization program on a long-term basis and intends to refinance the program in 2021 prior to the maturity date. The company may borrow up to \$1.2 billion under the North American asset securitization program. The program is conducted through Arrow Electronics Funding Corporation ("AFC"), a wholly-owned, bankruptcy remote subsidiary. The program does not qualify for sale treatment. Accordingly, the accounts receivable and related debt obligation remain on the company's consolidated balance sheets. Interest on borrowings is calculated using a base rate, or a commercial paper rate, plus a spread (.40% at December 31, 2020), or an effective interest rate of .56% at December 31, 2020. The facility fee is .40% of the total borrowing capacity. The company had no outstanding borrowings under the North American asset securitization program at December 31, 2020 and \$400.0 million in outstanding borrowings under the North American asset securitization program at December 31, 2019. During the years ended December 31, 2020 and 2019, the average daily balance outstanding under the North American asset securitization program was \$429.9 million and \$1.0 billion, respectively.

Both the revolving credit facility and North American asset securitization program include terms and conditions that limit the incurrence of additional borrowings and require that certain financial ratios be maintained at designated levels. As of December 31, 2020, the company was in compliance with all such financial covenants.

The company has \$200.0 million in uncommitted lines of credit. There were no outstanding borrowings under the uncommitted lines of credit at December 31, 2020. There were \$60.0 million of outstanding borrowings under the uncommitted lines of credit at December 31, 2019. These borrowings were provided on a short-term basis and the maturity is agreed upon between the company and the lender. The lines had a weighted-average effective interest rate of 1.53% at December 31, 2020. During 2020 and 2019, the average daily balance outstanding under the uncommitted lines of credit was \$7.4 million and \$22.8 million, respectively.

In May 2019, the company entered into a series of ten-year forward-starting interest rate swaps (the "2019 swaps") which locked in an average treasury rate of 2.33% on a total aggregate notional amount of \$300.0 million. The 2019 swaps were designated as cash flow hedges managing the risk of variability in interest rates of future expected debt issuance by June 2020. In February 2020, the company determined that certain of the forecasted cash flows were no longer probable and de-designated the hedging relationship. In February 2020, the company re-designated the 2019 swaps in a new cash flow hedge managing the risk of variability in interest rates of future expected debt issuance by June 2023. In May 2020, the company cash settled and terminated the 2019 swaps for a total of \$48.4 million.

In April 2020, the company entered into a series of ten-year forward-starting interest rate swaps (the "April 2020 swaps") which locked in an average swap rate of 0.97% on a total aggregate notional amount of \$300.0 million and expire in December 2024. The April 2020 swaps were designated as cash flow hedges managing the risk of variability in interest rates of future expected debt issuance by December 2025.

In May 2020, the company entered into a series of ten-year forward-starting interest rate swaps (the “May 2020 swaps”) which locked in an average swap rate of 0.90% on a total aggregate notional amount of \$300.0 million and expire in June 2022. The May 2020 swaps were designated as cash flow hedges managing the risk of variability in interest rates of future expected debt issuance by June 2023.

In the normal course of business, certain of the company’s subsidiaries have agreements to sell, without recourse, selected trade receivables to financial institutions. The company does not retain financial or legal interests in these receivables, and, accordingly, they are accounted for as sales of the related receivables and the receivables are removed from the company’s consolidated balance sheets.

The global economic impact from COVID-19 may adversely affect the company’s ability to access capital markets. Management believes that the company’s current cash availability, its current borrowing capacity under its revolving credit facility and asset securitization programs, and its expected ability to generate future operating cash flows are sufficient to meet its projected cash flow needs for the foreseeable future. The company’s current committed and undrawn liquidity stands at over \$3.2 billion in addition to \$373.6 million of cash on hand at December 31, 2020. The company also may issue debt or equity securities in the future and management believes the company will have adequate access to the capital markets, if needed. The company continually evaluates its liquidity requirements and would seek to amend its existing borrowing capacity or access the financial markets as deemed necessary.

Contractual Obligations

Payments due under contractual obligations at December 31, 2020 are as follows (in thousands):

	Within 1 Year	1-3 Years	4-5 Years	After 5 Years	Total
Debt	\$ 158,633	\$ 649,559	\$ 843,219	\$ 605,162	\$ 2,256,573
Interest on long-term debt	91,175	142,494	85,002	75,680	394,351
Operating leases	84,625	120,019	72,543	117,745	394,932
Purchase obligations (a)	4,738,951	408,114	35,127	57,673	5,239,865
Other (b)	29,039	17,092	31,894	38	78,063
	<u>\$ 5,102,423</u>	<u>\$ 1,337,278</u>	<u>\$ 1,067,785</u>	<u>\$ 856,298</u>	<u>\$ 8,363,784</u>

- (a) Amounts represent an estimate of non-cancelable inventory purchase orders and other contractual obligations related to information technology and facilities as of December 31, 2020.
- (b) Includes amounts relating to the Tax Act transition tax payable, personnel and certain other costs resulting from restructuring and integration activities, and other miscellaneous contractual obligations.

Under the terms of various joint venture agreements, the company is required to pay its pro-rata share of the third party debt of the joint ventures in the event that the joint ventures are unable to meet their obligations. There were no outstanding borrowings under the third party debt agreements of the joint ventures as of December 31, 2020.

At December 31, 2020, the company had a liability for unrecognized tax positions of \$62.2 million. The timing of the resolution of these uncertain tax positions is dependent on the tax authorities’ income tax examination processes. Material changes are not expected; however, it is possible that the amount of unrecognized tax benefits with respect to uncertain tax positions could increase or decrease during 2021. Currently, the company is unable to make a reasonable estimate of when tax cash settlement would occur and how it would impact the effective tax rate.

Share-Repurchase Programs

The following table shows the company's Board of Directors (the "Board") approved share-repurchase programs as of December 31, 2020 (in thousands):

Month of Board Approval	Dollar Value Approved for Repurchase	Dollar Value of Shares Repurchased	Approximate Dollar Value of Shares that May Yet be Purchased Under the Program
December 2016	\$ 400,000	\$ 400,000	\$ —
December 2018	600,000	600,000	—
July 2020	600,000	136,543	463,457
Total	\$ 1,600,000	\$ 1,136,543	\$ 463,457

Off-Balance Sheet Arrangements

During the first quarter of 2020, the company entered into an EMEA asset securitization program under which it will continuously sell its interest in designated pools of trade accounts receivables of certain of its subsidiaries in the EMEA region, at a discount, to a special purpose entity, which in turn sells certain of the receivables to unaffiliated financial institutions and conduits administered by such unaffiliated financial institutions ("unaffiliated financial institutions") on a monthly basis. The company may sell up to €400.0 million under the EMEA asset securitization program, which matures in January 2023, subject to extension in accordance with its terms. The program is conducted through Arrow EMEA Funding Corp B.V., an entity structured to be bankruptcy remote. The company is deemed the primary beneficiary of Arrow EMEA Funding Corp B.V. as the company has both the power to direct the activities that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive the benefits that could potentially be significant to the entity from the transfer of the trade accounts receivables into the special purpose entity. Accordingly, Arrow EMEA Funding Corp B.V. is included in the company's consolidated financial statements.

Receivables sold to unaffiliated financial institutions under the program are excluded from "Accounts receivable, net" on the company's consolidated balance sheets and cash receipts are reflected as cash provided by operating activities on the consolidated statements of cash flows. The purchase price is paid in cash when the receivables are sold. Certain unsold receivables held on Arrow EMEA Funding Corp B.V. are pledged as collateral to unaffiliated financial institutions. These unsold receivables are included in "Accounts receivable, net" in the company's consolidated balance sheets.

The company continues servicing the receivables which were sold and in exchange receives a servicing fee under the program. The company does not record a servicing asset or liability on the company's consolidated balance sheets as the company estimates that the fee it receives to service these receivables approximates the fair market compensation to provide the servicing activities.

During 2020, the company sold approximately €1.7 billion, or \$1.9 billion, of accounts receivables to unaffiliated financial institutions under the EMEA asset securitization program. There were €323.6 million, or \$397.9 million, of receivables sold to unaffiliated financial institutions that were uncollected as of December 31, 2020. Total collateralized accounts receivables of approximately €448.8 million, or \$551.8 million, were held by Arrow EMEA Funding Corp B.V. at December 31, 2020. Any accounts receivables held by Arrow EMEA Funding Corp B.V. would likely not be available to other creditors of the company in the event of bankruptcy or insolvency proceedings if there are outstanding balances under the EMEA asset securitization program. The assets of the special purpose entity cannot be used by the company for general corporate purposes. Additionally, the financial obligations of Arrow EMEA Funding Corp B.V. to the unaffiliated financial institution under the program are limited to the assets it owns and there is no recourse to the Arrow Electronics, Inc. for receivables that are uncollectible as a result of the insolvency or inability to pay of the account debtors.

The EMEA asset securitization program includes terms and conditions that limit the incurrence of additional borrowings and require that certain financial ratios be maintained at designated levels. As of December 31, 2020, the company was in compliance with all such financial covenants.

Critical Accounting Policies and Estimates

The company's consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires the company to make significant estimates and judgments that affect the reported amounts of assets, liabilities, revenues, and expenses and related disclosure of contingent assets and liabilities. The company evaluates its estimates on an ongoing basis. The company bases its estimates on historical experience and on various other assumptions that are believed reasonable under the circumstances; the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The company believes the following critical accounting policies involve the more significant judgments and estimates used in the preparation of its consolidated financial statements:

Revenue Recognition

The company recognizes revenue as control of products is transferred to customers, which generally happens at the point of shipment. Sales are recorded net of discounts, rebates, and returns, which historically have not been material. The company allows its customers to return product for exchange or credit in limited circumstances. A liability is recorded at the time of sale for estimated product returns based upon historical experience. The company also provides volume rebates and other discounts to certain customers which are considered variable consideration. A provision for customer rebates and other discounts is recorded as a reduction of revenue at the time of sale based on an evaluation of the contract terms and historical experience. Tariffs are included in sales as the company has enforceable rights to additional consideration to cover the cost of tariffs. Other taxes imposed by governmental authorities on the company's revenue producing activities with customers, such as sales taxes and value added taxes, are excluded from net sales.

Products sold by the company are generally delivered via shipment from the company's facilities, drop shipment directly from the vendor, or by electronic delivery of keys for software products. A portion of the company's business involves shipments directly from its suppliers to its customers, in these transactions, the company is generally responsible for negotiating price both with the supplier and customer, payment to the supplier, establishing payment terms with the customer, product returns, and has risk of loss if the customer does not make payment. As the principal with the customer, the company recognizes revenue upon receiving notification from the supplier that the product was shipped.

The company has contracts with certain customers where the company's performance obligation is to arrange for the products or services to be provided by another party. In these arrangements, as the company assumes an agency relationship in the transaction, revenue is recognized in the amount of the net fee associated with serving as an agent. These arrangements relate to the sale of supplier service contracts to customers where the company has no future obligation to perform under these contracts or the rendering of logistics services for the delivery of inventory for which the company does not assume the risks and rewards of ownership.

No single customer accounted for more than 2% of the company's 2020 consolidated sales. One supplier accounted for approximately 14% of the company's consolidated sales in 2020. No other single supplier accounted for more than 7% of the company's consolidated sales in 2020. The company believes that many of the products it sells are available from other sources at competitive prices. However, certain parts of the company's business, such as the company's global ECS business segment, rely on a limited number of suppliers with the strategy of providing focused support, extensive product knowledge, and customized service to suppliers, MSPs, and VARs. Most of the company's purchases are pursuant to distributor agreements, which are typically non-exclusive and cancelable by either party at any time or on short notice.

Trade Accounts and Notes Receivable

On January 1, 2020, the company adopted Topic 326 using a modified retrospective approach with a cumulative effect adjustment to the opening balance of retained earnings, which increased the allowance for credit losses by \$47.0 million (\$35.9 million net of tax). Increases in the allowance for credit losses relate to the required change from an incurred loss model to an expected loss model, and the related change in timing of loss recognition where an allowance for credit losses is now applied to all receivables, at a rate dependent on the credit characteristics of the collective pool each customer is in. Refer to Notes 1 and 5.

Trade accounts and notes receivable are reported at amortized cost, net of the allowance for credit losses in the consolidated balance sheets. The allowance for credit losses is a valuation account that is deducted from the receivables' amortized cost basis

to present the net amount expected to be collected. Receivables are written off against the allowance when management believes the receivable balance is confirmed to be uncollectible.

Management estimates the allowance for credit losses using relevant available information about expected credit losses and an age-based reserve model. Inputs to the model include information about historical credit losses, customer credit ratings, past events, current conditions, and reasonable and supportable forecasts. Adjustments to historical loss information are made for differences in current receivable-specific risk characteristics such as changes in the economic and industry environment, or other relevant factors.

Expected credit losses are estimated on a collective (pool) basis, when similar risk characteristics exist, based on customer credit ratings, which include both externally acquired as well as internally determined credit ratings. Receivables that do not share risk characteristics are evaluated on an individual basis.

Inventories

Inventories are stated at the lower of cost or net realizable value. Write-downs of inventories to market value are based upon contractual provisions governing price protection, stock rotation rights, and obsolescence, as well as assumptions about future demand and market conditions. If assumptions about future demand change and/or actual market conditions are less favorable than those projected by the company, additional write-downs of inventories may be required. Due to the large number of transactions and the complexity of managing the process around price protections and stock rotations, estimates are made regarding adjustments to the book cost of inventories. Actual amounts could be different from those estimated.

Income Taxes

Income taxes are accounted for under the liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of differences between the tax bases of assets and liabilities and their financial reporting amounts using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The carrying value of the company's deferred tax assets is dependent upon the company's ability to generate sufficient future taxable income in certain tax jurisdictions. Should the company determine that it is more likely than not that some portion or all of its deferred tax assets will not be realized, a valuation allowance to reduce the deferred tax assets is established in the period such determination is made. The assessment of the need for a valuation allowance requires considerable judgment on the part of management with respect to the benefits that could be realized from future taxable income, as well as other positive and negative factors.

It is also the company's policy to provide for uncertain tax positions and the related interest and penalties based upon management's assessment of whether a tax benefit is more likely than not to be sustained upon examination by tax authorities. To the extent the company prevails in matters for which a liability for an unrecognized tax benefit is established, or is required to pay amounts in excess of the liability, or when other facts and circumstances change, the company's effective tax rate in a given financial statement period may be materially affected.

Contingencies and Litigation

The company is subject to proceedings, lawsuits, and other claims related to environmental, regulatory, labor, product, tax, and other matters and assesses the likelihood of an adverse judgment or outcome for these matters, as well as the range of potential losses. A determination of the reserves required, if any, is made after careful analysis. The reserves may change in the future due to new developments impacting the probability of a loss, the estimate of such loss, and the probability of recovery of such loss from third parties.

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. The company tests goodwill for impairment annually as of the first day of the fourth quarter and/or when an event occurs or circumstances change such that it is more likely than not that an impairment may exist. Examples of such events and circumstances that the company would consider include the following:

- macroeconomic conditions such as deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets;
- industry and market considerations such as a deterioration in the environment in which the company operates, an increased competitive environment, a decline in market-dependent multiples or metrics (considered in both absolute terms and relative to peers), a change in the market for the company's products or services, or a regulatory or political development;
- cost factors such as increases in inventory, labor, or other costs that have a negative effect on earnings and cash flows;
- overall financial performance such as negative or declining cash flows or a decline in actual or planned revenue or earnings compared with actual and projected results of relevant prior periods;
- other relevant entity-specific events such as changes in management, key personnel, strategy, or customers, contemplation of bankruptcy, or litigation;
- events affecting a reporting unit such as a change in the composition or carrying amount of its net assets, a more likely than not expectation of selling or disposing all, or a portion, of a reporting unit, the testing for recoverability of a significant asset group within a reporting unit, or recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit; and
- a sustained decrease in share price (considered in both absolute terms and relative to peers).

Goodwill is tested at a level of reporting referred to as “the reporting unit.” The company's reporting units are defined as each of the three regional businesses within the global components business segment, which are the Americas, EMEA, and Asia-Pacific, each of the two regional businesses within the global ECS business segment, which are North America and EMEA, and eInfochips which was acquired in 2018 and is part of the global components business segment.

An entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (that is, a likelihood of more than 50%) that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then the quantitative goodwill impairment test is unnecessary. The company has elected not to perform the qualitative assessment and performed the quantitative goodwill impairment test. The quantitative goodwill impairment test, used to identify both the existence of impairment and the amount of impairment loss, compares the fair value of a reporting unit with its carrying amount, including goodwill. If the carrying amount of the reporting unit is less than its fair value, no impairment exists. If the carrying amount of a reporting unit exceeds its fair value, an impairment loss shall be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit.

The company estimates the fair value of a reporting unit using the income approach. For the purposes of the income approach, fair value is determined based on the present value of estimated future cash flows, discounted at an appropriate risk-adjusted rate. The assumptions included in the income approach include forecasted revenues, gross profit margins, operating income margins, working capital cash flow, perpetual growth rates, income tax rates, and long-term discount rates, among others, all of which require significant judgments by management. Actual results may differ from those assumed in the company's forecasts. The company also reconciles its discounted cash flow analysis to its current market capitalization allowing for a reasonable control premium.

While there is ongoing uncertainty related to COVID-19, the company has observed continued improvements in macroeconomic conditions and equity valuations, and market conditions related to our components business, along with improvements in working capital in certain reporting units. As of the first day of the fourth quarters of 2020, 2019, and 2018, the company's annual impairment testing did not indicate impairment at any of the company's reporting units.

A decline in general economic conditions or global equity valuations could impact the judgments and assumptions about the fair value of the company's businesses, and the company could be required to record an impairment charge in the future, which could impact the company's consolidated balance sheets, as well as the company's consolidated statements of operations. If the company was required to recognize an impairment charge in the future, the charge would not impact the company's consolidated cash flows, current liquidity, capital resources, and covenants under its existing revolving credit facility, North American asset securitization program, other outstanding borrowings, and EMEA asset securitization program.

During the first quarter of 2020, as a result of significant declines in macroeconomic conditions and equity valuations, and the implementation of regulatory restrictions brought forth by the COVID-19 pandemic, and due to historically low head-room, the company determined that it was more likely than not that an impairment may exist within the Americas components and eInfochips reporting units. The company performed a quantitative goodwill impairment test for these reporting units and determined goodwill was not impaired (see Note 3).

During the second quarter of 2019, the company recorded a goodwill impairment charge of \$570.2 million and \$61.2 million within the Americas components and Asia-Pacific components reporting units, respectively (see Note 3).

As of December 31, 2020, the company has \$2.1 billion of goodwill, of which approximately \$607.3 million and \$90.5 million was allocated to the Americas and EMEA reporting units within the global components business segment, respectively, \$787.7 million and \$432.8 million was allocated to the North America and EMEA reporting units within the global ECS business segment, respectively, and \$197.2 million was allocated to the eInfochips reporting unit. As of the date of the company's latest impairment test, the fair value of the EMEA components reporting unit, within the global components business segment, and the Americas ECS and EMEA ECS reporting units, within the global ECS business segment, exceeded their carrying values by more than 175%. The Americas components and eInfochips reporting units, within the global components business segment, exceeded their carrying values by less than 10% (see Note 3).

Impact of Recently Issued Accounting Standards

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-04, *Reference Rate Reform (Topic 848) Facilitation of the Effects of Reference Rate Reform on Financial Reporting* ("ASU No. 2020-04"). ASU No. 2020-04 provides optional expedients and exceptions for applying GAAP to contract modifications and hedging relationships, subject to meeting certain criteria, that reference LIBOR or another rate that is expected to be discontinued. In January 2021, the FASB issued ASU No. 2021-01, *Reference Rate Reform (Topic 848)*. This ASU provides supplemental guidance and clarification to ASU No. 2020-04, and these updates must be adopted concurrently, cumulatively referred to as "Topic 848." The amendments in Topic 848 are effective for all entities as of March 12, 2020 through December 31, 2022. The company adopted the provisions of Topic 848 on a prospective basis in March 2020, and the adoption had no impact on the consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses* ("Topic 326"). Topic 326 revises the methodology for measuring credit losses on financial instruments and the timing of when such losses are recorded. On January 1, 2020, the company adopted Topic 326 using a modified retrospective approach with a cumulative effect adjustment to the opening balance of retained earnings, which increased the allowance for credit losses by \$47.0 million (\$35.9 million net of tax). Increases in the allowance for credit losses relate to the required change from an incurred loss model to an expected loss model, and the related change in timing of loss recognition where an allowance for credit losses is now applied to all receivables, at a rate dependent on the credit characteristics of the collective pool each customer is in. Refer to Note 5.

Information Relating to Forward-Looking Statements

This report includes "forward-looking statements," as the term is defined under the federal securities laws. Forward-looking statements are those statements which are not statements of historical fact. These forward-looking statements can be identified by forward-looking words such as "expects," "anticipates," "intends," "plans," "may," "will," "believes," "seeks," "estimates," and similar expressions. These forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which could cause actual results or facts to differ materially from such statements for a variety of reasons, including, but not limited to: potential adverse effects of the ongoing global COVID-19 coronavirus pandemic, including actions taken to contain or treat COVID-19, the speed and effectiveness of COVID-19 vaccine and treatment developments and deployment, potential mutations of COVID-19, industry conditions, changes in product supply, pricing and customer demand, competition, other vagaries in the global components and global ECS markets, changes in relationships with key suppliers, increased profit margin pressure, changes in legal, tax and regulatory matters, non-compliance with certain regulations, such as export, anti-trust, and anti-corruption laws, foreign tax and other loss contingencies, and the company's ability to generate cash flow. For a further discussion of these and other factors that could cause the company's future results to differ materially from any forward-looking statements, see the section entitled "Risk Factors" in this Form 10-K. Shareholders and other 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. The company undertakes no obligation to update publicly or revise any of the forward-looking statements.

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

The company is exposed to market risk from changes in foreign currency exchange rates and interest rates.

Foreign Currency Exchange Rate Risk

The company, as a large global organization, faces exposure to adverse movements in foreign currency exchange rates. These exposures may change over time as business practices evolve and could materially impact the company's financial results in the future. The company's primary exposure relates to transactions in which the currency collected from customers is different from the currency utilized to purchase the product sold in Europe, the Asia-Pacific region, Canada, and Latin America. The

company's policy is to hedge substantially all such currency exposures for which natural hedges do not exist. Natural hedges exist when purchases and sales within a specific country are both denominated in the same currency and, therefore, no exposure exists to hedge with foreign exchange forward, option, or swap contracts (collectively, the "foreign exchange contracts"). In many regions in Asia, for example, sales and purchases are primarily denominated in U.S. dollars, resulting in a "natural hedge." Natural hedges exist in most countries in which the company operates, although the percentage of natural offsets, as compared with offsets that need to be hedged by foreign exchange contracts, will vary from country to country. The company does not enter into foreign exchange contracts for trading purposes. The risk of loss on a foreign exchange contract is the risk of nonperformance by the counterparties, which the company minimizes by limiting its counterparties to major financial institutions. The fair value of the foreign exchange contracts are estimated using foreign currency spot rates and forward rates quotes by third party financial institutions. The notional amount of the foreign exchange contracts inclusive of foreign exchange contracts designated as a net investment hedge at December 31, 2020 and 2019 was \$914.9 million and \$930.0 million, respectively.

The translation of the financial statements of the non-United States operations is impacted by fluctuations in foreign currency exchange rates. The change in consolidated sales and operating income was impacted by the translation of the company's international financial statements into U.S. dollars. This resulted in increased sales and operating income of \$119.0 million and \$8.3 million, respectively, for 2020, compared with the year-earlier period, based on 2019 sales and operating income at the average rate for 2020. Sales and operating income would decrease by approximately \$693.7 million and \$28.0 million, respectively, if average foreign exchange rates had declined by 10% against the U.S. dollar in 2020. These amounts were determined by considering the impact of a hypothetical foreign exchange rate on the sales and operating income of the company's international operations.

Interest Rate Risk

The company's interest expense, in part, is sensitive to the general level of interest rates in North America, Europe, and the Asia-Pacific region. The company historically has managed its exposure to interest rate risk through the proportion of fixed-rate and floating-rate debt in its total debt portfolio. Additionally, the company utilizes interest rate swaps in order to manage its targeted mix of fixed- and floating-rate debt.

At December 31, 2020, substantially all of the company's debt was subject to fixed rates. During 2020, the average outstanding balance on the company's floating rate debt was \$815.6 million, and a one percentage point change in average interest rates would have caused net interest and other financing expense during 2020 to increase by \$8.2 million. This was determined by considering the impact of a hypothetical interest rate on the company's average floating rate average outstanding variable debt. This analysis does not consider the effect of the level of overall economic activity that could exist. In the event of a change in the level of economic activity, which may adversely impact interest rates, the company could likely take actions to further mitigate any potential negative exposure to the change. However, due to the uncertainty of the specific actions that might be taken and their possible effects, the sensitivity analysis assumes no changes in the company's financial structure.

In July 2017, the Financial Conduct Authority (the authority that regulates LIBOR) announced it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021. The Alternative Reference Rates Committee ("ARRC") has proposed that the Secured Overnight Financing Rate ("SOFR") is the rate that represents best practice as the alternative to USD-LIBOR for use in derivatives and other financial contracts that are currently indexed to USD-LIBOR. ARRC has proposed a paced market transition plan to SOFR from USD-LIBOR and organizations are currently working on industry wide and company specific transition plans as it relates to derivatives and cash markets exposed to USD-LIBOR. In January 2021, the ICE Benchmark Administration extended the cessation date for most LIBOR tenors to June 30, 2023. The company has a North American asset securitization program, revolving credit facility, certain lines of credit, and interest rate swaps that are indexed to USD-LIBOR and is monitoring this activity and evaluating the related risks.

Item 8. Financial Statements and Supplementary Data.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Arrow Electronics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Arrow Electronics, Inc. (the Company) as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for each of the three years in the period ended December 31, 2020, and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 11, 2021 expressed an unqualified opinion thereon.

Adoption of ASU No. 2016-13

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for credit losses in 2020 due to the adoption of Accounting Standards Update (ASU) No. 2016-13, Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, and the related amendments.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the 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. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

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

Evaluation of net realizable value adjustments to inventories for excess or obsolescence

Description of the Matter

At December 31, 2020, the Company’s inventories were \$3.29 billion. As discussed in Note 1 to the consolidated financial statements, inventories are stated at the lower of cost or net realizable value. Write-downs of inventories to net realizable value for excess or obsolete inventories are based upon forecasted sales, contractual supplier protection and stock rotation privileges, and the age of inventories.

Auditing management's lower of cost or net realizable value determination for excess or obsolete inventories was especially challenging and highly judgmental because of the estimation uncertainty in determining demand for aging inventory and future market conditions, after considering supplier protection provisions. Inventories not supported by forecasted sales orders or stock rotation privileges are written down to lower of cost or net realizable value based on the age of the inventories and inventory turnover.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's determination of the lower of cost or net realizable value for excess and obsolete inventories. For example, we tested controls over management's review of excess and obsolescence inventories which includes their review of the assumptions supporting current product demand, supplier protections, evaluation of aging of inventories and consideration of inventory turnover.

Our audit procedures to test the net realizable value adjustments to inventories for excess or obsolescence included, among others, testing the completeness and accuracy of the underlying data used in management's assessment. We evaluated the reasonableness of management's assumptions by performing a retrospective review of the prior year assumptions to actual activity, including write-off history. We evaluated the appropriateness and consistency of management's methods and assumptions used in developing their estimates around forecasted sales and expected stock rotation privileges. We tested the aging of inventories. We held discussions with senior financial and operating management to determine whether any strategic or operational changes in the business would impact expected demand or related carrying value of inventory. We assessed the reasonableness of management's general excess and obsolescence assumptions by comparing those assumptions to historical data and trends, as well as reviewing such assumptions for management bias. We considered macroeconomic trends within the industry, including trends that could impact the movement of the products provided by the Company. We performed procedures to compare recent sales transactions or market data to cost of inventories to assess that the carrying value of inventories was the lower of cost or net realizable value.

Evaluation of Americas Components and eInfochips Goodwill for Impairment

Description of the Matter

At December 31, 2020, the Company's consolidated goodwill was \$2.12 billion. As discussed in Note 3 to the consolidated financial statements, goodwill is tested for impairment annually as of the first day of the fourth quarter, or more frequently if indicators of potential impairment exist. During the first quarter of 2020, as a result of significant declines in macroeconomic conditions and equity valuations, and the implementation of regulatory restrictions brought forth by the COVID-19 pandemic, and due to historically low head-room, the Company performed a quantitative goodwill impairment test for Americas components and eInfochips reporting units. While no impairment charge was recorded as a result of the Company's interim impairment test, the fair value of each of these two reporting units exceed their carrying value by less than 10% and remain at risk of impairment. As of the first day of the fourth quarter, the Company also performed its annual impairment test which did not result in any impairment of goodwill.

Auditing management's interim and annual impairment tests related to the Americas components and eInfochips reporting units was especially challenging due to the complexity of forecasting the long-term cash flows of these businesses and the significant estimation uncertainty of the assumptions included within such forecasts. The significant estimation uncertainty was primarily due to the sensitivity of the reporting units' fair value to changes in the underlying assumptions used in the income approach which include, among others, forecasted revenue, gross profit margins, operating income margins, forecasted working capital levels, and long-term growth and discount rates. These significant assumptions are inherently uncertain and require a high degree of estimation and judgment based on an evaluation of historical performance, current industry and global economic and geo-political conditions, and the timing and success of the Company's ability to implement strategic initiatives.

How We Addressed
the Matter in Our
Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's goodwill impairment review process, including controls over management's review of the significant assumptions described above and controls over management's review of its annual financial forecasts.

To test the estimated fair value of the Americas components and eInfochips reporting units, we performed audit procedures that included, among others, involving a specialist to assist in assessing the Company's fair value methodologies and its development and calculation of the long-term growth and discount rates. We assessed the reasonableness of the Company's assumptions around forecasted revenue, gross profit margins, operating income margins, forecasted working capital levels, long-term growth and discount rates, and tax rates by comparing those assumptions to recent historical performance, current economic and industry trends, and annual financial forecasts presented to the Board of Directors and communicated to external analysts. We also assessed the reasonableness of estimates included in the Company's annual financial forecast by evaluating how such assumptions compared to economic, industry, and peer expectations. We evaluated management's historical accuracy of forecasting revenues, gross profit margin, operating income margins, and capital expenditures by comparing past forecasts to subsequent actual activity. We performed various sensitivity analyses around these significant assumptions to understand the impact on the fair value calculation and focused our testing accordingly. We evaluated the Company's determination of its reporting units and tested the allocation of net assets to each its reporting units. We also tested the Company's reconciliation of the fair value of its reporting units to the Company's market value as of the impairment test dates.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1975.
Denver, Colorado
February 11, 2021

ARROW ELECTRONICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands except per share data)

	Years Ended December 31,		
	2020	2019	2018
Sales	\$ 28,673,363	\$ 28,916,847	\$ 29,676,768
Cost of sales	25,482,233	25,618,466	25,975,856
Gross profit	3,191,130	3,298,381	3,700,912
Operating expenses:			
Selling, general, and administrative expenses	2,087,050	2,191,612	2,303,051
Depreciation and amortization	189,058	189,790	186,384
Loss on disposition of businesses, net (Note 2)	—	21,252	3,604
Impairments (Notes 2 and 3)	7,223	698,246	—
Restructuring, integration, and other charges	13,288	89,785	60,361
	2,296,619	3,190,685	2,553,400
Operating income	894,511	107,696	1,147,512
Equity in (losses) of affiliated companies	(531)	(2,765)	(2,332)
Gain (loss) on investments, net	5,348	11,831	(14,166)
Employee benefit plan expense, net	(2,859)	(24,849)	(6,870)
Interest and other financing expense, net	(137,210)	(203,743)	(214,771)
Income (loss) before income taxes	759,259	(111,830)	909,373
Provision for income taxes	172,795	88,338	187,799
Consolidated net income (loss)	586,464	(200,168)	721,574
Noncontrolling interests	2,026	3,919	5,379
Net income (loss) attributable to shareholders	\$ 584,438	\$ (204,087)	\$ 716,195
Net income (loss) per share:			
Basic	\$ 7.49	\$ (2.44)	\$ 8.19
Diluted	\$ 7.43	\$ (2.44)	\$ 8.10
Weighted-average shares outstanding:			
Basic	77,992	83,568	87,476
Diluted	78,635	83,568	88,444

See accompanying notes.

ARROW ELECTRONICS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(In thousands)

	Years Ended December 31,		
	2020	2019	2018
Consolidated net income (loss)	\$ 586,464	\$ (200,168)	\$ 721,574
Other comprehensive income (loss):			
Foreign currency translation adjustment and other, net of taxes	185,952	19,948	(163,927)
Unrealized gain (loss) on foreign exchange contracts designated as net investment hedges, net of taxes	(13,488)	10,368	—
Unrealized gain (loss) on interest rate swaps designated as cash flow hedges, net of taxes	(9,000)	(7,787)	931
Employee benefit plan items, net of taxes	(2,864)	14,035	8,253
Other comprehensive income (loss)	160,600	36,564	(154,743)
Comprehensive income (loss)	747,064	(163,604)	566,831
Less: Comprehensive income attributable to noncontrolling interests	5,300	3,245	2,848
Comprehensive income (loss) attributable to shareholders	\$ 741,764	\$ (166,849)	\$ 563,983

See accompanying notes.

ARROW ELECTRONICS, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands except par value)

	December 31,	
	2020	2019
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 373,615	\$ 300,103
Accounts receivable, net	9,205,343	8,482,687
Inventories	3,287,308	3,477,120
Other current assets	286,633	266,249
Total current assets	13,152,899	12,526,159
Property, plant, and equipment, at cost:		
Land	7,940	7,793
Buildings and improvements	207,614	173,370
Machinery and equipment	1,553,371	1,481,525
	1,768,925	1,662,688
Less: Accumulated depreciation and amortization	(969,320)	(859,578)
Property, plant, and equipment, net	799,605	803,110
Investments in affiliated companies	76,358	86,942
Intangible assets, net	233,819	271,903
Goodwill	2,115,469	2,061,322
Other assets	675,761	651,360
Total assets	\$ 17,053,911	\$ 16,400,796
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	\$ 7,937,889	\$ 7,046,221
Accrued expenses	1,034,361	880,507
Short-term borrowings, including current portion of long-term debt	158,633	331,431
Total current liabilities	9,130,883	8,258,159
Long-term debt	2,097,940	2,640,129
Other liabilities	676,136	636,115
Commitments and contingencies (Notes 14 and 15)		
Equity:		
Shareholders' equity:		
Common stock, par value \$1:		
Authorized - 160,000 shares in both 2020 and 2019		
Issued - 125,424 shares in both 2020 and 2019	125,424	125,424
Capital in excess of par value	1,165,850	1,150,006
Treasury stock (50,581 and 44,804 shares in 2020 and 2019, respectively), at cost	(2,776,821)	(2,332,548)
Retained earnings	6,679,751	6,131,248
Accumulated other comprehensive loss	(104,885)	(262,211)
Total shareholders' equity	5,089,319	4,811,919
Noncontrolling interests	59,633	54,474
Total equity	5,148,952	4,866,393
Total liabilities and equity	\$ 17,053,911	\$ 16,400,796

See accompanying notes.

ARROW ELECTRONICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Years Ended December 31,		
	2020	2019	2018
Cash flows from operating activities:			
Consolidated net income (loss)	\$ 586,464	\$ (200,168)	\$ 721,574
Adjustments to reconcile consolidated net income (loss) to net cash provided by operations:			
Depreciation and amortization	189,058	189,790	186,384
Amortization of stock-based compensation	35,288	41,070	46,238
Equity in losses of affiliated companies	531	2,765	2,332
Deferred income taxes	29,713	(50,288)	1,236
Loss (gain) on investments, net	(5,333)	(11,462)	14,166
Loss on disposition of businesses, net	—	21,252	3,604
Pension settlement loss	—	20,111	1,665
Impairments	7,223	698,246	—
Other	5,059	10,659	9,198
Change in assets and liabilities, net of effects of acquired and disposed businesses:			
Accounts receivable, net	(541,427)	338,849	(1,007,308)
Inventories	244,325	383,058	(618,875)
Accounts payable	760,883	(521,575)	936,423
Accrued expenses	86,484	(27,475)	112,123
Other assets and liabilities	(38,425)	(36,837)	(136,070)
Net cash provided by operating activities	1,359,843	857,995	272,690
Cash flows from investing activities:			
Cash consideration paid for acquired businesses, net of cash acquired	—	—	(331,563)
Proceeds from (cash paid on) disposition of businesses	—	(13,094)	32,013
Acquisition of property, plant, and equipment	(123,585)	(143,191)	(135,336)
Proceeds from sale of property, plant, and equipment	—	—	5,421
Cash paid for customer relationship intangible asset	(713)	(7,616)	(20,000)
Other	(14,496)	(9,682)	(13,500)
Net cash used for investing activities	(138,794)	(173,583)	(462,965)
Cash flows from financing activities:			
Change in short-term and other borrowings	(95,017)	(113,923)	192,192
Proceeds from (repayments of) long-term bank borrowings, net	(411,497)	(405,007)	306,635
Redemption of notes	(209,366)	—	(300,000)
Proceeds from exercise of stock options	21,037	16,911	8,819
Repurchases of common stock	(483,735)	(404,203)	(243,305)
Settlement of forward-starting interest rate swap	(48,378)	—	—
Other	(141)	(147)	(1,174)
Net cash used for financing activities	(1,227,097)	(906,369)	(36,833)
Effect of exchange rate changes on cash	79,560	12,733	6,352
Net increase (decrease) in cash and cash equivalents	73,512	(209,224)	(220,756)
Cash and cash equivalents at beginning of year	300,103	509,327	730,083
Cash and cash equivalents at end of year	\$ 373,615	\$ 300,103	\$ 509,327

See accompanying notes.

ARROW ELECTRONICS, INC.
CONSOLIDATED STATEMENTS OF EQUITY
(In thousands)

	Common Stock at Par Value	Capital in Excess of Par Value	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests	Total
Balance at December 31, 2017	\$ 125,424	\$ 1,114,167	\$ (1,762,239)	\$ 5,596,786	\$ (124,883)	\$ 48,685	\$ 4,997,940
Effect of new accounting principles	—	—	—	22,354	(22,354)	—	—
Consolidated net income	—	—	—	716,195	—	5,379	721,574
Other comprehensive loss	—	—	—	—	(152,212)	(2,531)	(154,743)
Amortization of stock-based compensation	—	46,238	—	—	—	—	46,238
Shares issued for stock-based compensation awards	—	(24,471)	33,290	—	—	—	8,819
Repurchases of common stock	—	—	(243,305)	—	—	—	(243,305)
Distributions	—	—	—	—	—	(157)	(157)
Balance at December 31, 2018	125,424	1,135,934	(1,972,254)	6,335,335	(299,449)	51,376	5,376,366
Consolidated net income (loss)	—	—	—	(204,087)	—	3,919	(200,168)
Other comprehensive income (loss)	—	—	—	—	37,238	(674)	36,564
Amortization of stock-based compensation	—	41,070	—	—	—	—	41,070
Shares issued for stock-based compensation awards	—	(26,998)	43,909	—	—	—	16,911
Repurchases of common stock	—	—	(404,203)	—	—	—	(404,203)
Distributions	—	—	—	—	—	(147)	(147)
Balance at December 31, 2019	125,424	1,150,006	(2,332,548)	6,131,248	(262,211)	54,474	4,866,393
Effect of new accounting principles	—	—	—	(35,935)	—	—	(35,935)
Consolidated net income	—	—	—	584,438	—	2,026	586,464
Other comprehensive income	—	—	—	—	157,326	3,274	160,600
Amortization of stock-based compensation	—	35,288	—	—	—	—	35,288
Shares issued for stock-based compensation awards	—	(19,444)	40,481	—	—	—	21,037
Repurchases of common stock	—	—	(484,754)	—	—	—	(484,754)
Distributions	—	—	—	—	—	(141)	(141)
Balance at December 31, 2020	\$ 125,424	\$ 1,165,850	\$ (2,776,821)	\$ 6,679,751	\$ (104,885)	\$ 59,633	\$ 5,148,952

See accompanying notes.

ARROW ELECTRONICS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Dollars in thousands except per share data)

1. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements of Arrow Electronics, Inc. (the “company” or “Arrow”) include the accounts of the company, its majority-owned subsidiaries, and Arrow EMEA Funding Corp B.V. (see Note 5). All significant intercompany transactions are eliminated.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("GAAP") requires the company to make significant estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash equivalents consist of highly liquid investments, which are readily convertible into cash, with original maturities of three months or less.

Trade Accounts and Notes Receivable

Trade accounts and notes receivable are reported at amortized cost, net of the allowance for credit losses in the consolidated balance sheets. The allowance for credit losses is a valuation account that is deducted from the receivables' amortized cost basis to present the net amount expected to be collected. Receivables are written off against the allowance when management believes the receivable balance is confirmed to be uncollectible.

Management estimates the allowance for credit losses using relevant available information about expected credit losses and an age-based reserve model. Inputs to the model include information about historical credit losses, customer credit ratings, past events, current conditions, and reasonable and supportable forecasts. Adjustments to historical loss information are made for differences in current receivable-specific risk characteristics such as changes in the economic and industry environment, or other relevant factors.

Expected credit losses are estimated on a collective (pool) basis, when similar risk characteristics exist, based on customer credit ratings, which include both externally acquired as well as internally determined credit ratings. Receivables that do not share risk characteristics are evaluated on an individual basis.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined on a moving average cost basis, which approximates the first-in, first-out method. Substantially all inventories represent finished goods held for sale.

Property, Plant, and Equipment

Property, plant, and equipment are stated at cost. Depreciation is computed on the straight-line method over the estimated useful lives of the assets. The estimated useful lives for depreciation of buildings is generally 20 to 30 years, and the estimated useful lives of machinery and equipment is generally three to ten years. Leasehold improvements are amortized over the shorter of the term of the related lease or the life of the improvement. Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable. If the carrying value of the asset cannot be recovered from estimated future cash flows, undiscounted and without interest, the fair value of the asset is calculated using the present value of estimated net future cash flows. If the fair value is less than the carrying amount of the asset, a loss is recognized for the difference, subject to the limitation of individual asset fair values within the group.

Software Development Costs

The company capitalizes certain internal and external costs incurred to acquire or create internal-use software. Capitalized software costs are amortized on a straight-line basis over the estimated useful life of the software, which is generally three to twelve years. At December 31, 2020 and 2019, the company had unamortized software development costs of \$453,407 and \$501,190, respectively, which are included in "Machinery and equipment" in the company's consolidated balance sheets.

Identifiable Intangible Assets

Amortization of definite-lived intangible assets is computed on the straight-line method over the estimated useful lives of the assets. Identifiable intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable.

Investments

Investments are accounted for using the equity method if the investment provides the company the ability to exercise significant influence, but not control, over an investee. Significant influence is generally deemed to exist if the company has an ownership interest in the voting stock of the investee between 20% and 50%, although other factors, such as representation on the investee's Board of Directors, are considered in determining whether the equity method is appropriate. The company records its investments in equity method investees meeting these characteristics as "Investments in affiliated companies" in the company's consolidated balance sheets.

Equity investments which the company does not possess the ability to exercise significant influence, are measured at fair value, using quoted market prices, and are included in "Other assets" in the company's consolidated balance sheets. Changes in fair value are recorded in "Gain (Loss) on investments, net" in the company's consolidated statements of operations. During the year ended December 31, 2020, the company recorded a net gain on investments of \$5,348.

The company records equity investments that do not have readily determinable fair values at cost minus impairment, if any, plus or minus changes resulting from observable price changes.

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. The company tests goodwill for impairment annually as of the first day of the fourth quarter and/or when an event occurs or circumstances change such that it is more likely than not that an impairment may exist. Examples of such events and circumstances that the company would consider include the following:

- macroeconomic conditions such as deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets;
- industry and market considerations such as a deterioration in the environment in which the company operates, an increased competitive environment, a decline in market-dependent multiples or metrics (considered in both absolute terms and relative to peers), a change in the market for the company's products or services, or a regulatory or political development;
- cost factors such as increases in inventory, labor, or other costs that have a negative effect on earnings and cash flows;
- overall financial performance such as negative or declining cash flows or a decline in actual or planned revenue or earnings compared with actual and projected results of relevant prior periods;
- other relevant entity-specific events such as changes in management, key personnel, strategy, or customers, contemplation of bankruptcy, or litigation;
- events affecting a reporting unit such as a change in the composition or carrying amount of its net assets, a more likely than not expectation of selling or disposing all, or a portion, of a reporting unit, the testing for recoverability of a significant asset group within a reporting unit, or recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit; and
- a sustained decrease in share price (considered in both absolute terms and relative to peers).

Goodwill is tested at a level of reporting referred to as "the reporting unit." The company's reporting units are defined as each of the three regional businesses within the global components business segment, which are the Americas; Europe, the Middle East, and Africa ("EMEA"); and Asia-Pacific, each of the two regional businesses within the global ECS business segment, which are North America and EMEA, and eInfochips, which was acquired in 2018 and is part of the global components business segment.

An entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (that is, a likelihood of more than 50%) that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then the quantitative goodwill impairment test is unnecessary. The company has elected not to perform the qualitative assessment and performed the quantitative goodwill impairment test. The quantitative goodwill impairment test, used to identify both the existence of impairment and the amount of impairment loss, compares the fair value of a reporting unit with its carrying amount, including goodwill. If the carrying amount of the reporting unit is less than its fair value, no impairment exists. If the carrying amount of a reporting unit exceeds its fair value, an impairment loss shall be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit.

The company estimates the fair value of a reporting unit using the income approach. For the purposes of the income approach, fair value is determined based on the present value of estimated future cash flows, discounted at an appropriate risk-adjusted rate. The assumptions included in the income approach include forecasted revenues, gross profit margins, operating income margins, working capital cash flow, perpetual growth rates, income tax rates, and long-term discount rates, among others, all of which require significant judgments by management. Actual results may differ from those assumed in the company's forecasts. The company also reconciles its discounted cash flow analysis to its current market capitalization allowing for a reasonable control premium.

During the second quarter of 2019, the company recorded a goodwill impairment charge of \$509,000 and \$61,175 within the Americas components and Asia-Pacific components reporting units, respectively (see Note 3).

During the first quarter of 2020, as a result of significant declines in macroeconomic conditions and equity valuations, and the implementation of regulatory restrictions brought forth by the COVID-19 pandemic, and due to historically low head-room, the company determined that it was more likely than not that an impairment may exist within the Americas components and eInfochips reporting units. The company performed a quantitative goodwill impairment test for these reporting units and determined goodwill was not impaired (see Note 3).

While there is ongoing uncertainty related to COVID-19, the company has observed continued improvements in macroeconomic conditions and equity valuations, and market conditions related to our components business, along with improvements in working capital in certain reporting units. As of the first day of the fourth quarters of 2020, 2019, and 2018, the company's annual impairment testing did not indicate additional impairment at any of the company's reporting units.

A decline in general economic conditions or global equity valuations could impact the judgments and assumptions about the fair value of the company's businesses, and the company could be required to record an impairment charge in the future, which could impact the company's consolidated balance sheets, as well as the company's consolidated statements of operations. If the company was required to recognize an impairment charge in the future, the charge would not impact the company's consolidated cash flows, current liquidity, capital resources, and covenants under its existing revolving credit facility, North American asset securitization program, other outstanding borrowings, and EMEA asset securitization program.

As of December 31, 2020, the company has \$2,115,469 of goodwill, of which approximately \$607,315 and \$90,463 was allocated to the Americas and EMEA reporting units within the global components business segment, respectively, \$787,675 and \$432,819 was allocated to the North America and EMEA reporting units within the global ECS business segment, respectively, and \$197,197 was allocated to the eInfochips reporting unit. As of the date of the company's latest impairment test, the fair value of the EMEA components reporting unit, within the global components business segment, and the Americas ECS and EMEA ECS reporting units, within the global ECS business segment, exceeded their carrying values by more than 175%. The Americas components and eInfochips reporting units, within the global components business segment, exceeded their carrying values by less than 10% (see Note 3).

Leases

The company determines if a contract contains a lease at inception based on whether it conveys the right to control the use of an identified asset. Substantially all of the company's leases are classified as operating leases. The company records operating lease right-of-use assets within "Other assets" and lease liabilities are recorded within "Other liabilities" and "Accrued expenses" in the consolidated balance sheets. Lease expenses are recorded within "Selling, general, and administrative expenses" in the consolidated statements of operations. Operating lease payments are presented within "Operating cash flows" in the consolidated statements of cash flows.

Operating lease right-of-use assets and lease liabilities are recognized based on the net present value of future minimum lease payments over the lease term starting on the commencement date. The company generally is not able to determine the rate implicit in its leases and, as such, applies an incremental borrowing rate based on the company's cost of borrowing for the relevant terms of each lease. Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term. Lease terms may include an option to extend or terminate a lease if it is reasonably certain that the company will exercise such options. The company has elected the practical expedient to not separate lease components from non-lease components, and also has elected not to record a right-of-use asset or lease liability for leases which, at inception, have a term of twelve months or less. Variable lease payments are recognized in the period in which the obligation for those payments is incurred.

Foreign Currency Translation and Remeasurement

The assets and liabilities of international operations are translated at the exchange rates in effect at the balance sheet date. Revenue and expense accounts are translated at the monthly average exchange rates. Adjustments arising from the translation of the foreign currency financial statements of the company's international operations are reported as a component of "Accumulated other comprehensive loss" in the company's consolidated balance sheets.

For foreign currency remeasurement from each local currency into the appropriate functional currency, monetary assets and liabilities are remeasured to functional currencies using current exchange rates in effect at the balance sheet date. Gains or losses from these remeasurements were not significant and have been included in the company's consolidated statements of operations. Non-monetary assets and liabilities are recorded at historical exchange rates.

Income Taxes

Income taxes are accounted for under the liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of differences between the tax bases of assets and liabilities and their financial reporting amounts using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The carrying value of the company's deferred tax assets is dependent upon the company's ability to generate sufficient future taxable income in certain tax jurisdictions. Should the company determine that it is more likely than not that some portion or all of its deferred tax assets will not be realized, a valuation allowance to reduce the deferred tax assets is established in the period such determination is made. The assessment of the need for a valuation allowance requires considerable judgment on the part of management with respect to the benefits that could be realized from future taxable income, as well as other positive and negative factors.

It is also the company's policy to provide for uncertain tax positions and the related interest and penalties based upon management's assessment of whether a tax benefit is more likely than not to be sustained upon examination by tax authorities. To the extent the company prevails in matters for which a liability for an unrecognized tax benefit is established, or is required to pay amounts in excess of the liability, or when other facts and circumstances change, the company's effective tax rate in a given financial statement period may be materially affected.

Net Income (Loss) Per Share

Basic net income (loss) per share is computed by dividing net income (loss) attributable to shareholders by the weighted-average number of common shares outstanding for the period. Diluted net income (loss) per share reflects the potential dilution that would occur if securities or other contracts to issue common stock were exercised or converted into common stock.

Comprehensive Income (Loss)

Comprehensive income (loss) consists of consolidated net income (loss), foreign currency translation adjustment, unrealized gains or losses on post-retirement benefit plans, unrealized gains on foreign exchange contracts designated as net investment hedges, and unrealized gains and losses on interest rate swaps designated as cash flow hedges. Unrealized gains or losses on interest rate swaps, and foreign exchange contracts are net of any reclassification adjustments for realized gains or losses included in consolidated net income. Amounts related to net investment hedges that are excluded from the assessment of hedge effectiveness are amortized to "interest and other financing expenses, net" on a straight-line basis over the life of the hedging instrument. Foreign currency translation adjustments included in comprehensive income (loss) which are deemed permanent

investments in international affiliates were not tax effected. All other comprehensive income (loss) items are net of related income taxes.

Stock-Based Compensation

The company records share-based payment awards exchanged for employee services at fair value on the date of grant and expenses the awards in the consolidated statements of operations over the requisite employee service period. Stock-based compensation expense includes an estimate for forfeitures. Stock-based compensation expense related to awards with a market or performance condition which cliff vest, are recognized over the vesting period on a straight-line basis. Stock-based compensation awards with service conditions only are also recognized on a straight-line basis.

Segment Reporting

Operating segments are defined as components of an enterprise for which separate financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The company's operations are classified into two reportable business segments: global components and global ECS.

Revenue Recognition

The company recognizes revenue as control of products is transferred to customers, which generally happens at the point of shipment. Sales are recorded net of discounts, rebates, and returns, which historically have not been material. The company allows its customers to return product for exchange or credit in limited circumstances. A liability is recorded at the time of sale for estimated product returns based upon historical experience. The company also provides volume rebates and other discounts to certain customers which are considered variable consideration. A provision for customer rebates and other discounts is recorded as a reduction of revenue at the time of sale based on an evaluation of the contract terms and historical experience. Tariffs are included in sales as the company has enforceable rights to additional consideration to cover the cost of tariffs. Other taxes imposed by governmental authorities on the company's revenue producing activities with customers, such as sales taxes and value added taxes, are excluded from net sales.

Products sold by the company are generally delivered via shipment from the company's facilities, drop shipment directly from the vendor, or by electronic delivery of keys for software products. A portion of the company's business involves shipments directly from its suppliers to its customers, in these transactions, the company is generally responsible for negotiating price both with the supplier and customer, payment to the supplier, establishing payment terms with the customer, product returns, and has risk of loss if the customer does not make payment. As the principal with the customer, the company recognizes revenue upon receiving notification from the supplier that the product was shipped.

The company has contracts with certain customers where the company's performance obligation is to arrange for the products or services to be provided by another party. In these arrangements, as the company assumes an agency relationship in the transaction, revenue is recognized in the amount of the net fee associated with serving as an agent. These arrangements relate to the sale of supplier service contracts to customers where the company has no future obligation to perform under these contracts or the rendering of logistics services for the delivery of inventory for which the company does not assume the risks and rewards of ownership.

No single customer accounted for more than 2% of the company's 2020 consolidated sales. One supplier accounted for approximately 14% of the company's consolidated sales in 2020. No other single supplier accounted for more than 7% of the company's consolidated sales in 2020. The company believes that many of the products it sells are available from other sources at competitive prices. However, certain parts of the company's business, such as the company's global ECS business segment, rely on a limited number of suppliers with the strategy of providing focused support, extensive product knowledge, and customized service to suppliers, MSPs, and VARs. Most of the company's purchases are pursuant to distributor agreements, which are typically non-exclusive and cancelable by either party at any time or on short notice.

Shipping and Handling Costs

The company reports shipping and handling costs, primarily related to outbound freight, in the consolidated statements of operations as a component of selling, general, and administrative expenses. Shipping and handling costs included in selling, general, and administrative expenses totaled \$95,634, \$97,227, and \$103,553 in 2020, 2019, and 2018, respectively.

Vendor Programs

The company participates in supplier programs that provide for price protection, product rebates, marketing/promotional allowances, and other incentives. The consideration received under these programs is recorded in the consolidated statements of operations as an adjustment to cost of goods sold or selling, general, and administrative expenses, according to the nature of the activity and terms of the vendor program. Incentives are accrued as they are earned based on sales of qualifying products or as services are provided in accordance with the terms of the related program.

Impact of Recently Issued Accounting Standards

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-04, *Reference Rate Reform (Topic 848) Facilitation of the Effects of Reference Rate Reform on Financial Reporting* ("ASU No. 2020-04"). ASU No. 2020-04 provides optional expedients and exceptions for applying GAAP to contract modifications and hedging relationships, subject to meeting certain criteria, that reference LIBOR or another rate that is expected to be discontinued. In January 2021, the FASB issued ASU No. 2021-01, *Reference Rate Reform (Topic 848)*. This ASU provides supplemental guidance and clarification to ASU No. 2020-04, and these updates must be adopted concurrently, cumulatively referred to as "Topic 848." The amendments in Topic 848 are effective for all entities as of March 12, 2020 through December 31, 2022. The company adopted the provisions of Topic 848 on a prospective basis in March 2020, and the adoption had no impact on the consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses* ("Topic 326"). Topic 326 revises the methodology for measuring credit losses on financial instruments and the timing of when such losses are recorded. On January 1, 2020, the company adopted Topic 326 using a modified retrospective approach with a cumulative effect adjustment to the opening balance of retained earnings, which increased the allowance for credit losses by \$47,011 (\$35,935 net of tax). Increases in the allowance for credit losses relate to the required change from an incurred loss model to an expected loss model, and the related change in timing of loss recognition where an allowance for credit losses is now applied to all receivables, at a rate dependent on the credit characteristics of the collective pool each customer is in. Refer to Note 5.

Reclassification

Certain prior period amounts were reclassified to conform to the current period presentation. These reclassifications did not have a material impact on previously reported amounts.

2. Impairment of Long-Lived Assets and Loss on Disposition of Businesses

During the second quarter of 2019, the company committed to a plan to close its personal computer and mobility asset disposition business within the global components business segment. In light of the plan, the company performed an impairment analysis of the long-lived assets of the personal computer and mobility asset disposition business in accordance with Accounting Standards Codification ("ASC") topic 360 and recorded a pre-tax impairment charge of \$74,908 to write-down certain assets of the personal computer and mobility asset disposition business to estimated fair value in the second quarter of 2019.

During 2019, the company completed the disposition of three foreign subsidiaries related to the personal computer and mobility asset disposition business. As a result of the disposition, the company recognized a loss on disposition of business, net, of \$19,384, primarily related to the reclassification of cumulative translation adjustment to earnings upon the sale.

3. Goodwill and Intangible Assets

Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. The company tests goodwill and other indefinite-lived intangible assets for impairment annually as of the first day of the fourth quarter, or more frequently if indicators of potential impairment exist.

Goodwill of companies acquired, allocated to the company's business segments, is as follows:

	Global Components	Global ECS	Total
Balance as of December 31, 2018 (a)	\$ 1,437,501	\$ 1,187,189	\$ 2,624,690
Impairments and dispositions	(570,175)	(1,386)	(571,561)
Foreign currency translation adjustment	16,170	(7,977)	8,193
Balance as of December 31, 2019 (b)	\$ 883,496	\$ 1,177,826	\$ 2,061,322
Foreign currency translation adjustment	11,479	42,668	54,147
Balance as of December 31, 2020 (b)	\$ 894,975	\$ 1,220,494	\$ 2,115,469

- (a) The total carrying value of goodwill of companies acquired as of December 31, 2018 in the table above is reflected net of \$1,018,780 of accumulated impairment charges, of which \$716,925 was recorded in the global components business segment and \$301,855 was recorded in the global ECS business segment.
- (b) The total carrying value of goodwill of companies acquired as of December 31, 2020 and December 31, 2019 in the table above is reflected net of \$1,588,955 of accumulated impairment charges, of which \$1,287,100 was recorded in the global components business segment and \$301,855 was recorded in the global ECS business segment.

As of the first day of the fourth quarters of 2020, 2019, and 2018, the company's annual impairment testing did not result in any additional impairment of goodwill of companies acquired.

During the first quarter of 2020, as a result of significant declines in macroeconomic conditions and equity valuations, and the implementation of regulatory restrictions brought forth by the COVID-19 pandemic, and due to historically low head-room, the company determined that it was more likely than not that an impairment may exist within the Americas components and eInfochips reporting units. The company performed a quantitative goodwill impairment test for these reporting units and determined goodwill was not impaired.

During the second quarter of 2019, as a result of the company's downward revision of forecasted future earnings and the decision to wind down the company's personal computer and mobility asset disposition business, the company determined that it was more likely than not that an impairment may exist within the Americas components and Asia-Pacific components reporting units. The company evaluated its other four reporting units and concluded an interim impairment analysis was not required based on the results of those reporting units and historical levels of headroom in each of those reporting units. The interim goodwill impairment analysis resulted in a partial goodwill impairment charge of \$509,000 (\$457,806 net of tax) with approximately \$600,000 of goodwill remaining within the Americas components reporting unit and a full impairment charge of \$61,175 (\$61,175 net of tax) within the Asia-Pacific components reporting unit.

Intangible assets, net, are comprised of the following as of December 31, 2020:

	Weighted- Average Life	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	12 years	\$ 335,027	\$ (157,151)	\$ 177,876
Amortizable trade name	8 years	74,008	(18,065)	55,943
		<u>\$ 409,035</u>	<u>\$ (175,216)</u>	<u>\$ 233,819</u>

Intangible assets, net, are comprised of the following as of December 31, 2019:

	Weighted- Average Life	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	12 years	\$ 354,305	\$ (148,632)	\$ 205,673
Amortizable trade name	8 years	76,407	(10,177)	66,230
		<u>\$ 430,712</u>	<u>\$ (158,809)</u>	<u>\$ 271,903</u>

During the second quarter of 2019, the company initiated actions to further integrate two global components businesses. These businesses held indefinite-lived trade names with a carrying value of \$101,000. As a result of the company's decision to integrate these brands, we determined the useful lives of the trade names were no longer indefinite. Subsequent to the second quarter of 2019, the company began amortizing these trade names over their estimated remaining useful lives. The trade names were tested for impairment during the second quarter of 2019 as a result of the change in estimated useful lives. The company estimated the fair value of the trade names to be \$55,000 using the relief from royalty method and recorded a non-cash impairment charge of \$46,000 (\$34,653 net of tax). The drivers of the impairment were primarily due to the shortened useful lives of the asset and a decline of the forecasted revenues attributable to the trade names as integration to the Arrow brand occurs over the estimated remaining useful lives.

In December 2018, the company completed an asset acquisition of a \$20,000 customer relationship intangible asset with an assigned useful life of 10 years. The intangible asset is included in the company's global components business segment.

Amortization expense related to identifiable intangible assets was \$38,417, \$48,097, and \$49,356 for the years ended December 31, 2020, 2019, and 2018, respectively. Amortization expense for each of the years 2021 through 2025 is estimated to be approximately \$37,288, \$35,830, \$31,833, \$30,095, and \$20,525, respectively.

4. Investments in Affiliated Companies

The company owns a 50% interest in each of the two joint ventures with Marubun Corporation (collectively "Marubun/Arrow") and a 50% interest in one other joint venture. These investments are accounted for using the equity method.

The following table presents the company's investment in the following joint ventures at December 31:

	2020	2019
Marubun/Arrow	\$ 65,943	\$ 76,574
Other	10,415	10,368
	<u>\$ 76,358</u>	<u>\$ 86,942</u>

The equity in earnings (losses) of affiliated companies for the years ended December 31 consists of the following:

	2020	2019	2018
Marubun/Arrow	\$ (726)	\$ 3,066	\$ 5,543
Other	195	(5,831)	(7,875)
	<u>\$ (531)</u>	<u>\$ (2,765)</u>	<u>\$ (2,332)</u>

Under the terms of various joint venture agreements, the company is required to pay its pro-rata share of the third party debt of the joint ventures in the event that the joint ventures are unable to meet their obligations. There were no outstanding borrowings under the third party debt agreements of the joint ventures as of December 31, 2020. The company's pro-rata share of this debt was approximately \$1,700 at December 31, 2019. The company believes there is sufficient equity in each of the joint ventures to meet the obligations.

5. Accounts Receivable

Accounts receivable, net, consists of the following at December 31:

	2020	2019
Accounts receivable	\$ 9,298,135	\$ 8,552,120
Allowances for doubtful accounts	(92,792)	(69,433)
Accounts receivable, net	<u>\$ 9,205,343</u>	<u>\$ 8,482,687</u>

Allowances for doubtful accounts consists of the following:

Balance at December 31, 2019	\$ 69,433
Effect of adoption of ASU No. 2016-13 (Note 1)	47,011
Charged to income	26,942
Translation Adjustments	510
Writeoffs	(51,104)
Balance at December 31, 2020	<u>\$ 92,792</u>

The company has considered the current credit condition of its customers in estimating the expected credit losses and has not experienced significant changes in customers' payment trends or significant deterioration in customers' credit risk as of December 31, 2020. The global economic impact from COVID-19 may adversely affect the credit condition of some of our customers. The impact of COVID-19 on our customers' credit condition is highly uncertain and will largely depend on the outcome of future events that are outside of our control, which could cause credit losses to increase.

During the first quarter of 2020, the company entered into an EMEA (Europe, the Middle East, and Africa) asset securitization program under which it will continuously sell its interest in designated pools of trade accounts receivables of certain of its subsidiaries in the EMEA region, at a discount, to a special purpose entity, which in turn sells certain of the receivables to unaffiliated financial institutions and conduits administered by such unaffiliated financial institutions ("unaffiliated financial institutions") on a monthly basis. The company may sell up to €400,000 under the EMEA asset securitization program, which matures in January 2023, subject to extension in accordance with its terms. The program is conducted through Arrow EMEA Funding Corp B.V., an entity structured to be bankruptcy remote. The company is deemed the primary beneficiary of Arrow EMEA Funding Corp B.V. as the company has both the power to direct the activities that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive the benefits that could potentially be significant to the entity from the transfer of the trade accounts receivables into the special purpose entity. Accordingly, Arrow EMEA Funding Corp B.V. is included in the company's consolidated financial statements.

Receivables sold to unaffiliated financial institutions under the program are excluded from "Accounts receivable, net" on the company's consolidated balance sheets and cash receipts are reflected as cash provided by operating activities on the consolidated statements of cash flows. The purchase price is paid in cash when the receivables are sold. Certain unsold receivables held on Arrow EMEA Funding Corp B.V. are pledged as collateral to unaffiliated financial institutions. These unsold receivables are included in "Accounts receivable, net" in the company's consolidated balance sheets.

The company continues servicing the receivables which were sold and in exchange receives a servicing fee under the program. The company does not record a servicing asset or liability on the company's consolidated balance sheets as the company estimates that the fee it receives to service these receivables approximates the fair market compensation to provide the servicing activities.

During 2020, the company sold approximately €1,721,202, or \$1,936,089, of accounts receivables to unaffiliated financial institutions under the EMEA asset securitization program. There were €323,623, or \$397,914, of receivables sold to unaffiliated financial institutions that were uncollected as of December 31, 2020. Total collateralized accounts receivables of approximately €448,814, or \$551,843, were held by Arrow EMEA Funding Corp B.V. at December 31, 2020. Any accounts receivables held by Arrow EMEA Funding Corp B.V. would likely not be available to other creditors of the company in the event of bankruptcy or insolvency proceedings if there are outstanding balances under the EMEA asset securitization program. The assets of the special purpose entity cannot be used by the company for general corporate purposes. Additionally, the financial obligations of Arrow EMEA Funding Corp B.V. to the unaffiliated financial institution under the program are limited to the assets it owns and there is no recourse to the Arrow Electronics, Inc. for receivables that are uncollectible as a result of the insolvency or inability to pay of the account debtors.

The EMEA asset securitization program includes terms and conditions that limit the incurrence of additional borrowings and require that certain financial ratios be maintained at designated levels. As of December 31, 2020, the company was in compliance with all such financial covenants.

6. Debt

Short-term borrowings, including current portion of long-term debt, consists of the following at December 31:

	2020	2019
6.00% notes, due 2020	\$ —	\$ 209,322
5.125% notes, due March 2021	130,836	—
Borrowings on lines of credit	—	60,000
Other short-term borrowings	27,797	62,109
	<u>\$ 158,633</u>	<u>\$ 331,431</u>

Other short-term borrowings are primarily utilized to support working capital requirements. The weighted-average interest rate on these borrowings was 1.73% and 2.76% at December 31, 2020 and 2019, respectively.

The company has \$200,000 in uncommitted lines of credit. There were no outstanding borrowings under the uncommitted lines of credit at December 31, 2020. There were \$60,000 of outstanding borrowings under the uncommitted lines of credit at December 31, 2019. These borrowings were provided on a short-term basis and the maturity is agreed upon between the company and the lender. The lines had a weighted-average effective interest rate of 1.53% and 2.61% at December 31, 2020, and December 31, 2019, respectively.

The company has a commercial paper program and the maximum aggregate balance of commercial paper outstanding may not exceed the borrowing capacity of \$1,200,000. The company had no outstanding borrowings under this program as of December 31, 2020 and 2019. The program had a weighted-average effective interest rate of 0.30% and 2.24% at December 31, 2020, and December 31, 2019, respectively.

Long-term debt consists of the following at December 31:

	2020	2019
North American asset securitization program	\$ —	\$ 400,000
Revolving credit facility	—	10,000
5.125% notes, due 2021	—	130,691
3.50% notes, due 2022	348,918	348,088
4.50% notes, due 2023	298,701	298,148
3.25% notes, due 2024	496,034	495,045
4.00% notes, due 2025	346,999	346,368
7.50% senior debentures, due 2027	109,939	109,857
3.875% notes, due 2028	495,223	494,648
Other obligations with various interest rates and due dates	2,126	7,284
	<u>\$ 2,097,940</u>	<u>\$ 2,640,129</u>

The 7.50% senior debentures are not redeemable prior to their maturity. All other notes may be called at the option of the company subject to “make whole” clauses.

The estimated fair market value of long-term debt at December 31, using quoted market prices, is as follows:

	2020	2019
3.50% notes, due 2022	\$ 360,500	\$ 358,500
4.50% notes, due 2023	321,500	316,000
3.25% notes, due 2024	540,500	515,500
4.00% notes, due 2025	383,000	367,000
7.50% senior debentures, due 2027	140,000	135,000
3.875% notes, due 2028	564,000	516,500

The carrying amount of the company's short-term borrowings in various countries, revolving credit facility, 5.125% notes due March 2021, North American asset securitization program, commercial paper, and other obligations approximate their fair value.

The company has a \$2,000,000 revolving credit facility maturing in December 2023. This facility may be used by the company for general corporate purposes including working capital in the ordinary course of business, letters of credit, repayment, prepayment or purchase of long-term indebtedness, acquisitions, and as support for the company's commercial paper program, as applicable. Interest on borrowings under the revolving credit facility is calculated using a base rate or a Eurocurrency rate plus a spread (1.18% at December 31, 2020), which is based on the company's credit ratings, or an effective interest rate of 1.26% at December 31, 2020. The facility fee, which is based on the company's credit ratings, was .20% of the total borrowing capacity at December 31, 2020. The company had no outstanding borrowings under the revolving credit facility at December 31, 2020 and \$10,000 in outstanding borrowings under the revolving credit facility at December 31, 2019.

The company has a North American asset securitization program collateralized by accounts receivable of certain of its subsidiaries. The company may borrow up to \$1,200,000 under the program, which matures in June 2021. The company has the intent and ability to refinance the North American asset securitization program on a long-term basis and intends to refinance the program in 2021 prior to the maturity date. The program is conducted through Arrow Electronics Funding Corporation ("AFC"), a wholly-owned, bankruptcy remote subsidiary. The North American asset securitization program does not qualify for sale treatment. Accordingly, the accounts receivable and related debt obligation remain on the company's consolidated balance sheets. Interest on borrowings is calculated using a base rate or a commercial paper rate plus a spread (.40% at December 31, 2020), or an effective interest rate of .56% at December 31, 2020. The facility fee is .40% of the total borrowing capacity.

At December 31, 2020, the company had no outstanding borrowings under the North American asset securitization program. At December 31, 2019, the company had \$400,000 in outstanding borrowings under the North American asset securitization program, which was included in "Long-term debt" in the company's consolidated balance sheets. Total collateralized accounts receivable of approximately \$2,207,700 and \$2,217,800 were held by AFC and were included in "Accounts receivable, net" in the company's consolidated balance sheets at December 31, 2020 and 2019, respectively. Any accounts receivable held by AFC would likely not be available to other creditors of the company in the event of bankruptcy or insolvency proceedings before repayment of any outstanding borrowings under the North American asset securitization program.

Both the revolving credit facility and North American asset securitization program include terms and conditions that limit the incurrence of additional borrowings and require that certain financial ratios be maintained at designated levels. As of December 31, 2020, the company was in compliance with all such financial covenants.

During April 2020, the company repaid \$209,366 principal amount of its 6.00% notes due April 2020.

During March 2018, the company redeemed \$300,000 principal amount of its 3.00% notes due March 2018.

In the normal course of business, certain of the company's subsidiaries have agreements to sell, without recourse, selected trade receivables to financial institutions. The company does not retain financial or legal interests in these receivables, and, accordingly they are accounted for as sales of the related receivables and the receivables are removed from the company's consolidated balance sheets.

Annual payments of borrowings during each of the years 2021 through 2025 are \$158,633, \$350,491, \$299,049, \$496,220, and \$347,018, respectively, and \$605,162 for all years thereafter.

Interest and other financing expense, net, includes interest and dividend income of \$22,568, \$54,815, and \$47,860 in 2020, 2019, and 2018, respectively. Interest paid, net of interest and dividend income, amounted to \$138,303, \$209,512, and \$213,913 in 2020, 2019, and 2018, respectively.

7. Financial Instruments Measured at Fair Value

Fair value is defined as 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 on the measurement date. The company utilizes a fair value hierarchy, which maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. The fair value hierarchy has three levels of inputs that may be used to measure fair value:

- Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2 Quoted prices in markets that are not active; or other inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability.
- Level 3 Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable.

The following table presents assets (liabilities) measured at fair value on a recurring basis at December 31, 2020:

	Balance Sheet Location	Level 1	Level 2	Level 3	Total
Cash equivalents (a)	Cash and cash equivalents/ other assets	\$ 6,062	\$ —	\$ —	\$ 6,062
Equity investments (b)	Other assets	45,879	—	—	45,879
Interest rate swaps designated as cash flow hedges	Other assets	—	20,983	—	20,983
Foreign exchange contracts designated as net investment hedges	Other assets	—	12,760	—	12,760
		<u>\$ 51,941</u>	<u>\$ 33,743</u>	<u>\$ —</u>	<u>\$ 85,684</u>

The following table presents assets (liabilities) measured at fair value on a recurring basis at December 31, 2019:

	Balance Sheet Location	Level 1	Level 2	Level 3	Total
Cash equivalents (a)	Cash and cash equivalents/ other assets	\$ 18,579	\$ —	\$ —	\$ 18,579
Equity investments (b)	Other assets	44,677	—	—	44,677
Interest rate swaps designated as cash flow hedges	Other liabilities	—	(11,574)	—	(11,574)
Foreign exchange contracts designated as net investment hedges	Other assets	—	21,718	—	21,718
		<u>\$ 63,256</u>	<u>\$ 10,144</u>	<u>\$ —</u>	<u>\$ 73,400</u>

- (a) Cash equivalents include highly liquid investments with an original maturity of less than three months.
- (b) The company has an 8.4% equity ownership interest in Marubun Corporation and a portfolio of mutual funds with quoted market prices. During 2020, 2019, and 2018 the company recorded unrealized gains (losses) of \$(239), \$4,204, and \$(13,854), respectively, on equity securities held at the end of each year.

Assets and liabilities that are measured at fair value on a nonrecurring basis relate primarily to goodwill, identifiable intangible assets, and long-lived assets (see Notes 2 and 3). The company tests these assets for impairment if indicators of potential impairment exist or at least annually if indefinite lived.

Derivative Instruments

The company uses various financial instruments, including derivative instruments, for purposes other than trading. Certain derivative instruments are designated at inception as hedges and measured for effectiveness both at inception and on an ongoing basis. Derivative instruments not designated as hedges are marked-to-market each reporting period with any unrealized gains or losses recognized in earnings.

Interest Rate Swaps

The company manages the risk of variability in interest rates of future expected debt issuances by entering into various forward starting interest rate swaps, designated as cash flow hedges. Changes in fair value of interest rate swaps are recorded in the shareholders' equity section in the company's consolidated balance sheets in "Accumulated other comprehensive loss" and will be reclassified into income over the life of the anticipated debt issuance or in the period the hedged forecasted cash flows are deemed no longer probable to occur. Gains and losses on interest rate swaps are recorded within the line item "Interest and other financing expense, net" in the consolidated statements of operations. The fair value of interest rate swaps are estimated using a discounted cash flow analysis on the expected cash flows of each derivative using observable inputs including interest rate curves and credit spreads.

At December 31, 2020 the company had the following outstanding interest rate swaps designated as cash flow hedges:

Trade Date	Maturity Date	Notional Amount	Weighted Average Interest Rate	Date Range of Forecasted Transaction
April 2020	December 2024	\$300,000	0.97%	Jan 2023 - Dec 2025
May 2020	June 2022	\$300,000	0.90%	Jan 2021 - Jun 2023

At December 31, 2019 the company had the following outstanding interest rate swaps designated as cash flow hedges:

Trade Date	Maturity Date	Notional Amount	Weighted Average Interest Rate	Date Range of Forecasted Transaction
May 2019	June 2020	\$300,000	2.33%	Sep 2019 - Jun 2020

In May 2019, the company entered into a series of ten-year forward-starting interest rate swaps (the "2019 swaps"). The 2019 swaps were designated as cash flow hedges managing the risk of variability in interest rates of future expected debt issuance by June 2020. In February 2020, the company determined that certain of the forecasted cash flows were no longer probable and de-designated the hedging relationship. In February 2020, the company re-designated the 2019 swaps in a new cash flow hedge managing the risk of variability in interest rates of future expected debt issuance by June 2023. In May 2020, the company terminated the 2019 swaps for a cash payment of \$48,378, which is reported in the "cash flows from financing activities" section of the consolidated statements of cash flows. During the year ended December 31, 2020, losses of \$2,616, before taxes, were reclassified from "Accumulated other comprehensive loss" ("AOCI") to "Interest and other financing expense, net" related to forecasted cash flows that were deemed no longer probable to occur. At December 31, 2020 losses of \$34,751, net of taxes, remained in AOCI related to the May 2019 swaps.

Foreign Exchange Contracts

The company's foreign currency exposure relates primarily to international transactions where the currency collected from customers can be different from the currency used to purchase the product. The company's transactions in its foreign operations are denominated primarily in the following currencies: Euro, Indian Rupee, Chinese Renminbi, Canadian Dollar, and British Pound. The company enters into foreign exchange forward, option, or swap contracts (collectively, the "foreign exchange contracts") to facilitate the hedging of foreign currency exposures resulting from inventory purchases and sales and mitigate the impact of changes in foreign currency exchange rates related to these transactions. Foreign exchange contracts generally have terms of no more than six months. Gains or losses on these contracts are deferred and recognized when the underlying future purchase or sale is recognized or when the corresponding asset or liability is revalued. The company does not enter into foreign exchange contracts for trading purposes. The risk of loss on a foreign exchange contract is the risk of nonperformance by the counterparties, which the company minimizes by limiting its counterparties to major financial institutions. The fair value of the foreign exchange contracts are estimated using foreign currency spot rates and forward rates quotes by third party financial institutions. The notional amount of the foreign exchange contracts inclusive of foreign exchange contracts designated as a net investment hedge at December 31, 2020 and 2019 was \$914,930 and \$929,966, respectively.

Gains and losses related to non-designated foreign currency exchange contracts are recorded in "Cost of sales" in the company's consolidated statements of operations. Gains and losses related to foreign currency exchange contracts designated as cash flow hedges are recorded in "Cost of sales," "Selling, general, and administrative expenses," and "Interest and other financing expense, net" based upon the nature of the underlying hedged transaction, in the company's consolidated statements of operations.

During the first quarter of 2019, the company entered into a series of foreign exchange contracts to sell Euro and buy United States Dollars, with various maturity dates as noted in the table below:

Maturity Date	Notional Amount
March 2023	EUR 50,000
September 2024	EUR 50,000
April 2025	EUR 100,000
January 2028	EUR 100,000
Total	EUR 300,000

The contracts above have been designated as a net investment hedge which is in place to hedge a portion of the company's net investment in subsidiaries with euro-denominated net assets. The change in the fair value of derivatives designated as net investment hedges are recorded in "foreign currency translation adjustment" ("CTA") within "Accumulated other comprehensive loss" in the company's consolidated balance sheets. Amounts excluded from the assessment of hedge effectiveness are included in "Interest and other financing expense, net" in the company's consolidated statements of operations.

The effects of derivative instruments on the company's consolidated statements of operations and other comprehensive income are as follows for the years ended December 31:

	Income Statement Line	2020	2019	2018
Gain (Loss) Recognized in Income (Loss)				
Foreign exchange contracts, net investment hedge (a)	Interest Expense	\$ 8,805	\$ 8,068	\$ —
Interest rate swaps, cash flow hedge	Interest Expense	(3,979)	(1,298)	(1,236)
Total		\$ 4,826	\$ 6,770	\$ (1,236)
Gain (Loss) Recognized in Other Comprehensive Income (Loss) before reclassifications, net of tax				
Foreign exchange contracts, net investment hedge (b)		\$ (6,802)	\$ 16,489	\$ —
Interest rate swaps, cash flow hedge		(12,023)	(8,767)	—
Total		\$ (18,825)	\$ 7,722	\$ —

(a) Represents derivative amounts excluded from the assessment of effectiveness for the net investment hedges reclassified from CTA to Interest and other financing expenses, net.

(b) Includes derivative gains (losses) excluded from the assessment of effectiveness for the net investment hedges and recognized in other comprehensive income (net of tax) of \$17,991 and \$10,734 for 2020 and 2019, respectively.

Other

The carrying amount of cash and cash equivalents, accounts receivable, net, and accounts payable approximate their fair value due to the short maturities of these financial instruments.

8. Income Taxes

The provision for income taxes for the years ended December 31 consists of the following:

	2020	2019	2018
Current:			
Federal	\$ 5,085	\$ 3,887	\$ (12,345)
State	7,114	(69)	20,141
International	130,883	134,808	178,767
	<u>\$ 143,082</u>	<u>\$ 138,626</u>	<u>\$ 186,563</u>
Deferred:			
Federal	\$ 13,496	\$ (54,356)	\$ 19,207
State	4,603	(2,710)	312
International	11,614	6,778	(18,283)
	<u>29,713</u>	<u>(50,288)</u>	<u>1,236</u>
	<u>\$ 172,795</u>	<u>\$ 88,338</u>	<u>\$ 187,799</u>

The principal causes of the difference between the U.S. federal statutory tax rate of 21% and effective income tax rates for the years ended December 31 are as follows:

	2020	2019	2018
United States	\$ 104,637	\$ (557,592)	\$ 186,677
International	654,622	445,762	722,696
Income (loss) before income taxes	<u>\$ 759,259</u>	<u>\$ (111,830)</u>	<u>\$ 909,373</u>
Provision (benefit) at statutory tax rate	\$ 159,444	\$ (23,484)	\$ 190,968
State taxes (benefit), net of federal benefit	10,218	(2,051)	16,166
International effective tax rate differential	3,112	17,474	7,480
U.S. tax on foreign earnings	5,316	26,013	—
Tax expense (benefit) on wind down of business (a)	1,937	(11,311)	—
Capital loss	—	—	(60,757)
Change in valuation allowance	2,906	1,305	66,557
Other non-deductible expenses	2,600	1,585	14,128
Changes in tax accruals	3,089	10,418	(3,968)
Tax credits	(16,075)	(3,034)	(7,884)
Non-deductible portion of impairment of goodwill	—	75,900	—
Tax Act's transition tax (b)	—	—	(28,323)
Other	248	(4,477)	(6,568)
Provision for income taxes	<u>\$ 172,795</u>	<u>\$ 88,338</u>	<u>\$ 187,799</u>

- (a) The wind down of the company's personal computer and mobility asset disposition business resulted in net tax expense (benefit) of \$1,937 and \$(11,311) during 2020 and 2019, respectively.
- (b) For the year ended December 31, 2018, the company recorded a \$28,323 benefit upon finalizing its analysis of the impact from the Tax Act.

With the effective date of January 1, 2018, the Tax Act introduced a provision to tax global intangible low-taxed income ("GILTI") of foreign subsidiaries. The company generated federal GILTI tax in the amount of \$233 and \$31,042 during 2020 and 2019, respectively. The 2019 GILTI tax was adversely affected by losses from the wind down of the personal computer and mobility asset disposition business. The company elected to account for GILTI tax as a current period cost.

As of December 31, 2020, a long-term tax payable of \$30,857 was recorded in "other liabilities" in the consolidated balance sheets related to the Tax Act's one-time transition tax on the foreign subsidiaries' accumulated, unremitted earnings.

At December 31, 2020, the company had a liability for unrecognized tax position of \$62,203. The timing of the resolution of these uncertain tax positions is dependent on the tax authorities' income tax examination processes. Material changes are not expected, however, it is possible that the amount of unrecognized tax benefits with respect to uncertain tax positions could increase or decrease during 2021. Currently, the company is unable to make a reasonable estimate of when tax cash settlement would occur and how it would impact the effective tax rate.

A reconciliation of the beginning and ending amount of unrecognized tax benefits for the years ended December 31 is as follows:

	2020	2019	2018
Balance at beginning of year	\$ 52,986	\$ 35,879	\$ 24,361
Additions based on tax positions taken during a prior period	8,574	13,018	583
Reductions based on tax positions taken during a prior period	(1,749)	(86)	(1,248)
Additions related to positions taken upon finalization of Tax Act during the current period	—	—	16,506
Additions based on tax positions taken during the current period	5,174	8,926	3,133
Reductions based on tax positions taken during the current period	(831)	(259)	(233)
Reductions related to settlement of tax matters	(538)	—	(136)
Reductions related to a lapse of applicable statute of limitations	(1,413)	(4,492)	(7,087)
Balance at end of year	<u>\$ 62,203</u>	<u>\$ 52,986</u>	<u>\$ 35,879</u>

Interest costs related to unrecognized tax benefits are classified as a component of “Interest and other financing expense, net” in the company's consolidated statements of operations. In 2020, 2019, and 2018, the company recognized \$1,862, \$1,469, and \$945, respectively, of interest expense related to unrecognized tax benefits. At December 31, 2020 and 2019, the company had accrued a liability of \$8,100 and \$5,639, respectively, for the payment of interest related to unrecognized tax benefits.

In many cases the company's uncertain tax positions are related to tax years that remain subject to examination by tax authorities. The following describes the open tax years, by major tax jurisdiction, as of December 31, 2020:

United States - Federal	2016 - present
United States - States	2013 - present
Germany (a)	2013 - present
Hong Kong	2013 - present
Italy (a)	2013 - present
Sweden	2014 - present
United Kingdom	2016 - present

(a) Includes federal as well as local jurisdictions.

Deferred income taxes are provided for the effects of temporary differences between the tax basis of an asset or liability and its reported amount in the consolidated balance sheets. These temporary differences result in taxable or deductible amounts in future years.

The deferred tax assets and liabilities consist of the following at December 31:

	2020	2019
Deferred tax assets:		
Net operating loss carryforwards	\$ 90,179	\$ 96,605
Capital loss carryforwards	56,854	57,031
Inventory adjustments	58,088	54,500
Allowance for doubtful accounts	20,134	12,797
Accrued expenses	34,196	27,998
Interest carryforward	13,265	13,059
Stock-based compensation awards	8,972	11,006
Lease liability	83,698	74,935
Intangible assets	—	4,266
Other	4,659	15,685
	<u>370,045</u>	<u>367,882</u>
Valuation allowance	<u>(83,942)</u>	<u>(81,037)</u>
Total deferred tax assets	<u>\$ 286,103</u>	<u>\$ 286,845</u>
Deferred tax liabilities:		
Goodwill	\$ (122,129)	\$ (109,131)
Depreciation	(113,587)	(115,459)
Intangible assets	(12,470)	—
Lease right-of-use assets	<u>(75,968)</u>	<u>(69,491)</u>
Total deferred tax liabilities	<u>\$ (324,154)</u>	<u>\$ (294,081)</u>
Total net deferred tax assets (liabilities)	<u>\$ (38,051)</u>	<u>\$ (7,236)</u>

At December 31, 2020, the company had international tax loss carryforwards of approximately \$350,067, of which \$26,210 have expiration dates ranging from 2021 to 2040, and the remaining \$323,857 have no expiration date. Deferred tax assets related to these international tax loss carryforwards were \$80,768 with a corresponding valuation allowance of \$9,111. At December 31, 2020, the company had a valuation allowance of \$4,004 related to other deferred tax assets.

At December 31, 2020, the company also had deferred tax assets of \$313 related to U.S. Federal net operating loss carryforwards from acquired subsidiaries. These U.S. Federal net operating losses expire in various years beginning after 2028. Additionally, as of December 31, 2020, the company had deferred tax assets of approximately \$9,098 with a corresponding valuation allowance of \$6,678, related to U.S. state net operating loss carryforwards. Valuation allowances are needed when deferred tax assets may not be realized due to the uncertainty of the timing and the ability of the company to generate sufficient future taxable income in certain tax jurisdictions.

To achieve greater cash management agility and to further advance business objectives, during the fourth quarter of 2019, the company reversed its assertion to indefinitely reinvest a certain portion of its foreign earnings, of which approximately \$2,400,000 are still available for distribution in future periods as of December 31, 2020, after distributions of \$349,000 and \$761,000 during 2020 and 2019, respectively. The company continues to indefinitely reinvest the residual \$1,600,000 of undistributed earnings of its foreign subsidiaries and recognizes that it may be subject to additional foreign withholding taxes and U.S. state income taxes, if it reverses its indefinite reinvestment assertion on these foreign earnings.

Income taxes paid, net of income taxes refunded, amounted to \$160,143, \$188,601, and \$226,422 in 2020, 2019, and 2018, respectively.

9. Restructuring, Integration, and Other Charges

Restructuring initiatives are due to the company's continued efforts to lower cost and drive operational efficiency. Integration costs are primarily related to the integration of acquired businesses within the company's pre-existing business and the consolidation of certain operations. The following table presents the components of the restructuring, integration, and other charges for the years ended December 31:

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Restructuring and integration charges - current period actions	\$ 13,389	\$ 22,256	\$ 23,698
Restructuring and integration (credits) charges - actions taken in prior periods	(633)	636	7,517
Other charges	532	66,893	29,146
	<u>\$ 13,288</u>	<u>\$ 89,785</u>	<u>\$ 60,361</u>

Restructuring and Integration Accrual Summary

The restructuring and integration accrual was \$9,735 and \$9,667 at December 31, 2020 and December 31, 2019, respectively. During the year ended December 31, 2020, the company made \$12,619 of payments related to restructuring and integration accruals. Substantially all amounts accrued at December 31, 2020, and all restructuring and integration charges for the year ending December 31, 2020 relate to the termination of personnel and are expected to be spent in cash within one year.

Other Charges

Included in restructuring, integration, and other charges for 2019 are other expenses of \$66,893, which include personnel charges of \$45,951 related to the operating expense reduction program and charges of \$8,959 related to relocation and other charges associated with centralization efforts to maximize operating efficiencies. The accrual related to the operating expense reduction program was \$24,252 at December 31, 2019.

Included in restructuring, integration, and other charges for 2018 are other expenses of \$29,146, which include acquisition-related charges of \$10,236 related to professional and other fees directly related to recent acquisition activity as well as contingent consideration for acquisitions completed in prior years, and charges of \$11,188 related to relocation and infrastructure upgrades of the company's data centers, and other centralization efforts to maximize operating efficiencies.

10. Shareholders' Equity

Accumulated Other Comprehensive Loss

The following table presents the changes in Accumulated other comprehensive loss, excluding noncontrolling interests:

	Foreign Currency Translation Adjustment and Other, Net	Unrealized Gain (Loss) on Foreign Exchange Contracts Designated as Net Investment Hedges, Net	Unrealized Gain (Loss) on Interest Rate Swaps Designated as Cash Flow Hedges, Net	Employee Benefit Plan Items, Net	Total
Balance as of December 31, 2018	\$ (266,327)	\$ —	\$ (5,560)	\$ (27,562)	\$ (299,449)
Other comprehensive income (loss) before reclassifications (a)	7,658	16,489	(8,767)	(3,079)	12,301
Amounts reclassified into income (loss) (b)	12,964	(6,121)	980	17,114	24,937
Net change in accumulated other comprehensive income (loss) for the year ended December 31, 2019	20,622	10,368	(7,787)	14,035	37,238
Balance as of December 31, 2019	(245,705)	10,368	(13,347)	(13,527)	(262,211)
Other comprehensive income (loss) before reclassifications (a)	183,636	(6,802)	(12,023)	(4,882)	159,929
Amounts reclassified into income (loss)	(958)	(6,686)	3,023	2,018	(2,603)
Net change in accumulated other comprehensive income (loss) for the year ended December 31, 2020	182,678	(13,488)	(9,000)	(2,864)	157,326
Balance as of December 31, 2020	\$ (63,027)	\$ (3,120)	\$ (22,347)	\$ (16,391)	\$ (104,885)

- (a) Foreign currency translation adjustment includes intra-entity foreign currency transactions that are of a long-term investment nature of \$31,470 and \$10,630 for 2020 and 2019, respectively.
- (b) Foreign currency translation adjustment includes a reclassification of cumulative translation adjustments to earnings upon the sale of three foreign subsidiaries during 2019 of \$19,602 (Note 2). Employee Benefit Plan Items, net includes a pre-tax pension settlement expense of \$20,111 (\$15,257 net of tax) for 2019 (Note 13).

Common Stock Outstanding Activity

The following table sets forth the activity in the number of shares outstanding (in thousands):

	Common Stock Issued	Treasury Stock	Common Stock Outstanding
Common stock outstanding at December 31, 2017	125,424	37,733	87,691
Shares issued for stock-based compensation awards	—	(709)	709
Repurchases of common stock	—	3,209	(3,209)
Common stock outstanding at December 31, 2018	125,424	40,233	85,191
Shares issued for stock-based compensation awards	—	(886)	886
Repurchases of common stock	—	5,457	(5,457)
Common stock outstanding at December 31, 2019	125,424	44,804	80,620
Shares issued for stock-based compensation awards	—	(764)	764
Repurchases of common stock	—	6,541	(6,541)
Common stock outstanding at December 31, 2020	125,424	50,581	74,843

The company has 2,000,000 authorized shares of serial preferred stock with a par value of one dollar. There were no shares of serial preferred stock outstanding at December 31, 2020 and 2019.

Share-Repurchase Programs

The following table shows the company's Board of Directors (the "Board") approved share-repurchase programs as of December 31, 2020:

Month of Board Approval	Dollar Value Approved for Repurchase	Dollar Value of Shares Repurchased	Approximate Dollar Value of Shares that May Yet be Purchased Under the Program
December 2016	\$ 400,000	\$ 400,000	\$ —
December 2018	600,000	600,000	—
July 2020	600,000	136,543	463,457
Total	\$ 1,600,000	\$ 1,136,543	\$ 463,457

11. Net Income (Loss) Per Share

The following table presents the computation of net income (loss) per share on a basic and diluted basis for the years ended December 31 (shares in thousands):

	2020	2019	2018
Net income (loss) attributable to shareholders	\$ 584,438	\$ (204,087)	\$ 716,195
Weighted-average shares outstanding - basic	77,992	83,568	87,476
Net effect of various dilutive stock-based compensation awards	643	—	968
Weighted-average shares outstanding - diluted	78,635	83,568	88,444
Net income (loss) per share:			
Basic	\$ 7.49	\$ (2.44)	\$ 8.19
Diluted (a)	\$ 7.43	\$ (2.44)	\$ 8.10

- (a) Stock-based compensation awards for the issuance of 1,143 shares, 1,614 shares, and 651 shares for the years ended December 31, 2020, 2019, and 2018, respectively, were excluded from the computation of net income (loss) per share on a diluted basis as their effect was anti-dilutive. As the company reported a net loss attributable to shareholders for 2019, basic and diluted net loss per share attributable to shareholders are the same.

12. Employee Stock Plans

Omnibus Plan

The company maintains the Arrow Electronics, Inc. 2004 Omnibus Incentive Plan (the "Omnibus Plan"), which provides an array of equity alternatives available to the company when designing compensation incentives. The Omnibus Plan permits the grant of cash-based awards, non-qualified stock options, incentive stock options ("ISOs"), stock appreciation rights, restricted stock, restricted stock units, performance shares, performance units, covered employee annual incentive awards, and other stock-based awards. The Compensation Committee of the company's Board of Directors (the "Compensation Committee") determines the vesting requirements, termination provision, and the terms of the award for any awards under the Omnibus Plan when such awards are issued.

Under the terms of the Omnibus Plan, a maximum of 24,000,000 shares of common stock may be awarded. During 2019, the company registered an additional 4,900,000 shares of common stock reserved for issuance pursuant to the Omnibus Plan. There were 6,777,309 and 7,622,287 shares available for grant under the Omnibus Plan as of December 31, 2020 and 2019, respectively. Generally, shares are counted against the authorization only to the extent that they are issued. Restricted stock, restricted stock units, performance shares, and performance units count against the authorization at a rate of 1.69 to 1.

The company recorded, as a component of “Selling, general, and administrative expenses,” amortization of stock-based compensation of \$35,288, \$41,070, and \$46,238 in 2020, 2019, and 2018, respectively. The actual tax benefit realized from share-based payment awards during 2020, 2019, and 2018 was \$5,308, \$7,308, and \$7,517, respectively.

Stock Options

Under the Omnibus Plan, the company may grant both ISOs and non-qualified stock options. ISOs may only be granted to employees of the company, its subsidiaries, and its affiliates. The exercise price for options cannot be less than the fair market value of Arrow's common stock on the date of grant. Options generally vest in equal installments over a four-year period. Options currently outstanding have contractual terms of ten years.

The following information relates to the stock option activity for the year ended December 31, 2020:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at December 31, 2019	1,631,017	\$ 69.83		
Granted	319,438	79.22		
Exercised	(353,206)	59.56		
Forfeited	(76,332)	79.87		
Outstanding at December 31, 2020	1,520,917	73.68	81 months	\$ 35,917
Exercisable at December 31, 2020	768,112	\$ 67.72	65 months	\$ 22,724

The aggregate intrinsic value in the table above represents the total pre-tax intrinsic value (the difference between the company's closing stock price on the last trading day of 2020 and the exercise price, multiplied by the number of in-the-money options) received by the option holders had all option holders exercised their options on December 31, 2020. This amount changes based on the market value of the company's stock.

The total intrinsic value of options exercised during 2020, 2019, and 2018 was \$8,211, \$9,346, and \$5,368, respectively.

Cash received from option exercises during 2020, 2019, and 2018 was \$21,037, \$16,911, and \$8,819, respectively, and is included within the financing activities section in the company's consolidated statements of cash flows.

The fair value of stock options was estimated using the Black-Scholes valuation model with the following weighted-average assumptions for the years ended December 31:

	2020	2019	2018
Volatility (percent) (a)	24	24	24
Expected term (in years) (b)	5.6	5.6	5.5
Risk-free interest rate (percent) (c)	1.4	2.5	2.7

- (a) Volatility is measured using historical daily price changes of the company's common stock over the expected term of the option.
- (b) The expected term represents the weighted-average period the option is expected to be outstanding and is based primarily on the historical exercise behavior of employees.
- (c) The risk-free interest rate is based on the U.S. Treasury zero-coupon yield with a maturity that approximates the expected term of the option.

There is no expected dividend yield.

The weighted-average fair value per option granted was \$20.59, \$22.68, and \$23.12 during 2020, 2019, and 2018, respectively.

Performance Awards

The Compensation Committee, subject to the terms and conditions of the Omnibus Plan, may grant performance share and/or performance unit awards (collectively “performance awards”). The fair value of a performance award is the fair market value of the company's common stock on the date of grant. Such awards will be earned only if performance goals over performance periods established by or under the direction of the Compensation Committee are met. The performance goals and periods may vary from participant-to-participant, group-to-group, and time-to-time. The performance awards will be delivered in common stock at the end of the service period based on the company's actual performance compared to the target metric and may be from 0% to 185% of the initial award. Compensation expense is recognized using the graded vesting method over the three-year service period and is adjusted each period based on the current estimate of performance compared to the target metric.

Restricted Stock

Subject to the terms and conditions of the Omnibus Plan, the Compensation Committee may grant shares of restricted stock and/or restricted stock units. Restricted stock units are similar to restricted stock except that no shares are actually awarded to the participant on the date of grant. Shares of restricted stock and/or restricted stock units awarded under the Omnibus Plan may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable period of restriction established by the Compensation Committee and specified in the award agreement (and in the case of restricted stock units until the date of delivery or other payment). Compensation expense is recognized on a straight-line basis as shares become free of forfeiture restrictions (i.e. vest) generally over a four-year period.

Non-Employee Director Awards

The company's Board shall set the amounts and types of equity awards that shall be granted to all non-employee directors on a periodic, nondiscriminatory basis pursuant to the Omnibus Plan, as well as any additional amounts, if any, to be awarded, also on a periodic, nondiscriminatory basis, based on each of the following: the number of committees of the Board on which a non-employee director serves, service of a non-employee director as the chair of a Committee of the Board, service of a non-employee director as Chairman of the Board or Lead Director, or the first selection or appointment of an individual to the Board as a non-employee director. Non-employee directors currently receive annual awards of fully-vested restricted stock units valued at \$175. All restricted stock units are settled in common stock following the director's separation from the Board.

Unless a non-employee director gives notice setting forth a different percentage, 50% of each director's annual retainer fee is deferred and converted into units based on the fair market value of the company's stock as of the date it was payable. A non-employee director can choose between one-year cliff vesting or keep the deferral until separation from the Board. After separation from the board, the deferral will be converted into a share of company stock and distributed to the non-employee director as soon as practicable following such date.

Summary of Non-Vested Shares

The following information summarizes the changes in non-vested performance shares, performance units, restricted stock, and restricted stock units for 2020:

	Shares	Weighted- Average Grant Date Fair Value
Non-vested shares at December 31, 2019	1,010,492	\$ 76.55
Granted	421,514	78.09
Vested	(412,328)	71.63
Forfeited	(65,377)	80.65
Non-vested shares at December 31, 2020	954,301	\$ 79.07

The total fair value of shares vested during 2020, 2019, and 2018 was \$31,851, \$46,676, and \$42,381, respectively.

As of December 31, 2020, there was \$30,663 of total unrecognized compensation cost related to non-vested shares and stock options which is expected to be recognized over a weighted-average period of 2.2 years.

13. Employee Benefit Plans

The company maintains an unfunded Arrow supplemental executive retirement plan (“SERP”) under which the company will pay supplemental pension benefits to certain employees upon retirement. As of December 31, 2020, there were 10 current and 23 former corporate officers participating in this plan. The Board determines those employees who are eligible to participate in the Arrow SERP.

The Arrow SERP, as amended, provides for the pension benefits to be based on a percentage of average final compensation, based on years of participation in the Arrow SERP. The Arrow SERP permits early retirement, with payments at a reduced rate, based on age and years of service subject to a minimum retirement age of 55. Participants whose accrued rights under the Arrow SERP, prior to the 2002 amendment, which were adversely affected by the amendment, will continue to be entitled to such greater rights.

As part of the company's acquisition of Wyle in 2000, Wyle provided retirement benefits for certain employees under a defined benefit plan. Benefits under this plan were frozen as of December 31, 2000 and on December 31, 2018 the plan was terminated. Prior to terminating the plan, the company adopted an amendment to the plan that provided eligible plan participants with the option to receive an early distribution of their pension benefits. In 2019 the company entered into a settlement for the remaining portion of its Wyle defined benefit plan under which participants received benefits through lump sum payments and an insurance annuity contract. During 2019, the settlement of \$59,311 was completed and the company recorded settlement expense of \$20,111, which is recorded in the “Employee benefit plan expense, net” line item in the company's consolidated statements of operations. The company decided to terminate the plan to reduce administrative burdens.

The company uses a December 31 measurement date for the Arrow SERP and the Wyle defined benefit plan. Pension information for the years ended December 31 is as follows:

	Arrow SERP		Wyle Defined Benefit Plan	
	2020	2019	2020	2019
Accumulated benefit obligation	\$ 100,825	\$ 93,385	\$ —	\$ —
Changes in projected benefit obligation:				
Projected benefit obligation at beginning of year	101,817	90,578	—	59,399
Service cost	3,514	2,874	—	—
Interest cost	3,087	3,710	—	1,130
Actuarial loss (gain)	5,699	9,210	—	1,500
Benefits paid	(4,561)	(4,555)	—	(2,718)
Settlement	—	—	—	(59,311)
Projected benefit obligation at end of year	109,556	101,817	—	—
Changes in plan assets:				
Fair value of plan assets at beginning of year	—	—	502	54,925
Actual return on plan assets	—	—	—	7,606
Company contributions	—	—	(502)	—
Benefits paid	—	—	—	(2,718)
Settlement	—	—	—	(59,311)
Fair value of plan assets at end of year	—	—	—	502
Funded status	\$ (109,556)	\$ (101,817)	\$ —	\$ 502
Amounts recognized in the company's consolidated balance sheets:				
Current assets	\$ —	\$ —	\$ —	\$ 502
Current liabilities	(4,532)	(4,535)	—	—
Noncurrent liabilities	(105,024)	(97,282)	—	—
Net asset (liability) at end of year	(109,556)	(101,817)	—	502
Components of net periodic pension cost:				
Service cost	3,514	2,874	—	—
Interest cost	3,087	3,710	—	1,130
Expected return on plan assets	—	—	—	(954)
Amortization of net loss	1,606	100	—	820
Settlement charge	—	—	—	20,111
Net periodic pension cost	\$ 8,207	\$ 6,684	\$ —	\$ 21,107
Weighted-average assumptions used to determine benefit obligation:				
Discount rate	2.40 %	3.10 %	N/A	N/A
Rate of compensation increase	5.00 %	5.00 %	N/A	N/A
Expected return on plan assets	N/A	N/A	N/A	N/A
Weighted-average assumptions used to determine net periodic pension cost:				
Discount rate	3.10 %	4.20 %	N/A	2.60 %
Rate of compensation increase	5.00 %	5.00 %	N/A	N/A
Expected return on plan assets	N/A	N/A	N/A	N/A

The amounts reported for net periodic pension cost and the respective benefit obligation amounts are dependent upon the actuarial assumptions used. The company reviews historical trends, future expectations, current market conditions, and external data to determine the assumptions. The discount rate represents the market rate for a high-quality corporate bond. The rate of compensation increase is determined by the company, based upon its long-term plans for such increases. The actuarial

assumptions used to determine the net periodic pension cost are based upon the prior year's assumptions used to determine the benefit obligation.

Benefit payments are expected to be paid as follows:

	Arrow SERP
2021	\$ 4,532
2022	6,071
2023	6,380
2024	6,551
2025	6,461
2026-2030	34,019

The company has funded \$101,495 of the Arrow SERP obligation for the former corporate officers in a rabbi trust comprised primarily of life insurance policies and mutual fund assets. Contributions to the rabbi trust are irrevocable by the company. In the event of bankruptcy by the company, the assets held by the rabbi trust are subject to claims made by the company's creditors.

Comprehensive Income Items

In 2020, 2019, and 2018, actuarial (gains) losses of \$4,341, \$2,922, and \$(6,339), respectively, were recognized in comprehensive income, net of related taxes, related to the company's defined benefit plans. In 2020, 2019, and 2018, a reclassification adjustment of comprehensive income was recognized, net of related taxes, as a result of being recognized in net periodic pension cost for an actuarial loss of \$1,220, \$15,797, and \$1,758, respectively.

Accumulated other comprehensive income (loss) at December 31, 2020 and 2019 includes unrecognized actuarial losses, net of related taxes, of \$17,375 and \$14,253, respectively, that have not yet been recognized in net periodic pension cost.

The actuarial loss included in accumulated other comprehensive income (loss), net of related taxes, which is expected to be recognized in net periodic pension cost during the year ended December 31, 2021 is \$1,860.

Defined Contribution Plan

The company has defined contribution plans for eligible employees, which qualify under Section 401(k) of the Internal Revenue Code. The company's contribution to the plans, which are based on a specified percentage of employee contributions, amounted to \$17,989, \$19,655, and \$20,523 in 2020, 2019, and 2018, respectively. The company made discretionary contributions in the amount of \$7,503 to the company's defined contribution 401(k) plan during 2018. Certain international subsidiaries maintain separate defined contribution plans for their employees and made contributions thereunder, which amounted to \$21,819, \$21,025, and \$18,996 in 2020, 2019, and 2018, respectively.

14. Lease Commitments

The company leases certain offices, distribution centers, and other property under non-cancelable operating leases expiring at various dates through 2033. Substantially all leases are classified as operating leases. The company recorded operating lease cost of \$89,060, \$101,729, and \$88,988 in 2020, 2019, and 2018, respectively.

The following amounts were recorded in the consolidated balance sheets at December 31:

	2020	2019
Operating Leases		
Right-of-use asset	\$ 306,109	\$ 277,953
Lease liability - current	70,787	56,268
Lease liability - non-current	260,570	251,672
Total operating lease liabilities	\$ 331,357	\$ 307,940

Maturities of operating lease liabilities at December 31, 2020 were as follows:

2021	\$ 84,625
2022	68,358
2023	51,661
2024	40,623
2025	31,920
Thereafter	117,745
Total lease payments	394,932
Less: imputed interest	(63,575)
Total	\$ 331,357

Other information pertaining to leases consists of the following for the year ended December 31:

	2020	2019
Supplemental Cash Flow Information		
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 88,478	\$ 98,171
Right-of-use assets obtained in exchange for operating lease obligations	61,027	40,860
Operating Lease Term and Discount Rate		
Weighted-average remaining lease term in years	7	7
Weighted-average discount rate	4.6 %	5.0 %

15. Contingencies

Environmental Matters

In connection with the purchase of Wyle in August 2000, the company acquired certain of the then outstanding obligations of Wyle, including Wyle's indemnification obligations to the purchasers of its Wyle Laboratories division for environmental clean-up costs associated with any then existing contamination or violation of environmental regulations. Under the terms of the company's purchase of Wyle from the sellers, the sellers agreed to indemnify the company for certain costs associated with the Wyle environmental obligations, among other things. In 2012, the company entered into a settlement agreement with the sellers pursuant to which the sellers paid \$110,000 and the company released the sellers from their indemnification obligation. As part of the settlement agreement the company accepted responsibility for any potential subsequent costs incurred related to the Wyle matters. The company is aware of two Wyle Laboratories facilities (in Huntsville, Alabama and Norco, California) at which contaminated groundwater was identified and will require environmental remediation. In addition, the company was named as a defendant in several lawsuits related to the Norco facility and a third site in El Segundo, California which have now been settled to the satisfaction of the parties.

The company expects these environmental liabilities to be resolved over an extended period of time. Costs are recorded for environmental matters when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated. Accruals for environmental liabilities are adjusted periodically as facts and circumstances change, assessment and remediation efforts progress, or as additional technical or legal information becomes available. Environmental liabilities are

difficult to assess and estimate due to various unknown factors such as the timing and extent of remediation, improvements in remediation technologies, and the extent to which environmental laws and regulations may change in the future. Accordingly, the company cannot presently estimate the ultimate potential costs related to these sites until such time as a substantial portion of the investigation at the sites is completed and remedial action plans are developed and, in some instances, implemented. To the extent that future environmental costs exceed amounts currently accrued by the company, net income would be adversely impacted and such impact could be material.

Accruals for environmental liabilities are included in “Accrued expenses” and “Other liabilities” in the company's consolidated balance sheets. The company has determined that there is no amount within the environmental liability range that is a better estimate than any other amount, and therefore has recorded the accruals at the minimum amount of the ranges.

As successor-in-interest to Wyle, the company is the beneficiary of various Wyle insurance policies that covered liabilities arising out of operations at Norco and Huntsville. To date, the company has recovered approximately \$42,000 from certain insurance carriers relating to environmental clean-up matters at the Norco and Huntsville sites. The company filed suit against two insurers regarding liabilities arising out of operations at Huntsville and reached a confidential settlement with one of the insurers. The resolution of this matter against the remaining insurer will likely take several years. The company has not recorded a receivable for any potential future insurance recoveries related to the Norco and Huntsville environmental matters, as the realization of the claims for recovery are not deemed probable at this time.

Environmental Matters - Huntsville

In February 2015, the company and the Alabama Department of Environmental Management (“ADEM”) finalized and executed a consent decree in connection with the Huntsville, Alabama site. Characterization of the extent of contaminated soil and groundwater is complete and has been approved by ADEM. Health-risk evaluations and a Corrective Action Development Plan were approved by ADEM in 2018, opening the way for pilot testing of on-site remediation in late 2019. Pilot testing is currently underway. Approximately \$7,100 was spent to date and the company currently anticipates no additional investigative and related expenditures. The cost of subsequent remediation at the site is estimated to be between \$3,300 and \$10,000.

Despite the amount of work undertaken and planned to date, the company is unable to estimate any potential costs in addition to those discussed above because the complete scope of the work is not yet known, and, accordingly, the associated costs have yet to be determined.

Environmental Matters - Norco

In October 2003, the company entered into a consent decree with Wyle Laboratories and the California Department of Toxic Substance Control (the “DTSC”) in connection with the Norco site. Subsequent to the decree, a Remedial Investigation Work Plan was approved by DTSC in April 2005, the required investigations were performed, and a final Remedial Investigation Report was submitted early in 2008. In 2008, a hydraulic containment system (“HCS”) was installed as an interim remedial measure to capture and treat groundwater before it moves into the adjacent off-site area. In September 2013, the DTSC approved the final Remedial Action Plan (“RAP”) for actions in five on-site areas and one off-site area. As of 2018, the remediation measures described in the RAP had been implemented and were being monitored. A Five Year Review (“FYR”) of the HCS submitted to DTSC in December 2016 found that while significant progress was made in on-site and off-site groundwater remediation, contaminants were not sufficiently reduced in a key off-site area identified in the RAP. This exception triggered the need for additional off-site remediation that began in 2018 and was completed in mid-2019. Routine progress monitoring of groundwater and soil gas continue on-site and off-site.

Approximately \$76,000 was spent to date on remediation, project management, regulatory oversight, and investigative and feasibility study activities. The company currently estimates that these activities will give rise to an additional \$5,900 to \$17,000. Project management and regulatory oversight include costs incurred by project consultants for project management and costs billed by DTSC to provide regulatory oversight.

Despite the amount of work undertaken and planned to date, the company is unable to estimate any potential costs in addition to those discussed above because the complete scope of the work under the RAP is not yet known, and, accordingly, the associated costs have yet to be determined.

Other

In 2019, the company determined that from 2015 to 2019 a limited number of non-executive employees, without first obtaining required authorization from the company or the United States government, had facilitated product shipments with an aggregate

total invoiced value of approximately \$4,770, to resellers for reexports to persons covered by the Iran Threat Reduction and Syria Human Rights Act of 2012 or other United States sanctions and export control laws. The company has voluntarily reported these activities to the United States Treasury Department's Office of Foreign Assets Control ("OFAC") and the United States Department of Commerce's Bureau of Industry and Security ("BIS"), and conducted an internal investigation and terminated or disciplined the employees involved. BIS has closed its investigation and issued the company a warning letter without referring the matter for further proceedings. No penalties have been imposed by BIS. The company has cooperated fully and intends to continue to cooperate fully with OFAC with respect to its review, which may result in the imposition of penalties, which the company is currently not able to estimate.

During 2020, the company recorded reserves and other adjustments of approximately \$32,700 primarily related to foreign tax and other loss contingencies. These reserves are principally associated with transactional taxes on activity from several prior years, not significant to any one year.

From time to time, in the normal course of business, the company may become liable with respect to other pending and threatened litigation, environmental, regulatory, labor, product, and tax matters. While such matters are subject to inherent uncertainties, it is not currently anticipated that any such matters will materially impact the company's consolidated financial position, liquidity, or results of operations.

16. Segment and Geographic Information

The company is a global provider of products, services, and solutions to industrial and commercial users of electronic components and enterprise computing solutions. The company distributes electronic components to original equipment manufacturers and contract manufacturers through its global components business segment and provides enterprise computing solutions to value-added resellers and managed service providers through its global ECS business segment. As a result of the company's philosophy of maximizing operating efficiencies through the centralization of certain functions, selected fixed assets and related depreciation, as well as borrowings, are not directly attributable to the individual operating segments and are included in the corporate business segment.

Sales, by segment by geographic area, are as follows:

	2020	2019	2018
Components:			
Americas	\$ 6,183,119	\$ 7,167,295	\$ 7,816,533
EMEA	4,987,534	5,412,379	5,733,222
Asia-Pacific	9,332,034	7,671,061	7,307,096
Global components	\$ 20,502,687	\$ 20,250,735	\$ 20,856,851
ECS:			
Americas	\$ 5,109,372	\$ 5,632,025	\$ 5,742,526
EMEA	3,061,304	3,034,087	3,077,391
Global ECS	\$ 8,170,676	\$ 8,666,112	\$ 8,819,917
Consolidated (a)	\$ 28,673,363	\$ 28,916,847	\$ 29,676,768

- (a) Includes sales related to the United States of \$10,162,989, \$11,511,611, and \$12,157,306 for 2020, 2019, and 2018, respectively.

Operating income (loss), by segment, are as follows:

	2020	2019	2018
Operating income (loss):			
Global components (a)	\$ 780,333	\$ (10,199)	\$ 1,007,638
Global ECS (b)	353,763	426,192	427,605
Corporate (c)	(239,585)	(308,297)	(287,731)
Consolidated	<u>\$ 894,511</u>	<u>\$ 107,696</u>	<u>\$ 1,147,512</u>

- (a) Global components operating income for 2019 includes restructuring, integration, and other charges of \$10,778, a loss on disposition of businesses, net, of \$19,384, impairments of \$698,246, a non-recurring charge of \$22,332 related to a subset of inventory held by its digital business, and a non-recurring charge of \$18,037 related to the receivables and inventory of its financing solutions business. During 2019 the company decided to narrow its digital inventory offerings and will no longer provide notes to its components customers.
- (b) Global ECS operating income for 2020 includes reserves and other adjustments of approximately \$29,858 primarily related to foreign tax and other loss contingencies. These reserves are principally associated with transactional taxes on activity from several prior years, not significant to any one year. Global ECS operating income for 2020 also includes \$4,918 in impairment charges related to various long-lived assets.
- (c) Corporate operating income for the years 2020, 2019, and 2018 includes restructuring, integration, and other charges (credits) of \$13,288, \$79,007, and \$60,361, respectively. Also included in 2019 and 2018 was a net loss on the disposition of businesses of \$1,868 and \$3,604, respectively. Corporate operating income for 2020 includes \$2,305 of impairment charges related to various long-lived assets.

Total assets, by segment, at December 31 are as follows:

	2020	2019
Global components	\$ 10,509,970	\$ 10,253,006
Global ECS	5,718,992	5,479,919
Corporate	824,949	667,871
Consolidated	<u>\$ 17,053,911</u>	<u>\$ 16,400,796</u>

Long-lived asset information, by geographic area, is as follows:

	2020	2019
Americas (a)	\$ 652,006	\$ 713,925
EMEA	339,652	274,656
Asia-Pacific	114,056	92,482
Consolidated	<u>\$ 1,105,714</u>	<u>\$ 1,081,063</u>

- (a) Includes net long-lived assets related to the United States of \$645,807 and \$709,056 at December 31, 2020 and 2019, respectively.

17. Quarterly Financial Data (Unaudited)

The company operates on a quarterly calendar that closes on the Saturday closest to the end of the calendar quarter, except for the third quarter of 2020, which closed on September 26, 2020, and the fourth quarter of 2020 and 2019, which closed on December 31.

A summary of the company's consolidated quarterly results of operations is as follows:

	<u>First Quarter (b)</u>	<u>Second Quarter (c)</u>	<u>Third Quarter (d)</u>	<u>Fourth Quarter (e)</u>
2020				
Sales	\$ 6,381,417	\$ 6,606,494	\$ 7,231,260	\$ 8,454,192
Gross profit	728,391	750,463	788,590	923,686
Operating income	138,304	196,613	238,182	321,412
Net income attributable to shareholders	49,503	132,804	166,060	236,071
Net income per share:				
Basic	\$ 0.62	\$ 1.69	\$ 2.15	\$ 3.12
Diluted	\$ 0.61	\$ 1.68	\$ 2.13	\$ 3.08
2019				
Sales	\$ 7,155,991	\$ 7,344,548	\$ 7,078,118	\$ 7,338,190
Gross profit	861,688	814,909	798,841	822,943
Operating income (loss)	245,560	(549,190)	173,218	238,108
Net income (loss) attributable to shareholders	140,735	(548,966)	92,131	112,013
Net income (loss) per share (a):				
Basic	\$ 1.65	\$ (6.48)	\$ 1.11	\$ 1.37
Diluted	\$ 1.63	\$ (6.48)	\$ 1.10	\$ 1.36

Amounts discussed below are before tax except for tax related items.

- (a) Quarterly net income per share is calculated using the weighted-average shares outstanding during each quarterly period, while net income per share for the full year is calculated using the weighted-average shares outstanding during the year. Therefore, the sum of the net income per share for each of the four quarters may not equal the net income per share for the full year. As the company reported a net loss attributable to shareholders for the second quarter of 2019, basic and diluted net loss per share attributable to shareholders are the same.
- (b) Net income attributable to shareholders for the first quarter of 2020 includes a loss on investments, net of \$16,810, and reserves and other adjustments of approximately \$32,700 primarily related to foreign tax and other loss contingencies. These reserves are principally associated with transactional taxes on activity from several prior years, not significant to any one year.
- (c) Net income attributable to shareholders for the second quarter of 2019 includes impairments of \$697,993, a charge of \$20,114 related to a subset of inventory held by its digital business, and a charge of \$15,851 related to the receivables and inventory of its financing solutions business.
- (d) Net income attributable to shareholders for the third quarter of 2019 includes a loss on disposition of businesses, net, of \$14,573, personnel charges of \$30,906 related to the operating expense reduction program, previously disclosed in July 2019.
- (e) Net income attributable to shareholders for the fourth quarter of 2019 includes a pension settlement loss of \$20,111, a loss on disposition of businesses, net of \$5,813, and tax expense of \$18,193 related to the repatriation of foreign earnings and the wind down of the personal computer and mobility asset disposition business.

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

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

The company's management, under the supervision and with the participation of the company's Chief Executive Officer and Chief Financial Officer, carried out an evaluation of the effectiveness of the design and operation of the company's disclosure controls and procedures as of December 31, 2020 (the "Evaluation"). Based upon the Evaluation, the company's Chief Executive Officer and Chief Financial Officer concluded that the company's disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934) are effective.

Management's Report on Internal Control Over Financial Reporting

The company's management is responsible for establishing and maintaining adequate "internal control over financial reporting" (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)). Management evaluates the effectiveness of the company's internal control over financial reporting using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Management, under the supervision and with the participation of the company's Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2020, and concluded that it is effective.

The company's independent registered public accounting firm, Ernst & Young LLP, has audited the effectiveness of the company's internal control over financial reporting as of December 31, 2020, as stated in their report, which is included herein.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Arrow Electronics, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Arrow Electronics, Inc.'s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Arrow Electronics, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for each of the three years in the period ended December 31, 2020, and the related notes and schedule and our report dated February 11, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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.

/s/ Ernst & Young LLP
Denver, Colorado
February 11, 2021

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

See “Executive Officers” in Part I of this Annual Report on Form 10-K. In addition, the information set forth under the headings “Election of Directors” and “Delinquent Section 16(a) Reports” in the company's Proxy Statement, filed in connection with the Annual Meeting of Shareholders scheduled to be held on May 12, 2021, are incorporated herein by reference.

Information about the company's audit committee financial experts set forth under the heading “The Board and its Committees” in the company's Proxy Statement, filed in connection with the Annual Meeting of Shareholders scheduled to be held on May 12, 2021, is incorporated herein by reference.

Information about the company's code of ethics governing the Chief Executive Officer, Chief Financial Officer, and Corporate Controller, known as the “Finance Code of Ethics,” as well as a code of ethics governing all employees, known as the “Worldwide Code of Business Conduct and Ethics,” is available free of charge on the company's website at investor.arrow.com in the Leadership and Governance section and is available in print to any shareholder upon request.

Information about the company's “Corporate Governance Guidelines” and written committee charters for the company's Audit Committee, Compensation Committee, and Corporate Governance Committee is available free of charge on the company's website at investor.arrow.com in the Leadership and Governance section and is available in print to any shareholder upon request.

Item 11. Executive Compensation.

The information required by Item 11 is included in the company's Proxy Statement filed in connection with the Annual Meeting of Shareholders scheduled to be held on May 12, 2021, and is incorporated herein by reference.

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

The information required by Item 12 is included in the company's Proxy Statement filed in connection with the Annual Meeting of Shareholders scheduled to be held on May 12, 2021, and is incorporated herein by reference.

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

The information required by Item 13 is included in the company's Proxy Statement filed in connection with the Annual Meeting of Shareholders scheduled to be held on May 12, 2021, and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

The information required by Item 14 is included in the company's Proxy Statement filed in connection with the Annual Meeting of Shareholders scheduled to be held on May 12, 2021, and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) The following documents are filed as part of this report:

Page

1 Financial Statements.

Report of Independent Registered Public Accounting Firm [40](#)

Consolidated Statements of Operations for the years ended December 31, 2020, 2019, and 2018 [43](#)

Consolidated Statements of Comprehensive Income for the years ended December 31, 2020, 2019, and 2018 [44](#)

Consolidated Balance Sheets as of December 31, 2020 and 2019 [45](#)

Consolidated Statements of Cash Flows for the years ended December 31, 2020, 2019, and 2018 [46](#)

Consolidated Statements of Equity for the years ended December 31, 2020, 2019, and 2018 [47](#)

Notes to the Consolidated Financial Statements [48](#)

2 Financial Statement Schedule.

Schedule II - Valuation and Qualifying Accounts [82](#)

All other schedules are omitted since the required information is not present, or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements, including the notes thereto.

3 Exhibits.

See Index of Exhibits included on pages 83 - 86

ARROW ELECTRONICS, INC.
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
(In thousands)

	<u>Balance at beginning of year</u>	<u>Charged to income</u>	<u>Other (a)</u>	<u>Write-down</u>	<u>Balance at end of year</u>
<u>Allowance for doubtful accounts:</u>					
Year ended December 31, 2020	\$ 69,433	\$ 26,942	\$ 47,521	\$ 51,104	\$ 92,792
Year ended December 31, 2019	\$ 80,000	\$ 26,220	\$ (681)	\$ 36,106	\$ 69,433
Year ended December 31, 2018	\$ 59,661	\$ 35,978	\$ (1,958)	\$ 13,681	\$ 80,000

- (a) "Other" primarily includes the effect of fluctuations in foreign currencies and the allowance for doubtful accounts of the businesses acquired and disposed of by the company. For the year ended December 31, 2020, "Other" also includes the effect of adoption of ASU No. 2016-13, refer to Note 1, Significant Accounting Policies, to the consolidated financial statements included in Item 8 of Part II of this 10-K.

INDEX OF EXHIBITS

Exhibit Number	Exhibit
<u>3(a)*</u>	<u>Restated Certificate of Incorporation of Arrow Electronics, Inc.</u>
<u>3(b)</u>	<u>Amended and Restated Bylaws of the company, dated December 9, 2020 (incorporated by reference to Exhibit 3.1 to the company's Current Report on Form 8-K filed with the SEC on December 11, 2020, Commission File No. 1-4482).</u>
<u>4(a)</u>	<u>Description of Registrant's Securities (incorporated by reference to Exhibit 4 to the company's Quarterly Report on Form 10-Q for the quarter ended March 28, 2020, Commission File No. 1-4482).</u>
<u>4(b)</u>	<u>Indenture, dated as of January 15, 1997, between the company and The Bank of New York Mellon (formerly, the Bank of Montreal Trust Company), as Trustee (incorporated by reference to Exhibit 4(b)(i) to the company's Annual Report on Form 10-K for the year ended December 31, 1996, Commission File No. 1-4482).</u>
<u>4(b)(i)</u>	<u>Officers' Certificate, as defined by the Indenture in 4(b) above, dated as of January 22, 1997, with respect to the company's \$200,000,000 7% Senior Notes due 2007 and \$200,000,000 7 1/2% Senior Debentures due 2027 (incorporated by reference to Exhibit 4(b)(ii) to the company's Annual Report on Form 10-K for the year ended December 31, 1996, Commission File No. 1-4482).</u>
<u>4(b)(ii)</u>	<u>Supplemental Indenture, dated as of September 30, 2009, between the company and The Bank of New York Mellon (as successor to the Bank of Montreal Trust Company), as trustee (incorporated by reference to Exhibit 4.1 to the company's Current Report on Form 8-K dated September 29, 2009, Commission File No. 1-4482).</u>
<u>4(b)(iii)</u>	<u>Supplemental Indenture, dated as of November 3, 2010, between the company and The Bank of New York Mellon (as successor to the Bank of Montreal Trust Company), as trustee (incorporated by reference to Exhibit 4.1 to the company's Current Report on Form 8-K dated November 2, 2010, Commission File No. 1-4482).</u>
<u>4(b)(iv)</u>	<u>Supplemental Indenture, dated as of February 20, 2013, between the company and The Bank of New York Mellon (as successor to the Bank of Montreal Trust Company), as trustee (incorporated by reference to Exhibit 4.1 to the company's Current Report on Form 8-K dated February 14, 2013, Commission File No. 1-4482).</u>
<u>4(b)(v)</u>	<u>Supplemental Indenture, dated as of March 2, 2015, between the company and The Bank of New York Mellon (as successor to the Bank of Montreal Trust Company), as trustee (incorporated by reference to Exhibit 4(a)(x) to the company's Annual Report on Form 10-K for the year ended December 31, 2015, Commission File No. 1-4482).</u>
<u>4(c)</u>	<u>Indenture, dated as of June 1, 2017, between the company and US Bank National Association, as Trustee (incorporated by reference to Exhibit 4.4 to the company's Post-effective amendment No. 1 to the Form S-3 dated June 1, 2017, Commission File No. 1-4482).</u>
<u>4(c)(i)</u>	<u>First Supplemental Indenture, dated as of June 12, 2017, between the company and US Bank National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the company's Current Report on Form 8-K dated June 12, 2017, Commission File No. 1-4482).</u>

- [4\(c\)\(ii\)](#) [Second Supplemental Indenture, dated as of September 8, 2017, between the company and US Bank National Association, as Trustee \(incorporated by reference to Exhibit 4.1 to the company's Current Report on Form 8-K dated September 8, 2017, Commission File No. 1-4482\).](#)
- [10\(a\)+](#) [Arrow Electronics Savings Plan, as amended and restated effective January 1, 2018 \(incorporated by reference to Exhibit 10\(a\) to the company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, Commission File No. 1-4482\).](#)
- [10\(c\)+](#) [Management Insurance Program Agreement, dated as of September 16, 2015 \(incorporated by reference to Exhibit 10\(m\) to the company's Annual Report on Form 10-K for the year ended December 31, 2015, Commission File No. 1-4482\).](#)
- [10\(d\)\(i\)*+](#) [Arrow Electronics, Inc. 2004 Omnibus Incentive Plan \(as amended and restated through December 8, 2020\).](#)
- [10\(d\)\(ii\)*+](#) [Form of Non-Qualified Stock Option Award Agreement for the Executive Committee under 10\(d\)\(i\) above \(as amended and restated through February 19, 2020\).](#)
- [10\(d\)\(iii\)*+](#) [Form of Performance Stock Unit Award Agreement for the Executive Committee under 10\(d\)\(i\) above \(as amended and restated through February 19, 2020\).](#)
- [10\(d\)\(iv\)*+](#) [Form of Restricted Stock Unit Award Agreement for the Executive Committee under 10\(d\)\(i\) above \(as amended through February 19, 2020\).](#)
- [10\(e\)*](#) [Non-Employee Directors Deferred Compensation Plan, as amended and restated effective July 1, 2018.](#)
- [10\(e\)\(i\)](#) [Amendment to the Non-Employee Directors Deferred Compensation Plan, as amended on December 31, 2019, to the Non-Employee Directors Deferred Compensation Plan in 10\(e\) above \(incorporated by reference to Exhibit 10\(e\)\(i\) to the company's Annual Report on Form 10-K for the year ended December 31, 2019, Commission File No. 1-4482\).](#)
- [10\(f\)+](#) [Arrow Electronics, Inc. Supplemental Executive Retirement Plan, as amended and restated effective January 1, 2009 \(incorporated by reference to Exhibit 10\(i\) to the company's Annual Report on Form 10-K for the year ended December 31, 2009, Commission File No. 1-4482\).](#)
- [10\(g\)+](#) [Arrow Electronics, Inc. Executive Deferred Compensation Plan, as amended and restated effective July 1, 2018 \(incorporated by reference to Exhibit 10\(a\) to the company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, Commission File No. 1-4482\).](#)
- [10\(g\)\(i\)+](#) [Amendment to the Executive Deferred Compensation Plan, as amended on December 31, 2019, to the Executive Deferred Compensation Plan in 10\(g\) above \(incorporated by reference to Exhibit 10\(g\)\(i\) to the company's Annual Report on Form 10-K for the year ended December 31, 2019, Commission File No. 1-4482\).](#)
- [10\(h\)\(i\)+](#) [Arrow Electronics, Inc. Executive Severance Policy \(incorporated by reference to Exhibit 10.1 to the company's Current Report on Form 8-K dated February 19, 2013, Commission File No. 1-4482\).](#)
- [10\(h\)\(ii\)+](#) [Form of the Arrow Electronics, Inc. Executive Severance Policy Participation Agreement \(incorporated by reference to Exhibit 10.2 to the company's Current Report on Form 8-K dated February 19, 2013, Commission File No. 1-4482\).](#)
- [10\(h\)\(iii\)+](#) [Form of Executive Change in Control Retention Agreement \(incorporated by reference to Exhibit 10.3 to the company's Current Report on Form 8-K dated February 19, 2013, Commission File No. 1-4482\).](#)

- [10\(h\)\(iv\)](#) [Grantor Trust Agreement, as amended and restated on November 11, 2003, by and between Arrow Electronics, Inc. and Wachovia Bank, N.A. \(incorporated by reference to Exhibit 10\(i\)\(xvii\) to the company's Annual Report on Form 10-K for the year ended December 31, 2003, Commission File No. 1-4482\).](#)
- [10\(h\)\(v\)](#) [First Amendment, dated September 17, 2004, to the amended and restated Grantor Trust Agreement in 10\(h\)\(iv\) above by and between Arrow Electronics, Inc. and Wachovia Bank, N.A. \(incorporated by reference to Exhibit 10\(a\) to the company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004, Commission File No. 1-4482\).](#)
- [10\(h\)\(vi\)](#) [Paying Agency Agreement, dated November 11, 2003, by and between Arrow Electronics, Inc. and Wachovia Bank, N.A. \(incorporated by reference to Exhibit 10\(d\)\(iii\) to the company's Annual Report on Form 10-K for the year ended December 31, 2003, Commission File No. 1-4482\).](#)
- [10\(i\)](#) [Third Amended and Restated Credit Agreement, dated as of December 14, 2018, among Arrow Electronics, Inc. and certain of its subsidiaries, as borrowers, the lenders from time to time parties thereto, JPMorgan Chase Bank, N.A., as administrative agent and BNP Paribas, Bank of America, N.A., The Bank of Nova Scotia, MUFG Bank, Ltd, ING Bank N.V., Dublin Branch, Mizuho Bank, Ltd, and Sumitomo Mitsui Banking Corporation as syndication agents \(incorporated by reference to Exhibit 10\(i\) to the company's Annual Report on Form 10-K for the year ended December 31, 2018, Commission File No. 1-4482\).](#)
- [10\(i\)\(i\)†](#) [Amendment No. 1 to the Third Amended and Restated Credit Agreement, dated as of May 29, 2020, to the Third Amended and Restated Credit Agreement in 10\(i\) above \(incorporated by reference to Exhibit 10\(a\) to the company's Quarterly Report on Form 10-Q for the quarter ended June 27, 2020, Commission File No. 1-4482\).](#)
- [10\(j\)*](#) [Amendment No. 32, dated as of September 27, 2019, to the Transfer and Administration Agreement dated as of March 21, 2001, reflecting original agreement and cumulative amendments.](#)
- [10\(k\)\(i\)](#) [Commercial Paper Private Placement Agreement, dated as of November 9, 1999, among Arrow Electronics, Inc., as issuer, and Chase Securities Inc., Bank of America Securities LLC, Goldman, Sachs & Co., and Morgan Stanley & Co. Incorporated as placement agents \(incorporated by reference to Exhibit 10\(g\) to the company's Annual Report on Form 10-K for the year ended December 31, 1999, Commission File No. 1-4482\).](#)
- [10\(k\)\(ii\)](#) [Amendment No. 1, dated as of October 11, 2011, to Dealer Agreement dated as of November 9, 1999, between Arrow Electronics, Inc. and J.P. Morgan Securities LLC \(f.k.a. Chase Securities Inc.\), Merrill Lynch, Pierce, Fenner & Smith Incorporated \(f.k.a. Bank of America Securities LLC\), Goldman, Sachs & Co. and Morgan Stanley & Co. LLC \(f.k.a. Morgan Stanley & Co. Incorporated\) \(incorporated by reference to Exhibit 10\(n\)\(ii\) to the company's Annual Report on Form 10-K for the year ended December 31, 2011, Commission File No. 1-4482\).](#)
- [10\(k\)\(iii\)](#) [Amendment No. 2, dated as of October 20, 2014, to Dealer Agreement dated as of November 9, 1999, between Goldman, Sachs & Co., J.P. Morgan Securities LLC \(f.k.a. Chase Securities Inc.\), Morgan Stanley & Co. LLC \(f.k.a. Morgan Stanley & Co. Incorporated\), Merrill Lynch, Pierce, Fenner & Smith Incorporated \(f.k.a. Bank of America Securities LLC\) and Arrow Electronics, Inc., as amended by Amendment No. 1 \(incorporated by reference to Exhibit 10\(a\) to the company's Quarterly Report on Form 10-Q for the quarter ended September 27, 2014, Commission File No. 1-4482\).](#)
- [10\(k\)\(iv\)](#) [Amendment No. 3, dated as of January 6, 2016, to Dealer Agreement dated as of November 9, 1999, between Goldman, Sachs & Co., J.P. Morgan Securities LLC \(f.k.a. Chase Securities Inc.\), Morgan Stanley & Co. LLC \(f.k.a. Morgan Stanley & Co. Incorporated\), Merrill Lynch, Pierce, Fenner & Smith Incorporated \(f.k.a. Bank of America Securities LLC\) and Arrow Electronics, Inc., as amended by Amendment No. 1 and Amendment No. 2. \(incorporated by reference to Exhibit 10\(b\) to the company's Quarterly Report on Form 10-Q for the quarter ended April 2, 2016, Commission File No. 1-4482\).](#)

<u>10(l)</u>	<u>Issuing and Paying Agency Agreement, dated as of October 20, 2014, by and between Arrow Electronics, Inc. and BNP Paribas (incorporated by reference to Exhibit 10(b) to the company's Quarterly Report on Form 10-Q for the quarter ended September 27, 2014, Commission File No. 1-4482).</u>
<u>10(m)(i)</u>	<u>English Receivables Sales Agreement dated as of January 27, 2020 between Arrow Electronics (UK) Limited, as the seller, and Arrow EMEA Funding Corp B.V., as the buyer (incorporated by reference to Exhibit 10.1 to the company's Current Report on Form 8-K dated January 30, 2020, Commission File No. 1-4482).</u>
<u>10(m)(ii)</u>	<u>German Receivables Sale Agreement dated as of January 27, 2020 between Arrow Central Europe GmbH, as the seller, and Arrow EMEA Funding Corp B.V., as the buyer (incorporated by reference to Exhibit 10.2 to the company's Current Report on Form 8-K dated January 30, 2020, Commission File No. 1-4482).</u>
<u>10(n)*</u>	<u>Form of Indemnification Agreement between the company and each director.</u>
<u>21*</u>	<u>Subsidiary Listing.</u>
<u>23*</u>	<u>Consent of Independent Registered Public Accounting Firm.</u>
<u>24*</u>	<u>Power of Attorney (included on the signature page of this report).</u>
<u>31(i)*</u>	<u>Certification of Chief Executive Officer pursuant to Rule 13A-14(a)/15d-14(a) of the Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>31(ii)*</u>	<u>Certification of Chief Financial Officer pursuant to Rule 13A-14(a)/15d-14(a) of the Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>32(i)**</u>	<u>Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
<u>32(ii)**</u>	<u>Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101.SCH*	XBRL Taxonomy Extension Schema Document.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Documents.
101.DEF*	XBRL Taxonomy Definition Linkbase Document.
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* : Filed herewith.

** : Furnished herewith.

† : Certain portions of this exhibit have been redacted in accordance with Item 601(b)(10) of Regulation S-K.

+ : Indicates a management contract or compensatory plan or arrangement.

Item 16. Form 10-K Summary.

None.

SIGNATURES

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

ARROW ELECTRONICS, INC.

Date: February 11, 2021

By: /s/ Carine Jean-Claude
Carine Jean-Claude
 Vice President, Interim Chief Legal Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Mike J. Long and Chris D. Stansbury, and each of them, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes, may lawfully do or cause to be done by virtue thereof.

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:

	<u>Signature</u>	<u>Title</u>	<u>Date</u>
By:	<u>/s/ Michael J. Long</u> Michael J. Long	Chairman, President, and Chief Executive Officer <i>(principal executive officer)</i>	<u>February 11, 2021</u>
By:	<u>/s/ Chris D. Stansbury</u> Chris D. Stansbury	Senior Vice President and Chief Financial Officer <i>(principal financial officer)</i>	<u>February 11, 2021</u>
By:	<u>/s/ Richard A. Seidlitz</u> Richard A. Seidlitz	Corporate Controller <i>(principal accounting officer)</i>	<u>February 11, 2021</u>
By:	<u>/s/ Barry W. Perry</u> Barry W. Perry	Lead Independent Director	<u>February 11, 2021</u>
By:	<u>/s/ William F. Austen</u> William F. Austen	Director	<u>February 11, 2021</u>
By:	<u>/s/ Steven H. Gunby</u> Steven H. Gunby	Director	<u>February 11, 2021</u>
By:	<u>/s/ Gail E. Hamilton</u> Gail E. Hamilton	Director	<u>February 11, 2021</u>
By:	<u>/s/ Richard S. Hill</u> Richard S. Hill	Director	<u>February 11, 2021</u>
By:	<u>/s/ Fran Keeth</u> Fran Keeth	Director	<u>February 11, 2021</u>
By:	<u>/s/ Andrew C. Kerin</u> Andrew C. Kerin	Director	<u>February 11, 2021</u>

By: /s/ Stephen C. Patrick
Stephen C. Patrick

Director

February 11, 2021

By: /s/ Laurel J. Krzeminski
Laurel J. Krzeminski

Director

February 11, 2021

By: /s/ Gerry P. Smith
Gerry P. Smith

Director

February 11, 2021