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

Form 10-K

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2019
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 1-8974

Honeywell International Inc.

(Exact name of registrant as specified in its charter)

Delaware	22-2640650
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
300 South Tryon Street Charlotte, NC	28202
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (704) 627-6200

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

Title of Each Class	Trading Symbols	Name of each exchange on which registered
Common Stock, par value $1 per share*	HON	New York Stock Exchange
0.650% Senior Notes due 2020	HON 20	New York Stock Exchange
1.300% Senior Notes due 2023	HON 23A	New York Stock Exchange
2.250% Senior Notes due 2028	HON 28A	New York Stock Exchange

* The common stock is also listed on the London 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 Exchange Act. Yes ☐ No ☒

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

Indicate by check mark whether the Registrant has submitted electronically 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, or a smaller reporting company. See definition of "accelerated filer," "large accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check One):

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐

Emerging growth company ☐

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

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

The aggregate market value of the voting stock held by nonaffiliates of the Registrant was approximately $125.6 billion at June 30, 2019.

There were 712,599,803 shares of Common Stock outstanding at January 25, 2020.

Documents Incorporated by Reference

Part III: Proxy Statement for Annual Meeting of Shareowners to be held April 27, 2020.

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PART I.

Item 1. Business

Honeywell International Inc. (“Honeywell” or “the Company”) invents and commercializes technologies that address some of the world’s most critical challenges around energy, safety, security, air travel, productivity and global urbanization. As a diversified technology and manufacturing company, we are uniquely positioned to blend physical products with software to serve customers worldwide with aerospace products and services, energy efficient products and solutions for businesses, specialty chemicals, electronic and advanced materials, process technology for refining and petrochemicals, and productivity, sensing, safety and security technologies for buildings and industries. Our products and solutions enable a safer, more comfortable and more productive world, enhancing the quality of life of people around the globe. Honeywell was incorporated in Delaware in 1985.

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports, are available free of charge on our website (www.honeywell.com) under the heading Investors (see SEC Filings and Reports) immediately after they are filed with, or furnished to, the Securities and Exchange Commission (SEC). In addition, in this Annual Report on Form 10-K, the Company incorporates by reference certain information from parts of its Proxy Statement for the 2020 Annual Meeting of Stockholders, which we expect to file with the SEC on or about March 12, 2020, and which will also be available free of charge on our website.

Major Businesses

We globally manage our business operations through four segments: Aerospace, Honeywell Building Technologies, Performance Materials and Technologies, and Safety and Productivity Solutions. Financial information related to our segments is included in Note 22 Segment Financial Data of Notes to Consolidated Financial Statements. The major products/services, including Honeywell Forge solutions supported by Honeywell Connected Enterprise ("HCE"), customers/uses and key competitors of each of our segments are:

Aerospace

Aerospace is a leading global supplier of products, software and services for aircrafts that it sells to original equipment manufacturers (OEM) and other customers in a variety of end markets including: air transport, regional, business and general aviation aircraft, airlines, aircraft operators and defense and space contractors. Aerospace products and services include auxiliary power units, propulsion engines, environmental control systems, integrated avionics, wireless connectivity services, electric power systems, engine controls, flight safety, communications, navigation hardware, data and software applications, radar and surveillance systems, aircraft lighting, management and technical services, advanced systems and instruments, satellite and space components, aircraft wheels and brakes, repair and overhaul services and thermal systems. Aerospace also provides spare parts, repair, overhaul and maintenance services (principally to aircraft operators) for the aftermarket. Honeywell Forge solutions are designed to identify and resolve problems faster, making fleet management and flight operations more efficient.

Honeywell Building Technologies

Honeywell Building Technologies is a leading global provider of products, software, solutions and technologies that enable building owners and occupants to ensure their facilities are safe, energy efficient, sustainable and productive. Honeywell Building Technologies products and services include advanced software applications for building control and optimization; sensors, switches, control systems and instruments for energy management; access control; video surveillance; fire products; remote patient monitoring systems; and installation, maintenance and upgrades of systems. Honeywell Forge solutions are designed to digitally manage buildings to use space intelligently, cut operating expenses and reduce maintenance.

Performance Materials and Technologies

Performance Materials and Technologies is a global leader in developing and manufacturing high-quality performance chemicals and materials, process technologies and automation solutions, including Honeywell Forge connected solutions. The segment comprises Process Solutions, UOP and Advanced Materials. Process Solutions provides automation control, instrumentation, advanced software and related services for the oil and gas, refining, pulp and paper, industrial power generation, chemicals and petrochemicals, biofuels, life sciences, and metals, minerals and mining industries. Through its smart energy products, Process Solutions enables utilities and distribution companies to deploy advanced capabilities to improve operations, reliability and environmental sustainability. UOP provides process technology, products, including catalysts and adsorbents, equipment, and consulting services that enable customers to efficiently produce gasoline, diesel, jet fuel, petrochemicals and renewable fuels for the petroleum refining, gas processing, petrochemical, and other industries. Advanced Materials manufactures a wide variety of high-performance products, including materials used to manufacture end products such as bullet-resistant armor, nylon, computer chips and pharmaceutical packaging, and provides reduced and low global-warming-potential (GWP) materials based on hydrofluoro-olefin technology. In the industrial environment, Honeywell Forge solutions enable integration and connectivity to provide a holistic view of operations and turn data into clear actions to maximize productivity and efficiency. Honeywell Forge's cybersecurity capabilities help identify risks and act on cyber-related incidents, together enabling improved operations and protecting processes, people and assets.

Safety and Productivity Solutions

Safety and Productivity Solutions is a leading global provider of products and software that improve productivity, workplace safety and asset performance to customers around the globe. Safety products include personal protection equipment, apparel, gear, and footwear designed for work, play and outdoor activities; gas detection technology; and cloud-based notification and emergency messaging. Productivity Solutions products and services include mobile devices and software for computing, data collection and thermal printing; supply chain and warehouse automation equipment, software and solutions; custom-engineered sensors, switches and controls for sensing and productivity solutions; and software-based data and asset management productivity solutions. Honeywell Forge solutions digitally automate processes to improve efficiency while reducing downtime and safety costs.

Competition

We are subject to competition in substantially all product and service areas. Some of our key competitors are:

- Aerospace: Garmin, Safran, Thales, and United Technologies
- Honeywell Building Technologies: Johnson Controls, Schneider Electric, Siemens and United Technologies
- Performance Materials and Technologies: Albemarle, BASF, Dupont, Emerson Electric, Schneider Electric, Siemens, Sinopec and Yokogawa
- Safety and Productivity Solutions: 3M, Kion Group, Mine Safety Appliances (MSA), TE Connectivity, and Zebra Technologies

Our businesses compete on a variety of factors such as price, quality, reliability, delivery, customer service, performance, applied technology, product innovation and product recognition. Brand identity, service to customers and quality are important competitive factors for our products and services, and there is considerable price competition. Other competitive factors include breadth of product line, research and development efforts and technical and managerial capability. While our competitive position varies among our products and services, we believe we are a significant competitor in each of our major product and service classes. Many of our competitors have substantial financial resources and significant technological capabilities. In addition, some of our products compete with the captive component divisions of OEMs.

U.S. Government Sales

Sales to the U.S. Government (principally by Aerospace), acting through its various departments and agencies and through prime contractors, amounted to $4,057 million, $3,403 million and $3,203 million in 2019, 2018 and 2017, which included sales to the U.S. Department of Defense, as a prime contractor and subcontractor, of $3,491 million, $2,832 million and $2,546 million in 2019, 2018 and 2017. We do not expect our overall operating results to be significantly affected by any proposed changes in 2020 federal defense spending due principally to the varied mix of the government programs which impact us (OEMs' production, engineering development programs, aftermarket spares and repairs and overhaul programs), as well as our diversified commercial businesses.

International Operations

We engage in manufacturing, sales, service and research and development (R&D) globally. U.S. exports and non-U.S. manufactured products are significant to our operations. U.S. exports comprised 15% of our total sales in 2019, 13% in 2018 and 12% in 2017. Non-U.S. manufactured products and services, mainly in Europe and Asia, were 40% of our total sales in 2019, 43% in 2018 and 44% in 2017.

	Year Ended December 31, 2019			
Manufactured Products and Systems and Performance of Services	**Aerospace**	**Honeywell Building Technologies**	**Performance Materials and Technologies**	**Safety and Productivity Solutions**
	(% of Segment Sales)			
U.S. Exports	25%	2%	16%	2%
Non-U.S. manufactured/services	19%	64%	56%	41%

Information related to risks attendant to our foreign operations is included in Item 1A. Risk Factors under the caption “Macroeconomic and Industry Risks.”

Backlog

Our backlog represents the estimated remaining value of work to be performed under firm contracts. Backlog is equal to our remaining performance obligations under the contracts that meet the guidance on revenue from contracts with customers as discussed in Note 7 to the Consolidated Financial Statements. Backlog was $25,612 million and $24,850 million at December 31, 2019 and 2018. We expect to recognize approximately 57% of our remaining performance obligations as revenue in 2020, and the remaining balance thereafter.

Raw Materials

The principal raw materials used in our operations are readily available. Although we occasionally experience disruption in raw materials supply, we experienced no significant problems in the purchase of key raw materials or commodities in 2019. We are not dependent on any one supplier for a material amount of our raw materials.

Prices of certain key raw materials, including copper, fluorspar, tungsten salts, ethylene, aluminum, and molybdenum in Performance Materials and Technologies and nickel, steel, titanium and other metals in Aerospace, are expected to fluctuate. We offset raw material cost increases with formula or long-term supply agreements, price increases and hedging activities where feasible. We do not presently anticipate that a shortage of raw materials will cause any material adverse impacts during 2020.

Patents, Trademarks, Licenses and Distribution Rights

Our segments are not dependent upon any single patent or related group of patents, or any licenses or distribution rights. In our judgment, our intellectual property rights are adequate for the conduct of our business. We believe that, in the aggregate, the rights under our patents, trademarks and licenses are generally important to our operations, but we do not consider any individual patent, trademark or any licensing or distribution rights related to a specific process or product to be of material importance in relation to our total business.

Environment

We are subject to various federal, state, local and foreign government requirements regarding protection of human health and the environment. Our policies, practices and procedures are designed to prevent unreasonable risk of environmental damage, and of resulting financial liability, in connection with our business. Some risk of environmental damage is, however, inherent in some of our operations and products, as it is with other companies engaged in similar businesses.

We engage in the handling, manufacturing, use and disposal of many substances classified as hazardous by one or more regulatory agencies. Our policies, practices and procedures are designed to prevent unreasonable risk of environmental damage and personal injury, and that our handling, manufacture, use and disposal of these substances meet or exceed environmental and safety laws and regulations. It is possible that future knowledge or other developments, such as improved capability to detect substances in the environment or increasingly strict environmental laws and standards and enforcement policies, could bring into question our current or past handling, manufacture, use or disposal of these substances.

Among other environmental requirements, we are subject to the federal Superfund and similar state and foreign laws and regulations, under which we have been designated as a potentially responsible party that may be liable for cleanup costs associated with current and former operating sites and various hazardous waste sites, some of which are on the U.S. Environmental Protection Agency's National Priority List. While there is a possibility that a responsible party might be unable to obtain appropriate contribution from other responsible parties, we do not anticipate having to bear significantly more than our proportional share in multi-party situations taken as a whole.

We do not believe that Federal, State and local provisions regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, or any existing or pending climate change legislation, regulation, or international treaties or accords are reasonably likely to have a material effect in the foreseeable future on the Company's business. We will continue to monitor emerging developments in this area.

Employees

We have approximately 113,000 employees at December 31, 2019, of whom approximately 44,000 are located in the United States.

Information About our Executive Officers

The executive officers of Honeywell, listed as follows, are elected annually by the Board of Directors. There are no family relationships among them.

Name, Age, Date First Elected an Executive Officer	Business Experience
Darius Adamczyk, 54 2017[(a)]	Chairman of the Board and Chief Executive Officer since April 2018. President and Chief Executive Officer from April 2017 to April 2018. Chief Operating Officer from April 2016 to March 2017. President and Chief Executive Officer Performance Materials and Technologies from April 2014 to April 2016. President of Honeywell Process Solutions from April 2012 to April 2014.
Que Thanh Dallara, 46 2018	President and Chief Executive Officer Connected Enterprise since October 2018. Vice President and Chief Commercial Officer from January 2017 to October 2018. From 2007 to 2016, Ms. Dallara served in multiple leadership positions at TE Connectivity Ltd., most recently as Senior Vice President, Corporate Strategy and Analytics.
Rajeev Gautam, 67 2016	President and Chief Executive Officer Performance Materials and Technologies since April 2016. President of Honeywell UOP from January 2009 to April 2016.
Mark R. James, 58 2007	Senior Vice President Human Resources, Security and Communications since November 2007.
Vimal Kapur, 54 2018	President and Chief Executive Officer Honeywell Building Technologies since May 2018. President of Honeywell Process Solutions from 2014 to May 2018.
Gregory P. Lewis, 52 2018	Senior Vice President and Chief Financial Officer since August 2018. Vice President of Enterprise Information Management from October 2016 to April 2018, prior to being named Vice President, Corporate Finance in May 2018. Chief Financial Officer of Automation and Control Solutions from April 2013 to September 2016.
Anne T. Madden, 55 2017	Senior Vice President and General Counsel since October 2017. Corporate Secretary from February 2018 to September 2019. Vice President of Corporate Development and Global Head of M&A from January 2002 to October 2017.
Michael R. Madsen, 56 2019	President and Chief Executive Officer Aerospace since October 2019. Vice President, Integrated Supply Chain of Aerospace from May 2015 to October 2019. President, Aerospace Defense and Space from October 2010 to May 2015
John F. Waldron, 44 2016	President and Chief Executive Officer, Safety and Productivity Solutions since July 2016. President of Sensing and Productivity Solutions from July 2015 to July 2016. President of Scanning and Mobility from April 2012 to July 2015.

(a)Also a Director.

Item 1A. Risk Factors

Cautionary Statement About Forward-Looking Statements

We describe many of the trends and other factors that drive our business and future results in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and in other parts of this report (including this Item 1A). Such discussions contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are those that address activities, events or developments that management intends, expects, projects, believes or anticipates will or may occur in the future. They are based on management's assumptions and assessments in light of past experience and trends, current economic and industry conditions, expected future developments and other relevant factors. They are not guarantees of future performance, and actual results, developments and business decisions may differ significantly from those envisaged by our forward-looking statements. We do not undertake to update or revise any of our forward-looking statements. Our forward-looking statements are also subject to risks and uncertainties that can affect our performance in both the near- and long-term. These forward-looking statements should be considered in light of the information included in this Form 10-K, including, in particular, the factors discussed below. These factors may be revised or supplemented in subsequent reports on Forms 10-Q and 8-K.

Risk Factors

Our business, operating results, cash flows and financial condition are subject to the principal risks and uncertainties set forth below, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results.

<u>Macroeconomic and Industry Risks</u>

Each of our businesses is subject to unique industry and economic conditions that may adversely affect the markets and operating conditions of our customers, which in turn can affect demand for our products and services and our results of operations.

- ***Aerospace***—Our Aerospace business is impacted by customer buying patterns of aftermarket parts, supplier stability, factory transitions and global supply chain capacity constraints that may lead to shortages of crucial components. Operating results may be adversely affected by downturns in the global demand for air travel which impacts new aircraft production or the delay or cancellation of new aircraft orders, delays in launch schedules for new aircraft, the retirement of aircraft and global flying hours, which impact air transport, regional, business and general aviation aircraft utilization rates. Operating results may be adversely affected by the decrease in air travel demand due to regional restrictions or suspension of service for public health, safety, or environmental events. Operating results could also be impacted by changes in overall trends related to end market demand for the product portfolio, as well as, new entrants and non-traditional players entering the market. Operating results in our Defense and Space business unit may be affected by the mix of U.S. and foreign government appropriations for defense and space programs and by compliance risks. Results may also be impacted by the potential introduction of counterfeit parts into our global supply chain.
- ***Honeywell Building Technologies***—Operating results may be adversely impacted by downturns in the level of global commercial construction activity (including retrofits and upgrades), lower capital spending and operating expenditures on building projects, less industrial plant expansion, changes in the competitive landscape including new market entrants and new technologies, and fluctuations in inventory levels in distribution channels.
- ***Performance Materials and Technologies***—Operating results may be adversely impacted by downturns in capacity utilization for chemical, industrial, refining, petrochemical and semiconductor plants, our customers' availability of capital for refinery construction and expansion, raw material demand and supply volatility, product commoditization, continued illegal imports of hydrofluorocarbons into Europe and our ability to maximize our facilities' production capacity and minimize downtime. In particular, the volatility in oil and natural gas prices have and will continue to impact our customers' operating levels and capital spending and thus demand for our products and services.
- ***Safety and Productivity Solutions***—Operating results may be adversely impacted by reduced investments in process automation, safety monitoring, and plant capacity utilization initiatives, fluctuations in retail markets, lower customer demand due to the failure to anticipate and respond to overall trends related to end market demand, changes in the competitive landscape including new market entrants and technology that may lead to product commoditization, and adverse industry economic conditions, all of which could result in lower market share, reduced selling prices and lower margins.

An increasing percentage of our sales and operations is in non-U.S. jurisdictions and is subject to the economic, political, regulatory, foreign exchange and other risks of international operations.

Our international operations, including U.S. exports, represent more than half of the Company's sales. Risks related to international operations include exchange control regulations, wage and price controls, antitrust regulations, employment regulations, foreign investment laws, import, export and other trade restrictions (such as sanctions and embargoes), differing levels of protection of intellectual property, acts of industrial espionage, violations by our employees of anti-corruption laws (despite our efforts to mitigate these risks), changes in regulations regarding transactions with state-owned enterprises, nationalization of private enterprises, acts of terrorism, and our ability to hire and maintain qualified staff and maintain the safety of our employees in these regions. Instability and uncertainties arising from the global geopolitical environment, and the evolving international and domestic political, regulatory and economic landscape, the potential for changes in global trade policies including sanctions and trade barriers, trends such as populism, economic nationalism and negative sentiment toward multinational companies, and the cost of compliance with increasingly complex and often conflicting regulations worldwide can impair our flexibility in modifying product, marketing, pricing or other strategies for growing our businesses, as well as our ability to improve productivity and maintain acceptable operating margins.

While there is uncertainty regarding the final outcome and full terms of the United Kingdom's future relationship with the European Union, it is possible that there will be greater restrictions on imports and exports between the United Kingdom and other countries, including the United States, increased tariffs on U.K. imports and exports, and increased regulatory complexities. The Company has developed plans to mitigate the potential impact of these possible restrictions, but the implications of these uncertainties could affect the Company's business, financial position and results of operations.

Existing free trade laws and regulations provide certain beneficial duties and tariffs for qualifying imports and exports. Changes in laws or policies governing the terms of foreign trade, and in particular increased trade restrictions, tariffs or taxes on imports from countries where we manufacture products or from where we import products or raw materials, either directly or through our suppliers, could have an impact on our competitive position and financial results.

The United States has commenced certain trade actions, including imposing tariffs on certain goods imported from China and other countries, which has resulted in retaliatory tariffs by China and other countries. Additional tariffs imposed by the United States on a broader range of imports, or further retaliatory trade measures taken by China or other countries in response, could increase the cost of our products.

Operating outside of the United States also exposes us to foreign exchange risk, which we monitor and seek to reduce through hedging activities. However, foreign exchange hedging activities bear a financial cost and may not always be available to us or be successful in eliminating such volatility. Finally, we generate significant amounts of cash outside of the United States that is invested with financial and non-financial counterparties. While we employ comprehensive controls regarding global cash management to guard against cash or investment loss and to ensure our ability to fund our operations and commitments, a material disruption to the counterparties with whom we transact business could expose Honeywell to financial loss.

Operating outside the United States also exposes us to additional intellectual property risk. The laws and enforcement practices of certain jurisdictions in which we operate may not protect our intellectual property rights to the same extent as in the U.S. and may impose joint venture, technology transfer, local service or other foreign investment requirements and restrictions that potentially compromise control over our technology and proprietary information. Failure of foreign jurisdictions to protect our intellectual property rights, an inability to effectively enforce such rights in foreign jurisdictions, or the imposition of foreign jurisdiction investment or sourcing restrictions or requirements could result in loss of valuable proprietary information and could impact our competitive position and financial results.

Risks related to our defined benefit pension plans may adversely impact our results of operations and cash flow.

Significant changes in actual investment return on pension assets, discount rates, and other factors could adversely affect our results of operations and require cash pension contributions in future periods. Changes in discount rates and actual asset returns different than our anticipated asset returns can result in significant non-cash actuarial gains or losses which we record in the fourth quarter of each fiscal year, and, if applicable, in any quarter in which an interim re-measurement is triggered. With regard to cash pension contributions, funding requirements for our pension plans are largely dependent upon interest rates, actual investment returns on pension assets and the impact of legislative or regulatory changes related to pension funding obligations.

We may be required to transition from the use of the LIBOR interest rate index in the future.

We have certain contracts indexed to LIBOR to calculate the interest rate. The continued availability of the LIBOR index is not guaranteed after 2021. We cannot predict whether and to what extent banks will continue to provide LIBOR submissions to the administrator of LIBOR or whether any additional reforms to LIBOR may be enacted. The language in certain of our LIBOR-based contracts identify various events that trigger when a successor rate to the designated rate would be selected. If a trigger is satisfied, such contracts may give the calculation agent discretion over the substitute index or indices for the calculation of interest rates to be selected. The implementation of a substitute index or indices for the calculation of interest rates under our contracts may result in our incurring significant expenses in effecting the transition and may result in disputes or litigation over the appropriateness or comparability to LIBOR of the substitute index or indices, which could have an adverse effect on our results of operations.

Operational Risks

Raw material price fluctuations, the ability of key suppliers to meet quality and delivery requirements, or catastrophic events can increase the cost of our products and services, impact our ability to meet commitments to customers and cause us to incur significant liabilities.

The cost of raw materials is a key element in the cost of our products, particularly in Performance Materials and Technologies (copper, fluorspar, tungsten salts, ethylene, aluminum, and molybdenum) and in Aerospace (nickel, steel, titanium and other metals). Our inability to offset material price inflation through increased prices to customers, formula or long-term fixed price contracts with suppliers, productivity actions or through commodity hedges could adversely affect our results of operations.

Many major components, product equipment items and raw materials, particularly in Aerospace, are procured or subcontracted on a single or sole-source basis. Although we maintain a qualification and performance surveillance process and we believe that sources of supply for raw materials and components are generally adequate, it is difficult to predict what effects shortages or price increases may have in the future. Our ability to manage inventory and meet delivery requirements may be constrained by our suppliers' inability to scale production and adjust delivery of long-lead time products during times of volatile demand. Our inability to fill our supply needs would jeopardize our ability to fulfill obligations under commercial and government contracts, which could, in turn, result in reduced sales and profits, contract penalties or terminations, and damage to customer relationships.

We may be unable to successfully execute or effectively integrate acquisitions, and divestitures may not occur as planned.

We regularly review our portfolio of businesses and pursue growth through acquisitions and seek to divest non-core businesses. We may not be able to complete transactions on favorable terms, on a timely basis, or at all. In addition, our results of operations and cash flows may be adversely impacted by (i) the failure of acquired businesses to meet or exceed expected returns, including risk of impairment; (ii) the failure to integrate multiple acquired businesses into Honeywell simultaneously and on schedule and/or to achieve expected synergies; (iii) the inability to dispose of non-core assets and businesses on satisfactory terms and conditions; and (iv) the discovery of unanticipated liabilities, labor relations difficulties, cybersecurity concerns, compliance issues or other problems in acquired businesses for which we lack contractual protections, insurance or indemnities, or with regard to divested businesses, claims by purchasers to whom we have provided contractual indemnification.

Our future growth is largely dependent upon our ability to develop new technologies and introduce new products that achieve market acceptance in increasingly competitive markets with acceptable margins.

Our future growth rate depends upon a number of factors, including our ability to (i) identify and evolve with emerging technological and broader industry trends in our target end-markets; (ii) develop and maintain competitive products; (iii) defend our market share against an ever-expanding number of competitors including many new and non-traditional competitors; (iv) enhance our products by adding innovative features that differentiate our products from those of our competitors and prevent commoditization of our products; (v) develop, manufacture and bring compelling new products to market quickly and cost-effectively; (vi) monitor disruptive technologies and business models; (vii) achieve sufficient return on investment for new products introduced based on capital expenditures and research and development spending; (viii) respond to changes in overall trends related to end-market demand; and (ix) attract, develop and retain individuals with the requisite technical expertise and understanding of customers' needs to develop new technologies and introduce new products. Competitors may also develop after-market services and parts for our products which attract customers and adversely affect our return on investment for new products. The failure of our technologies or products to gain market acceptance due to more attractive offerings by our competitors or the failure to address any of the above factors could significantly reduce our revenues and adversely affect our competitive standing and prospects.

Failure to increase productivity through sustainable operational improvements, as well as an inability to successfully execute repositioning projects or to effectively manage our workforce, may reduce our profitability or adversely impact our businesses.

Our profitability and margin growth are dependent upon our ability to drive sustainable improvements. In addition, we seek productivity and cost savings benefits through repositioning actions and projects, such as consolidation of manufacturing facilities, transitions to cost-competitive regions and product line rationalizations. Risks associated with these actions include delays in execution, additional unexpected costs, realization of fewer than estimated productivity improvements and adverse effects on employee morale. We may not realize the full operational or financial benefits we expect, the recognition of these benefits may be delayed and these actions may potentially disrupt our operations. In addition, organizational changes, increased attrition, failure to create and implement a succession plan for key Company positions, not retaining key talent, inability to attract new employees with unique skills, labor relations difficulties, or workforce stoppage could have a material adverse effect on our business, reputation, financial position and results of operations.

As a supplier to the U.S. Government, we are subject to unique risks, such as the right of the U.S. Government to terminate contracts for convenience and to conduct audits and investigations of our operations and performance.

U.S. Government contracts are subject to termination by the government, either for the convenience of the government or for our failure to perform consistent with the terms of the applicable contract. Our contracts with the U.S. Government are also subject to government audits that may recommend downward price adjustments and other changes. When appropriate and prudent, we made adjustments and paid voluntary refunds in the past and may do so in the future.

We are also subject to government investigations of business practices and compliance with government procurement regulations. If, as a result of any such investigation or other government investigations (including investigation of violations of certain environmental, employment or export laws), Honeywell or one of its businesses were found to have violated applicable law, then it could be suspended from bidding on or receiving awards of new government contracts, suspended from contract performance pending the completion of legal proceedings and/or have its export privileges suspended.

Our operations and the prior operations of predecessor companies expose us to the risk of material environmental liabilities.

Mainly because of past operations and operations of predecessor companies, we are subject to potentially material liabilities related to the remediation of environmental hazards and to claims of personal injuries or property damages that may be caused by hazardous substance releases and exposures. We continue to incur remedial response and voluntary clean-up costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future. Various federal, state, local and foreign governments regulate the discharge of materials into the environment, or the use of or communications respecting certain materials in our products, and can impose substantial fines and criminal sanctions for violations, and require injunctive relief measures, including installation of costly equipment or operational changes to limit emissions and/or decrease the likelihood of accidental hazardous substance releases, or limiting access of our products to markets, among others. In addition, changes in laws, regulations and enforcement of policies, the discovery of previously unknown contamination or new technology or information related to individual sites, the establishment of stricter toxicity standards with respect to certain contaminants, or the imposition of new clean-up requirements or remedial techniques could require us to incur additional costs in the future that would have a negative effect on our financial condition or results of operations.

Cybersecurity incidents could disrupt business operations, result in the loss of critical and confidential information, and adversely impact our reputation and results of operations.

Global cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to information technology (IT) systems to sophisticated and targeted measures known as advanced persistent threats, directed at the Company, its products, its customers and/or its third party service providers, including cloud providers. Our customers, including the U.S. government, are increasingly requiring cybersecurity protections and mandating cybersecurity standards in our products, and we may incur additional costs to comply with such demands. While we have experienced, and expect to continue to experience, these types of threats and incidents, none of them to date have been material to the Company. We seek to deploy comprehensive measures to deter, prevent, detect, respond to and mitigate these threats, including identity and access controls, data protection, vulnerability assessments, continuous monitoring of our IT networks and systems and maintenance of backup and protective systems. Despite these efforts, cybersecurity incidents, depending on their nature and scope, could potentially result in the misappropriation, destruction, corruption or unavailability of critical data and confidential or proprietary information (our own or that of third parties) and the disruption of business operations. The potential consequences of a material cybersecurity incident include financial loss, reputational damage, litigation with third parties, theft of intellectual property, fines levied by the Federal Trade Commission, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs due to the increasing sophistication and proliferation of threats, which in turn could adversely affect our competitiveness and results of operations.

The development of technology products and services presents security and safety risks.

An increasing number of our products, services and technologies are delivered with Internet of Things (IoT) capabilities and the accompanying interconnected device networks which include sensors, data and advanced computing capabilities. We have developed product software designs which we believe are less susceptible to cyber-attacks, but despite these efforts, if our products and services that include IoT solutions do not work as intended or are compromised, the possible consequences include financial loss, reputational damage, exposure to legal claims or enforcement actions, theft of intellectual property, and diminution in the value of our investment in research, development and engineering, which in turn could adversely affect our competitiveness and results of operations.

Data privacy, data protection, and information security may require significant resources and presents certain risks.

We collect, store, have access to and otherwise process certain confidential or sensitive data, including proprietary business information, personal data or other information that is subject to privacy and security laws, regulations and/or customer-imposed controls. Despite our efforts to protect such data, we may be vulnerable to material security breaches, theft, misplaced or lost data, programming errors, or employee errors that could potentially lead to the compromising of such data, improper use of our systems, software solutions or networks, unauthorized access, use, disclosure, modification or destruction of information, defective products, production downtimes and operational disruptions. In addition, we operate in an environment in which there are different and potentially conflicting data privacy laws in effect in the various U.S. states and foreign jurisdictions in which we operate and we must understand and comply with each law and standard in each of these jurisdictions while ensuring the data is secure. For example, the State of California recently passed legislation granting residents certain new data privacy rights and regulating the security of IoT devices, effective in January 2020; European laws require us to have an approved legal mechanism to transfer personal data out of Europe; the European Union General Data Protection Regulation, which became enforceable in May 2018, superseded prior European Union data protection legislation and imposes more stringent requirements in how we collect and process personal data and provides for significantly greater penalties for noncompliance; and several other countries have passed laws that require personal data relating to their citizens to be maintained on local servers and impose additional data transfer restrictions. Government enforcement actions can be costly and interrupt the regular operation of our business, and violations of data privacy laws can result in fines, reputational damage and civil lawsuits, any of which may adversely affect our business, reputation and financial statements.

A material disruption of our operations, particularly at our manufacturing facilities or within our information technology infrastructure, could adversely affect our business.

Our facilities, supply chains, distribution systems and information technology systems are subject to catastrophic loss due to natural disasters, including hurricanes and floods, power outages, fires, explosions, terrorism, equipment failures, sabotage, cyber incidents, adverse weather conditions, labor disputes, critical supply failure, inaccurate downtime forecast, political disruption, and other reasons, which can result in undesirable consequences, including financial losses and damaged relationships with customers. Public health crises, like a regional or global pandemic, could disrupt our supply chain, distribution channels, production facilities, operations and customer demand, which could negatively impact our operations and adversely affect our business. We employ information technology systems and networks to support the business and rely on them to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. Disruptions to our information technology infrastructure from system failures, shutdowns, power outages, telecommunication or utility failures, cybersecurity incidents, and other events, including disruptions at our cloud computing, server, systems and other third party IT service providers, could interfere with our operations, interrupt production and shipments, damage customer and business partner relationships, and negatively impact our reputation.

Concentrations of credit and market risk may adversely affect our results of operations.

We maintain long-term contract relationships with many of our customers, suppliers, and other counterparties. While we monitor the financial health of these counterparties, we are exposed to credit and market risks to the extent that customers, suppliers, and other counterparties are concentrated in similar industries and geographic regions. Changes in economic conditions in these industries or geographic regions could result in the credit deterioration or insolvency of a significant counterparty, which may lead to concerns about the creditworthiness of other counterparties in the same industry or geography, impacting our ability to renew our long-term contract arrangements or collect amounts due under these arrangements.

Legal and Regulatory Risks

Our U.S. and non-U.S. tax liabilities are dependent, in part, upon the distribution of income among various jurisdictions in which we operate.

Our future results of operations could be adversely affected by changes in the effective tax rate as a result of a change in the mix of earnings in countries with differing statutory tax rates, changes in tax laws, regulations and judicial rulings (or changes in the interpretation thereof), potential taxation of digital services, changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, changes in the amount of earnings permanently reinvested offshore, the results of audits and examinations of previously filed tax returns and continuing assessments of our tax exposures and various other governmental enforcement initiatives. Our tax expense includes estimates of tax reserves and reflects other estimates and assumptions, including assessments of future earnings of the Company which could impact the valuation of our deferred tax assets. Changes in tax laws or regulations, including further regulatory developments arising from U.S. tax reform legislation as well as multi-jurisdictional changes enacted in response to the action items provided by the Organization for Economic Co-operation and Development (OECD), will increase tax uncertainty and impact our provision for income taxes.

Changes in legislation or government regulations or policies can have a significant impact on our results of operations.

The sales and margins of each of our segments are directly impacted by government regulations including safety, performance and product certification regulations. Within Aerospace, the operating results of Commercial Original Equipment and Commercial Aftermarket may be impacted by, among other things, mandates of the Federal Aviation Administration and other similar international regulatory bodies requiring the installation of equipment on aircraft. Our Defense and Space business unit may be affected by changes in government procurement regulations. Within Honeywell Building Technologies and Safety and Productivity Solutions, the demand for and cost of providing products, services and solutions can be impacted by fire, security, safety, health care, environmental and energy efficiency standards and regulations. Performance Materials and Technologies' results of operations can be impacted by environmental standards, regulations, and judicial determinations. Growth in all our businesses within emerging markets may be adversely impacted by the inability to acquire and retain qualified employees where local employment law mandates may be restrictive. Noncompliance with legislation and regulations can result in fines and penalties.

Increased public awareness and concern regarding global climate change may result in more international, regional and/or federal or other stakeholder requirements or expectations that could mandate more restrictive or expansive standards, such as stricter limits on greenhouse gas emissions or more prescriptive reporting of environmental, social, and governance metrics, than the voluntary commitments, that the Company has adopted or require such changes on a more accelerated time frame. There continues to be a lack of consistent climate legislation, which creates economic and regulatory uncertainty. If environmental laws or regulations are either changed or adopted and impose significant operational restrictions and compliance requirements upon the Company or its products, they could negatively impact the Company's business, capital expenditures, results of operations, financial condition and competitive position.

We cannot predict with certainty the outcome of litigation matters, government proceedings and other contingencies and uncertainties.

We are subject to a number of lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employment, employee benefits plans, intellectual property, antitrust, accounting, import and export, and environmental, health and safety matters. Our potential liabilities are subject to change over time due to new developments, changes in settlement strategy or the impact of evidentiary requirements, and we may become subject to or be required to pay damage awards or settlements that could have a material adverse effect on our results of operations, cash flows and financial condition. While we maintain insurance for certain risks, the amount of our insurance coverage may not be adequate to cover the total amount of all insured claims and liabilities. The incurrence of significant liabilities for which there is no or insufficient insurance coverage could adversely affect our results of operations, cash flows, liquidity and financial condition.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We have approximately 932 locations, of which 242 are manufacturing sites. Our properties and equipment are in good operating condition and are adequate for our present needs. We do not anticipate difficulty in renewing existing leases as they expire or in finding alternative facilities.

Item 3. Legal Proceedings

We are subject to a number of lawsuits, investigations and claims (some of which involve substantial amounts) arising out of the conduct of our business. See a discussion of environmental, asbestos and other litigation matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements.

The following matter is disclosed solely pursuant to the requirement to disclose certain environmental matters involving potential monetary sanctions in excess of $100,000: In January 2020, Honeywell reached agreement with the Texas Commission on Environmental Quality (TCEQ) to settle allegations that its Orange, Texas facility had exceeded certain emissions limits in its air permit. When Honeywell discovered these emissions, it took immediate corrective measures to address the issue, and self-reported the emissions to the TCEQ. Under the terms of the settlement, Honeywell will pay a penalty of $152,415 to resolve the matter.

Item 4. Mine Safety Disclosures

One of our wholly-owned subsidiaries has a placer claim for and operates a chabazite ore surface mine in Arizona. Information concerning mine safety and other regulatory matters associated with this mine is required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K and is included in Exhibit 95 to this annual report.

Part II.

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

Our common stock is listed on the New York Stock Exchange under the ticker symbol "HON". Dividend information for Honeywell's common stock is included in Note 25 Unaudited Quarterly Financial Information of Notes to Consolidated Financial Statements.

The number of record holders of our common stock at December 31, 2019 was 43,552.

Information regarding securities authorized for issuance under equity compensation plans is included in Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters under the caption "Equity Compensation Plans."

We purchased 4,325,518 shares of our common stock, par value $1 per share, in the quarter ending December 31, 2019. On April 29, 2019, the Board of Directors authorized the repurchase of up to a total of $10 billion of Honeywell common stock, which included amounts remaining under, and replaced, the previously approved share repurchase program. As of December 31, 2019, $7.0 billion remained available for additional share repurchases. We expect to repurchase outstanding shares from time to time to generally offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and the level of our operating, financing and other investing activities.

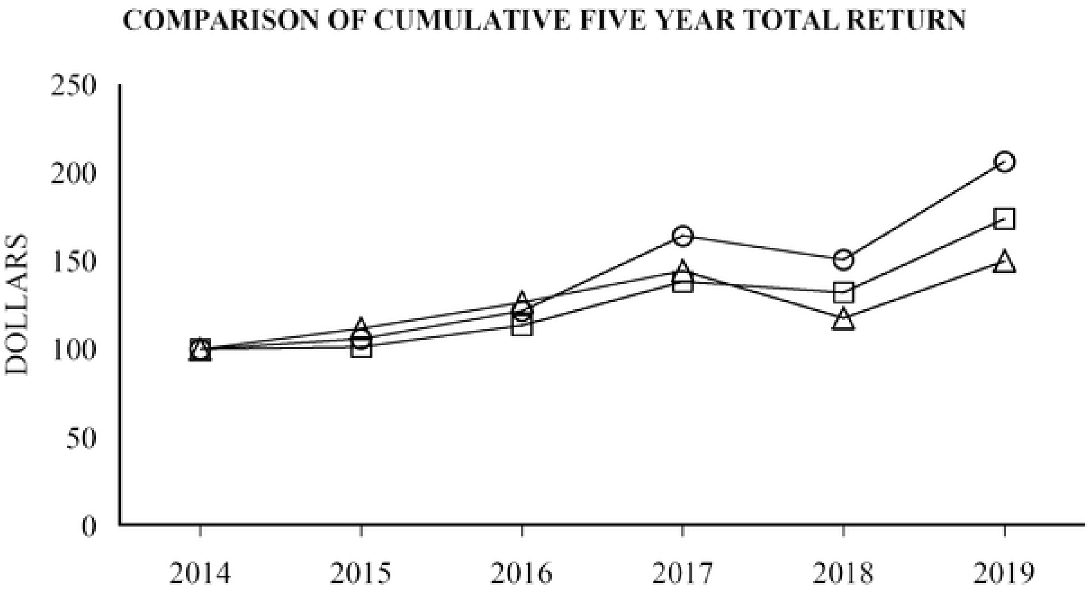
The following table summarizes our purchases of Honeywell's common stock for the three months ended December 31, 2019:

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet be Purchased Under Plans or Programs (Dollars in millions)
October 2019	1,326,831	$ 163.68	1,326,831	$ 7,522
November 2019	1,573,877	$ 179.03	1,573,877	$ 7,240
December 2019	1,424,810	$ 176.15	1,424,810	$ 6,989

Performance Graph

The following graph compares the five-year cumulative total return on our common stock to the total returns on the Standard & Poor's (S&P) 500 Stock Index and a composite of S&P's Industrial Conglomerates and Aerospace and Defense indices, on a 55%/45% weighted basis (the Composite Index). The weighting of the components of the Composite Index are based on our segments' relative contribution to total segment profit. The selection of the Industrial Conglomerates component of the Composite Index reflects the diverse and distinct range of non-aerospace businesses conducted by Honeywell. The annual changes for the five-year period shown in the graph are based on the assumption that $100 had been invested in Honeywell stock and each index on December 31, 2014 and that all dividends were reinvested.



		Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019
Honeywell	–○–	100	105.80	121.65	164.35	150.84	206.19
S&P Index	–□–	100	101.38	113.51	138.29	132.23	173.86
Composite Index	–△–	100	111.71	126.60	144.27	117.70	150.03

HONEYWELL INTERNATIONAL INC.

This selected financial data should be read in conjunction with Honeywell's Consolidated Financial Statements and related Notes included elsewhere in this Annual Report as well as the section of this Annual Report titled Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Item 6. Selected Financial Data

	Years Ended December 31,				
	2019	2018(1)(2)	2017(1)	2016	2015
	(Dollars in millions, except per share amounts)				
Results of Operations					
Net sales	$ 36,709	$ 41,802	$ 40,534	$ 39,302	$ 38,581
Net income attributable to Honeywell	6,143	6,765	1,545	4,812	4,771
Earnings Per Common Share					
Earnings from continuing operations:					
Basic	8.52	9.10	2.03	6.30	6.12
Assuming dilution	8.41	8.98	2.00	6.21	6.04
Dividends per share	3.36	3.06	2.74	2.45	2.15
Balance Sheet Data					
Property, plant and equipment-net	5,325	5,296	5,926	5,793	5,789
Total assets	58,679	57,773	59,470	54,566	49,711
Short-term debt	4,892	6,458	5,309	3,593	6,514
Long-term debt	11,110	9,756	12,573	12,182	5,554
Total debt	16,002	16,214	17,882	15,775	12,068
Redeemable noncontrolling interest	7	7	5	3	290
Shareowners' equity	18,706	18,358	16,665	18,883	17,751

(1) 2018 and 2017 Net Income attributable to Honeywell and Earnings Per Common Share were impacted by U.S. Tax Reform; see Note 5 Income Taxes of Notes to Consolidated Financial Statements for further details.

(2) The results of operations for Transportation Systems business and Homes and Global Distribution business are included in the Consolidated Statement of Operations through the effective dates of the respective spin-offs, which occurred in 2018.

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

(Dollars in millions, except per share amounts)

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to help the reader understand the results of operations and financial condition of Honeywell International Inc. and its consolidated subsidiaries ("Honeywell" or "the Company") for the three years ended December 31, 2019. All references to Notes relate to Notes to Consolidated Financial Statements in Item 8. Financial Statements and Supplementary Data.

On October 1, 2018, we completed the tax-free spin-off to Honeywell shareowners of our Transportation Systems business, previously part of Aerospace, into a standalone publicly-traded company, Garrett Motion Inc. ("Garrett").

On October 29, 2018, we completed the tax-free spin-off to Honeywell shareowners of our Homes and Global Distribution business, previously part of Home and Building Technologies (renamed Honeywell Building Technologies following the spin-off), into a standalone publicly-traded company, Resideo Technologies, Inc. ("Resideo").

We removed the assets and liabilities associated with Garrett and Resideo from our Consolidated Balance Sheet as of the effective dates of the respective spin-offs. We included the results of operations for Garrett and Resideo in our Consolidated Statement of Operations through the effective dates of the respective spin-offs. Total sales and total cost of products and services sold attributable to these spin-offs, impacting segment profit, were $6.6 billion and $4.8 billion for the year ended December 31, 2018.

A detailed discussion of the prior year 2018 to 2017 year-over-year changes are not included herein and can be found in the Management's Discussion and Analysis section in the 2018 Annual Report on Form 10-K filed February 8, 2019.

EXECUTIVE SUMMARY

During 2019, we continued to deliver on our financial commitments and to create long-term shareowner value. Income before taxes grew 1% to $7.6 billion despite the spin-offs. The improvement in year over year Income before taxes was attributable to both sales growth as well as operational improvements that increased operating margins. We believe our ability to drive continuous earnings growth over a long history results from consistently identifying and investing in productivity initiatives. We continue to focus on commercial excellence and improvements in our manufacturing and operational processes, including our Integrated Supply Chain and Honeywell Digital transformations, to drive higher sales at better margins.

We are careful not to allow the attainment of short-term financial results to imperil the creation of long-term, sustainable shareowner value. We are committed to a strategy to become one of the world's leading software industrial companies. Our technology investments allow us to introduce new technology solutions in high growth businesses in broad-based, attractive industrial end markets. Each of these end markets is characterized by favorable global mega-trends including energy efficiency, infrastructure investment, urbanization and safety.

In 2019 we deployed capital of $7.8 billion, including capital expenditures, dividends, share repurchases, mergers and acquisitions, and venture investments.

BUSINESS OBJECTIVES

Our businesses are focused on the following objectives:

- Driving profitable growth through delivering innovative products through research and development and technological excellence, and through continued enhancement of our footprint in high growth regions;
- Continuing to execute on our strategy to become the premier software-industrial, including the ongoing expansion of Honeywell Forge connected solutions for aircraft, buildings, cybersecurity, plants, and workers and driving a recurring revenue model across the Company;
- Expanding margins by optimizing the Company's cost structure through Supply Chain and Honeywell Digital transformation initiatives, commercial excellence, repositioning, and other manufacturing and operational process improvements;
- Executing disciplined, rigorous M&A and integration processes to deliver growth through acquisitions;
- Controlling corporate costs, including costs incurred for asbestos and environmental matters, pension and other post-retirement benefits; and
- Increasing availability of capital through strong cash flow generation and conversion from effective working capital management and proactively managing debt to enable the Company to smartly deploy capital for strategic acquisitions, dividends, share repurchases and capital expenditures.

CONSOLIDATED RESULTS OF OPERATIONS

Net Sales

	2019	2018	2017
Net sales	$ 36,709	$ 41,802	$ 40,534
% change compared with prior period	(12)%	3%	

Net sales decreased in 2019 compared to 2018 due to the spin-offs. Our 2018 results included $6,550 million of sales related to the Transportation Systems and Homes and Global Distribution businesses. Absent the impact of the spin-offs during 2018, sales grew 4% from $35,252 in 2018 to $36,709 in 2019.

The change in net sales is attributable to the following:

	2019 Versus 2018	2018 Versus 2017
Volume	3 %	4 %
Price	2 %	2 %
Foreign Currency Translation	(1)%	1 %
Acquisitions/Divestitures	(16)%	(4)%
	(12)%	3 %

A discussion of net sales by segment can be found in the Review of Business Segments section of this Management's Discussion and Analysis.

The unfavorable impact of foreign currency translation in 2019 compared with 2018 was principally driven by the strengthening of the U.S. Dollar against the currencies of the majority of our international markets, primarily the Euro, British Pound and Chinese Renminbi.

Cost of Products and Services Sold

	2019	2018	2017
Cost of products and services sold	$ 24,339	$ 29,046	$ 28,144
% change compared with prior period	(16)%	3%	
Gross Margin percentage	33.7 %	30.5%	30.6%

Cost of products and services sold decreased in 2019 compared to 2018 due to lower direct and indirect material costs of approximately $3,920 million, lower labor costs of approximately $160 million (both driven by the spin-offs of the Transportation Systems and Homes and Global Distribution businesses), and lower repositioning and other charges of approximately $530 million, largely due to lower asbestos and environmental related charges net of the reimbursements. Absent the impact of these items during 2018, cost of products and services sold increased approximately 3%.

Gross margin percentage increased in 2019 compared with 2018 primarily due to higher gross margin in the segments (approximately 1.4 percentage points), with higher Aerospace, Honeywell Building Technologies and Performance Materials and Technologies gross margins, including the favorable impact following the spin-offs, partially offset by lower Safety and Productivity Solutions gross margin. Additionally, gross margin percentage increased due to the lower costs within cost of products and services sold for repositioning and other charges (approximately 1.5 percentage point impact) and pension service costs (approximately 0.2 percentage point impact).

Selling, General and Administrative Expenses

	2019	2018	2017
Selling, general and administrative expenses	$ 5,519	$ 6,051	$ 6,087
% of sales	15.0%	14.5%	15.0%

Selling, general and administrative expenses decreased in 2019 compared with 2018 primarily due to the impact of the spin-offs. In addition, selling, general and administrative expenses decreased due to productivity and the favorable impact of foreign currency translation, partially offset by labor inflation.

Other (Income) Expense

	2019	2018	2017
Other (income) expense	$ (1,065)	$ (1,149)	$ (963)

Other (income) expense decreased in 2019 compared with 2018 primarily due to lower pension non-service income, partially offset by lower separation costs.

Tax Expense

	2019	2018	2017
Tax expense	$ 1,329	$ 659	$ 5,362
Effective tax rate	17.6%	8.8%	77.2%

The effective tax rate for 2019 was lower than the U.S. federal statutory rate of 21% primarily resulting from the impacts of revised guidance related to U.S. Tax Reform and internal restructuring initiatives that resulted in a $281 million reduction of accrued withholding taxes related to unremitted foreign earnings.

The effective tax rate for 2018 was lower than the U.S. federal statutory rate of 21% primarily attributable to internal restructuring initiatives that resulted in a reduction of accrued withholding taxes of approximately $1.1 billion related to unremitted foreign earnings. In addition, we recorded a tax benefit of approximately $440 million as a reduction to our 2017 provisional estimate of impacts from what is commonly referred to as the U.S. Tax Cuts and Jobs Act ("U.S. Tax Reform"), which was partially offset by $411 million of tax costs associated with the internal restructuring of the Homes and Global Distribution business and the Transportation Systems business in advance of their spin-offs.

For further discussion of changes in the effective tax rate, see Note 5 Income Taxes of Notes to Consolidated Financial Statements.

Net Income Attributable to Honeywell

	2019	2018	2017
Net income attributable to Honeywell	$ 6,143	$ 6,765	$ 1,545
Earnings per share of common stock–assuming dilution	$ 8.41	$ 8.98	$ 2.00

Earnings per share of common stock–assuming dilution decreased in 2019 compared with 2018 primarily driven by the absence of profit attributable to the spin-offs, higher income tax expense (attributable to a lower income tax benefit related to U.S. Tax Reform and internal restructuring initiatives when compared to the prior year), partially offset by increased operational segment profit and lower repositioning and other charges.

Review of Business Segments

We globally manage our business operations through four segments: Aerospace, Honeywell Building Technologies, Performance Materials and Technologies, and Safety and Productivity Solutions.

	Years Ended December 31,			% Change	
	2019	2018	2017	2019 Versus 2018	2018 Versus 2017
Aerospace Sales					
Commercial Aviation Original Equipment	$ 2,997	$ 2,833	$ 2,475	6 %	14 %
Commercial Aviation Aftermarket	5,731	5,373	5,103	7 %	5 %
Defense and Space	5,326	4,665	4,053	14 %	15 %
Transportation Systems	—	2,622	3,148	(100)%	(17)%
Total Aerospace Sales	14,054	15,493	14,779		
Honeywell Building Technologies Sales					
Homes	—	3,928	4,482	(100)%	(12)%
Buildings	5,717	5,370	5,295	6 %	1 %
Total Honeywell Building Technologies Sales	5,717	9,298	9,777		
Performance Materials and Technologies Sales					
UOP	2,890	2,845	2,753	2 %	3 %
Process Solutions	5,146	4,981	4,795	3 %	4 %
Advanced Materials	2,798	2,848	2,791	(2)%	2 %
Total Performance Materials and Technologies Sales	10,834	10,674	10,339		
Safety and Productivity Solutions Sales					
Safety	2,215	2,278	2,169	(3)%	5 %
Productivity Solutions	3,889	4,059	3,470	(4)%	17 %
Total Safety and Productivity Solutions Sales	6,104	6,337	5,639		
Net Sales	$ 36,709	$ 41,802	$ 40,534		

Aerospace

	2019		2018		Change	2017		Change
Net sales	$	14,054	$	15,493	(9)%	$	14,779	5%
Cost of products and services sold		9,398		10,837			10,320	
Selling, general and administrative and other expenses		1,049		1,153			1,171	
Segment profit	$	3,607	$	3,503	3 %	$	3,288	7%

	2019 vs. 2018		2018 vs. 2017	
Factors Contributing to Year-Over-Year Change	**Sales**	**Segment Profit**	**Sales**	**Segment Profit**
Organic	9 %	21 %	9 %	9 %
Foreign currency translation	— %	— %	1 %	1 %
Acquisitions, divestitures and other, net	(18)%	(18)%	(5)%	(3)%
Total % Change	(9)%	3 %	5 %	7 %

2019 compared with 2018

Aerospace sales decreased due to the impact of the spin-off of the Transportation Systems business. Our 2018 results included $2,622 million of sales related to the spin-off. Absent the impact of the spin-off during 2018, sales grew approximately 9% from $12,871 million to $14,054 million due to growth in organic sales.

- Commercial Aviation Original Equipment sales increased 6% (increased 6% organic) primarily due to increased demand from business aviation original equipment manufacturers (OEM).
- Commercial Aviation Aftermarket sales increased 7% (increased 7% organic) primarily due to growth in air transport and regional and business aviation.
- Defense and Space sales increased 14% (increased 14% organic) primarily driven by growth in U.S. and international defense.

Aerospace segment profit increased primarily due to organic sales volume, price, and productivity, net of inflation, partially offset by the divestiture impacts following the spin-off of the Transportation Systems business. Cost of products and services sold decreased primarily due to the spin-off of the Transportation Systems business and productivity, net of inflation, partially offset by higher sales volume.

Honeywell Building Technologies

	2019		2018		Change	2017		Change
Net sales	$	5,717	$	9,298	(39)%	$	9,777	(5)%
Cost of products and services sold		3,444		6,066			6,430	
Selling, general and administrative and other expenses		1,108		1,624			1,697	
Segment profit	$	1,165	$	1,608	(28)%	$	1,650	(3)%

	2019 vs. 2018		2018 vs. 2017	
Factors Contributing to Year-Over-Year Change	**Sales**	**Segment Profit**	**Sales**	**Segment Profit**
Organic	5 %	8 %	3 %	5 %
Foreign currency translation	(2)%	(2)%	1 %	1 %
Acquisitions, divestitures and other, net	(42)%	(34)%	(9)%	(9)%
Total % Change	(39)%	(28)%	(5)%	(3)%

2019 compared with 2018

Honeywell Building Technologies sales decreased due to the impact of the spin-off of the Homes and Global Distribution business. Our 2018 results included $3,928 million of sales related to the spin-off. Absent the impact of the spin-off during 2018, sales grew approximately 6% from $5,370 million to $5,717 million.

- Sales in Building Technologies increased 6% (increased 5% organic) due to the organic growth in both Products and Building Solutions, partially offset by the unfavorable impact of foreign currency translation.

Honeywell Building Technologies segment profit decreased primarily due to the divestiture impacts following the spin-off of the Homes and Global Distribution business. This was offset by an increase in organic sales volumes and price, partially offset by inflation. Cost of products and services sold decreased due to the spin-off, partially offset by higher sales volumes.

Performance Materials and Technologies

	2019	2018	Change	2017	Change
Net sales	$ 10,834	$ 10,674	1%	$ 10,339	3%
Cost of products and services sold	6,989	6,948		6,764	
Selling, general and administrative and other expenses	1,412	1,398		1,369	
Segment profit	$ 2,433	$ 2,328	5%	$ 2,206	6%

	2019 vs. 2018		2018 vs. 2017	
Factors Contributing to Year-Over-Year Change	**Sales**	**Segment Profit**	**Sales**	**Segment Profit**
Organic	4 %	6 %	2%	5%
Foreign currency translation	(3)%	(1)%	1%	1%
Acquisitions, divestitures and other, net	—	—	—%	—%
Total % Change	1 %	5 %	3%	6%

2019 compared with 2018

Performance Materials and Technologies sales increased primarily due to organic growth, mainly due to volumes, partially offset by the unfavorable impact of foreign currency translation.

- UOP sales increased 2% (increased 3% organic) driven primarily by increases in catalyst sales, project volumes, and licensing, partially offset by lower gas processing volumes and the unfavorable impact of foreign currency translation.
- Process Solutions sales increased 3% (increased 6% organic) driven primarily by increases in maintenance and migration services, project volumes, field products, and software sales, partially offset by the unfavorable impact of foreign currency translation.
- Advanced Materials sales decreased 2% (flat organic) driven primarily by the unfavorable impact of foreign currency translation and decreased volumes in specialty products, partially offset by growth in fluorine products sales.

Performance Materials and Technologies segment profit increased primarily due to productivity, net of inflation, and price, partially offset by higher sales of lower margin products and the impact of foreign currency translation. Cost of products and services sold increased primarily due to higher sales volumes, partially offset by the impact of foreign currency translation and productivity, net of inflation.

Safety and Productivity Solutions

	2019	2018	Change	2017	Change
Net sales	$ 6,104	$ 6,337	(4)%	$ 5,639	12%
Cost of products and services sold	4,158	4,205		3,714	
Selling, general and administrative and other expenses	1,156	1,100		1,073	
Segment profit	$ 790	$ 1,032	(23)%	$ 852	21%

	2019 vs. 2018		2018 vs. 2017	
Factors Contributing to Year-Over-Year Change	**Sales**	**Segment Profit**	**Sales**	**Segment Profit**
Organic	(4)%	(23)%	11%	20%
Foreign currency translation	(2)%	(2)%	1%	1%
Acquisitions, divestitures and other, net	2 %	2 %	—%	—%
Total % Change	(4)%	(23)%	12%	21%

2019 compared with 2018

Safety and Productivity Solutions sales decreased primarily due to lower organic sales and the unfavorable impact of foreign currency translation, partially offset by acquisitions.

- Sales in Safety decreased 3% (decreased 1% organic) primarily due to the unfavorable impact of foreign currency translation and lower organic sales in Industrial Safety.
- Sales in Productivity Solutions decreased 4% (decreased 6% organic) primarily due to lower organic sales in Productivity Products and the unfavorable impact of foreign currency translation, partially offset by acquisitions.

Safety and Productivity Solutions segment profit decreased as a result of lower sales volumes in Productivity Products, higher sales of lower margin products and the impact of foreign currency translation, partially offset by higher productivity, net of inflation, favorable pricing and acquisitions. Cost of products and services sold decreased primarily due to higher productivity, net of inflation, and the impact of foreign currency translation, partially offset by acquisitions.

Repositioning Charges

See Note 3 Repositioning and Other Charges of Notes to Consolidated Financial Statements for a discussion of our repositioning actions and related charges incurred in 2019, 2018 and 2017. Cash spending related to our repositioning actions was $249 million, $285 million and $177 million in 2019, 2018 and 2017, and was funded through operating cash flows. In 2020, we expect cash spending for repositioning actions to be approximately $300 million and to be funded through operating cash flows.

LIQUIDITY AND CAPITAL RESOURCES

We continue to manage our businesses to maximize operating cash flows as the primary source of liquidity. In addition to our available cash and operating cash flows, we maintain additional sources of liquidity, including committed credit lines, short-term debt from the commercial paper market, long-term borrowings, access to the public debt and equity markets and the ability to access non-U.S. cash as a result of the U.S. Tax Reform. We use cash generated through operations to invest in our existing core businesses, acquisitions, share repurchases and dividends.

Cash Flow Summary

Our cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows, are summarized as follows:

	Years Ended December 31,		
	2019	2018	2017
Cash provided by (used for):			
Operating activities	$ 6,897	$ 6,434	$ 5,966
Investing activities	(533)	1,027	(3,574)
Financing activities	(6,600)	(5,032)	(3,516)
Effect of exchange rate changes on cash	16	(201)	340
Net (decrease) increase in cash and cash equivalents	$ (220)	$ 2,228	$ (784)

2019 compared with 2018

Cash provided by operating activities increased by $463 million primarily due to $276 million decrease in net payments for repositioning and other charges, largely due to asbestos and environmental related reimbursement receipts, and a $35 million favorable impact from working capital (favorable inventory and accounts receivable partially offset by accounts payable).

Cash used by investing activities increased by $1,560 million primarily due to a net $1,762 million increase in investments, primarily short-term marketable securities.

Cash used for financing activities increased by $1,568 million primarily due to the prior year pre-spin separation funding of $2,622 million net of spin-off cash, an increase in cash dividends paid of $170 million and an increase in net repurchases of common stock of $169 million, partially offset by a decrease in net debt payments of $1,330 million.

Liquidity

Each of our businesses is focused on increasing operating cash flows through revenue growth, margin expansion and improved working capital turnover. We believe that cash balances and operating cash flow will continue to be our principal source of liquidity. In addition to the available cash and operating cash flows, additional sources of liquidity include committed credit lines, short-term debt from the commercial paper markets, long-term borrowings, and access to the public debt and equity markets. To date, the Company has not experienced any limitations in our ability to access these sources of liquidity.

We monitor the third-party depository institutions that hold our cash and cash equivalents on a daily basis. Our emphasis is primarily safety of principal and secondarily maximizing yield of those funds. We diversify our cash and cash equivalents among counterparties to minimize exposure to any one of these entities.

A source of liquidity is our ability to access the commercial paper market. Commercial paper notes are sold at a discount or premium and have a maturity of not more than 365 days from date of issuance. Borrowings under the commercial paper program are available for general corporate purposes as well as for financing acquisitions. The weighted average interest rate on short-term borrowings and commercial paper outstanding as of December 31, 2019 was (0.37%) and as of December 31, 2018 was (0.31%).

Our ability to access the commercial paper market, and the related cost of these borrowings, is affected by the strength of our credit rating and market conditions. Our credit ratings are periodically reviewed by the major independent debt-rating agencies. As of December 31, 2019, Standard and Poor's (S&P), Fitch, and Moody's have ratings on our long-term debt of A, A and A2 and short-term debt of A-1, F1 and P1. S&P, Fitch and Moody's have Honeywell's rating outlook as "stable."

We also have a current shelf registration statement filed with the Securities and Exchange Commission under which we may issue additional debt securities, common stock and preferred stock that may be offered in one or more offerings on terms to be determined at the time of the offering. Net proceeds of any offering would be used for general corporate purposes, including repayment of existing indebtedness, share repurchases, capital expenditures and acquisitions.

See Note 2 Acquisitions and Divestitures and Note 13 Long-term Debt and Credit Agreements of Notes to Consolidated Financial Statements for additional discussion of items impacting our liquidity.

In 2019, we repurchased $4,400 million of outstanding shares to offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans, and to reduce share count when attractive opportunities arise. On April 29, 2019, the Board of Directors authorized the repurchase of up to a total of $10.0 billion of Honeywell common stock, of which $7.0 billion remained available as of December 31, 2019 for additional share repurchases. This authorization included amounts remaining under and replaced the previously approved share repurchase program. We expect to repurchase outstanding shares from time to time to offset the dilutive impact of employee stock based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. We will continue to seek to reduce share count via share repurchases when attractive opportunities arise.

In addition to our normal operating cash requirements, our principal future cash requirements will be to fund capital expenditures, share repurchases, dividends, strategic acquisitions and debt repayments.

Specifically, we expect our primary cash requirements in 2020 to be as follows:

- Capital expenditures—we expect to spend approximately $900 million for capital expenditures in 2020 primarily for growth, production and capacity expansion, cost reduction, maintenance, and replacement.
- Share repurchases—under our share repurchase program, $7.0 billion is available as of December 31, 2019 for additional share repurchases. We expect to repurchase outstanding shares from time to time to offset the dilutive impact of employee stock-based compensation plans, including option exercises, restricted unit vesting and matching contributions under our savings plans. Additionally, we will seek to reduce share count via share repurchases as and when attractive opportunities arise. The amount and timing of future repurchases may vary depending on market conditions and our level of operating, financing and other investing activities.
- Dividends—we increased our quarterly dividend rate by 10% to $0.90 per share of common stock effective with the fourth quarter 2019 dividend. We intend to continue to pay quarterly dividends in 2020.

We continuously assess the relative strength of each business in our portfolio as to strategic fit, market position, profit and cash flow contribution in order to identify target investment and acquisition opportunities in order to upgrade our combined portfolio. We identify acquisition candidates that will further our strategic plan and strengthen our existing core businesses. We also identify businesses that do not fit into our long-term strategic plan based on their market position, relative profitability or growth potential. These businesses are considered for potential divestiture, restructuring or other repositioning actions subject to regulatory constraints.

Based on past performance and current expectations, we believe that our operating cash flows will be sufficient to meet our future operating cash needs. Our available cash, committed credit lines and access to the public debt and equity markets, provide additional sources of short-term and long-term liquidity to fund current operations, debt maturities, and future investment opportunities.

Contractual Obligations

Following is a summary of our significant contractual obligations and probable liability payments at December 31, 2019:

		Payments by Period			
	Total[6][7]	2020	2021-2022	2023-2024	Thereafter
Long-term debt, including finance leases[1]	$ 12,486	$ 1,376	$ 3,617	$ 2,513	$ 4,980
Interest payments on long-term debt, including finance leases	3,100	327	577	434	1,762
Operating lease liabilities	790	195	290	160	145
Purchase obligations[2]	1,606	782	586	238	—
Estimated environmental liability payments[3]	709	222	257	177	53
Asbestos related liability payments[4]	2,357	361	612	438	946
Asbestos insurance recoveries[5]	(434)	(42)	(108)	(64)	(220)
	$ 20,614	$ 3,221	$ 5,831	$ 3,896	$ 7,666

(1) Assumes all long-term debt is outstanding until scheduled maturity.
(2) Purchase obligations are entered into with various vendors in the normal course of business and are consistent with our expected requirements.
(3) The payment amounts in the table only reflect the environmental liabilities which are probable and reasonably estimable as of December 31, 2019.
(4) These amounts are estimates of asbestos related cash payments for NARCO and Bendix based on our asbestos related liabilities which are probable and reasonably estimable as of December 31, 2019. See Asbestos Matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.
(5) These amounts represent our insurance recoveries that are deemed probable for asbestos related liabilities as of December 31, 2019. See Asbestos Matters in Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.
(6) The table excludes tax liability payments, including those for unrecognized tax benefits. See Note 5 Income Taxes of Notes to Consolidated Financial Statements for additional information.
(7) The table excludes expected proceeds from the indemnification and reimbursement agreements entered into with Garrett and Resideo. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for additional information.

Asbestos Matters

Payments, net of insurance recoveries, related to known asbestos matters was $163 million, $216 million and $239 million in 2019, 2018 and 2017 and is estimated to be approximately $320 million in 2020. We expect to pay these asbestos matters from operating cash flows. The timing of these payments depends on several factors, including the timing of litigation and settlements of liability claims.

Reimbursements from Garrett for payments related to asbestos matters, as defined in the indemnification and reimbursement agreement, was $152 million in 2019 and is expected to be approximately $115 million in 2020. We received approximately $36 million in January 2020.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for further discussion of our asbestos matters and the indemnification and reimbursement agreement entered into with Garrett.

Environmental Matters

Accruals for environmental matters deemed probable and reasonably estimable were $213 million, $395 million and $287 million in 2019, 2018 and 2017. In addition, in 2019, 2018 and 2017 we incurred operating costs for ongoing businesses of approximately $99 million, $95 million and $82 million relating to compliance with environmental regulations.

Payments related to known environmental matters was $256 million, $218 million and $212 million in 2019, 2018 and 2017 and is estimated to be approximately $220 million in 2020. We expect to pay these environmental matters from operating cash flows. The timing of these payments depends on several factors, including the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, execution timeframe of projects, remedial techniques to be utilized and agreement with other parties.

Reimbursements from Resideo for payments related to environmental matters at certain sites, as defined in the indemnification and reimbursement agreement, was $140 million in 2019 and is expected to be $140 million in 2020. We received approximately $35 million in January 2020.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for further discussion of our environmental matters and the indemnification and reimbursement agreement entered into with Resideo.

Financial Instruments

The following table illustrates the potential change in fair value for interest rate sensitive instruments based on a hypothetical immediate one percentage point increase in interest rates across all maturities and the potential change in fair value for foreign exchange rate sensitive instruments based on a 10% weakening of the U.S. Dollar versus local currency exchange rates across all maturities at December 31, 2019 and 2018.

	Face or Notional Amount	Carrying Value(1)	Fair Value(1)	Estimated Increase (Decrease) in Fair Value(2)
December 31, 2019				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$ 12,486	$ (12,486)	$ (13,578)	$ (677)
Interest rate swap agreements	3,950	25	25	(72)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts(3)	12,746	270	270	(676)
Cross currency swap agreements	1,200	51	51	(115)
December 31, 2018				
Interest Rate Sensitive Instruments				
Long-term debt (including current maturities)	$ 12,628	$ (12,628)	$ (13,133)	$ (654)
Interest rate swap agreements	2,600	(45)	(45)	(83)
Foreign Exchange Rate Sensitive Instruments				
Foreign currency exchange contracts(3)	14,995	115	115	(742)
Cross currency swap agreements	1,200	32	32	(117)

(1) Asset or (liability)

(2) A hypothetical immediate one percentage point decrease in interest rates across all maturities and a potential change in fair value of foreign exchange rate sensitive instruments based on a 10% strengthening of the U.S. dollar versus local currency exchange rates across all maturities will result in a change in fair value approximately equal to the inverse of the amount disclosed in the table.

(3) Changes in the fair value of foreign currency exchange contracts are offset by changes in the fair value, cash flows, or net investments of underlying hedged foreign currency transactions or foreign operations.

See Note 15 Financial Instruments and Fair Value Measures of Notes to Consolidated Financial Statements for further discussion on the agreements.

CRITICAL ACCOUNTING ESTIMATES

The preparation of our consolidated financial statements in accordance with generally accepted accounting principles is based on the selection and application of accounting policies that require us to make significant estimates and assumptions about the effects of matters that are inherently uncertain. Many estimates and assumptions involved in the application of accounting principles have a material impact on reported financial condition and operating performance and on the comparability of such reported information over different reporting periods. Critical accounting estimates or assumptions are those where the nature of the estimates or assumptions is material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and the impact of the estimates and assumptions on financial condition or operating performance is material. We consider the estimates and assumptions discussed below to be critical to the understanding of our financial statements. Actual results could differ from our estimates and assumptions, and any such differences could be material to our consolidated financial statements.

Contingent Liabilities—We are subject to a number of lawsuits, investigations and claims (some of which involve substantial dollar amounts) that arise out of the conduct of our global business operations or those of previously owned entities, including matters relating to commercial transactions, government contracts, product liability (including asbestos), prior acquisitions and divestitures, employee benefit plans, intellectual property, legal and environmental, health and safety matters. We continually assess the likelihood of any adverse judgments or outcomes to our contingencies, as well as potential amounts or ranges of probable losses, and recognize a liability, if any, for these contingencies based on a thorough analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Such analysis includes making judgments concerning matters such as the costs associated with environmental matters, the outcome of negotiations, the number and cost of pending and future asbestos claims, and the impact of evidentiary requirements. Because most contingencies are resolved over long periods of time, liabilities may change in the future due to new developments (including new discovery of facts, changes in legislation and outcomes of similar cases through the judicial system), changes in assumptions or changes in our settlement strategy. See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management's judgment applied in the recognition and measurement of our environmental and asbestos liabilities which represent our most significant contingencies.

Asbestos Related Liabilities and Insurance Recoveries—In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. In assessing the probability of insurance recovery, we make judgments concerning insurance coverage that we believe are reasonable and consistent with our historical dealings and our knowledge of any pertinent solvency issues surrounding insurers. While the substantial majority of our insurance carriers are solvent, some of our individual carriers are insolvent, which has been considered in our analysis of probable recoveries. Projecting future events is subject to various uncertainties that could cause the insurance recovery on asbestos related liabilities to be higher or lower than that projected and recorded. Given the inherent uncertainty in making future projections, we reevaluate our projections concerning our probable insurance recoveries considering any changes to the projected liability, our recovery experience or other relevant factors that may impact future insurance recoveries.

Our involvement in asbestos related personal injury actions relates to two predecessor companies. Regarding North American Refractories Company ("NARCO") asbestos related claims, we accrue for pending claims based on terms and conditions in agreements with NARCO, its former parent company, and certain asbestos claimants, and an estimate of the unsettled claims pending as of the time NARCO filed for bankruptcy protection. We also accrue for the estimated value of future NARCO asbestos related claims expected to be asserted against the NARCO Trust. The estimate of future NARCO claims was prepared in 2002, in the same year NARCO filed for bankruptcy protection, using NARCO tort system litigation experience based on a commonly accepted methodology used by numerous bankruptcy courts addressing 524(g) trusts. Accordingly, the estimated value of future NARCO asbestos claims was prepared before there was data on claims filings and payment rates in the NARCO Trust under the Trust Distribution Procedures and prepared when the stay of all NARCO asbestos claims was in effect (which remained in effect until NARCO emerged from Bankruptcy protection). Some critical assumptions underlying this commonly accepted methodology included claims filing rates, disease criteria and payment values contained in the Trust Distribution Procedures, estimated approval rates of claims submitted to the NARCO Trust and epidemiological studies estimating disease instances. This estimate resulted in a range of estimated liability of $743 million to $961 million. We believe that no amount within this range is a better estimate than any other amount and accordingly, we have recorded the minimum amount in the range. Given the Trust's lack of sufficiently reliable claims data since NARCO emerged from bankruptcy protection, it is not yet possible to update our estimated future claim costs based on actual NARCO Trust experience. When sufficiently reliable claims data exists, we will update our estimate of the NARCO Trust Liability and it is possible that a material change may need to be recognized. Regarding Bendix Friction Materials ("Bendix") asbestos related claims, we accrued for the estimated value of pending claims using average resolution values for the previous five years. We also accrued for the estimated value of future claims related to Bendix over the full term of epidemiological projections through 2059 based on historic and anticipated claims filing experience and dismissal rates, disease classifications, and average resolution values in the tort system for the previous five years.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of management's judgments applied in the recognition and measurement of our asbestos-related liabilities and related insurance recoveries.

Reimbursement Receivables—In conjunction with the Garrett and Resideo spin-offs, the Company entered into reimbursement agreements under which Honeywell receives cash payments as reimbursement primarily for asbestos related liability payments related to the Bendix business in the U.S. (Garrett) and net spending for environmental matters at certain sites as defined in the agreement (Resideo). Accordingly, the Company has recorded a receivable based on estimates in the underlying reimbursable Honeywell spend, and we monitor the recoverability of such receivable, which is subject to terms of applicable credit agreements and general ability to pay.

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of the recognition and measurement of our reimbursement receivables.

Defined Benefit Pension Plans—We sponsor both funded and unfunded U.S. and non-U.S. defined benefit pension plans. For financial reporting purposes, net periodic pension (income) expense is calculated annually based upon a number of actuarial assumptions, including a discount rate for plan obligations and an expected long-term rate of return on plan assets. Changes in the discount rate and expected long-term rate of return on plan assets could materially affect the annual pension (income) expense amount. Annual pension (income) expense is comprised of service and interest cost, assumed return on plan assets, prior service amortization (Pension Ongoing (Income) Expense) and a potential mark-to-market adjustment (MTM Adjustment).

The key assumptions used in developing our 2019, 2018 and 2017 net periodic pension (income) expense for our U.S. plans included the following:

	2019	2018	2017
Discount Rate:			
Projected benefit obligation	4.35%	3.68 %	4.20%
Service cost	4.47%	3.77 %	4.42%
Interest cost	3.94%	3.27 %	3.49%
Assets:			
Expected rate of return	6.75%	7.75 %	7.75%
Actual rate of return	21.2%	(1.8)%	20.5%
Actual 10 year average annual compounded rate of return	11.1%	11.0 %	7.4%

The MTM Adjustment represents the recognition of net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plans' projected benefit obligation (the corridor). Net actuarial gains and losses occur when the actual experience differs from any of the various assumptions used to value our pension plans or when assumptions change. The primary factors contributing to actuarial gains and losses are changes in the discount rate used to value pension obligations as of the measurement date each year and the difference between expected and actual returns on plan assets. The mark-to-market accounting method results in the potential for volatile and difficult to forecast MTM Adjustments. MTM charges were $123 million, $37 million and $87 million in 2019, 2018 and 2017.

We determine the expected long-term rate of return on plan assets utilizing historical plan asset returns over varying long-term periods combined with our expectations of future market conditions and asset mix considerations (see Note 21 Pension and Other Postretirement Benefits of Notes to Consolidated Financial Statements for details on the actual various asset classes and targeted asset allocation percentages for our pension plans). We plan to use an expected rate of return on plan assets of 6.15% for 2020 down from 6.75% for 2019 reflecting a decline in interest rates and additional re-balancing of assets to more fixed income.

The discount rate reflects the market rate on December 31 (measurement date) for high-quality fixed-income investments with maturities corresponding to our benefit obligations and is subject to change each year. The discount rate can be volatile from year to year as it is determined based upon prevailing interest rates as of the measurement date. We used a 3.22% discount rate to determine benefit obligations as of December 31, 2019, reflecting a decrease in the market interest rate environment since the prior year-end.

In addition to the potential for MTM Adjustments, changes in our expected rate of return on plan assets and discount rate resulting from economic events also affects future pension ongoing (income) expense. The following table highlights the sensitivity of our U.S. pension obligations and ongoing (income) expense to changes in these assumptions, assuming all other assumptions remain constant. These estimates exclude any potential MTM Adjustment:

Change in Assumption	Impact on 2020 Pension Ongoing Expense	Impact on PBO
0.25 percentage point decrease in discount rate	Decrease $26 million	Increase $480 million
0.25 percentage point increase in discount rate	Increase $25 million	Decrease $470 million
0.25 percentage point decrease in expected rate of return on assets	Increase $46 million	—
0.25 percentage point increase in expected rate of return on assets	Decrease $46 million	—

Pension ongoing income for our world-wide pension plans is expected to be approximately $786 million in 2020 compared with pension ongoing income of $592 million in 2019. The expected increase in pension income is primarily due to lower interest cost from a decrease in discount rates in our U.S. and UK plans, and higher expected return on plan assets (lower rate of return on a higher asset base). Also, if required, an MTM Adjustment will be recorded in the fourth quarter of 2020 in accordance with our pension accounting method as previously described. It is difficult to reliably forecast or predict whether there will be a MTM Adjustment in 2020, and if one is required, what the magnitude of such adjustment will be. MTM Adjustments are primarily driven by events and circumstances beyond the control of the Company such as changes in interest rates and the performance of the financial markets.

Finite-Lived Intangible Assets—The determination of useful lives (for depreciation/amortization purposes) and whether or not intangible assets are impaired involves the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. We evaluate the recoverability of the carrying amount of our finite-lived intangible assets whenever events or changes in circumstances indicate that the carrying amount of a finite-lived intangible asset group may not be fully recoverable. The principal factors in considering when to perform an impairment review are as follows:

- Significant under-performance (i.e., declines in sales, earnings or cash flows) of a business or product line in relation to expectations;
- Annual operating plans or strategic plan outlook that indicate an unfavorable trend in operating performance of a business or product line;
- Significant negative industry or economic trends; or
- Significant changes or planned changes in our use of the assets.

Once it is determined that an impairment review is necessary, recoverability of assets is measured by comparing the carrying amount of the asset grouping to the estimated future undiscounted cash flows. If the carrying amount exceeds the estimated future undiscounted cash flows, the asset grouping is considered to be impaired. The impairment is then measured as the difference between the carrying amount of the asset grouping and its fair value. We endeavor to utilize the best information available to measure fair value, which is usually either market prices (if available), level 1 or level 2 of the fair value hierarchy, or an estimate of the future discounted cash flow, level 3 of the fair value hierarchy. The key estimates in our discounted cash flow analysis include assumptions as to expected industry and business growth rates, sales volume, selling prices and costs, cash flows, and the discount rate selected. These estimates are subject to changes in the economic environment, including market interest rates and expected volatility. Management believes the estimates of future cash flows and fair values are reasonable; however, changes in estimates due to variance from assumptions could materially affect the valuations.

Goodwill and Indefinite-Lived Intangible Assets Impairment Testing—Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to annual, or more frequent if necessary, impairment testing. In testing goodwill and indefinite-lived intangible assets, the fair value is estimated utilizing a discounted cash flow approach utilizing cash flow forecasts, including strategic and annual operating plans, adjusted for terminal value assumptions. These impairment tests involve the use of accounting estimates and assumptions, changes in which could materially impact our financial condition or operating performance if actual results differ from such estimates and assumptions. To address this uncertainty, we perform sensitivity analysis on key estimates and assumptions.

Income Taxes—On a recurring basis, we assess the need for a valuation allowance against our deferred tax assets by considering all available positive and negative evidence, such as past operating results, projections of future taxable income, enacted tax law changes and the feasibility and impact of tax planning initiatives. Our projections of future taxable income include a number of estimates and assumptions regarding our volume, pricing and costs, as well as the timing and amount of reversals of taxable temporary differences.

We recognize tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities including resolution of any related appeals and litigation. We assess our income tax positions based upon our evaluation of the facts, circumstances and information available at the reporting date. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements.

For further discussion of additional income tax policies, see Note 1 Summary of Significant Accounting Policies and Note 5 Income Taxes of Notes to Consolidated Financial Statements.

Sales Recognition on Long-Term Contracts—We recognize sales for long-term contracts with performance obligations satisfied over time using either an input or output method. We recognize revenue over time as we perform on these contracts based on the continuous transfer of control to the customer. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. We generally use the cost-to-cost input method of progress for our contracts because it best depicts the transfer of control to the customer that occurs as we incur costs. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. Due to the nature of the work required to be performed on many of our performance obligations, the estimation of total revenue and cost at completion requires judgment. Contract revenues are largely determined by negotiated contract prices and quantities, modified by our assumptions regarding contract options, change orders, incentive and award provisions associated with technical performance and price adjustment clauses (such as inflation or index-based clauses). Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Revenue and cost estimates are regularly monitored and revised based on changes in circumstances. Impacts from changes in estimates of net sales and cost of sales are recognized on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a performance obligation's percentage of completion. Anticipated losses on long-term contracts are recognized when such losses become evident. We maintain financial controls over the customer qualification, contract pricing and estimation processes to reduce the risk of contract losses.

OTHER MATTERS

Litigation

See Note 20 Commitments and Contingencies of Notes to Consolidated Financial Statements for a discussion of environmental, asbestos and other litigation matters.

Recent Accounting Pronouncements

See Note 1 Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements for a discussion of recent accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risks

Information relating to market risks is included in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations under the caption "Financial Instruments".

Item 8. Financial Statements and Supplementary Data

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF OPERATIONS

	Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions, except per share amounts)		
Product sales	$ 27,629	$ 32,848	$ 32,317
Service sales	9,080	8,954	8,217
Net sales	36,709	41,802	40,534
Costs, expenses and other			
Cost of products sold	19,269	23,634	23,176
Cost of services sold	5,070	5,412	4,968
	24,339	29,046	28,144
Selling, general and administrative expenses	5,519	6,051	6,087
Other (income) expense	(1,065)	(1,149)	(963)
Interest and other financial charges	357	367	316
	29,150	34,315	33,584
Income before taxes	7,559	7,487	6,950
Tax expense	1,329	659	5,362
Net income	6,230	6,828	1,588
Less: Net income attributable to the noncontrolling interest	87	63	43
Net income attributable to Honeywell	$ 6,143	$ 6,765	$ 1,545
Earnings per share of common stock—basic	$ 8.52	$ 9.10	$ 2.03
Earnings per share of common stock—assuming dilution	$ 8.41	$ 8.98	$ 2.00

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Net income	$ 6,230	$ 6,828	$ 1,588
Other comprehensive income (loss), net of tax			
Foreign exchange translation adjustment	143	(685)	(37)
Actuarial gains (losses) recognized	162	(602)	753
Prior service credit (cost) recognized	1	2	(59)
Prior service credit recognized during year	(79)	(74)	(70)
Actuarial (gains) losses recognized during year	16	35	83
Settlements and curtailments	—	2	19
Foreign exchange translation and other	(14)	31	(49)
Pensions and other postretirement benefit adjustments	86	(606)	677
Cash flow hedges recognized in other comprehensive income	103	89	(101)
Less: Reclassification adjustment for gains (losses) included in net income	92	4	60
Changes in fair value of cash flow hedges	11	85	(161)
Other comprehensive income (loss), net of tax	240	(1,206)	479
Comprehensive income	6,470	5,622	2,067
Less: Comprehensive income attributable to the noncontrolling interest	82	53	51
Comprehensive income attributable to Honeywell	$ 6,388	$ 5,569	$ 2,016

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED BALANCE SHEET

	December 31, 2019	December 31, 2018
	(Dollars in millions)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 9,067	$ 9,287
Short-term investments	1,349	1,623
Accounts receivable—net	7,493	7,508
Inventories	4,421	4,326
Other current assets	1,973	1,618
Total current assets	24,303	24,362
Investments and long-term receivables	588	742
Property, plant and equipment—net	5,325	5,296
Goodwill	15,563	15,546
Other intangible assets—net	3,734	4,139
Insurance recoveries for asbestos related liabilities	392	437
Deferred income taxes	86	382
Other assets	8,688	6,869
Total assets	$ 58,679	$ 57,773
LIABILITIES		
Current liabilities:		
Accounts payable	$ 5,730	$ 5,607
Commercial paper and other short-term borrowings	3,516	3,586
Current maturities of long-term debt	1,376	2,872
Accrued liabilities	7,476	6,859
Total current liabilities	18,098	18,924
Long-term debt	11,110	9,756
Deferred income taxes	1,670	1,713
Postretirement benefit obligations other than pensions	326	344
Asbestos related liabilities	1,996	2,269
Other liabilities	6,766	6,402
Redeemable noncontrolling interest	7	7
SHAREOWNERS' EQUITY		
Capital—common stock issued	958	958
—additional paid-in capital	6,876	6,452
Common stock held in treasury, at cost	(23,836)	(19,771)
Accumulated other comprehensive income (loss)	(3,197)	(3,437)
Retained earnings	37,693	33,978
Total Honeywell shareowners' equity	18,494	18,180
Noncontrolling interest	212	178
Total shareowners' equity	18,706	18,358
Total liabilities, redeemable noncontrolling interest and shareowners' equity	$ 58,679	$ 57,773

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF CASH FLOWS

	Years Ended December 31,		
	2019	2018	2017
	(Dollars in millions)		
Cash flows from operating activities:			
Net income	$ 6,230	$ 6,828	$ 1,588
Less: Net income attributable to the noncontrolling interest	87	63	43
Net income attributable to Honeywell	6,143	6,765	1,545
Adjustments to reconcile net income attributable to Honeywell to net cash provided by operating activities:			
Depreciation	673	721	717
Amortization	415	395	398
(Gain) loss on sale of non-strategic businesses and assets	1	—	7
Repositioning and other charges	546	1,091	973
Net payments for repositioning and other charges	(376)	(652)	(628)
Pension and other postretirement income	(516)	(987)	(647)
Pension and other postretirement benefit payments	(78)	(80)	(106)
Stock compensation expense	153	175	176
Deferred income taxes	179	(586)	2,452
Other	(287)	(694)	1,642
Changes in assets and liabilities, net of the effects of acquisitions and divestitures:			
Accounts receivable	11	(236)	(682)
Inventories	(100)	(503)	(259)
Other current assets	(430)	218	(568)
Accounts payable	118	733	924
Accrued liabilities	445	74	22
Net cash provided by (used for) operating activities	6,897	6,434	5,966
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(839)	(828)	(1,031)
Proceeds from disposals of property, plant and equipment	43	15	86
Increase in investments	(4,253)	(4,059)	(6,743)
Decrease in investments	4,464	6,032	4,414
Cash paid for acquisitions, net of cash acquired	(50)	(535)	(82)
Other	102	402	(218)
Net cash provided by (used for) investing activities	(533)	1,027	(3,574)
Cash flows from financing activities:			
Proceeds from issuance of commercial paper and other short-term borrowings	14,199	23,891	13,701
Payments of commercial paper and other short-term borrowings	(14,199)	(24,095)	(13,532)
Proceeds from issuance of common stock	498	267	520
Proceeds from issuance of long-term debt	2,726	27	1,238
Payments of long-term debt	(2,903)	(1,330)	(292)
Repurchases of common stock	(4,400)	(4,000)	(2,889)
Cash dividends paid	(2,442)	(2,272)	(2,119)
Pre-separation funding	—	2,801	—
Spin-off cash	—	(179)	—
Other	(79)	(142)	(143)
Net cash provided by (used for) financing activities	(6,600)	(5,032)	(3,516)
Effect of foreign exchange rate changes on cash and cash equivalents	16	(201)	340
Net increase (decrease) in cash and cash equivalents	(220)	2,228	(784)
Cash and cash equivalents at beginning of period	9,287	7,059	7,843
Cash and cash equivalents at end of period	$ 9,067	$ 9,287	$ 7,059

The Notes to Consolidated Financial Statements are an integral part of this statement.

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF SHAREOWNERS' EQUITY

	Years Ended December 31,					
	2019		2018		2017	
	Shares	$	Shares	$	Shares	$
	(in millions)					
Common stock, par value	957.6	958	957.6	958	957.6	958
Additional paid-in capital						
Beginning balance		6,452		6,212		5,781
Issued for employee savings and option plans		271		65		255
Stock-based compensation expense		153		175		176
Ending balance		6,876		6,452		6,212
Treasury stock						
Beginning balance	(228.0)	(19,771)	(206.7)	(15,914)	(196.8)	(13,366)
Reacquired stock or repurchases of common stock	(26.5)	(4,400)	(26.5)	(4,000)	(20.5)	(2,889)
Issued for employee savings and option plans	8.0	335	5.2	143	10.6	341
Ending balance	(246.5)	(23,836)	(228.0)	(19,771)	(206.7)	(15,914)
Retained earnings						
Beginning balance		33,978		27,481		28,046
Adoption of new accounting standards		—		264		—
Net income attributable to Honeywell		6,143		6,765		1,545
Dividends on common stock		(2,428)		(2,279)		(2,101)
Spin-offs		—		1,749		(9)
Redemption value adjustment		—		(2)		—
Ending balance		37,693		33,978		27,481
Accumulated other comprehensive income (loss)						
Beginning balance		(3,437)		(2,235)		(2,714)
Foreign exchange translation adjustment		143		(728)		(37)
Pensions and other postretirement benefit adjustments		86		(559)		677
Changes in fair value of cash flow hedges		11		85		(161)
Ending balance		(3,197)		(3,437)		(2,235)
Noncontrolling interest						
Beginning balance		178		163		178
Acquisitions, divestitures, and other		(3)		(12)		(11)
Net income attributable to noncontrolling interest		87		63		43
Foreign exchange translation adjustment		(5)		(10)		8
Dividends paid		(45)		(26)		(55)
Ending balance		212		178		163
Total shareowners' equity	711.1	18,706	729.6	18,358	750.9	16,665
Cash dividends per share of common stock		$ 3.360		$ 3.055		$ 2.740

The Notes to Consolidated Financial Statements are an integral part of this statement.

Note 1. Summary of Significant Accounting Policies

Accounting Principles—The financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America. The following is a description of Honeywell's significant accounting policies.

Principles of Consolidation—The consolidated financial statements include the accounts of Honeywell International Inc. and all of its subsidiaries and entities in which a controlling interest is maintained. Our consolidation policy requires equity investments that we exercise significant influence over but do not control the investee and are not the primary beneficiary of the investee's activities to be accounted for using the equity method. Investments through which we are not able to exercise significant influence over the investee and which we do not have readily determinable fair values are accounted for under the cost method. All intercompany transactions and balances are eliminated in consolidation.

Property, Plant and Equipment—Property, plant and equipment are recorded at cost, including any asset retirement obligations, less accumulated depreciation. For financial reporting, the straight-line method of depreciation is used over the estimated useful lives of 10 to 50 years for buildings and improvements and 2 to 16 years for machinery and equipment. Recognition of the fair value of obligations associated with the retirement of tangible long-lived assets is required when there is a legal obligation to incur such costs. Upon initial recognition of a liability, the cost is capitalized as part of the related long-lived asset and depreciated over the corresponding asset's useful life.

Goodwill and Indefinite-Lived Intangible Assets—Goodwill and indefinite-lived intangible assets are subject to impairment testing annually as of March 31, and whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. This testing compares carrying values to fair values and, when appropriate, the carrying value of these assets is reduced to fair value. We completed our annual goodwill impairment test as of March 31, 2019 and determined that there was no impairment as of that date.

Other Intangible Assets with Determinable Lives—Other intangible assets with determinable lives consist of customer lists, technology, patents and trademarks and other intangibles and are amortized over their estimated useful lives, ranging from 2 to 24 years.

Sales Recognition—Product and service sales are recognized when or as the Company transfers control of the promised products or services to its customers. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services. Service sales, principally representing repair, maintenance and engineering activities are recognized over the contractual period or as services are rendered. Sales under long-term contracts with performance obligations satisfied over time are recognized using either an input or output method. We recognize revenue over time as we perform on these contracts because of the continuous transfer of control to the customer. With control transferring over time, revenue is recognized based on the extent of progress towards completion of the performance obligation. We generally use the cost-to-cost input method of progress for our contracts because it best depicts the transfer of control to the customer that occurs as we incur costs. Under the cost-to-cost method, the extent of progress towards completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. We review our cost estimates on significant contracts on a periodic basis, or when circumstances change and warrant a modification to a previous estimate. Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements. Provisions for anticipated losses on long-term contracts are recorded in full when such losses become evident, to the extent required.

The customer funding for costs incurred for nonrecurring engineering and development activities of our products under agreements with commercial customers is deferred and subsequently recognized as revenue as products are delivered to the customers. Additionally, expenses incurred, up to the customer agreed funded amount, are deferred as an asset and recognized as cost of sales when products are delivered to the customer. The deferred customer funding and costs result in recognition of deferred costs (asset) and deferred revenue (liability) on our Consolidated Balance Sheet. Capitalized contract fulfillment costs were approximately $1 billion as of December 31, 2019 and 2018. The amounts recognized as cost of sales were approximately $0.1 billion for the years ended December 31, 2019 and 2018.

Revenues for our mechanical service programs are recognized as performance obligations are satisfied over time, with recognition reflecting a series of distinct services using the output method.

The terms of a contract or the historical business practice can give rise to variable consideration due to, but not limited to, cash-based incentives, rebates, performance awards, or credits. We estimate variable consideration at the most likely amount we will receive from customers. We include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized for such transaction will not occur, or when the uncertainty associated with the variable consideration is resolved. Our estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of our anticipated performance and all information (historical, current and forecasted) that is reasonably available to us.

For the year ended 2017, prior to the adoption of the revenue recognition standard (see Note 7 Revenue Recognition and Contracts with Customers), product and service sales were recognized when persuasive evidence of an arrangement existed, product delivery had occurred or services had been rendered, pricing was fixed or determinable, and collection was reasonably assured. Service sales, principally representing repair, maintenance and engineering activities were recognized over the contractual period or as services were rendered. Sales under long-term contracts were recorded on a percentage-of-completion method measured on the cost-to-cost basis for engineering-type contracts and the units-of-delivery basis for production-type contracts. Provisions for anticipated losses on long-term contracts were recorded in full when such losses became evident. Revenues from contracts with multiple element arrangements were recognized as each element was earned based on the relative fair value of each element provided the delivered elements had value to customers on a standalone basis. Amounts allocated to each element were based on its objectively determined fair value, such as the sales price for the product or service when it was sold separately or competitor prices for similar products or services.

Environmental—The Company accrues costs related to environmental matters when it is probable that we have incurred a liability related to a contaminated site and the amount can be reasonably estimated. For additional information, see Note 20 Commitments and Contingencies.

Asbestos Related Liabilities and Insurance Recoveries—The Company recognizes a liability for any asbestos related contingency that is probable of occurrence and reasonably estimable. In connection with the recognition of liabilities for asbestos related matters, we record asbestos related insurance recoveries that are deemed probable. For additional information, see Note 20 Commitments and Contingencies.

Reimbursement Receivables—In conjunction with the Garrett Motion Inc. ("Garrett") and Resideo Technologies, Inc. ("Resideo") spin-offs, the Company entered into reimbursement agreements under which Honeywell receives cash payments as reimbursement primarily for asbestos related liability payments related to the Bendix business in the U.S. (Garrett) and net spending for environmental matters at certain sites as defined in the agreement (Resideo). Accordingly, the Company has recorded a receivable based on estimates in the underlying reimbursable Honeywell spend, and we monitor the recoverability of such receivable, which is subject to terms of applicable credit agreements and general ability to pay. For additional information, see Note 20 Commitments and Contingencies.

Aerospace Sales Incentives—The Company provides sales incentives to commercial aircraft manufacturers and airlines in connection with their selection of its aircraft equipment, predominately wheel and braking system hardware, avionics, and auxiliary power units, for installation on commercial aircraft. These incentives consist of free or deeply discounted products, credits for future purchases of product or upfront cash payments. These costs are generally recognized in the period incurred as cost of products sold or as a reduction to relevant sales, as appropriate.

Research and Development—Research and development costs for company-sponsored research and development projects are expensed as incurred. Such costs are included in cost of products and services sold and were $1,556 million, $1,809 million and $1,835 million in 2019, 2018 and 2017. Customer-sponsored research and development activities under contracts with customers are included as a contract cost and included in cost of products and services sold when revenue from such contracts is recognized. Such customer-sponsored research and development activities amounted to an additional $1,079 million, $1,069 million and $876 million in 2019, 2018 and 2017.

Stock-Based Compensation Plans—The principal awards issued under our stock-based compensation plans, which are described in Note 19 Stock-Based Compensation Plans, are non-qualified stock options and restricted stock units. The cost for such awards is measured at the grant date based on the fair value of the award. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods (generally the vesting period of the equity award) and is included in selling, general and administrative expenses. Forfeitures are estimated at the time of grant to recognize expense for those awards that are expected to vest and are based on our historical forfeiture rates.

Pension Benefits—The Company presents net periodic pensions costs by disaggregating the service cost component of net benefit costs and reports those costs in the same line item or items in the Consolidated Statement of Operations as other compensation costs arising from services rendered by the pertinent employees during the period. The other non-service components of net benefit costs are required to be presented separately from the service cost component.

The Company records the service cost component of Pension ongoing (income) expense in Costs of products and services sold and Selling, general and administrative expenses. The remaining components of net benefit costs within Pension ongoing (income) expense, primarily interest costs and assumed return on plan assets, are recorded in Other (income) expense. We recognize net actuarial gains or losses in excess of 10% of the greater of the fair value of plan assets or the plans' projected benefit obligation (the corridor) annually in the fourth quarter each year (MTM Adjustment). The MTM Adjustment is also reported in Other (income) expense.

Foreign Currency Translation—Assets and liabilities of subsidiaries operating outside the United States with a functional currency other than U.S. Dollars are translated into U.S. Dollars using year-end exchange rates. Sales, costs and expenses are translated at the average exchange rates in effect during the year. Foreign currency translation gains and losses are included as a component of Accumulated other comprehensive income (loss). For subsidiaries operating in highly inflationary environments, inventories and property, plant and equipment, including related expenses, are remeasured at the exchange rate in effect on the date the assets were acquired, while monetary assets and liabilities are remeasured at year-end exchange rates. Remeasurement adjustments for these subsidiaries are included in earnings.

Derivative Financial Instruments—The Company reduces our risks from interest and foreign currency exchange rate fluctuations through our normal operating and financing activities and, when deemed appropriate through the use of derivative financial instruments. Derivative financial instruments are used to manage risk and are not used for trading or other speculative purposes. We do not use leveraged derivative financial instruments. Derivative financial instruments that qualify for hedge accounting must be designated and effective as a hedge of the identified risk exposure at the inception of the contract. Accordingly, changes in fair value of the derivative contract must be highly correlated with changes in fair value of the underlying hedged item at inception of the hedge and over the life of the hedge contract.

All derivatives are recorded on the balance sheet as assets or liabilities and measured at fair value. For derivatives designated as hedges of the fair value of assets or liabilities, the changes in fair values of both the derivatives and the hedged items are recorded in current earnings. For derivatives designated as cash flow hedges, the changes in fair value of the derivatives are recorded in Accumulated other comprehensive income (loss) and subsequently recognized in earnings when the hedged items impact earnings. Cash flows of such derivative financial instruments are classified consistent with the underlying hedged item. We have elected to exclude the time value of the derivatives (i.e., the forward points) from the assessment of hedge effectiveness and recognize the initial value of the excluded component in earnings using the amortization approach. For derivative instruments that are designated and qualify as a net investment hedge, the gain or loss is reported as a component of Other comprehensive income (loss) and recorded in Accumulated other comprehensive income (loss). The gain or loss will be subsequently reclassified into net earnings when the hedged net investment is either sold or substantially liquidated.

Income Taxes—Significant judgment is required in evaluating tax positions. We establish reserves for income taxes when, despite the belief that tax positions are fully supportable, there remain certain positions that do not meet the minimum recognition threshold. The approach for evaluating certain and uncertain tax positions is defined by the authoritative guidance which determines when a tax position is more likely than not to be sustained upon examination by the applicable taxing authority. In the normal course of business, the Company and its subsidiaries are examined by various federal, state and foreign tax authorities. We regularly assess the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of our provision for income taxes. We continually assess the likelihood and amount of potential adjustments and adjust the income tax provision, the current tax liability and deferred taxes in the period in which the facts that give rise to a change in estimate become known. For discussion of the impacts from what is commonly referred to as the U.S. Tax Cuts and Jobs Act ("U.S Tax Reform"), see Note 5 Income Taxes.

Cash and cash equivalents—Cash and cash equivalents include cash on hand and highly liquid investments having an original maturity of three months or less.

Earnings Per Share—Basic earnings per share is based on the weighted average number of common shares outstanding. Diluted earnings per share is based on the weighted average number of common shares outstanding and all dilutive potential common shares outstanding.

Reclassifications—Certain prior year amounts have been reclassified to conform to the current year presentation.

Leases—At the inception of a contract, the Company assesses whether the contract is, or contains, a lease. The assessment is based on (1) whether the contract involves the use of a distinct identified asset, (2) whether the Company obtains the right to substantially all the economic benefit from the use of the asset throughout the period, and (3) whether the Company has the right to direct the use of the asset.

All significant lease arrangements are generally recognized at lease commencement. Operating lease right-of-use ("ROU") assets and lease liabilities are recognized at commencement. An ROU asset and corresponding lease liability are not recorded for leases with an initial term of 12 months or less (short term leases), and we recognize lease expense for these leases as incurred over the lease term.

ROU assets represent our right to use an underlying asset during the reasonably certain lease term, and lease liabilities represent our obligation to make lease payments arising from the lease. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option.

Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. Lease payments may be fixed or variable, however, only fixed payments or in-substance fixed payments are included in determining the lease liability. Variable lease payments are recognized in operating expenses in the period in which the obligation for those payments are incurred. The operating lease ROU asset also includes any lease payments related to initial direct cost and prepayments and excludes lease incentives. Lease expense is recognized on a straight-line basis over the lease term. We have lease agreements with lease and non-lease components, which are generally accounted for separately.

The Company primarily uses our incremental borrowing rate, which is based on the information available at the lease commencement date, in determining the present value of the lease payments. In determining the borrowing rate, we consider the lease term, secured incremental borrowing rate, and for leases denominated in a currency different than U.S. dollar, the collateralized borrowing rate in the foreign currency using the U.S. dollar and foreign currency swap spread, when available.

Recent Accounting Pronouncements—The Company considers the applicability and impact of all Accounting Standards Updates (ASUs) issued by the Financial Accounting Standards Board (FASB). ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on our consolidated results of operations, financial position and cash flows (consolidated financial statements).

In December 2019, the FASB issued accounting standard update to simplify the accounting for income taxes. The standard's amendments include changes in various subtopics of accounting for income taxes including, but not limited to, accounting for "hybrid" tax regimes, tax basis step-up in goodwill obtained in a transaction that is not a business combination, intraperiod tax allocation exception to incremental approach, ownership changes in investments, interim-period accounting for enacted changes in tax law, and year-to date loss limitation in interim-period tax accounting. The guidance is effective for fiscal years beginning after December 15, 2020 with early adoption permitted, including the interim periods within those years. We are currently evaluating impacts of these amendments on our Consolidated financial position, results of operations, cash flows, and related notes to the Financial Statements.

In February 2018, the FASB issued guidance that allows for an entity to elect to reclassify the income tax effects on items resulting from what is commonly referred to as the U.S. Tax Cuts and Jobs Act ("U.S. Tax Reform") from accumulated other comprehensive income to retained earnings. The guidance is effective for fiscal years beginning after December 15, 2018 with early adoption permitted, including interim periods within those years. The Company has elected to not reclassify the stranded income tax effects of U.S. Tax Reform from accumulated other comprehensive income to retained earnings.

In June 2016, the FASB issued accounting standard that requires companies to utilize an impairment model (current expected credit loss, or CECL) for most financial assets measured at amortized cost and certain other financial instruments, which include, but are not limited to, trade and other receivables. This accounting standard will replace the incurred loss model under current GAAP with a model that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to estimate those losses. Effective January 1, 2020, the Company adopted this standard. The adoption of this standard does not have a material impact on our Consolidated Financial Statements.

Note 2. Acquisitions and Divestitures

During 2019, there were no significant acquisitions individually or in aggregate.

During 2018, the Company acquired businesses for an aggregate cost (net of cash and debt assumed) of approximately $535 million, mainly due to the November 2018 acquisition of Transnorm, a global leader in high-performance conveyor and warehouse solutions, including approximately $380 million allocated to goodwill. Transnorm is part of Safety and Productivity Solutions. The goodwill is non-deductible for tax purposes.

During 2017, there were no significant acquisitions individually or in the aggregate.

On October 1, 2018, the Company completed the tax-free spin-off to Honeywell shareowners of its Transportation Systems business, part of Aerospace, into a standalone publicly-traded company, Garrett Motion Inc. (“Garrett”). On October 29, 2018, the Company completed the tax-free spin-off to Honeywell shareowners of its Homes and Global Distribution business, part of Home and Building Technologies (renamed Honeywell Building Technologies following the spin-off), into a standalone publicly-traded company, Resideo Technologies, Inc. (“Resideo”). The assets of approximately $5.5 billion, including approximately $2.8 billion of goodwill and net of recorded receivables, and liabilities of approximately $7.2 billion associated with spin-off entities have been removed through Retained Earnings from the Company’s Consolidated Balance Sheet as of the effective date of the spin-off. The results of operations and cash flows are included in the Consolidated Statement of Operations and Consolidated Statement of Cash Flows through the effective date of the spin-off. The Income before taxes attributable to the spin-off businesses were $0.4 billion and $0.5 billion for 2018 and 2017.

Honeywell shareowners of record as of the close of business on October 16, 2018 received one share of Resideo common stock for every 6 shares of Honeywell common stock. Immediately prior to the effective date of the spin-off, Resideo incurred debt of $1.2 billion to make a cash distribution to the Company.

Honeywell shareowners of record as of the close of business on September 18, 2018 received one share of Garrett common stock for every 10 shares of Honeywell common stock. Immediately prior to the effective date of the spin-off, Garrett incurred debt of $1.6 billion to make a cash distribution to the Company.

In 2018 in connection with the spin-off, the Company entered into certain agreements with Resideo and Garrett to affect our legal and structural separation, including transition services agreements to provide certain administrative and other services for a limited time, and tax matters and indemnification and reimbursement agreements. As of the end of 2019, most of those agreements are still in effect.

(Dollars in millions, except per share amounts)

Note 3. Repositioning and Other Charges

A summary of repositioning and other charges follows:

	Years Ended December 31,		
	2019	2018	2017
Severance	$ 260	$ 289	$ 305
Asset impairments	95	162	142
Exit costs	83	79	60
Reserve adjustments	(5)	(10)	(16)
Total net repositioning charge	433	520	491
Asbestos related litigation charges, net of insurance and reimbursements	42	163	159
Probable and reasonably estimable environmental liabilities, net of reimbursements	59	345	287
Other	12	63	36
Total net repositioning and other charges	$ 546	$ 1,091	$ 973

The following table summarizes the pre-tax distribution of total net repositioning and other charges by classification:

	Years Ended December 31,		
	2019	2018	2017
Cost of products and services sold	$ 276	$ 811	$ 736
Selling, general and administrative expenses	270	239	187
Other (income) expense	—	41	50
	$ 546	$ 1,091	$ 973

The following table summarizes the pre-tax impact of total net repositioning and other charges by segment:

	Years Ended December 31,		
	2019	2018	2017
Aerospace	$ 33	$ 154	$ 248
Honeywell Building Technologies	108	111	78
Performance Materials and Technologies	93	191	102
Safety and Productivity Solutions	71	133	51
Corporate	241	502	494
	$ 546	$ 1,091	$ 973

In 2019, the Company recognized repositioning charges totaling $438 million including severance costs of $260 million related to workforce reductions of 5,336 manufacturing and administrative positions across our segments. The workforce reductions related to costs savings actions taken in connection with our productivity and ongoing functional transformation initiatives and to site transitions, mainly in Honeywell Building Technologies, as we transition manufacturing to more cost-effective locations. The repositioning charge included asset impairments of $95 million largely related to a write down in connection with assets held for sale. The repositioning charge included exit costs of $83 million primarily related to current period exit costs incurred for previously approved repositioning projects, termination fees associated with the early cancellation of supply agreements for certain raw materials in Performance Materials and Technologies and Honeywell Building Technologies and for closure obligations associated with site transitions.

In 2018, the Company recognized repositioning charges totaling $530 million including severance costs of $289 million related to workforce reductions of 6,486 manufacturing and administrative positions across our segments. The workforce reductions were primarily related to planned site closures, mainly in Safety and Productivity Solutions, Performance Materials and Technologies and Honeywell Building Technologies, as we transition manufacturing sites to more cost-effective locations. The workforce reductions were also related to our productivity and ongoing functional transformation initiatives. The repositioning charge included asset impairments of $162 million mainly related to manufacturing plant and equipment associated with planned site closures. Asset impairments also included the write-down of a legacy property in Corporate in connection with its planned disposition and the write-off of certain capitalized assets in Corporate. The repositioning charge included exit costs of $79 million primarily related to a termination fee associated with the early cancellation of a supply agreement for certain raw materials in Performance Materials and Technologies and for closure obligations associated with planned site closures.

(Dollars in millions, except per share amounts)

In 2017, the Company recognized repositioning charges totaling $507 million including severance costs of $305 million related to workforce reductions of 7,096 manufacturing and administrative positions across its segments. The workforce reductions were primarily related to cost savings actions taken in connection with our productivity and ongoing functional transformation initiatives and with site transitions, in each of our segments, to more cost-effective locations. The repositioning charge included asset impairments of $142 million principally in our Corporate segment related to the write-down of legacy properties and certain equipment in connection with their planned disposition and the write-down of a research and development facility in connection with a planned exit from such facility. The repositioning charge included exit costs of $60 million principally for closure obligations associated with site transitions in each of our segments and for lease exit obligations in our Corporate segment.

The following table summarizes the status of the Company's total repositioning reserves:

	Severance Costs	Asset Impairments	Exit Costs	Total
Balance at December 31, 2016	$ 298	$ —	$ 33	$ 331
Charges	305	142	60	507
Usage—cash	(163)	—	(14)	(177)
Usage—noncash	—	(142)	—	(142)
Adjustments and reclassifications	(13)	—	(10)	(23)
Foreign currency translation	15	—	2	17
Balance at December 31, 2017	442	—	71	513
Charges	289	162	79	530
Usage—cash	(218)	—	(67)	(285)
Usage—noncash	—	(163)	—	(163)
Divestitures	(11)	—	(3)	(14)
Adjustments	(8)	1	(3)	(10)
Foreign currency translation	(5)	—	—	(5)
Balance at December 31, 2018	489	—	77	566
Charges	260	95	83	438
Usage—cash	(186)	—	(63)	(249)
Usage—noncash	—	(100)	—	(100)
Divestitures	—	—	—	—
Adjustments	(8)	5	(2)	(5)
Foreign currency translation	—	—	1	1
Balance at December 31, 2019	$ 555	$ —	$ 96	$ 651

Certain repositioning projects will recognize exit costs in future periods when the actual liability is incurred. Such exit costs incurred in 2019, 2018 and 2017 were not significant.

In 2018, the other charge of $63 million mainly relates to reserves taken due to the required wind-down of the Company's activities in Iran and the evaluation of potential resolution of a certain legal matter.

(Dollars in millions, except per share amounts)

Note 4. Other (Income) Expense

	Years Ended December 31,		
	2019	2018	2017
Interest income	$ (255)	$ (217)	$ (151)
Pension ongoing income—non-service	(606)	(1,165)	(875)
Other postretirement income—non-service	(47)	(32)	(21)
Equity income of affiliated companies	(52)	(50)	(39)
Loss (gain) on sale of non-strategic business and assets	1	—	7
Foreign exchange	(120)	(63)	18
Separation costs	—	321	16
Other (net)	14	57	82
	$ (1,065)	$ (1,149)	$ (963)

Separation costs are associated with the spin-offs of the Company's Homes and Global Distribution business and Transportation Systems business, and are primarily associated with third party services.

For the year ended December 31, 2018 and 2017, Other (net) includes asset impairments in Corporate related to the write-down of a legacy property in connection with its planned disposition. See Note 3 Repositioning and Other Charges.

Note 5. Income Taxes

Income before taxes

	Years Ended December 31,		
	2019	2018	2017
U.S.	$ 4,178	$ 2,919	$ 2,873
Non-U.S.	3,381	4,568	4,077
	$ 7,559	$ 7,487	$ 6,950

Tax expense (benefit)

	Years Ended December 31,		
	2019	2018	2017
Tax expense (benefit) consists of			
Current:			
U.S. Federal	$ 8	$ (21)	$ 2,061
U.S. State	43	89	62
Non-U.S.	1,099	1,177	787
	$ 1,150	$ 1,245	$ 2,910
Deferred:			
U.S. Federal	$ 332	$ 396	$ 190
U.S. State	63	8	139
Non-U.S.	(216)	(990)	2,123
	179	(586)	2,452
	$ 1,329	$ 659	$ 5,362

(Dollars in millions, except per share amounts)

	Years Ended December 31,		
	2019	2018	2017
The U.S. federal statutory income tax rate is reconciled to our effective income tax rate as follows:			
U.S. federal statutory income tax rate	21.0 %	21.0 %	35.0 %
Taxes on non-U.S. earnings[(1)(2)]	(0.5)	0.2	(12.8)
U.S. state income taxes[(1)]	1.1	1.6	1.4
Reserves for tax contingencies	2.0	0.3	1.6
Employee share-based payments	(1.2)	(0.7)	(2.9)
U.S. Tax Reform	(3.6)	(5.8)	56.0
Reduction of taxes on unremitted earnings	—	(14.2)	—
Separation tax costs	—	5.5	—
All other items—net	(1.2)	0.9	(1.1)
	17.6 %	8.8 %	77.2 %

(1) Net of changes in valuation allowance
(2) Includes U.S. taxes on non-U.S. earnings

The effective tax rate increased by 8.8 percentage points in 2019 compared to 2018. The increase was primarily attributable to a lower income tax benefit resulting from revised guidance related to U.S. Tax Reform and internal restructuring initiatives that resulted in a $281 million reduction of accrued withholding taxes related to unremitted foreign earnings when compared to the prior year. The Company's non-U.S. effective tax rate was 26.1%, an increase of approximately 22.0 percentage points compared to 2018. The increase in the foreign effective tax rate was primarily attributable to a lower income tax benefit related to the Company's internal restructuring initiatives when compared to the prior year.

The effective tax rate decreased by 68.4 percentage points in 2018 compared to 2017. The decrease was primarily attributable to internal restructuring initiatives that resulted in a reduction of accrued withholding taxes of approximately $1.1 billion related to unremitted foreign earnings. In addition, we recorded a tax benefit of approximately $440 million as a reduction to our 2017 provisional estimate of impacts from U.S. Tax Reform, which was partially offset by $411 million of tax costs associated with the internal restructuring of the Homes and Global Distribution business and Transportation Systems business in advance of their spin-offs. The Company's non-U.S. effective tax rate was 4.1%, a decrease of approximately 67.3 percentage points compared to 2017. The year over year decrease in the foreign effective tax rate was primarily attributable to the impact of the Company's internal restructuring initiatives and the reduction of accrued withholding taxes on unremitted foreign earnings, partially offset by the spin-off transactions.

(Dollars in millions, except per share amounts)

Deferred tax assets (liabilities)

The tax effects of temporary differences and tax carryforwards which give rise to future income tax benefits and payables are as follows:

	December 31, 2019	December 31, 2018
Deferred tax assets:		
Postretirement benefits other than pensions	$ 111	$ 120
Asbestos and environmental	531	589
Employee compensation and benefits	205	262
Other accruals and reserves	279	336
Net operating and capital losses	652	688
Tax credit carryforwards	246	154
Gross deferred tax assets	2,024	2,149
Valuation allowance	(656)	(689)
Total deferred tax assets	$ 1,368	$ 1,460
Deferred tax liabilities:		
Pension	$ (469)	$ (40)
Property, plant and equipment	(469)	(422)
Intangibles	(1,296)	(1,553)
Unremitted earnings of foreign subsidiaries	(419)	(616)
Other asset basis differences	(136)	(110)
Other	(163)	(50)
Total deferred tax liabilities	(2,952)	(2,791)
Net deferred tax liability	$ (1,584)	$ (1,331)

The Company's gross deferred tax assets include $767 million related to non-U.S. operations comprised principally of net operating losses, capital loss and tax credit carryforwards (mainly in Canada, France, Germany, Luxembourg and the United Kingdom) and deductible temporary differences. We maintain a valuation allowance of $653 million against a portion of the non-U.S. gross deferred tax assets. The change in the valuation allowance resulted in a decrease of $23 million and increases of $57 million and $4 million to income tax expense in 2019, 2018 and 2017. In the event we determine that we will not be able to realize our net deferred tax assets in the future, we will reduce such amounts through an increase to income tax expense in the period such determination is made. Conversely, if we determine that we will be able to realize net deferred tax assets in excess of the carrying amounts, we will decrease the recorded valuation allowance through a reduction to income tax expense in the period that such determination is made.

As of December 31, 2019, the Company recorded a $419 million deferred tax liability on all of our unremitted foreign earnings based on estimated earnings and profits of approximately $16.7 billion as of the balance sheet date.

As of December 31, 2019, the Company's net operating loss, capital loss and tax credit carryforwards were as follows:

Jurisdiction	Expiration Period	Net Operating and Capital Loss Carryforwards	Tax Credit Carryforwards
U.S. Federal	2039	$ 16	$ 89
U.S. State	2039	389	20
Non-U.S.	2039	277	142
Non-U.S.	Indefinite	2,324	—
		$ 3,006	$ 251

(Dollars in millions, except per share amounts)

Many jurisdictions impose limitations on the timing and utilization of net operating loss and tax credit carryforwards. In those instances, whereby there is an expected permanent limitation on the utilization of the net operating loss or tax credit carryforward, the deferred tax asset and amount of the carryforward have been reduced.

	2019	2018	2017
Change in unrecognized tax benefits:			
Balance at beginning of year	$ 1,089	$ 947	$ 877
Gross increases related to current period tax positions	51	370	94
Gross increases related to prior periods tax positions	83	82	153
Gross decreases related to prior periods tax positions	(34)	(201)	(91)
Decrease related to resolutions of audits with tax authorities	(3)	(40)	(76)
Expiration of the statute of limitations for the assessment of taxes	(13)	(50)	(54)
Foreign currency translation	(9)	(19)	44
Balance at end of year	$ 1,164	$ 1,089	$ 947

As of December 31, 2019, 2018, and 2017 there were $1,164 million, $1,089 million, and $947 million of unrecognized tax benefits that if recognized would be recorded as a component of Tax expense.

The following table summarizes tax years that remain subject to examination by major tax jurisdictions as of December 31, 2019:

	Open Tax Years Based on Originally Filed Returns	
Jurisdiction	Examination in progress	Examination not yet initiated
U.S. Federal	2015 - 2016	2017-2019
U.S. State	2011 - 2017	2012-2018
Australia	N/A	2016-2019
Canada[(1)]	2015-2017	2018-2019
China	2009-2018	2019
France	N/A	2017-2019
Germany[(1)]	2008-2017	2018-2019
India	1999-2017	2018-2019
Italy	2012-2017	2018-2019
Netherlands	2016-2017	2018-2019
Switzerland[(1)]	2012-2018	2019
United Kingdom	2013-2017	2018-2019

(1) Includes provincial or similar local jurisdictions, as applicable.

Based on the outcome of these examinations, or as a result of the expiration of statute of limitations for specific jurisdictions, it is reasonably possible that certain unrecognized tax benefits for tax positions taken on previously filed tax returns will materially change from those recorded as liabilities in our financial statements. In addition, the outcome of these examinations may impact the valuation of certain deferred tax assets (such as net operating losses) in future periods.

Unrecognized tax benefits for examinations in progress were $413 million, $304 million and $487 million, as of December 31, 2019, 2018, and 2017. Estimated interest and penalties related to the underpayment of income taxes are classified as a component of Tax expense in the Consolidated Statement of Operations and totaled $73 million, $45 million and $28 million for the years ended December 31, 2019, 2018, and 2017. Accrued interest and penalties were $487 million, $426 million and $423 million, as of December 31, 2019, 2018, and 2017.

U.S. Tax Reform

During the quarter ending December 31, 2018, the Company completed the accounting for the tax effects of U.S. Tax Reform which amounted to a total tax charge of approximately $3.5 billion, most of which was recorded as a provisional estimate at the end of 2017. During 2018, we reduced our provisional estimate by approximately $440 million as a reduction to Tax expense.

Corporate Tax Rate Change—During the years 2018 and 2017, the Company recorded a total tax benefit of approximately $190 million due to the decrease in the corporate statutory tax rate from 35% to 21%. This includes a measurement period adjustment of approximately $90 million recorded during 2018 as a reduction to Tax expense. The change in the provisional estimate primarily relates to information contained in tax returns that were filed during the quarter ending December 31, 2018, some of which require approval from U.S. tax authorities. The tax benefit from the change in tax rates results from the Company's deferred tax liability position for the excess of its net book value over its tax basis of its U.S. assets and liabilities that will generate future taxable income in excess of book income. This additional taxable income will be subject to tax at a lower corporate tax rate, consequently reducing the Company's deferred tax liability.

Mandatory Transition Tax—During the years 2018 and 2017, the Company recorded a total tax charge of approximately $1,950 million due to the imposition of the mandatory transition tax ("MTT") on the deemed repatriation of undistributed foreign earnings. This includes a measurement period adjustment of approximately $50 million recorded during 2018 as an increase to Tax expense. The change in the provisional estimate primarily relates to updated amounts from tax returns that were finalized during 2018, computations based on 2018 testing dates and guidance from the taxing authorities that was received during the year. The Company has elected to pay the MTT liability over a period of eight years.

Undistributed Foreign Earnings—During the years 2018 and 2017, the Company recorded a total tax charge of approximately $1,700 million due to the Company's intent to no longer permanently reinvest the historical unremitted earnings of its foreign affiliates that existed as of December 31, 2017. This includes a measurement period adjustment of approximately $400 million recorded during 2018 as a reduction to Tax expense. The change in the provisional estimate primarily relates to updated amounts from tax returns that were finalized during 2018, the application of foreign tax credits based on guidance issued during the year and changes to the applicable withholding tax rates in local jurisdictions. The Company also reduced these taxes on unremitted foreign earnings by $281 million and $1.1 billion in 2019 and 2018, respectively, that were recorded as reductions to Tax expense.

Global Intangible Low Taxed Income—U.S. Tax Reform imposes a U.S. tax on global intangible low taxed income ("GILTI") that is earned by certain foreign affiliates owned by a U.S. shareholder. GILTI is generally intended to impose tax on the earnings of a foreign corporation that are deemed to exceed a certain threshold return relative to the underlying business investment. The Company has made a policy election to treat future taxes related to GILTI as a current period expense in the reporting period in which the tax is incurred.

(Dollars in millions, except per share amounts)

Note 6. Earnings Per Share

The details of the earnings per share calculations for the years ended December 31, 2019, 2018 and 2017 are as follows:

	Years Ended December 31,		
Basic	**2019**	**2018**	**2017**
Net income attributable to Honeywell	$ 6,143	$ 6,765	$ 1,545
Weighted average shares outstanding	721.0	743.0	762.1
Earnings per share of common stock	$ 8.52	$ 9.10	$ 2.03

	Years Ended December 31,		
Assuming Dilution	**2019**	**2018**	**2017**
Net income attributable to Honeywell	$ 6,143	$ 6,765	$ 1,545
Average Shares			
Weighted average shares outstanding	721.0	743.0	762.1
Dilutive securities issuable—stock plans	9.3	10.0	10.0
Total weighted average diluted shares outstanding	730.3	753.0	772.1
Earnings per share of common stock—assuming dilution	$ 8.41	$ 8.98	$ 2.00

The diluted earnings per share calculations exclude the effect of stock options when the options' assumed proceeds exceed the average market price of the common shares during the period. In 2019, 2018, and 2017 the weighted number of stock options excluded from the computations were 2.5 million, 2.5 million, and 2.8 million. These stock options were outstanding at the end of each of the respective periods.

(Dollars in millions, except per share amounts)

Note 7. Revenue Recognition and Contracts with Customers

The Company has a comprehensive offering of products and services, including software and technologies, that are sold to a variety of customers in multiple end markets. See the following disaggregated revenue table and related discussions by operating segment for details.

	Year Ended December 31,	
	2019	2018
Aerospace		
Commercial Aviation Original Equipment	$ 2,997	$ 2,833
Commercial Aviation Aftermarket	5,731	5,373
Defense and Space	5,326	4,665
Transportation Systems	—	2,622
	14,054	15,493
Honeywell Building Technologies		
Homes Products and Software	—	1,732
Distribution (ADI)	—	2,196
Products	3,314	2,953
Building Solutions	2,403	2,417
	5,717	9,298
Performance Materials and Technologies		
UOP	2,890	2,845
Process Solutions	5,146	4,981
Specialty Products	1,062	1,134
Fluorine Products	1,736	1,714
	10,834	10,674
Safety and Productivity Solutions		
Safety and Retail	2,215	2,278
Productivity Products	1,110	1,373
Warehouse and Workflow Solutions	1,931	1,829
Sensing & Internet-of-Things (IoT)	848	857
	6,104	6,337
Net sales	$ 36,709	$ 41,802

Aerospace – A global supplier of products, software and services for aircraft. Products include aircraft propulsion engines, auxiliary power units, environmental control systems, integrated avionics, electric power systems, hardware for engine controls, flight safety, communications and navigation, satellite and space components, aircraft wheels and brakes, and thermal systems. Software includes engine controls, flight safety, communications, navigation, radar and surveillance systems, internet connectivity and aircraft instrumentation. Services are provided to customers for the repair, overhaul, retrofit and modification of propulsion engines, auxiliary power units, avionics and mechanical systems and aircraft wheels and brakes. Additionally, Aerospace provides Honeywell Forge for aircraft connected solutions, software and data services designed to improve customers' efficiency and enable improved operations.

Honeywell Building Technologies – A global provider of products, software, solutions and technologies for buildings. Products include controls and displays for heating, cooling, indoor air quality, ventilation, humidification, combustion, and lighting; sensors, switches, control systems and instruments for measuring pressure, air flow, temperature and electrical current; access control; video surveillance; fire detection; and installation, maintenance and upgrades of systems that keep buildings safe, comfortable and productive. Software includes monitoring and managing heating, cooling, indoor air quality, ventilation, humidification, combustion, and lighting; advanced applications for building control and optimization; video surveillance; and remote patient monitoring systems. Installation, maintenance and upgrade services of products used in commercial building applications for heating, cooling, maintaining indoor air quality, ventilation, humidification, combustion, lighting, video surveillance and fire safety. These offerings, including Honeywell Forge for buildings connected solutions, address key energy challenges, keep people and places safe, enhance the building occupant experience, and improve critical infrastructure.

(Dollars in millions, except per share amounts)

Performance Materials and Technologies – A global provider of products, software, solutions and technologies. Products include catalysts, adsorbents, equipment and high-performance materials, devices for measurement, regulation, control and metering of gases and electricity, and metering and communications systems for water utilities and industries, including Honeywell Forge connected solutions. Honeywell Forge for plant provides seamless integration and connectivity within plants and facilities to provide a holistic view of operations, turning data into clear actions, and Honeywell Forge for cybersecurity helps identify risks and act on cyber-related incidents, together enabling the best operations and protecting process, people and assets. Software is provided to support process technologies supporting automation and to monitor a variety of industrial processes used in industries such as oil and gas, chemicals, petrochemicals, metals, minerals and mining industries. Services are provided for installation and maintenance of products.

Safety and Productivity Solutions – A global provider of products, software and Honeywell Forge for workers connected solutions. Products include personal protection equipment and footwear, gas detection devices, mobile computing, data collection and thermal printing devices, automation equipment for supply chain and warehouse automation and custom-engineered sensors, switches and controls. Software and solutions are provided to customers for supply chain and warehouse automation, to manage data and assets to drive productivity and for computing, data collection and thermal printing.

For a summary by disaggregated product and services sales for each segment, refer to Note 22 Segment Financial Data.

The Company recognizes revenue arising from performance obligations outlined in contracts with its customers that are satisfied at a point in time and over time. The disaggregation of our revenue based off timing of recognition is as follows:

	Year Ended December 31,	
	2019	2018
Products, transferred point in time	61%	67%
Products, transferred over time	14	12
Net product sales	75	79
Services, transferred point in time	9	7
Services, transferred over time	16	14
Net service sales	25	21
Net sales	100%	100%

Contract Balances

Progress on satisfying performance obligations under contracts with customers and the related billings and cash collections are recorded on the Consolidated Balance Sheet in Accounts receivable - net and Other assets (unbilled receivables (contract assets) and billed receivables) and Accrued liabilities and Other liabilities (customer advances and deposits (contract liabilities)). Unbilled receivables (contract assets) arise when the timing of cash collected from customers differs from the timing of revenue recognition, such as when contract provisions require specific milestones to be met before a customer can be billed. Those assets are recognized when the revenue associated with the contract is recognized prior to billing and derecognized when billed in accordance with the terms of the contract. Contract liabilities are recorded when customers remit contractual cash payments in advance of us satisfying performance obligations under contractual arrangements, including those with performance obligations to be satisfied over a period of time. Contract liabilities are derecognized when revenue is recorded, either when a milestone is met triggering the contractual right to bill or when the performance obligation is satisfied.

(Dollars in millions, except per share amounts)

Contract balances are classified as assets or liabilities on a contract-by-contract basis at the end of each reporting period.

The following table summarizes the Company's contract assets and liabilities balances:

	2019	2018
Contract assets—January 1	$ 1,548	$ 1,721
Contract assets—December 31	1,602	1,548
Change in contract assets—increase (decrease)	$ 54	$ (173)
Contract liabilities—January 1	$ (3,378)	$ (2,973)
Contract liabilities—December 31	(3,501)	(3,378)
Change in contract liabilities—(increase) decrease	$ (123)	$ (405)
Net change	$ (69)	$ (578)

The net change in 2019 was primarily driven by the receipt of advance payments from customers exceeding recognition of revenue as performance obligations were satisfied prior to billing. The net change in 2018 was primarily driven by the receipt of advance payments from customers exceeding reductions from recognition of revenue as performance obligations were satisfied and related billings. For the year ended December 31, 2019 and 2018, we recognized revenue of $1,543 million and $1,166 million that was previously included in the beginning balance of contract liabilities.

When contracts are modified to account for changes in contract specifications and requirements, the Company considers whether the modification either creates new or changes the existing enforceable rights and obligations. Contract modifications for goods or services and not distinct from the existing contract, due to the significant integration with the original good or service provided, are accounted for as if they were part of that existing contract. The effect of a contract modification on the transaction price and our measure of progress for the performance obligation to which it relates, is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) on a cumulative catch-up basis. When the modifications include additional performance obligations that are distinct and at relative stand-alone selling price, they are accounted for as a new contract and performance obligation, which are recognized prospectively.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is defined as the unit of account. A contract’s transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. When our contracts with customers require highly complex integration or manufacturing services that are not separately identifiable from other promises in the contracts and, therefore, not distinct, then the entire contract is accounted for as a single performance obligation. In situations when our contract includes distinct goods or services that are substantially the same and have the same pattern of transfer to the customer over time, they are recognized as a series of distinct goods or services. For any contracts with multiple performance obligations, we allocate the contract’s transaction price to each performance obligation based on the estimated relative standalone selling price of each distinct good or service in the contract. For product sales, each product sold to a customer typically represents a distinct performance obligation. In such cases, the observable standalone sales are used to determine the stand alone selling price.

Performance obligations are satisfied as of a point in time or over time. Performance obligations are supported by contracts with customers, providing a framework for the nature of the distinct goods, services or bundle of goods and services. The timing of satisfying the performance obligation is typically indicated by the terms of the contract.

(Dollars in millions, except per share amounts)

The following table outlines the Company's remaining performance obligations disaggregated by segment:

	December 31, 2019
Aerospace	$ 11,315
Honeywell Building Technologies	5,515
Performance Materials and Technologies	6,527
Safety and Productivity Solutions	2,255
	$ 25,612

Performance obligations recognized as of December 31, 2019 will be satisfied over the course of future periods. Our disclosure of the timing for satisfying the performance obligation is based on the requirements of contracts with customers. However, from time to time, these contracts may be subject to modifications, impacting the timing of satisfying the performance obligations. Performance obligations expected to be satisfied within one year and greater than one year are 57% and 43%.

The timing of satisfaction of the Company's performance obligations does not significantly vary from the typical timing of payment. Typical payment terms of our fixed-price over time contracts include progress payments based on specified events or milestones, or based on project progress. For some contracts we may be entitled to receive an advance payment.

The Company has applied the practical expedient for certain revenue streams to exclude the value of remaining performance obligations for (i) contracts with an original expected term of one year or less or (ii) contracts for which we recognize revenue in proportion to the amount we have the right to invoice for services performed.

Note 8. Accounts Receivable

	December 31,	
	2019	2018
Trade	$ 7,639	$ 7,705
Less—Allowance for doubtful accounts	(146)	(197)
	$ 7,493	$ 7,508

Trade Receivables includes $1,586 million and $1,543 million of unbilled balances under long-term contracts as of December 31, 2019 and 2018. These amounts are billed in accordance with the terms of customer contracts to which they relate.

Note 9. Inventories

	December 31,	
	2019	2018
Raw materials	$ 1,056	$ 1,109
Work in process	817	811
Finished products	2,593	2,445
	4,466	4,365
Reduction to LIFO cost basis	(45)	(39)
	$ 4,421	$ 4,326

Inventories valued at LIFO amounted to $292 million and $294 million at December 31, 2019 and 2018. Had such LIFO inventories been valued at current costs, the carrying values would have been approximately $45 million and $39 million higher at December 31, 2019 and 2018.

(Dollars in millions, except per share amounts)

Note 10. Property, Plant and Equipment—Net

	December 31, 2019	December 31, 2018
Land and improvements	$ 251	$ 262
Machinery and equipment	9,586	9,435
Buildings and improvements	3,152	3,125
Construction in progress	724	588
	13,713	13,410
Less—Accumulated depreciation	(8,388)	(8,114)
	$ 5,325	$ 5,296

Depreciation expense was $673 million, $721 million and $717 million in 2019, 2018 and 2017.

Note 11. Goodwill and Other Intangible Assets—Net

The following table summarizes the change in the carrying amount of goodwill for the years ended December 31, 2019 and 2018 by segment.

	December 31, 2018	Acquisitions/ Divestitures	Currency Translation Adjustment	December 31, 2019
Aerospace	$ 2,258	$ —	$ 8	$ 2,266
Honeywell Building Technologies	3,238	(1)	(22)	3,215
Performance Materials and Technologies	5,147	—	(42)	5,105
Safety and Productivity Solutions	4,903	75	(1)	4,977
	$ 15,546	$ 74	$ (57)	$ 15,563

Other intangible assets are comprised of:

	December 31, 2019			December 31, 2018		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Determinable life intangibles:						
Patents and technology	$ 2,060	$ (1,481)	$ 579	$ 1,996	$ (1,332)	$ 664
Customer relationships	3,769	(1,766)	2,003	3,785	(1,510)	2,275
Trademarks	317	(228)	89	326	(206)	120
Other	297	(262)	35	349	(299)	50
	6,443	(3,737)	2,706	6,456	(3,347)	3,109
Indefinite life intangibles:						
Trademarks	1,028	—	1,028	1,030	—	1,030
	$ 7,471	$ (3,737)	$ 3,734	$ 7,486	$ (3,347)	$ 4,139

Intangible assets amortization expense was $415 million, $395 million, and $398 million in 2019, 2018, 2017. Estimated intangible asset amortization expense for each of the next five years approximates $355 million in 2020, $317 million in 2021, $293 million in 2022, $256 million in 2023, and $234 million in 2024.

(Dollars in millions, except per share amounts)

Note 12. Accrued Liabilities

	December 31,	
	2019	2018
Customer advances and deferred income	$ 2,490	$ 2,403
Compensation, benefit and other employee related	1,551	1,469
Repositioning	640	566
Asbestos related liabilities	361	245
Income taxes	253	166
Other taxes	239	234
Environmental costs	222	175
Product warranties and performance guarantees	213	243
Operating lease liabilities	171	—
Insurance	143	170
Accrued interest	91	94
Other (primarily operating expenses)	1,102	1,094
	$ 7,476	$ 6,859

(Dollars in millions, except per share amounts)

Note 13. Long-term Debt and Credit Agreements

	December 31, 2019	December 31, 2018
1.40% notes due 2019	$ —	$ 1,250
Three year floating rate notes due 2019	—	250
Two year floating rate notes due 2019	—	450
1.80% notes due 2019	—	750
0.65% Euro notes due 2020	1,123	1,145
4.25% notes due 2021	800	800
1.85% notes due 2021	1,500	1,500
2.15% notes due 2022	600	—
Floating rate notes due 2022	600	—
1.30% Euro notes due 2023	1,404	1,432
3.35% notes due 2023	300	300
2.30% notes due 2024	750	—
2.50% notes due 2026	1,500	1,500
2.25% Euro notes due 2028	842	859
2.70% notes due 2029	750	—
5.70% notes due 2036	441	441
5.70% notes due 2037	462	462
5.375% notes due 2041	417	417
3.812% notes due 2047	445	445
Industrial development bond obligations, floating rate maturing at various dates through 2037	22	22
6.625% debentures due 2028	201	201
9.065% debentures due 2033	51	51
Other (including finance leases and debt issuance costs), 6.6% weighted average maturing at various dates through 2025	278	353
	12,486	12,628
Less: current portion	(1,376)	(2,872)
	$ 11,110	$ 9,756

The schedule of principal payments on long-term debt is as follows:

	December 31, 2019
2020	$ 1,376
2021	2,375
2022	1,242
2023	1,733
2024	780
Thereafter	4,980
	12,486
Less-current portion	(1,376)
	$ 11,110

On August 8, 2019, the Company issued $600 million 2.15% Senior Notes due 2022, $600 million Floating Rate Senior Notes due 2022, $750 million 2.30% Senior Notes due 2024 and $750 million 2.70% Senior Notes due 2029 (collectively the "2019 Notes"). The 2019 Notes are senior unsecured and unsubordinated obligations of Honeywell and rank equally with all of Honeywell's existing and future senior unsecured debt and senior to all of Honeywell's subordinated debt. The offering resulted in gross proceeds of $2,700 million, offset by $18 million in discount and closing costs related to the offering.

For the issuances described above, unless otherwise noted, all debt issuance costs are deferred and recognized as a direct deduction to the related debt liability and are amortized to interest expense over the debt term.

On October 30, 2019, the Company paid its 1.40% notes due 2019, Three year floating rate notes due 2019, Two year floating rate notes due 2019 and 1.80% notes due 2019.

In connection with the Garrett spin-off, wholly owned subsidiaries of Garrett issued notes and entered new credit facilities, which obligations were retained by Garrett in the spin-off. On September 27, 2018 the Company received net proceeds of $1,604 million from such borrowings.

In connection with the Resideo spin-off, wholly owned subsidiaries of Resideo issued notes and entered new credit facilities, which obligations were retained by Resideo in the spin-off. On October 25, 2018 the Company received net proceeds of $1,197 million from such borrowings.

On April 26, 2019, the Company entered into a $4.0 billion Amended and Restated Five Year Credit Agreement (the “5-Year Credit Agreement”), with a syndicate of banks. The 5-Year Credit Agreement is maintained for general corporate purposes. Commitments under the 5-Year Credit Agreement can be increased pursuant to the terms of the 5-Year Credit Agreement to an aggregate amount not to exceed $4.5 billion. The 5-Year Credit Agreement amends and restates the previously reported $4.0 billion amended and restated five-year credit agreement dated as of April 27, 2018 (the "Prior Agreement"). The 5-Year Credit Agreement has substantially the same material terms and conditions as the Prior Agreement.

On April 26, 2019, the Company entered into a $1.5 billion 364-Day Credit Agreement with a syndicate of banks. This 364-Day Credit Agreement is maintained for general corporate purposes.

There have been no borrowings under any of the credit agreements previously described.

Note 14. Leases

Adoption

Effective January 1, 2019, the Company adopted the new lease accounting standard using the modified retrospective method of applying the new standard at the adoption date. In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard. This allowed us to carry forward the historical lease classification. Adoption of this standard resulted in the recording of net operating lease right-of-use (ROU) assets and corresponding operating lease liabilities of $0.7 billion. Financial position for reporting periods beginning on or after January 1, 2019 are presented under the new guidance, while prior periods amounts are not adjusted and continue to be reported in accordance with previous guidance.

A significant portion of the Company's operating and finance lease portfolio includes corporate offices, research and development facilities, manufacturing sites, information technology (IT) equipment, and automobiles. The majority of our leases have remaining lease terms of 1 year to 20 years, some of which include options to extend the leases for 5 years or more. Operating lease ROU assets are presented within Other assets. The current portion of operating lease liabilities are presented within Accrued liabilities, and the non-current portion of operating lease liabilities are presented within Other liabilities on the Consolidated Balance Sheet. Finance lease assets are included in Property, plant and equipment - net, and the finance lease obligations are included in Current maturities of long-term debt, and in Long-term debt on the Consolidated Balance Sheet.

(Dollars in millions, except per share amounts)

A portion of the Company's real estate leases is generally subject to annual changes in the Consumer Price Index (CPI). The changes to the CPI are treated as variable lease payments and recognized in the period in which the obligation for those payments was incurred. In addition, a subset of our automobile leases is considered variable. The variable lease payments for such automobiles leases are based on actual mileage incurred at the stated contractual rate and recognized in the period in which the obligation for those payments was incurred.

	Year Ended December 31, 2019
Operating lease cost	$ 222
Variable lease cost	27
Short-term lease cost	12
Finance lease cost:	
Amortization of right-of-use assets	65
Interest on lease liability	30
Total finance lease cost	95
Total lease cost	$ 356

Supplemental cash flow information related to leases was as follows:

	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	$ 224
Operating cash flows from finance leases	32
Financing cash flows from finance leases	61
Right-of-use assets obtained in exchange for lease obligations:	
Operating leases	$ 179
Finance leases	34

(Dollars in millions, except per share amounts)

Supplemental balance sheet information related to leases was as follows:

		December 31, 2019
Operating leases		
Other assets	$	673
Accrued liabilities		171
Other liabilities		534
Total operating lease liabilities	$	705
Finance leases		
Property, plant and equipment	$	361
Accumulated depreciation		(152)
Property, plant and equipment - net	$	209
Current maturities of long-term debt		59
Long-term debt		156
Total finance lease liabilities	$	215
Weighted-average remaining lease term		
Operating leases		6 years
Finance leases		4 years
Weighted-average discount rate		
Operating leases		3.3%
Finance leases		16.2%

As of December 31, 2019, maturities of lease liabilities were as follows:

		Operating Leases		Finance Leases
2020	$	195	$	86
2021		162		73
2022		128		53
2023		97		41
2024		63		37
Thereafter		145		12
Total lease payments		790		302
Less: interest		(85)		(87)
Total	$	705	$	215

As previously disclosed in our 2018 Annual Report on Form 10-K and under the previous lease accounting standard, future minimum lease payments for operating leases having initial or remaining noncancellable lease terms in excess of one year would have been as follows:

		At December 31, 2018
2019	$	210
2020		168
2021		142
2022		109
2023		80
Thereafter		147
	$	856

Note 15. Financial Instruments and Fair Value Measures

Credit and Market Risk—Financial instruments, including derivatives, expose the Company to counterparty credit risk for nonperformance and to market risk related to changes in interest and currency exchange rates. Our counterparties in derivative transactions are substantial investment and commercial banks with significant experience using such derivative instruments.

The Company continually monitors the creditworthiness of its customers to which it grants credit terms in the normal course of business. The terms and conditions of our credit sales are designed to mitigate or eliminate concentrations of credit risk with any single customer. Our sales are not materially dependent on a single customer or a small group of customers.

Foreign Currency Risk Management—The Company conducts business on a multinational basis in a wide variety of foreign currencies. Our exposure to market risk for changes in foreign currency exchange rates arises from international financing activities between subsidiaries, foreign currency denominated monetary assets and liabilities and transactions arising from international trade. Our primary objective is to preserve the U.S. Dollar value of foreign currency denominated cash flows and earnings. We monitor our collective foreign currency exposure and enter into foreign currency exchange forward and option contracts (foreign currency exchange contracts) with third parties, when necessary, to minimize the impact of changes in foreign currency exchange rates.

The Company has monetary assets and liabilities denominated in non-functional currencies. Prior to conversion into U.S. dollars, these assets and liabilities are remeasured at spot exchange rates in effect on the balance sheet date. The effects of changes in spot rates are recognized in earnings and included in other (income) expense. We may purchase or enter into derivative instruments to hedge our foreign currency exposure. We hedge forecasted sales and purchases, which are denominated in non-functional currencies, with foreign currency exchange contracts. Changes in the forecasted non-functional currency cash flows due to movements in exchange rates are substantially offset by changes in the fair value of these foreign currency exchange contracts designated as hedges. Market value gains and losses on these contracts are recognized in earnings when the hedged transaction is recognized. As of December 31, 2019 and 2018, we had contracts with notional amounts of $12,746 million and $14,995 million to exchange foreign currencies, principally the U.S. Dollar, Euro, Canadian Dollar, British Pound, Mexican Peso, Chinese Renminbi, Indian Rupee, Malaysian Ringgit, and Swiss Franc. As of December 31, 2019, we estimate that approximately $52 million of net derivative gains related to our cash flow hedges included in Accumulated other comprehensive income (loss) will be reclassified into earnings within the next 12 months.

The Company has also designated foreign currency debt and certain derivative contracts as hedges against portions of its net investment in foreign operations during the year ended December 31, 2019. Gains or losses of the foreign currency debt and derivative contracts designated as a net investment hedge are recorded in the same manner as foreign currency translation adjustments.

Interest Rate Risk Management—Financial instruments, including derivatives, expose the Company to market risk related to changes in interest rates. The Company uses a combination of financial instruments, including long-term, medium-term and short-term financing, variable-rate commercial paper, and interest rate swaps to manage the interest rate mix of our total debt portfolio and related overall cost of borrowing. At December 31, 2019 and 2018, interest rate swap agreements designated as fair value hedges effectively changed $3,950 million and $2,600 million of fixed rate debt at 2.87% and 2.93% to LIBOR based floating rate debt. Our interest rate swaps mature at various dates through 2029.

(Dollars in millions, except per share amounts)

Fair Value of Financial Instruments—The accounting guidance for fair value measurements and disclosures establishes a three-level fair value hierarchy.

- Level 1-Inputs are based on quoted prices in active markets for identical assets and liabilities.
- Level 2-Inputs are based on observable inputs other than quoted prices in active markets for identical or similar assets and liabilities.
- Level 3-One or more inputs are unobservable and significant.

Financial and nonfinancial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

The following table sets forth the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis as of December 31, 2019 and 2018:

	December 31, 2019	December 31, 2018
Assets:		
Foreign currency exchange contracts	$ 291	$ 119
Available for sale investments	1,523	1,784
Interest rate swap agreements	38	20
Cross currency swap agreements	51	32
Liabilities:		
Foreign currency exchange contracts	$ 21	$ 4
Interest rate swap agreements	13	65

The foreign currency exchange contracts, interest rate swap agreements, and cross currency swap agreements are valued using broker quotations, or market transactions in either the listed or over-the-counter markets. As such, these derivative instruments are classified within level 2. The Company also holds investments in commercial paper, certificates of deposits, and time deposits that are designated as available for sale and are valued using published prices based off observable market data. As such, these investments are classified within level 2. The Company also holds available for sale investments in U.S. government and corporate debt securities valued utilizing published prices based on quoted market pricing, which are classified within level 1.

The carrying value of cash and cash equivalents, trade accounts and notes receivables, payables, commercial paper (of which $3,513 million and $3,583 million was Euro denominated as of December 31, 2019 and 2018) and short-term borrowings contained in the Consolidated Balance Sheet approximates fair value.

The following table sets forth the Company's financial assets and liabilities that were not carried at fair value:

	December 31, 2019		December 31, 2018	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets				
Long-term receivables	$ 129	$ 127	$ 333	$ 329
Liabilities				
Long-term debt and related current maturities	$ 12,486	$ 13,578	$ 12,628	$ 13,133

The following table sets forth the amounts recorded on the Consolidated Balance Sheet related to cumulative basis adjustments for fair value hedges:

	Carrying Amount of the Hedged Item		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Item	
Line in the Consolidated Balance Sheet of Hedged Item	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Long-term debt	$ 3,975	$ 2,555	$ 25	$ (45)

(Dollars in millions, except per share amounts)

The Company determined the fair value of the long-term receivables by utilizing transactions in the listed markets for identical or similar assets. As such, the fair value of these receivables is considered level 2. The Company determined the fair value of the long-term debt and related current maturities utilizing transactions in the listed markets for identical or similar liabilities. As such, the fair value of the long-term debt and related current maturities is considered level 2.

Interest rate swap agreements are designated as hedge relationships with gains or losses on the derivative recognized in interest and other financial charges offsetting the gains and losses on the underlying debt being hedged. Gains and losses on interest rate swap agreements recognized in earnings were $70 million of income, $37 million of expense and $29 million of expense in the years ended December 31, 2019, 2018 and 2017. Gains and losses are fully offset by losses and gains on the underlying debt being hedged.

The Company economically hedges its exposure to changes in foreign exchange rates principally with forward contracts. These contracts are marked-to-market with the resulting gains and losses recognized in earnings offsetting the gains and losses on the non-functional currency denominated monetary assets and liabilities being hedged. We recognized $106 million of income, $394 million of income, and $207 million of expense in Other (income) expense in the years ended December 31, 2019, 2018 and 2017.

The following tables summarize the location and impact to the Consolidated Statement of Operations related to fair value and cash flow hedging relationships:

	Year Ended December 31, 2019				
	Revenue	Cost of Products Sold	SG&A	Other (Income) Expense	Interest and Other Financial Charges
	$ 36,709	$ 19,269	$ 5,519	$ (1,065)	$ 357
Gain or (loss) on cash flow hedges:					
Foreign Currency Exchange Contracts:					
Amount reclassified from accumulated other comprehensive income into income	3	44	1	73	—
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	22	—	35	—
Gain or (loss) on fair value hedges:					
Interest Rate Swap Agreements:					
Hedged Items	—	—	—	—	(70)
Derivatives designated as hedges	—	—	—	—	70

	Year Ended December 31, 2018				
	Revenue	Cost of Products Sold	SG&A	Other (Income) Expense	Interest and Other Financial Charges
	$ 41,802	$ 23,634	$ 6,051	$ (1,149)	$ 367
Gain or (loss) on cash flow hedges:					
Foreign Currency Exchange Contracts:					
Amount reclassified from accumulated other comprehensive income into income	(9)	(35)	(2)	47	—
Amount excluded from effectiveness testing recognized in earnings using an amortization approach	—	6	—	9	—
Gain or (loss) on fair value hedges:					
Interest Rate Swap Agreements:					
Hedged Items	—	—	—	—	37
Derivatives designated as hedges	—	—	—	—	(37)

(Dollars in millions, except per share amounts)

The following table summarizes the amounts of gain or (loss) on net investment hedges recognized in Accumulated other comprehensive income (loss):

Derivatives Net Investment Hedging Relationships	Years Ended December 31, 2019	2018
Euro-denominated long-term debt	$ 68	$ 177
Euro-denominated commercial paper	71	168
Cross currency swap	32	44
Foreign currency exchange contracts	23	—

Note 16. Other Liabilities

	December 31, 2019	2018
Income taxes	$ 2,115	$ 2,236
Pension and other employee related	1,873	1,795
Deferred income	1,310	1,264
Operating lease liabilities	534	—
Environmental	487	580
Insurance	247	236
Asset retirement obligations	61	74
Product warranties and performance guarantees	56	67
Other	83	150
	$ 6,766	$ 6,402

Note 17. Capital Stock

Honeywell is authorized to issue up to 2,000,000,000 shares of common stock, with a par value of $1. Common shareowners are entitled to receive such dividends as may be declared by the Board of Directors, are entitled to one vote per share, and are entitled, in the event of liquidation, to share ratably in all the assets of Honeywell which are available for distribution to the common shareowners. Common shareowners do not have preemptive or conversion rights. Shares of common stock issued and outstanding or held in the treasury are not liable to further calls or assessments. There are no restrictions on us relative to dividends or the repurchase or redemption of common stock.

On April 29, 2019, the Board of Directors authorized the repurchase of up to a total of $10.0 billion of Honeywell common stock, which included amounts remaining under, and replaced, the previously approved share repurchase program. Approximately $7.0 billion and $3.7 billion remained available as of December 31, 2019, and December 31, 2018 for additional share repurchases.

Honeywell repurchased approximately 26.5 million shares of its common stock in both 2019 and 2018, for $4,400 million and $4,000 million.

Honeywell is authorized to issue up to 40,000,000 shares of preferred stock, without par value, and can determine the number of shares of each series, and the rights, preferences and limitations of each series. At December 31, 2019, there was no preferred stock outstanding.

(Dollars in millions, except per share amounts)

Note 18. Accumulated Other Comprehensive Income (Loss)

The changes in Accumulated other comprehensive income (loss) are provided in the tables below. Comprehensive income (loss) attributable to noncontrolling interest consists predominantly of net income.

	Pre-tax	Tax	After-Tax
Year Ended December 31, 2019			
Foreign exchange translation adjustment	$ 143	$ —	$ 143
Pensions and other postretirement benefit adjustments	115	(29)	86
Changes in fair value of designated cash flow hedges	20	(9)	11
	$ 278	$ (38)	$ 240
Year Ended December 31, 2018			
Foreign exchange translation adjustment	$ (728)	$ —	$ (728)
Pensions and other postretirement benefit adjustments	(727)	168	(559)
Changes in fair value of designated cash flow hedges	102	(17)	85
	$ (1,353)	$ 151	$ (1,202)
Year Ended December 31, 2017			
Foreign exchange translation adjustment	$ (37)	$ —	$ (37)
Pensions and other postretirement benefit adjustments	847	(170)	677
Changes in fair value of designated cash flow hedges	(194)	33	(161)
	$ 616	$ (137)	$ 479

Components of Accumulated Other Comprehensive Income (Loss)

	December 31,	
	2019	2018
Cumulative foreign exchange translation adjustment	$ (2,566)	$ (2,709)
Pensions and other postretirement benefit adjustments	(675)	(761)
Fair value of designated cash flow hedges	44	33
	$ (3,197)	$ (3,437)

(Dollars in millions, except per share amounts)

Changes in Accumulated Other Comprehensive Income (Loss) by Component

	Foreign Exchange Translation Adjustment	Pension and Other Postretirement Adjustments	Changes in Fair Value of Cash Flow Hedges	Total
Balance at December 31, 2017	$ (1,981)	$ (202)	$ (52)	$ (2,235)
Other comprehensive income (loss) before reclassifications	(685)	(569)	89	(1,165)
Amounts reclassified from accumulated other comprehensive income	—	(37)	(4)	(41)
Spin-off	(43)	47	—	4
Net current period other comprehensive income (loss)	(728)	(559)	85	(1,202)
Balance at December 31, 2018	$ (2,709)	$ (761)	$ 33	$ (3,437)
Other comprehensive income (loss) before reclassifications	156	149	103	408
Amounts reclassified from accumulated other comprehensive income	(13)	(63)	(92)	(168)
Net current period other comprehensive income (loss)	143	86	11	240
Balance at December 31, 2019	$ (2,566)	$ (675)	$ 44	$ (3,197)

Reclassifications Out of Accumulated Other Comprehensive Income (Loss)

	Year Ended December 31, 2019 Affected Line in the Consolidated Statement of Operations					
	Product Sales	Cost of Products Sold	Cost of Services Sold	Selling, General and Admin. Expenses	Other (Income) Expense	Total
Amortization of Pension and Other Postretirement Items:						
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 135	$ 135
Prior service (credit) recognized	—	—	—	—	(104)	(104)
Settlements and curtailments	—	—	—	—	—	—
Losses (gains) on cash flow hedges	(3)	(35)	(9)	(1)	(73)	(121)
Losses (gains) on net investment hedges	—	—	—	—	(19)	(19)
Total before tax	$ (3)	$ (35)	$ (9)	$ (1)	$ (61)	$ (109)
Tax expense (benefit)						(59)
Total reclassifications for the period, net of tax						$ (168)

(Dollars in millions, except per share amounts)

	Year Ended December 31, 2018 Affected Line in the Consolidated Statement of Operations					
	Product Sales	Cost of Products Sold	Cost of Services Sold	Selling, General and Admin. Expenses	Other (Income) Expense	Total
Amortization of Pension and Other Postretirement Items:						
Actuarial losses recognized	$ —	$ —	$ —	$ —	$ 45	$ 45
Prior service (credit) recognized	—	—	—	—	(99)	(99)
Settlements and curtailments	—	—	—	—	2	2
Losses (gains) on cash flow hedges	10	30	6	2	(47)	1
Total before tax	$ 10	$ 30	$ 6	$ 2	$ (99)	$ (51)
Tax expense (benefit)						10
Total reclassifications for the period, net of tax						$ (41)

Note 19. Stock-Based Compensation Plans

The 2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (2016 Plan) and 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. (2016 Directors Plan) were both approved by the shareowners at the Annual Meeting of Shareowners effective on April 25, 2016. Following approval of both plans, we have not and will not grant any new awards under any previously existing stock-based compensation plans. At December 31, 2019, there were 37,364,854, and 866,273 shares of Honeywell common stock available for future grants under terms of the 2016 Plan and 2016 Directors Plan, respectively.

Stock Options—The exercise price, term and other conditions applicable to each option granted under the Company's stock plans are generally determined by the Management Development and Compensation Committee of the Board. The exercise price of stock options is set on the grant date and may not be less than the fair market value per share of our stock on that date. The fair value is recognized as an expense over the employee’s requisite service period (generally the vesting period of the award). Options generally vest over a four-year period and expire after ten years.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model. Expected volatility is based on implied volatilities from traded options on our common stock and historical volatility of our common stock. We used a Monte Carlo simulation model to derive an expected term which represents an estimate of the time options are expected to remain outstanding. Such model uses historical data to estimate option exercise activity and post-vest termination behavior. The risk-free rate for periods within the contractual life of the option is based on the U.S. treasury yield curve in effect at the time of grant.

The following table summarizes the impact to the Consolidated Statement of Operations from stock options:

	Years Ended December 31,		
	2019	2018	2017
Compensation expense	$ 47	$ 64	$ 79
Future income tax benefit recognized	10	13	17

(Dollars in millions, except per share amounts)

The following table sets forth fair value per share information, including related weighted-average assumptions, used to determine compensation cost.

	Years Ended December 31,		
	2019	2018	2017
Weighted average fair value per share of options granted during the year[1]	$ 21.57	$ 23.63	$ 16.68
Assumptions:			
Expected annual dividend yield	2.65%	2.49%	2.81%
Expected volatility	18.40%	18.93%	18.96%
Risk-free rate of return	2.46%	2.71%	2.02%
Expected option term (years)	4.87	4.95	5.04

(1) Estimated on date of grant using Black-Scholes option-pricing model.

The following table summarizes information about stock option activity for the three years ended December 31, 2019:

	Number of Options	Weighted Average Exercise Price
Outstanding at December 31, 2016	28,667,300	$ 79.57
Granted	5,098,569	125.16
Exercised	(8,840,019)	62.34
Lapsed or canceled	(1,516,557)	109.04
Outstanding at December 31, 2017	23,409,293	94.16
Spin related adjustment[1]	989,158	
Granted	3,303,722	148.48
Exercised	(3,399,375)	78.29
Lapsed or canceled	(1,824,217)	123.01
Outstanding at December 31, 2018	22,478,581	97.83
Granted	3,136,058	155.43
Exercised	(5,897,060)	84.31
Lapsed or canceled	(986,017)	136.15
Outstanding at December 31, 2019	18,731,562	$ 109.87
Vested and expected to vest at December 31, 2019[2]	17,636,444	$ 107.39
Exercisable at December 31, 2019	11,620,992	$ 92.19

(1) Additional options granted to offset the dilutive impact of the spin-offs on outstanding options.
(2) Represents the sum of vested options of 11.6 million and expected to vest options of 6.0 million. Expected to vest options are derived by applying the pre-vesting forfeiture rate assumption to total outstanding unvested options of 7.1 million.

(Dollars in millions, except per share amounts)

The following table summarizes information about stock options outstanding and exercisable at December 31, 2019:

	Options Outstanding				Options Exercisable		
Range of Exercise Prices	Number Outstanding	Weighted Average Life[(1)]	Weighted Average Exercise Price	Aggregate Intrinsic Value	Number Exercisable	Weighted Average Exercise Price	Aggregate Intrinsic Value
$27.00–$64.99	1,621,042	1.87	$ 55.38	$ 197	1,621,042	$ 55.38	$ 197
$65.00–$89.99	3,388,800	3.74	79.79	329	3,388,800	79.79	329
$90.00–$99.99	5,266,409	5.70	98.80	412	4,461,659	98.81	349
$100.00–$134.99	3,344,472	7.11	119.07	194	1,636,518	118.65	95
$135.00–$180.99	5,110,839	8.76	152.49	125	512,973	148.52	15
	18,731,562	6.10	$ 109.87	$ 1,257	11,620,992	$ 92.19	$ 985

(1) Average remaining contractual life in years.

There were 14,073,120 and 12,288,854 options exercisable at weighted average exercise prices of $83.42 and $78.35 at December 31, 2018 and 2017.

The following table summarizes the financial statement impact from stock options exercised:

	Years Ended December 31,		
Options Exercised	2019	2018	2017
Intrinsic value[(1)]	$ 483	$ 238	$ 620
Tax benefit realized	117	47	221

(1) Represents the amount by which the stock price exceeded the exercise price of the options on the date of exercise.

At December 31, 2019 there was $88 million of total unrecognized compensation cost related to non-vested stock option awards which is expected to be recognized over a weighted-average period of 2.47 years. The total fair value of options vested during 2019, 2018 and 2017 was $61 million, $73 million and $87 million.

Restricted Stock Units—Restricted stock unit (RSU) awards entitle the holder to receive one share of common stock for each unit when the units vest. RSUs are issued to certain key employees and directors as compensation at fair market value at the date of grant. RSUs typically become fully vested over periods ranging from three to six years and are payable in Honeywell common stock upon vesting.

(Dollars in millions, except per share amounts)

The following table summarizes information about RSU activity for the three years ended December 31, 2019:

	Number of Restricted Stock Units	Weighted Average Grant Date Fair Value Per Share
Non-vested at December 31, 2016	4,467,343	$ 94.17
Granted	1,274,791	129.71
Vested	(1,289,892)	81.37
Forfeited	(505,415)	103.06
Non-vested at December 31, 2017	3,946,827	108.60
Spin related adjustment(1)	154,346	
Granted	1,360,338	153.46
Vested	(988,787)	91.68
Forfeited	(814,851)	117.40
Non-vested at December 31, 2018	3,657,873	125.35
Granted	1,200,202	162.43
Vested	(1,160,333)	104.32
Forfeited	(457,677)	134.50
Non-vested at December 31, 2019	3,240,065	$ 143.07

(1) Additional RSU grants to offset the dilutive impact of the spin-offs on non-vested RSUs.

As of December 31, 2019, there was approximately $217 million of total unrecognized compensation cost related to non-vested RSUs granted under our stock plans which is expected to be recognized over a weighted-average period of 2.86 years.

The following table summarizes the impact to the Consolidated Statement of Operations from RSUs:

	Years Ended December 31,		
	2019	2018	2017
Compensation expense	$ 106	$ 111	$ 97
Future income tax benefit recognized	21	21	19

Note 20. Commitments and Contingencies

Environmental Matters

The Company is subject to various federal, state, local and foreign government requirements relating to the protection of the environment. We believe that, as a general matter, our policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage and personal injury and that our handling, manufacture, use and disposal of hazardous substances are in accordance with environmental and safety laws and regulations. However, mainly because of past operations and operations of predecessor companies, we, like other companies engaged in similar businesses, have incurred remedial response and voluntary cleanup costs for site contamination and are a party to lawsuits and claims associated with environmental and safety matters, including past production of products containing hazardous substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future.

With respect to environmental matters involving site contamination, the Company continually conducts studies, individually or jointly with other potentially responsible parties, to determine the feasibility of various remedial techniques. It is our policy to record appropriate liabilities for environmental matters when remedial efforts or damage claim payments are probable and the costs can be reasonably estimated. Such liabilities are based on our best estimate of the undiscounted future costs required to complete the remedial work. The recorded liabilities are adjusted periodically as remediation efforts progress or as additional technical, regulatory or legal information becomes available. Given the uncertainties regarding the status of laws, regulations, enforcement policies, the impact of other potentially responsible parties, technology and information related to individual sites, we do not believe it is possible to develop an estimate of the range of reasonably possible environmental loss in excess of our recorded liabilities. We expect to fund expenditures for these matters from operating cash flow. The timing of cash expenditures depends on a number of factors, including the timing of remedial investigations and feasibility studies, the timing of litigation and settlements of remediation liability, personal injury and property damage claims, regulatory approval of cleanup projects, remedial techniques to be utilized and agreements with other parties.

(Dollars in millions, except per share amounts)

The following table summarizes information concerning the Company's recorded liabilities for environmental costs:

	Years Ended December 31,		
	2019	2018	2017
Beginning of year	$ 755	$ 595	$ 511
Accruals for environmental matters deemed probable and reasonably estimable	213	395	287
Environmental liability payments	(256)	(218)	(212)
Other	(3)	(17)	9
End of year	$ 709	$ 755	$ 595

Environmental liabilities are included in the following balance sheet accounts:

	December 31,	
	2019	2018
Accrued liabilities	$ 222	$ 175
Other liabilities	487	580
	$ 709	$ 755

The Company does not currently possess sufficient information to reasonably estimate the amounts of environmental liabilities to be recorded upon future completion of studies, litigation or settlements, and neither the timing nor the amount of the ultimate costs associated with environmental matters can be determined although they could be material to our consolidated results of operations and operating cash flows in the periods recognized or paid. However, considering our past experience and existing reserves, we do not expect that environmental matters will have a material adverse effect on our consolidated financial position.

In conjunction with the Resideo spin-off, the Company entered into an indemnification and reimbursement agreement with a Resideo subsidiary, pursuant to which Resideo’s subsidiary has an ongoing obligation to make cash payments to Honeywell in amounts equal to 90 percent of Honeywell’s annual net spending for environmental matters at certain sites as defined in the agreement. The amount payable to Honeywell in any given year is subject to a cap of $140 million, and the obligation will continue until the earlier of December 31, 2043, or December 31 of the third consecutive year during which the annual payment obligation has been less than $25 million. Reimbursements associated with this agreement were $140 million and $25 million in 2019 and 2018, respectively and offset operating cash outflows incurred by the Company. As the Company records the accruals for environmental matters deemed probable and reasonably estimable related to the sites covered by the indemnification and reimbursement agreement, a corresponding receivable from Resideo for 90 percent of that accrual is also recorded. This receivable amount recorded in 2019 and 2018, subsequent to the spin-off, was $109 million and $50 million. As of December 31, 2019, Other Current Assets and Other Assets includes $140 million and $445 million representing the short-term and long-term portion of the receivable amount due from Resideo under the indemnification and reimbursement agreement. As of December 31, 2018, Other Current Assets and Other Assets includes $140 million and $476 million representing the short-term and long-term portion of the receivable amount due from Resideo under the indemnification and reimbursement agreement.

Asbestos Matters

Honeywell is named in asbestos related personal injury claims related to North American Refractories Company (“NARCO”), which was sold in 1986, and Bendix Friction Materials (“Bendix”) business, which was sold in 2014.

(Dollars in millions, except per share amounts)

The following tables summarize information concerning NARCO and Bendix asbestos related balances:

Asbestos Related Liabilities

	Year Ended December 31, 2019			Year Ended December 31, 2018			Year Ended December 31, 2017		
	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO	Total
Beginning of year	$ 1,623	$ 891	$ 2,514	$ 1,703	$ 907	$ 2,610	$ 1,789	$ 919	$ 2,708
Accrual for update to estimated liability	78	22	100	197	32	229	199	31	230
Change in estimated cost of future claims	(22)	—	(22)	(72)	—	(72)	(65)	—	(65)
Update of expected resolution values for pending claims	(4)	—	(4)	1	—	1	3	—	3
Asbestos related liability payments	(176)	(55)	(231)	(206)	(48)	(254)	(223)	(43)	(266)
End of year	$ 1,499	$ 858	$ 2,357	$ 1,623	$ 891	$ 2,514	$ 1,703	$ 907	$ 2,610

Insurance Recoveries for Asbestos Related Liabilities

	Year Ended December 31, 2019			Year Ended December 31, 2018			Year Ended December 31, 2017		
	Bendix	NARCO	Total	Bendix	NARCO	Total	Bendix	NARCO	Total
Beginning of year	$ 170	$ 307	$ 477	$ 191	$ 312	$ 503	$ 201	$ 319	$ 520
Probable insurance recoveries related to estimated liability	3	—	3	11	—	11	10	—	10
Insurance receipts for asbestos related liabilities	(39)	(29)	(68)	(33)	(5)	(38)	(20)	(7)	(27)
Insurance receivables settlements and write offs	19	3	22	1	—	1	—	—	—
Other	—	—	—	—	—	—	—	—	—
End of year	$ 153	$ 281	$ 434	$ 170	$ 307	$ 477	$ 191	$ 312	$ 503

NARCO and Bendix asbestos related balances are included in the following balance sheet accounts:

	December 31,	
	2019	2018
Other current assets	$ 42	$ 40
Insurance recoveries for asbestos related liabilities	392	437
	$ 434	$ 477
Accrued liabilities	$ 361	$ 245
Asbestos related liabilities	1,996	2,269
	$ 2,357	$ 2,514

NARCO Products—Honeywell's predecessor, Allied Corporation owned NARCO from 1979 to 1986. When the NARCO business was sold, Honeywell's predecessor entered into a cross-indemnity agreement with NARCO which included an obligation to indemnify the purchaser for asbestos claims. Such claims arise primarily from alleged occupational exposure to asbestos-containing refractory brick and mortar for high-temperature applications. NARCO ceased manufacturing these products in 1980, and the first asbestos claims were filed in the tort system against NARCO in 1983. Claims filings and related costs increased dramatically in the late 1990s through 2001, which led to NARCO filing for bankruptcy in January 2002. Once NARCO filed for bankruptcy, all then current and future NARCO asbestos claims were stayed against both NARCO and Honeywell pending the reorganization of NARCO.

Following the bankruptcy filing, in December 2002 Honeywell recorded a total NARCO asbestos liability of $3.2 billion, which was comprised of three components: (i) the estimated liability to settle pre-bankruptcy petition NARCO claims and certain post-petition settlements ($2.2 billion, referred to as "Pre-bankruptcy NARCO Liability"), (ii) the estimated liability related to then unasserted NARCO claims for the period 2004 through 2018 ($950 million, referred to as "NARCO Trust Liability"), and (iii) other NARCO bankruptcy-related obligations totaling $73 million.

When the NARCO Trust Liability of $950 million was established in 2002, the methodology for estimating the potential liability was based primarily on: (a) epidemiological projections of the future incidence of disease for the period 2004 through 2018, a fifteen-year period; (b) historical claims rates in the tort system for the five-year period prior to the bankruptcy filing date; and (c) anticipated NARCO Trust payment values set forth in the then current draft of the NARCO Trust Distribution Procedures. The methodology required estimating, by disease, three critical inputs: (i) likely number of claims to be asserted against the NARCO Trust in the future, (ii) percentage of those claims likely to receive payment, and (iii) payment values. The Company utilized outside asbestos liability valuation specialists to support our preparation of the NARCO Trust Liability estimate, which was based on a commonly accepted methodology used by numerous bankruptcy courts addressing 524(g) trusts.

In 2002, when the Company first established its initial liability, NARCO asbestos claims resolution shifted from the tort system to an anticipated NARCO Trust framework, where claims would be processed in accordance with established NARCO Trust Distribution Procedures, including strict medical and exposure criteria for a plaintiff to receive compensation. We believed at the time that the NARCO Trust's claims filing and resolution experience after the NARCO Trust became operational would be significantly different from pre-bankruptcy tort system experience in light of these more rigorous claims processing requirements in the NARCO Trust Distribution Procedures and Honeywell's active oversight of claims processing and approval. Given these anticipated differences, we believed that a 15-year time period was the appropriate horizon for establishing a probable and reasonably estimable liability for then unasserted NARCO claims as it represented our best estimate of the time period it would take for the NARCO Trust to be approved by the Bankruptcy Court, become fully operational and generate sufficiently reliable claims data (i.e., a data set which is statistically representative) to enable us to update our NARCO Trust Liability.

The NARCO Trust Distribution Procedures were finalized in 2006, and the Company updated its NARCO Trust Liability to reflect the final terms and payment values. The original 15-year period (from 2004 through 2018) for unasserted claims did not change as asbestos claims filings continued to be stayed against both Honeywell and NARCO. The 2006 update resulted in a range of the estimated liability for unasserted claims of $743 million to $961 million, and we believed that no amount within this range was a better estimate than any other amount. In accordance with ASC 450–Contingencies ("ASC 450"), we recorded the low end of the range of $743 million (the "2006 NARCO Trust Liability Estimate") which resulted in a reduction of $207 million in our NARCO Trust Liability.

NARCO emerged from bankruptcy on April 30, 2013, at which time a federally authorized 524(g) trust was established for the evaluation and resolution of all existing and future NARCO asbestos claims. Both Honeywell and NARCO are protected by a permanent channeling injunction barring all present and future individual actions in state or federal courts and requiring all asbestos related claims based on exposure to NARCO asbestos-containing products to be made against the NARCO Trust.

The NARCO Trust Agreement and the NARCO Trust Distribution Procedures are the principal documents setting forth the structure of the NARCO Trust. These documents establish Honeywell's evergreen funding obligations. Honeywell is obligated to fund NARCO asbestos claims submitted to the NARCO Trust which qualify for payment under the Trust Distribution Procedures (Annual Contribution Claims), subject to an annual cap of $145 million. However, the initial $100 million of claims processed through the NARCO Trust (the Initial Claims Amount) will not count against the annual cap and any unused portion of the Initial Claims Amount will roll over to subsequent years until fully utilized. These documents also establish the material operating rules for the NARCO Trust, including Honeywell audit rights and the criteria claimants must meet to have a valid claim paid. These claims payment criteria include providing the NARCO Trust with adequate medical evidence of the claimant's asbestos-related condition and credible evidence of exposure to a specific NARCO asbestos-containing product. Further, the NARCO Trust is eligible to receive cash dividends from Harbison-Walker International Inc ("HWI"), the reorganized and renamed entity that emerged, fully operational, from the NARCO bankruptcy. The NARCO Trust is required to use any funding received from HWI to pay Annual Contribution Claims until those funds are exhausted. It is only at this point that Honeywell's funding obligation to the Trust is triggered. Thus, there is an unrelated primary source for funding that affects Honeywell's funding of the NARCO Trust Liability.

Once operational, the NARCO Trust began to receive, process and pay claims that had been previously stayed pending the Trust becoming operational. As the NARCO Trust began to pay claims in 2014, we began to assert our on-going audit rights to review and monitor the claims processor's adherence to the established requirements of the NARCO Trust Distribution Procedures. While doing so, we identified several issues with the way the Trust was implementing the NARCO Trust Distribution Procedures. In 2015, Honeywell filed suit against the NARCO Trust in Bankruptcy Court alleging breach of certain provisions of the NARCO Trust Agreement and NARCO Trust Distribution Procedures. The parties agreed to dismiss the proceeding without prejudice pursuant to an 18-month Standstill Agreement, which expired in October 2017. Notwithstanding its expiration, claims processing continues, and Honeywell continues to negotiate and attempt to resolve remaining disputed issues (that is, instances where Honeywell believes the NARCO Trust is not processing claims in accordance with established NARCO Trust Distribution Procedures). Honeywell reserves the right to seek judicial intervention should negotiations fail.

After the NARCO Trust became effective in 2013, the $743 million NARCO Trust Liability was then comprised of:

(i) liability for unasserted claims; and

(ii) liability for claims asserted after the NARCO Trust became operational but not yet paid.

Although the Company knows the number of claims filed with the NARCO Trust each year, it is not able to determine at this time the portion of the NARCO Trust Liability which represents asserted versus unasserted claims due to the lack of sufficiently reliable claims data because of the claims processing issues described previously.

Honeywell continues to maintain the 2006 NARCO Trust Liability (the $743 million accrual less payments made to the NARCO Trust for Annual Contribution Claims), as there has not been sufficiently reliable claims data history to enable the Company to update that liability.

As of December 31, 2019, all cash dividends paid to the NARCO Trust by HWI has been used to pay Annual Contribution Claims. In the fourth quarter of 2019, Honeywell funded $29 million to the NARCO Trust for the payment of Annual Contribution Claims.

As of December 31, 2019, the Company's total NARCO asbestos liability of $858 million reflects Pre-bankruptcy NARCO liability of $144 million and NARCO Trust Liability of $714 million (the $743 million accrual for NARCO Trust Liability was reduced by the $29 million payment to the NARCO Trust in the fourth quarter of 2019 for Annual Contribution Claims). Through December 31, 2019, Pre-bankruptcy NARCO Liability has been reduced by approximately $2 billion since first established in 2002, largely related to settlement payments. The remaining Pre-bankruptcy NARCO liability principally represents estimated amounts owed pursuant to settlement agreements reached during the pendency of the NARCO bankruptcy proceedings that provide for the right to submit claims to the NARCO Trust subject to qualification under the terms of the settlement agreements and Trust Distribution Procedures. The other NARCO bankruptcy obligations were paid in 2013 and no further liability is recorded.

Honeywell continues to evaluate the appropriateness of the 2006 NARCO Trust Liability Estimate. Despite becoming effective in 2013, the NARCO Trust has experienced delays in becoming fully operational. Violations of the Trust Distribution Procedures and the resulting disputes and challenges, a standstill pending dispute resolution, and limited claims payments, have all contributed to the lack of sufficient normalized data based on actual claims processing experience in the Trust since it became operational. As a result, we have not been able to further update the NARCO Trust Liability aside from deducting payments to the NARCO Trust for Annual Contribution Claims. The 2006 million NARCO Trust Liability Estimate continues to be appropriate because of the unresolved pending claims in the Trust, some portion of which will result in payouts in the future, and because new claims continue to be filed with the NARCO Trust. When sufficiently reliable claims data exists, we will update our estimate of the NARCO Trust Liability and it is possible that a material change may need to be recognized.

The Company's insurance receivable of $281 million as of December 31, 2019, corresponding to the estimated liability for asserted and unasserted NARCO asbestos claims, reflects coverage which reimburses Honeywell for portions of NARCO-related indemnity and defense costs and is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. We conduct analyses to estimate the probable amount of insurance that is recoverable for asbestos claims. While the substantial majority of our insurance carriers are solvent, some of our individual carriers are insolvent, which has been considered in our analysis of probable recoveries. We made judgments concerning insurance coverage that we believe are reasonable and consistent with our historical dealings and our knowledge of any pertinent solvency issues surrounding insurers.

(Dollars in millions, except per share amounts)

Bendix Products—Bendix manufactured automotive brake linings that contained chrysotile asbestos in an encapsulated form. Claimants consist largely of individuals who allege exposure to asbestos from brakes from either performing or being in the vicinity of individuals who performed brake replacements. The following tables present information regarding Bendix related asbestos claims activity:

	Years Ended December 31,	
Claims Activity	**2019**	**2018**
Claims Unresolved at the beginning of year	6,209	6,280
Claims Filed	2,659	2,430
Claims Resolved	(2,388)	(2,501)
Claims Unresolved at the end of year	6,480	6,209

	December 31,	
Disease Distribution of Unresolved Claims	**2019**	**2018**
Mesothelioma and Other Cancer Claims	3,399	2,949
Nonmalignant Claims	3,081	3,260
Total Claims	6,480	6,209

Honeywell has experienced average resolution values per claim excluding legal costs as follows:

	Years Ended December 31,				
	2019	**2018**	**2017**	**2016**	**2015**
			(in whole dollars)		
Malignant claims	$ 50,200	$ 55,300	$ 56,000	$ 44,000	$ 44,000
Nonmalignant claims	$ 3,900	$ 4,700	$ 2,800	$ 4,485	$ 100

It is not possible to predict whether resolution values for Bendix-related asbestos claims will increase, decrease or stabilize in the future.

The Company's consolidated financial statements reflect an estimated liability for resolution of asserted (claims filed as of the financial statement date) and unasserted Bendix-related asbestos claims and excludes the Company's legal fees to defend such asbestos claims which will continue to be expensed by the Company as they are incurred. We have valued Bendix asserted and unasserted claims using average resolution values for the previous five years. We update the resolution values used to estimate the cost of Bendix asserted and unasserted claims during the fourth quarter each year.

Honeywell reflects the inclusion of all years of epidemiological disease projection through 2059 when estimating the liability for unasserted Bendix-related asbestos claims. Such liability for unasserted Bendix-related asbestos claims is based on historic and anticipated claims filing experience and dismissal rates, disease classifications, and resolution values in the tort system for the previous five years.

Our insurance receivable corresponding to the liability for settlement of asserted and unasserted Bendix asbestos claims reflects coverage which is provided by a large number of insurance policies written by dozens of insurance companies in both the domestic insurance market and the London excess market. Based on our ongoing analysis of the probable insurance recovery, insurance receivables are recorded in the financial statements simultaneous with the recording of the estimated liability for the underlying asbestos claims. This determination is based on our analysis of the underlying insurance policies, our historical experience with our insurers, our ongoing review of the solvency of our insurers, judicial determinations relevant to our insurance programs, and our consideration of the impacts of any settlements reached with our insurers.

In conjunction with the Garrett spin-off, the Company entered into an indemnification and reimbursement agreement with a Garrett subsidiary, pursuant to which Garrett's subsidiary will have an obligation to make cash payments to Honeywell in amounts equal to (i) 90% of Honeywell's asbestos-related liability payments primarily related to the Bendix business in the United States, as well as certain environmental-related liability payments and accounts payable and non-United States asbestos-related liability payments, in each case related to legacy elements of the Garrett business, including the legal costs of defending and resolving such liabilities, less (ii) 90% of Honeywell's net insurance receipts and, as may be applicable, certain other recoveries associated with such liabilities. The amount payable to Honeywell in respect of such liabilities arising in any given year will be subject to a cap of approximately Euro 150 million (equivalent to $175 million at the time the indemnification and reimbursement agreement was entered into). The obligation will continue until the earlier of December 31, 2048, or December 31 of the third consecutive year during which the annual obligation has been less than the Euro equivalent, at the fixed exchange rate at time of the indemnification and reimbursement agreement was entered into, of $25 million. Reimbursements associated with this agreement were $152 million and $42 million in 2019 and 2018, respectively, and offset operating cash outflows incurred by the Company. As the Company records the accruals for matters covered by the agreement, a corresponding receivable from Garrett is recorded for 90 percent of that accrual as determined by the terms of the agreement. This receivable amount recorded in 2019 was $16 million. In 2018, subsequent to the spin-off, the Company recorded a reversal to the receivable for $17 million in the fourth quarter of 2018. As of December 31, 2019, Other Current Assets and Other Assets includes $115 million and $947 million representing the short-term and long-term portion of the receivable amount due from Garrett under the indemnification and reimbursement agreement. As of December 31, 2018, Other Current Assets and Other Assets includes $171 million and $1,058 million representing the short-term and long-term portion of the receivable amount due from Garrett under the indemnification and reimbursement agreement.

On December 2, 2019, Garrett Motion Inc. and Garrett ASASCO Inc. filed a Summons with Notice and commenced a lawsuit in the Commercial Division of the Supreme Court of the State of New York, County of New York seeking to invalidate the indemnification and reimbursement agreement between Garrett and Honeywell. Garrett seeks damages and a declaratory judgment based on various claims set forth in the Summons with Notice. On January 15, 2020, Garrett filed its complaint in the action, which asserted the same claims. We strongly believe that Garrett's allegations have no merit, nor are they material to Honeywell. We believe we have fully complied with our obligations under the Agreement and that the Agreement is enforceable.

On September 13, 2018, following completion of the Securities and Exchange Commission (SEC) Division of Corporation Finance’s review of our prior accounting for liabilities for unasserted Bendix-related asbestos claims, the SEC Division of Enforcement advised that it had opened an investigation related to this matter. On August 28, 2019, the SEC informed the Company that it had concluded its investigation and that it does not intend to recommend any enforcement action against Honeywell.

On October 31, 2018, David Kanefsky, a Honeywell shareholder, filed a putative class action complaint in the U.S. District Court for the District of New Jersey alleging violations of the Securities Exchange Act of 1934 and Rule 10b-5 related to the prior accounting for Bendix asbestos claims. On May 15, 2019, Wayne County Employees’ Retirement System, another Honeywell shareholder, filed a putative class action asserting the same claims relating to substantially the same alleged conduct in the same jurisdiction. On December 16, 2019, the court denied Wayne County Employees' Retirement System's motion to be appointed as substitute lead plaintiff in the Kanefsky action. On December 30, 2019, the lead plaintiff filed an amended complaint in the Kanefsky action. We believe the claims related to the prior accounting for Bendix asbestos claims have no merit.

Other Matters

The Company is subject to a number of other lawsuits, investigations and disputes (some of which involve substantial amounts claimed) arising out of the conduct of our business, including matters relating to commercial transactions, government contracts, product liability, prior acquisitions and divestitures, employee benefit plans, intellectual property, and environmental, health and safety matters. We recognize a liability for any contingency that is probable of occurrence and reasonably estimable. We continually assess the likelihood of adverse judgments of outcomes in these matters, as well as potential ranges of possible losses (taking into consideration any insurance recoveries), based on a careful analysis of each matter with the assistance of outside legal counsel and, if applicable, other experts. Included in these other matters are the following:

Honeywell v. United Auto Workers (UAW) et. al—In September 2011, the UAW and certain Honeywell retirees (Plaintiffs) filed a suit in the Eastern District of Michigan (the District Court) alleging that a series of Master Collective Bargaining Agreements (MCBAs) between Honeywell and the UAW provided the retirees with rights to lifetime, vested healthcare benefits that could never be changed or reduced. Plaintiffs alleged that Honeywell had violated those vested rights by implementing express limitations (CAPS) on the amount Honeywell contributed toward healthcare coverage for the retirees. Honeywell subsequently answered the UAW’s complaint and asserted counterclaims, including for breach of implied warranty.

Between 2014 and 2015, Honeywell began enforcing the CAPS against former employees. In response, the UAW and certain of the Plaintiffs filed a motion seeking a ruling that the MCBAs do not limit Honeywell’s obligation to contribute to healthcare coverage for those retirees.

On March 29, 2018, the District Court issued its opinion resolving all pending summary judgment motions, except for Honeywell's counterclaim for breach of implied warranty, which has since been dismissed without prejudice.

In the opinion, the District Court held that the MCBAs do not promise retirees vested, lifetime benefits that survive expiration of the MCBAs. Based on this ruling, Honeywell terminated the retirees healthcare coverage benefits altogether as of July 31, 2018. In response, the UAW filed a motion to enjoin Honeywell from completely terminating coverage as of July 31, 2018, arguing that the CAPS themselves are vested and that Honeywell must continue to provide retiree medical benefits at the capped level. On July 28, 2018, the District Court denied the UAW's motion and entered a final judgment consistent with its March 2018 ruling. The UAW has appealed this decision to the Sixth Circuit Court of Appeals. Honeywell believes the District Court's ruling will be upheld.

In the March 2018 opinion, the District Court also held that Honeywell is obligated under the MCBAs to pay the "full premium" for retiree healthcare rather than the capped amount. Based on this ruling, Honeywell would be required to pay monetary damages to retirees for any past years in which Honeywell paid less than the "full premium" of their healthcare coverage. Such damages would be limited, depending on the retiree group, to a two to three-year period ending when the 2017 MCBA expired, and Honeywell would have no ongoing obligation to continue funding healthcare coverage for subsequent periods. Honeywell has appealed the District Court's ruling on this "full premium" damages issue, and believes that the Sixth Circuit Court of Appeals will reverse the District Court on that issue. In the event the Sixth Circuit were to sustain the District Court's ruling on this issue, Honeywell would be liable for damages of at least $12 million.

Petrobras and Unaoil—We are cooperating with certain investigations by the U.S. Department of Justice (DOJ), the SEC and Brazilian authorities relating to our use of third parties who previously worked for our UOP business in Brazil in relation to Petróleo Brasileiro S.A. (Petrobras). The investigations are focused on compliance with the U.S. Foreign Corrupt Practices Act and similar Brazilian laws, and involve, among other things, document production and interviews with former and current management and employees. The DOJ and the SEC are also examining a matter involving a foreign subsidiary's prior engagement of Unaoil S.A.M. in Algeria. We are cooperating with the authorities in each of the above matters. While we cannot predict the outcome of these matters, based on the facts currently known to us, we do not anticipate that these matters will have a material adverse effect on our financial condition, results of operations, or cash flows.

In re Resideo Technologies, Inc. Securities Litigation—On January 7, 2020, The Gabelli Asset Fund and certain related parties filed a putative class action complaint against Resideo and Honeywell in the U.S. District Court for the District of Minnesota alleging violations of the Securities Exchange Act of 1934 and Rule 10b-5 related to Resideo's spinoff from Honeywell in October 2018. On January 27, 2020, this putative class action was consolidated with certain previously-filed actions asserting claims relating to substantially the same matters into a single class action under the title In re Resideo Technologies, Inc. Securities Litigation. We believe the allegations against Honeywell regarding the Resideo spinoff have no merit.

Given the uncertainty inherent in litigation and investigations (including the specific matters referenced above), we do not believe it is possible to develop estimates of reasonably possible loss in excess of current accruals for these matters (other than as specifically set forth above). Considering our past experience and existing accruals, we do not expect the outcome of these matters, either individually or in the aggregate, to have a material adverse effect on our consolidated financial position. Because most contingencies are resolved over long periods of time, potential liabilities are subject to change due to new developments, changes in settlement strategy or the impact of evidentiary requirements, which could cause us to pay damage awards or settlements (or become subject to equitable remedies) that could have a material adverse effect on our results of operations or operating cash flows in the periods recognized or paid.

(Dollars in millions, except per share amounts)

Warranties and Guarantees

In the normal course of business, the Company issues product warranties and product performance guarantees. We accrue for the estimated cost of product warranties and performance guarantees based on contract terms and historical experience at the time of sale. Adjustments to initial obligations for warranties and guarantees are made as changes to the obligations become reasonably estimable. The following table summarizes information concerning our recorded obligations for product warranties and product performance guarantees.

	Years Ended December 31,		
	2019	2018	2017
Beginning of year	$ 310	$ 408	$ 487
Accruals for warranties/guarantees issued during the year	173	208	215
Adjustment of pre-existing warranties/guarantees	(34)	(78)	(27)
Settlement of warranty/guarantee claims	(180)	(228)	(267)
End of year	$ 269	$ 310	$ 408

Product warranties and product performance guarantees are included in the following balance sheet accounts:

	December 31,	
	2019	2018
Accrued liabilities	$ 213	$ 243
Other liabilities	56	67
	$ 269	$ 310

Note 21. Pension and Other Postretirement Benefits

The Company sponsors a number of both funded and unfunded U.S. and non-U.S. defined benefit pension plans. Pension benefits for many of our U.S. employees are provided through non-contributory, qualified and non-qualified defined benefit plans. All non-union hourly and salaried employees joining Honeywell for the first time after December 31, 2012, are not eligible to participate in Honeywell's U.S. defined benefit pension plans. We also sponsor defined benefit pension plans which cover non-U.S. employees who are not U.S. citizens, in certain jurisdictions, principally the UK, Netherlands, Germany, and Canada. Other pension plans outside of the U.S. are not material to the Company either individually or in the aggregate.

The Company also sponsors postretirement benefit plans that provide health care benefits and life insurance coverage mainly to U.S. eligible retirees. None of Honeywell's U.S. employees are eligible for a retiree medical subsidy from the Company. In addition, the vast majority of Honeywell's U.S. retirees either have no Company subsidy or have a fixed-dollar subsidy amount. This significantly limits our exposure to the impact of future health care cost increases. The retiree medical and life insurance plans are not funded. Claims and expenses are paid from our operating cash flow.

(Dollars in millions, except per share amounts)

The following tables summarize the balance sheet impact, including the benefit obligations, assets and funded status associated with the Company's significant pension and other postretirement benefit plans.

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2019	2018	2019	2018
Change in benefit obligation:				
Benefit obligation at beginning of year	$ 16,141	$ 18,151	$ 6,182	$ 7,019
Service cost	82	140	22	26
Interest cost	613	573	142	143
Plan amendments	—	—	—	30
Actuarial (gains) losses	2,064	(1,111)	708	(356)
Benefits paid	(1,111)	(1,137)	(269)	(264)
Settlements and curtailments	(507)	—	—	(9)
Foreign currency translation	—	—	107	(342)
Other	1	(475)	5	(65)
Benefit obligation at end of year	17,283	16,141	6,897	6,182
Change in plan assets:				
Fair value of plan assets at beginning of year	17,109	18,985	6,481	7,151
Actual return on plan assets	3,458	(303)	863	(173)
Company contributions	45	34	62	137
Benefits paid	(1,111)	(1,137)	(269)	(264)
Settlements and curtailments	(507)	—	—	—
Foreign currency translation	—	—	165	(378)
Other	1	(470)	5	8
Fair value of plan assets at end of year	18,995	17,109	7,307	6,481
Funded status of plans	$ 1,712	$ 968	$ 410	$ 299
Amounts recognized in Consolidated Balance Sheet consist of:				
Prepaid pension benefit cost[1]	$ 2,069	$ 1,295	$ 1,196	$ 1,094
Accrued pension liabilities—current[2]	(32)	(27)	(13)	(12)
Accrued pension liabilities—noncurrent[3]	(325)	(300)	(773)	(783)
Net amount recognized	$ 1,712	$ 968	$ 410	$ 299

(1) Included in Other assets on Consolidated Balance Sheet
(2) Included in Accrued liabilities on Consolidated Balance Sheet
(3) Included in Other liabilities on Consolidated Balance Sheet

(Dollars in millions, except per share amounts)

	Other Postretirement Benefits	
	2019	2018
Change in benefit obligation:		
Benefit obligation at beginning of year	$ 364	$ 530
Service cost	—	—
Interest cost	14	15
Plan amendments	(2)	(34)
Actuarial (gains) losses	(16)	(110)
Benefits paid	(35)	(37)
Benefit obligation at end of year	325	364
Change in plan assets:		
Fair value of plan assets at beginning of year	—	—
Actual return on plan assets	—	—
Company contributions	—	—
Benefits paid	—	—
Fair value of plan assets at end of year	—	—
Funded status of plans	$ (325)	$ (364)
Amounts recognized in Consolidated Balance Sheet consist of:		
Accrued liabilities	$ (40)	$ (62)
Postretirement benefit obligations other than pensions[1]	(285)	(302)
Net amount recognized	$ (325)	$ (364)

(1) Excludes non-U.S. plans of $41 million and $42 million in 2019 and 2018.

Amounts recognized in Accumulated other comprehensive (income) loss associated with the Company's significant pension and other postretirement benefit plans at December 31, 2019 and 2018 are as follows:

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2019	2018	2019	2018
Prior service (credit) cost	$ (176)	$ (218)	$ 21	$ 20
Net actuarial loss	544	860	701	600
Net amount recognized	$ 368	$ 642	$ 722	$ 620

	Other Postretirement Benefits	
	2019	2018
Prior service (credit)	$ (166)	$ (226)
Net actuarial (gain) loss	(20)	(4)
Net amount recognized	$ (186)	$ (230)

(Dollars in millions, except per share amounts)

The components of net periodic benefit (income) cost and other amounts recognized in Other comprehensive (income) loss for the Company's significant pension and other postretirement benefit plans include the following components:

	Pension Benefits					
	U.S. Plans			Non-U.S. Plans		
Net Periodic Benefit Cost	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**
Service cost	$ 82	$ 140	$ 172	$ 22	$ 26	$ 40
Interest cost	613	573	586	142	143	147
Expected return on plan assets	(1,117)	(1,426)	(1,262)	(331)	(443)	(411)
Amortization of prior service (credit) cost	(42)	(43)	(43)	—	(1)	(1)
Recognition of actuarial losses	35	—	41	88	37	46
Settlements and curtailments	4	—	18	—	(3)	—
Net periodic benefit (income) cost	$ (425)	$ (756)	$ (488)	$ (79)	$ (241)	$ (179)

Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	U.S. Plans			Non-U.S. Plans		
	2019	**2018**	**2017**	**2019**	**2018**	**2017**
Actuarial (gains) losses	$ (277)	$ 619	$ (792)	$ 176	$ 250	$ (153)
Prior service cost (credit)	—	—	—	—	30	(1)
Prior service credit recognized during year	42	43	43	—	4	1
Actuarial losses recognized during year	(39)	—	(59)	(88)	(37)	(46)
Foreign currency translation	—	—	—	14	(34)	43
Total recognized in other comprehensive (income) loss	$ (274)	$ 662	$ (808)	$ 102	$ 213	$ (156)
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	$ (699)	$ (94)	$ (1,296)	$ 23	$ (28)	$ (335)

(Dollars in millions, except per share amounts)

The estimated prior service (credit) for pension benefits that will be amortized from Accumulated other comprehensive (income) loss into net periodic benefit (income) cost in 2020 are expected to be $(42) million and $0 million for U.S. and non-U.S. pension plans.

	Other Postretirement Benefits		
	Years Ended December 31,		
Net Periodic Benefit Cost	**2019**	**2018**	**2017**
Service cost	$ —	$ —	$ —
Interest cost	14	15	19
Amortization of prior service (credit)	(62)	(52)	(58)
Recognition of actuarial losses	—	3	13
Net periodic benefit (income) cost	$ (48)	$ (34)	$ (26)

	Years Ended December 31,		
Other Changes in Plan Assets and Benefits Obligations Recognized in Other Comprehensive (Income) Loss	**2019**	**2018**	**2017**
Actuarial (gains) losses	$ (16)	$ (110)	$ (14)
Prior service cost (credit)	(2)	(34)	91
Prior service credit recognized during year	62	52	58
Actuarial losses recognized during year	—	(3)	(13)
Total recognized in other comprehensive (income) loss	$ 44	$ (95)	$ 122
Total recognized in net periodic benefit (income) cost and other comprehensive (income) loss	$ (4)	$ (129)	$ 96

The estimated net (gain) and prior service (credit) for other postretirement benefits that will be amortized from Accumulated other comprehensive (income) loss into net periodic benefit (income) cost in 2020 are expected to be $0 and $(63) million.

(Dollars in millions, except per share amounts)

Major actuarial assumptions used in determining the benefit obligations and net periodic benefit (income) cost for our significant benefit plans are presented in the following table as weighted averages.

	Pension Benefits					
	U.S. Plans			Non-U.S. Plans		
	2019	2018	2017	2019	2018	2017
Actuarial assumptions used to determine benefit obligations as of December 31:						
Discount rate	3.22%	4.35%	3.68%	1.81%	2.63%	2.36%
Expected annual rate of compensation increase	3.25%	3.25%	4.50%	2.47%	2.46%	0.73%
Actuarial assumptions used to determine net periodic benefit (income) cost for years ended December 31:						
Discount rate—benefit obligation	4.35%	3.68%	4.20%	2.63%	2.36%	2.51%
Discount rate—service cost	4.47%	3.77%	4.42%	2.26%	2.20%	2.14%
Discount rate—interest cost	3.94%	3.27%	3.49%	2.34%	2.08%	2.19%
Expected rate of return on plan assets	6.75%	7.75%	7.75%	5.14%	6.23%	6.43%
Expected annual rate of compensation increase	3.25%	4.50%	4.50%	2.46%	2.49%	2.17%

	Other Postretirement Benefits		
	2019	2018	2017
Actuarial assumptions used to determine benefit obligations as of December 31:			
Discount rate	3.03%	4.07%	3.39%
Actuarial assumptions used to determine net periodic benefit cost for years ended December 31:			
Discount rate(1)	4.07%	3.39%	3.60%

(1) Discount rate was 3.65% for 1/1/2017 through 2/28/2017. Rate was changed to 3.60% for the remainder of 2017 due to a Plan remeasurement as of 3/1/2017.

The discount rate for the Company's U.S. pension and other postretirement benefits plans reflects the current rate at which the associated liabilities could be settled at the measurement date of December 31. To determine discount rates for our U.S. pension and other postretirement benefit plans, we use a modeling process that involves matching the expected cash outflows of our benefit plans to a yield curve constructed from a portfolio of high quality, fixed-income debt instruments. We use the single weighted-average yield of this hypothetical portfolio as a discount rate benchmark. We utilize a full yield curve approach in the estimation of the service and interest cost components of net periodic pension benefit (income) for our significant pension plans. This approach applies the specific spot rates along the yield curve used in the determination of the pension benefit obligation to their underlying projected cash flows and provides a more precise measurement of service and interest costs by improving the correlation between projected cash flows and their corresponding spot rates. For our U.S. pension plans, the single weighted average spot rates used to determine service and interest costs for 2020 are 3.33% and 2.76%. The discount rate used to determine the other postretirement benefit obligation is lower principally due to a shorter expected duration of other postretirement plan obligations as compared to pension plan obligations.

(Dollars in millions, except per share amounts)

The Company plans to use an expected rate of return on U.S. plan assets of 6.15% for 2020 down from 6.75% for 2019 reflecting a decline in interest rates and additional re-balancing of assets to more fixed income. Our asset return assumption is based on historical plan asset returns over varying long-term periods combined with current market conditions and broad asset mix considerations with a focus on long-term trends rather than short-term market conditions. We review the expected rate of return on an annual basis and revise it as appropriate.

For non-U.S. benefit plans actuarial assumptions reflect economic and market factors relevant to each country.

Pension Benefits

The following amounts relate to the Company's significant pension plans with accumulated benefit obligations exceeding the fair value of plan assets:

	December 31,			
	U.S. Plans		Non-U.S. Plans	
	2019	2018	2019	2018
Projected benefit obligation	$ 357	$ 327	$ 1,018	$ 1,668
Accumulated benefit obligation	$ 347	$ 321	$ 973	$ 1,604
Fair value of plan assets	$ —	$ —	$ 233	$ 873

The accumulated benefit obligation for the Company's U.S. defined benefit pension plans was $17.2 billion and $16.1 billion and for our Non-U.S. defined benefit pension plans was $6.8 billion and $6.1 billion at December 31, 2019 and 2018.

The Company's asset investment strategy for our U.S. pension plans focuses on maintaining a diversified portfolio using various asset classes in order to achieve our long-term investment objectives on a risk adjusted basis. During 2019, we continued to employ a de-risking strategy which increases the matching characteristics of our assets relative to our obligation. Our long-term target allocations are as follows: 55%-70% fixed income securities and cash, 25%-40% equity securities, 5%-10% real estate investments, and 10%-20% other types of investments. Equity securities include publicly-traded stock of companies located both inside and outside the United States. Fixed income securities include corporate bonds of companies from diversified industries, mortgage-backed securities, and U.S. Treasuries. Real estate investments include direct investments in commercial properties and investments in real estate funds. Other types of investments include investments in private equity and hedge funds that follow several different strategies. We review our assets on a regular basis to ensure that we are within the targeted asset allocation ranges and, if necessary, asset balances are adjusted back within target allocations.

The Company's non-U.S. pension assets are typically managed by decentralized fiduciary committees with the Honeywell Corporate Investments group providing funding and investment guidance. Our non-U.S. investment policies are different for each country as local regulations, funding requirements, and financial and tax considerations are part of the funding and investment allocation process in each country.

In accordance with ASU 2015-07, “Fair Value Measurement (Topic 820)”, certain investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in the following tables are intended to permit reconciliation of the fair value hierarchy to the amounts presented for the total pension benefits plan assets.

(Dollars in millions, except per share amounts)

The fair values of both the Company's U.S. and non-U.S. pension plans assets by asset category are as follows:

	U.S. Plans			
	December 31, 2019			
	Total	Level 1	Level 2	Level 3
Equities:				
Honeywell common stock	$ 2,857	$ 2,857	$ —	$ —
U.S. equities	1,227	1,227	—	—
Non-U.S. equities	—	—	—	—
Real estate investment trusts	—	—	—	—
Fixed income:				
Short term investments	1,395	1,395	—	—
Government securities	1,146	—	1,146	—
Corporate bonds	8,603	—	8,603	—
Mortgage/Asset-backed securities	1,023	—	1,023	—
Insurance contracts	8	—	8	—
Direct investments:				
Direct private investments	950	—	—	950
Real estate properties	619	—	—	619
Total	$ 17,828	$ 5,479	$ 10,780	$ 1,569
Investments measured at NAV:				
Private funds	1,019			
Real estate funds	42			
Hedge funds	—			
Commingled Funds	106			
Total assets at fair value	$ 18,995			

(Dollars in millions, except per share amounts)

	U.S. Plans			
	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Equities:				
Honeywell common stock	$ 2,438	$ 2,438	$ —	$ —
U.S. equities	1,365	1,365	—	—
Non-U.S. equities	753	753	—	—
Real estate investment trusts	244	244	—	—
Fixed income:				
Short term investments	877	877	—	—
Government securities	993	—	993	—
Corporate bonds	6,824	—	6,824	—
Mortgage/Asset-backed securities	1,032	—	1,032	—
Insurance contracts	8	—	8	—
Direct investments:				
Direct private investments	829	—	—	829
Real estate properties	657	—	—	657
Total	$ 16,020	$ 5,677	$ 8,857	$ 1,486
Investments measured at NAV:				
Private funds	931			
Real estate funds	56			
Hedge funds	1			
Commingled funds	101			
Total assets at fair value	$ 17,109			

	Non-U.S. Plans			
	December 31, 2019			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 149	$ —	$ 149	$ —
Non-U.S. equities	1,384	54	1,330	—
Fixed income:				
Short-term investments	522	522	—	—
Government securities	3,006	—	3,006	—
Corporate bonds	1,746	—	1,746	—
Mortgage/Asset-backed securities	84	—	84	—
Insurance contracts	120	—	120	—
Investments in private funds:				
Private funds	69	—	35	34
Real estate funds	150	—	—	150
Total	$ 7,230	$ 576	$ 6,470	$ 184
Investments measured at NAV:				
Private funds	21			
Real estate funds	56			
Total assets at fair value	$ 7,307			

(Dollars in millions, except per share amounts)

	Non-U.S. Plans			
	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Equities:				
U.S. equities	$ 429	$ 297	$ 132	$ —
Non-U.S. equities	1,356	44	1,312	—
Fixed income:				
Short-term investments	189	189	—	—
Government securities	2,572	—	2,572	—
Corporate bonds	1,468	—	1,468	—
Mortgage/Asset-backed securities	60	—	60	—
Insurance contracts	137	—	137	—
Investments in private funds:				
Private funds	46	—	12	34
Real estate funds	144	—	—	144
Total	$ 6,401	$ 530	$ 5,693	$ 178
Investments measured at NAV:				
Private funds	26			
Real estate funds	54			
Total assets at fair value	$ 6,481			

The following table summarizes changes in the fair value of Level 3 assets for both U.S. and Non-U.S. plans:

	U.S. Plans		Non-U.S. Plans	
	Direct Private Investments	Real Estate Properties	Private Funds	Real Estate Funds
Balance at December 31, 2017	$ 752	$ 597	$ 31	$ 149
Actual return on plan assets:				
Relating to assets still held at year-end	36	33	1	(4)
Relating to assets sold during the year	65	2	—	—
Purchases	95	47	2	—
Sales and settlements	(119)	(22)	—	(1)
Balance at December 31, 2018	$ 829	$ 657	$ 34	$ 144
Actual return on plan assets:				
Relating to assets still held at year-end	15	40	—	7
Relating to assets sold during the year	89	(23)	—	1
Purchases	216	48	—	—
Sales and settlements	(199)	(103)	—	(2)
Balance at December 31, 2019	$ 950	$ 619	$ 34	$ 150

The Company enters into futures contracts to gain exposure to certain markets. Sufficient cash or cash equivalents are held by our pension plans to cover the notional value of the futures contracts. At December 31, 2019 and 2018, our U.S. plans had contracts with notional amounts of $4,463 million and $2,808 million. At December 31, 2019 and 2018, our non-U.S. plans had contracts with notional amounts of $479 million and $111 million. In both our U.S. and non-U.S. pension plans, the notional derivative exposure is related to outstanding equity and fixed income futures contracts.

Common stocks, preferred stocks, real estate investment trusts, and short-term investments are valued at the closing price reported in the active market in which the individual securities are traded. Corporate bonds, mortgages, asset-backed securities, and government securities are valued either by using pricing models, bids provided by brokers or dealers, quoted prices of securities with similar characteristics or discounted cash flows and as such include adjustments for certain risks that may not be observable such as credit and liquidity risks. Certain securities are held in collective trust funds which are valued using net asset values provided by the administrators of the funds. Investments in private equity, debt, real estate and hedge funds and direct private investments are valued at estimated fair value based on quarterly financial information received from the investment advisor and/or general partner. Investments in real estate properties are valued on a quarterly basis using the income approach. Valuation estimates are periodically supplemented by third party appraisals.

(Dollars in millions, except per share amounts)

The Company's funding policy for qualified defined benefit pension plans is to contribute amounts at least sufficient to satisfy regulatory funding standards. In 2019, 2018, and 2017, we were not required to make contributions to our U.S. pension plans and no contributions were made. We are not required to make any contributions to our U.S. pension plans in 2020. In 2019, contributions of $43 million were made to our non-U.S. pension plans to satisfy regulatory funding requirements. In 2020, we expect to make contributions of cash and/or marketable securities of approximately $112 million to our non-U.S. pension plans to satisfy regulatory funding standards. Contributions for both our U.S. and non-U.S. pension plans do not reflect benefits paid directly from Company assets.

Benefit payments, including amounts to be paid from Company assets, and reflecting expected future service, as appropriate, are expected to be paid as follows:

	U.S. Plans	Non-U.S. Plans
2020	$ 1,159	$ 282
2021	1,151	288
2022	1,145	296
2023	1,138	303
2024	1,128	311
2025-2029	5,353	1,690

Other Postretirement Benefits

	December 31,	
	2019	2018
Assumed health care cost trend rate:		
Health care cost trend rate assumed for next year	7.00%	7.00%
Rate that the cost trend rate gradually declines to	5.00%	5.00%
Year that the rate reaches the rate it is assumed to remain at	2029	2029

The assumed health care cost trend rate has a significant effect on the amounts reported. A one-percentage-point change in the assumed health care cost trend rate would have the following effects:

	1 percentage point	
	Increase	Decrease
Effect on total of service and interest cost components	$ 1	$ (1)
Effect on postretirement benefit obligation	$ 14	$ (12)

Benefit payments reflecting expected future service, as appropriate, are expected to be paid as follows:

	Without Impact of Medicare Subsidy	Net of Medicare Subsidy
2020	$ 46	$ 41
2021	42	38
2022	39	35
2023	36	32
2024	22	20
2025-2029	95	84

(Dollars in millions, except per share amounts)

Note 22. Segment Financial Data

Honeywell globally manages its business operations through four reportable operating segments. Segment information is consistent with how management reviews the businesses, makes investing and resource allocation decisions and assesses operating performance.

Honeywell's senior management evaluates segment performance based on segment profit. Each segment's profit is measured as segment income (loss) before taxes excluding general corporate unallocated expense, interest and other financial charges, stock compensation expense, pension and other postretirement income (expense), repositioning and other charges, and other items within Other (income) expense.

	Years Ended December 31,		
	2019	2018	2017
Net Sales			
Aerospace			
Product	$ 8,766	$ 10,415	$ 10,067
Service	5,288	5,078	4,712
Total	14,054	15,493	14,779
Honeywell Building Technologies			
Product	4,395	7,868	8,396
Service	1,322	1,430	1,381
Total	5,717	9,298	9,777
Performance Materials and Technologies			
Product	8,732	8,589	8,521
Service	2,102	2,085	1,818
Total	10,834	10,674	10,339
Safety and Productivity Solutions			
Product	5,736	5,976	5,333
Service	368	361	306
Total	6,104	6,337	5,639
	$ 36,709	$ 41,802	$ 40,534
Depreciation and amortization			
Aerospace	$ 234	$ 281	$ 279
Honeywell Building Technologies	63	112	118
Performance Materials and Technologies	493	452	441
Safety and Productivity Solutions	222	216	219
Corporate	76	55	58
	$ 1,088	$ 1,116	$ 1,115
Segment Profit			
Aerospace	$ 3,607	$ 3,503	$ 3,288
Honeywell Building Technologies	1,165	1,608	1,650
Performance Materials and Technologies	2,433	2,328	2,206
Safety and Productivity Solutions	790	1,032	852
Corporate	(256)	(281)	(306)
	$ 7,739	$ 8,190	$ 7,690

(Dollars in millions, except per share amounts)

	December 31,		
	2019	2018	2017
Capital expenditures			
Aerospace	$ 272	$ 308	$ 380
Honeywell Building Technologies	43	125	88
Performance Materials and Technologies	314	254	303
Safety and Productivity Solutions	82	78	79
Corporate	128	63	181
	$ 839	$ 828	$ 1,031
Total Assets			
Aerospace	$ 11,378	$ 11,234	$ 11,769
Honeywell Building Technologies	5,968	6,010	10,592
Performance Materials and Technologies	16,888	17,827	17,203
Safety and Productivity Solutions	9,888	9,886	9,456
Corporate	14,557	12,816	10,450
	$ 58,679	$ 57,773	$ 59,470

A reconciliation of segment profit to consolidated income from continuing operations before taxes are as follows:

	Years Ended December 31,		
	2019	2018	2017
Segment Profit	$ 7,739	$ 8,190	$ 7,690
Interest and other financial charges	(357)	(367)	(316)
Stock compensation expense(1)	(153)	(175)	(176)
Pension ongoing income (expense)(2)	592	992	713
Pension mark-to-market expense(2)	(123)	(37)	(87)
Other postretirement income(2)	47	32	21
Repositioning and other charges(3)	(546)	(1,091)	(973)
Other(4)	360	(57)	78
Income before taxes	$ 7,559	$ 7,487	$ 6,950

(1) Amounts included in Selling, general and administrative expenses.
(2) Amounts included in Cost of products and services sold and Selling, general and administrative expenses (service costs) and Other income/expense (non-service cost components).
(3) Amounts included in Cost of products and services sold, Selling, general and administrative expenses, and Other income/expense.
(4) Amounts include the other components of Other income/expense not included within other categories in this reconciliation. Equity income/loss of affiliated companies is included in segment profit.

(Dollars in millions, except per share amounts)

Note 23. Geographic Areas—Financial Data

	Net Sales[1]			Long-lived Assets[2]		
	Years Ended December 31,			December 31,		
	2019	2018	2017	2019	2018	2017
United States	$ 21,910	$ 23,841	$ 22,722	$ 3,649	$ 3,601	$ 3,604
Europe	7,424	10,066	10,400	579	571	927
Other International	7,375	7,895	7,412	1,097	1,124	1,395
	$ 36,709	$ 41,802	$ 40,534	$ 5,325	$ 5,296	$ 5,926

(1) Sales between geographic areas approximate market and are not significant. Net sales are classified according to their country of origin. Included in United States net sales are export sales of $5,415 million, $5,293 million and $4,974 million in 2019, 2018 and 2017.

(2) Long-lived assets are comprised of property, plant and equipment - net.

Note 24. Supplemental Cash Flow Information

	Years Ended December 31,		
	2019	2018	2017
Net payments for repositioning and other charges:			
Severance and exit cost payments	$ (249)	$ (285)	$ (177)
Environmental payments	(256)	(218)	(212)
Reimbursement receipts	292	67	—
Insurance receipts for asbestos related liabilities	68	38	27
Asbestos related liability payments	(231)	(254)	(266)
	$ (376)	$ (652)	$ (628)
Interest paid, net of amounts capitalized	$ 344	$ 353	$ 306
Income taxes paid, net of refunds	1,564	1,566	1,751
Non-cash investing and financing activities:			
Common stock contributed to savings plans	159	52	172
Marketable securities contributed to non-U.S. pension plans	—	99	89

(Dollars in millions, except per share amounts)

Note 25. Unaudited Quarterly Financial Information

	2019				
	Mar. 31	June 30	Sept. 30	Dec. 31	Year
Net sales	$ 8,884	$ 9,243	$ 9,086	$ 9,496	$ 36,709
Gross profit	3,005	3,149	3,048	3,168	12,370
Net income attributable to Honeywell	1,416	1,541	1,624	1,562	6,143
Earnings per common share—basic(1)	1.94	2.13	2.26	2.19	8.52
Earnings per common share—assuming dilution(1)	1.92	2.10	2.23	2.16	8.41
Cash dividends per common share	0.820	0.820	0.820	0.900	3.360

	2018(2)				
	Mar. 31	June 30	Sept. 30	Dec. 31	Year
Net sales	$ 10,392	$ 10,919	$ 10,762	$ 9,729	$ 41,802
Gross profit	3,201	3,305	3,206	3,044	12,756
Net income attributable to Honeywell	1,439	1,267	2,338	1,721	6,765
Earnings per common share—basic(1)	1.92	1.70	3.15	2.34	9.10
Earnings per common share—assuming dilution(1)	1.89	1.68	3.11	2.31	8.98
Cash dividends per common share	0.745	0.745	0.745	0.820	3.055

(1) Total for the full year may differ from the sum of the individual quarters due to the requirement to use weighted average shares each quarter, which may fluctuate with share repurchases and share issuances, and due to the impact of losses in a quarter.

(2) The results of operations for Transportation Systems business and Homes and Global Distribution business are included in the Consolidated Statement of Operations through the effective dates of the respective spin-offs.

Report of Independent Registered Public Accounting Firm

To the shareowners and the Board of Directors of Honeywell International Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Honeywell International Inc. and subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income, shareowners' equity, and cash flows, for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America ("generally accepted accounting principles"). Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

Basis for Opinions

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

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

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

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matters

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

Asbestos Related Liabilities - North American Refractories Company (NARCO) Trust Liability - Refer to Note 20 to the financial statements

Critical Audit Matter Description

The Company is named in asbestos related personal injury claims related to a predecessor company, NARCO. Such claims arise primarily from alleged occupational exposure to asbestos-containing refractory brick and mortar for high-temperature applications.

Since becoming effective in 2013, the NARCO Trust has experienced delays in becoming fully operational. Disputes and challenges regarding violations of the Trust Distribution Procedures, an expired 18-month standstill agreement and limited claims payments, have all contributed to a lack of sufficient normalized data based on actual claims processing experience in the NARCO Trust.

Although the Company knows the number of claims filed with the NARCO Trust each year, it is not able at this time to determine the portion of the NARCO Trust Liability which represents asserted versus unasserted claims due to the lack of sufficiently reliable claims data.

Maintaining the NARCO Trust Liability is inherently subjective as it requires management to make significant assumptions and judgements regarding the sufficiency and reliability of historical claims filing data and experience and expected future claims filing rates.

Given the subjectivity in maintaining the NARCO Trust Liability the auditing of the NARCO Trust Liability required a high degree of auditor judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the NARCO Trust Liability included the following, among others:

- We tested the effectiveness of internal controls over the annual third-party assessment of the sufficiency and reliability of the NARCO Trust claims data including controls over the review of management’s assumptions and claims data used to estimate the NARCO Trust Liability.
- We made inquiries of internal and external legal counsel regarding the regulatory and litigation environments related to the NARCO Trust Liability.
- With the assistance of our internal actuarial specialists, we evaluated NARCO Trust claims data to assess the reasonableness of management’s conclusion that such data is not sufficiently reliable to enable the Company to update the estimate of the recorded NARCO Trust Liability.

Revenue Recognition and Contracts with Customers - Long-Term Fixed Price Contracts (Performance Materials and Technologies (PMT)) - Refer to Note 1 and Note 7 to the financial statements

Critical Audit Matter Description

The Company’s PMT segment develops and manufactures advanced materials, process technologies, and automation solutions. A portion of PMT’s revenue is generated from long-term fixed price contracts whereby revenue is recognized over the contract term (“over time”) as the work progresses and control of the goods and services is transferred to the customer. Revenue for these contracts is recognized based on the extent of progress toward completion, generally measured by using a cost-to-cost basis input method.

Accounting for PMT's long-term fixed price contracts requires management's judgment in estimating total contract costs. Contract costs, which can be incurred over several years, are largely determined based on negotiated or estimated purchase contract terms and consider factors such as historical performance, technical and schedule risk, internal and subcontractor performance trends, and anticipated labor agreements.

Given the significant judgments necessary to estimate costs associated with these long-term contracts, auditing PMT's long-term fixed price contracts requires a high degree of auditor judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to PMT's long-term fixed price contracts included the following, among others:

- We tested the effectiveness of internal controls over the recognition of revenue and the determination of estimated contract costs including controls over the review of management's assumptions and key inputs used to recognize revenue and costs on long-term fixed price contracts using the cost-to-cost input method.
- We evaluated the appropriateness and consistency of management's methods and assumptions used to recognize revenue and costs on long-term fixed price contracts using the cost-to-cost input method to recognize revenue over time.
- We selected a sample of long-term fixed price contracts and evaluated the estimates of total cost for each of the long-term fixed price contracts by:
  - Comparing costs incurred to date to the costs management estimated to be incurred to date.
  - Evaluating management's ability to achieve the estimates of total cost by performing corroborating inquiries with Company personnel, including project managers, and comparing the estimates to documentation such as management's work plans, contract terms and requirements, and purchase orders with suppliers. Our evaluation of management's assumptions included consideration of historical and current project performance such as consistency of gross margin, identified risks related to project timing including technical and schedule matters, and the status of internal and third-party activities such as hardware, software, and labor.
  - Performing a substantive analytical procedure, in which we compared the estimated costs to complete to an independent estimate of costs to complete that factored in information obtained from the corroborating inquiries and documentation obtained such as management's work plans, contract terms and requirements, and purchase orders with suppliers.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 14, 2020

We have served as the Company's auditor since 2014.

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

Not Applicable.

Item 9A. Controls and Procedures

Honeywell management maintains disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed under the Securities Exchange Act of 1934, as amended (Exchange Act) is recorded, processed, summarized and reported within the specified time periods and accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. There have been no changes that have materially affected, or are reasonably likely to materially affect, Honeywell's internal control over financial reporting that have occurred during the quarter ended December 31, 2019.

Our management, with the participation of our CEO and CFO, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Exchange Act) at December 31, 2019. Based on these evaluations, our CEO and CFO concluded that our disclosure controls and procedures required by paragraph (b) of Rules 13a-15 or 15d-15 were effective as of December 31, 2019.

Management's Report on Internal Control Over Financial Reporting

Honeywell management is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Honeywell's internal control over financial reporting is a process designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Management assessed the effectiveness of Honeywell's internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework (2013)*.

Based on this assessment, management determined that Honeywell maintained effective internal control over financial reporting as of December 31, 2019.

The effectiveness of Honeywell's internal control over financial reporting as of December 31, 2019 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included in Item 8. Financial Statements and Supplementary Data.

Item 9B. Other Information

Not Applicable.

PART III.

Item 10. Directors and Executive Officers of the Registrant

Information relating to the Directors of Honeywell, as well as information relating to compliance with Section 16(a) of the Securities Exchange Act of 1934, will be contained in our definitive Proxy Statement involving the election of the Directors, which will be filed with the SEC pursuant to Regulation 14A not later than 120 days after December 31, 2019, and such information is incorporated herein by reference. Certain other information relating to the Executive Officers of Honeywell appears in Part I of this Annual Report on Form 10-K under the heading Executive Officers of the Registrant.

The members of the Audit Committee of our Board of Directors are: George Paz (Chair), Kevin Burke, Jaime Chico Pardo (*ex officio* member), D. Scott Davis, Linnet Deily, Judd Gregg and Robin L. Washington. The Board has determined that Mr. Paz, Mr. Davis and Ms. Washington are audit committee financial experts as defined by applicable SEC rules and that Mr. Paz, Mr. Burke, Mr. Davis, Ms. Deily and Ms. Washington satisfy the accounting or related financial management expertise criteria established by the NYSE. All members of the Audit Committee are independent as that term is defined in applicable SEC rules and NYSE listing standards.

Honeywell's corporate governance policies and procedures, including the Code of Business Conduct, Corporate Governance Guidelines and Charters of the Committees of the Board of Directors are available, free of charge, on our website under the heading Investor Relations (see Corporate Governance), or by writing to Honeywell, 300 South Tryon Street, Charlotte, North Carolina 28202, c/o Vice President and Corporate Secretary. Honeywell's Code of Business Conduct applies to all Honeywell directors, officers (including the Chief Executive Officer, Chief Financial Officer and Controller) and employees. Amendments to or waivers of the Code of Business Conduct granted to any of Honeywell's directors or executive officers will be published on our website within five business days of such amendment or waiver.

Item 11. Executive Compensation

Information relating to executive compensation is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

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

Information relating to security ownership of certain beneficial owners and management and related stockholder matters is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

EQUITY COMPENSATION PLANS

As of December 31, 2019, information about our equity compensation plans is as follows:

Plan category	Number of Shares to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders	22,496,879 (1)	109.87 (2)	40,001,939 (3)
Equity compensation plans not approved by security holders	293,763 (4)	N/A (5)	N/A (6)
Total	22,790,642	109.87	40,001,939

(1) Equity compensation plans approved by shareowners which are included in column (a) of the table are the 2016 Stock Incentive Plan, the 2011 Stock Incentive Plan, and the 2006 Stock Incentive Plan (including 18,473,640

shares of Common Stock to be issued for options; 2,820,462 RSUs subject to continued employment; 402,054 RSUs at target level and subject to company performance metrics and continued employment, and 525,252 deferred RSUs); and the 2016 Stock Plan for Non-Employee Directors and the 2006 Stock Plan for Non-Employee Directors (including 257,922 shares of Common Stock to be issued for options; and 17,549 RSUs subject to continued services). RSUs included in column (a) of the table represent the full number of RSUs awarded and outstanding whereas the number of shares of Common Stock to be issued upon vesting will be lower than what is reflected on the table because the value of shares required to meet employee tax withholding requirements are not issued.

Because the number of future shares that may be distributed to employees participating in the Honeywell Global Stock Plan is unknown, no shares attributable to that plan are included in column (a) of the table above.

(2) Column (b) relates to stock options and does not include any exercise price for RSUs because an RSU's value is dependent upon attainment of certain performance goals or continued employment or service and they are settled for shares of Common Stock on a one-for-one basis.

(3) The number of shares that may be issued under the 2016 Stock Incentive Plan as of December 31, 2019 is 37,364,854 which includes the following additional shares that may again be available for issuance: shares that are settled for cash, expire, are canceled, or under similar prior plans, are tendered as option exercise price or tax withholding obligations, are reacquired with cash option exercise price or with monies attributable to any tax deduction to Honeywell upon the exercise of an option, or are under any outstanding awards assumed under any equity compensation plan of an entity acquired by Honeywell. No securities are available for future issuance under the 2011 Stock Incentive Plan or the 2006 Stock Incentive Plan.

The number of shares that may be issued under the Honeywell Global Stock Plan as of December 31, 2019 is 1,770,812. This plan is an umbrella plan for three plans described below maintained solely for eligible employees of participating non-U.S. countries.

- The UK Sharebuilder Plan allows an eligible UK employee to invest taxable earnings in Common Stock. The Company matches those shares and dividends paid are used to purchase additional shares of Common Stock. For the year ending December 31, 2019, 34,787 shares were credited to participants' accounts under the UK Sharebuilder Plan.
- The Honeywell Aerospace Ireland Share Participation Plan and the Honeywell Measurex (Ireland) Limited Group Employee Profit Sharing Plan allow eligible Irish employees to contribute a percentage of base pay and/or bonus that is invested in Common Stock. For the year ending December 31, 2019, 2,083 shares of Common Stock were credited to participants' accounts under these plans.

The remaining 866,273 shares included in column (c) are shares remaining under the 2016 Stock Plan for Non-Employee Directors.

(4) Equity compensation plans not approved by shareowners included in the table refers to the Honeywell Excess Benefit Plan and Supplemental Savings Plan.

The Honeywell Excess Benefit Plan and Supplemental Savings Plan for highly compensated employees is an unfunded, non-tax qualified plan that provides benefits equal to the employee deferrals and company matching allocations that would have been provided under Honeywell's U.S. tax-qualified savings plan if the Internal Revenue Code limitations on compensation and contributions did not apply. The Company matching contribution is credited to participants' accounts in the form of notional shares of Common Stock. The notional shares are distributed in the form of actual shares of Common Stock. The number of shares to be issued under this plan based on the value of the notional shares as of December 31, 2019 is 293,763.

(5) Column (b) does not include any exercise price for notional shares allocated to employees under Honeywell's equity compensation plans not approved by shareowners because all of these shares are only settled for shares of Common Stock on a one-for-one basis.

(6) The amount of securities available for future issuance under the Honeywell Excess Benefit Plan and Supplemental Savings Plan is not determinable because the number of securities that may be issued under this plan depends upon the amount deferred to the plan by participants in future years.

Item 13. Certain Relationships and Related Transactions

Information relating to certain relationships and related transactions is contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

Information relating to fees paid to and services performed by Deloitte & Touche LLP and our Audit Committee's pre-approval policies and procedures with respect to non-audit services are contained in the Proxy Statement referred to above in Item 10. Directors and Executive Officers of the Registrant, and such information is incorporated herein by reference.

PART IV.

Item 15. Exhibits and Financial Statement Schedules

Item 16. Form 10-K Summary

None.

EXHIBIT INDEX

Exhibit No.	Description
3(i)	Amended and Restated Certificate of Incorporation of Honeywell International Inc., as amended April 23, 2018 (incorporated by reference to Exhibit 3(i) to Honeywell's Form 10-Q for the quarter ended June 30, 2018)
3(ii)	By-laws of Honeywell International Inc., as amended April 23, 2018 (incorporated by reference to Exhibit 3(ii) to Honeywell's 10-Q for the quarter ended June 30, 2018)
4.1	Honeywell International Inc. is a party to several long-term debt instruments under which, in each case, the total amount of securities authorized does not exceed 10% of the total assets of Honeywell and its subsidiaries on a consolidated basis. Pursuant to paragraph 4(iii)(A) of Item 601(b) of Regulation S-K, Honeywell agrees to furnish a copy of such instruments to the Securities and Exchange Commission upon request.
4.2	Description of Honeywell International Inc. Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (filed herewith)
10.1*	Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for quarter ended June 30, 2003)
10.2*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed December 21, 2004)
10.3*	Amendment to Deferred Compensation Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-K for the year ended December 31, 2005)
10.4*	Honeywell International Inc. Incentive Compensation Plan for Executive Employees, as amended and restated (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-K for the year ended December 31, 2018)
10.5*	Honeywell Excess Benefit Plan and Honeywell Supplemental Savings Plan, as amended and restated (filed herewith)
10.6*	Honeywell International Inc. Severance Plan for Designated Officers, as amended and restated (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.7*	Honeywell Deferred Incentive Compensation Plan, as amended and restated (filed herewith)
10.8*	Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.9*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.10 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.10*	Amendment to Honeywell International Inc. Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.7 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.11*	Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.12*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.13*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.14*	Amendment to Honeywell International Inc. Supplemental Executive Retirement Plan for Executives in Career Band 6 and Above, as amended and restated (incorporated by reference to Exhibit 10.8 to Honeywell's Form 10-K for the year ended December 31, 2015)

Exhibit No.	Description
10.15*	Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.13 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.16*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.13 to Honeywell's Form 10-K for the year ended December 31, 2009)
10.17*	Amendment to Honeywell Supplemental Defined Benefit Retirement Plan, as amended and restated (incorporated by reference to Exhibit 10.9 to Honeywell's Form 10-K for the year ended December 31, 2015)
10.18*	Honeywell International Inc. Severance Plan for Corporate Staff Employees (Involuntary Termination Following a Change in Control), as amended and restated (incorporated by reference to Exhibit 10.12 to Honeywell's Form 10-K for the year ended December 31, 2013)
10.19*	Honeywell Supplemental Retirement Plan (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2006)
10.20*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.26 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.21*	Amendment to the 2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates, as amended and restated (incorporated by reference to Exhibit 10.1 to Honeywell's 10-Q for the quarter ended March 31, 2011)
10.22*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Option Award Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2009)
10.23*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.31 to Honeywell's Form 10-K for the year ended December 31, 2008)
10.24*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.27 to Honeywell's Form 10-K for the year ended December 31, 2011)
10.25*	Amendment to 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., as amended and restated (incorporated by reference to Exhibit 10.24 to Honeywell's Form 10-K for the year ended December 31, 2014)
10.26*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Option Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended March 31, 2012)
10.27*	2006 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended March 31, 2012)
10.28*	2007 Honeywell Global Employee Stock Plan (incorporated by reference to Honeywell's Proxy Statement, dated March 12, 2007, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.29*	2006 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Option Award Agreement, Form 2 (incorporated by reference to Exhibit 10.37 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.30*	Letter Agreement dated September 3, 2009 between Honeywell and Timothy Mahoney (incorporated by reference to Exhibit 10.38 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.31*	Form of Honeywell International Inc. Noncompete Agreement for Senior Executives (incorporated by reference to Exhibit 10.39 to Honeywell's Form 10-K for the year ended December 31, 2010)
10.32*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2011, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)

Exhibit No.	Description
10.33*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.36 to Honeywell's Form 10-K for the year ended December 31, 2012)
10.34*	Amendment to 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.35*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.36*	2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.37*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.4 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.38*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Stock Option Award Agreement, Form 2 (incorporated by reference to Exhibit 10.39 to Honeywell's Form 10-K for the year ended December 31, 2014)
10.39*	2011 Stock Incentive Plan of Honeywell International Inc. and Its Affiliates—Form of Growth Plan Agreement (incorporated by reference to Exhibit 10.5 to Honeywell's Form 10-Q for the quarter ended March 31, 2014)
10.40*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates–Form of Performance Plan Grant Agreement (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended March 31, 2017)
10.41*	Letter Agreement dated February 24, 2012 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2016)
10.42*	Offer letter dated March 31, 2016 from Honeywell International Inc. to Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed April 6, 2016)
10.43*	Employment Offer Letter dated March 1, 2017 between Honeywell and Darius Adamczyk (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed March 6, 2017)
10.44*	Offer letter dated March 11, 2013 from Honeywell International Inc. to Krishna Mikkilineni (incorporated by reference to Exhibit 10.43 to Honeywell's Form 10-K for the year ended December 31, 2016)
10.45*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.46*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.47*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Restricted Unit Agreement, Form 2 (incorporated by reference to Exhibit 10.2 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.48*	2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.3 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)
10.49*	2016 Stock Plan for Non-Employee Directors (incorporated by reference to Honeywell's Proxy Statement, dated March 10, 2016, filed pursuant to Rule 14a-6 of the Securities Exchange Act of 1934)
10.50*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.74 to Honeywell's Form 10-K for the year ended December 31, 2017)
10.51*	2016 Stock Plan for Non-Employee Directors of Honeywell International Inc.—Form of Restricted Unit Agreement (incorporated by reference to Exhibit 10.6 to Honeywell's Form 10-Q for the quarter ended June 30, 2016)

Exhibit No.	Description
10.52*	UOP LLC Supplemental Pension Plan, as amended and restated (incorporated by reference to Exhibit 10.76 to Honeywell's 10-K for the year ended December 31, 2017)
10.53*	Letter Agreement dated April 1, 2016 between Honeywell and Rajeev Gautam (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2018)
10.54*	Letter Agreement dated July 27, 2018 between Honeywell and Greg Lewis (incorporated by reference to Exhibit 99.1 to Honeywell's Form 8-K filed August 2, 2018)
10.55	364-Day Credit Agreement, dated as of April 26, 2019, among Honeywell International Inc., the banks, financial institutions, and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC, and Wells Fargo Bank, National Association, as documentation agents, and Citibank N.A. and JPMorgan Chase Bank, N.A., as joint lead arrangers and co-book managers (incorporated by reference to Exhibit 10.1 to Honeywell's Form 8-K filed April 26, 2019)
10.56	Amended and Restated Five-Year Credit Agreement, dated as of April 26, 2019, among Honeywell International Inc., the banks, financial institutions, and other institutional lenders parties thereto, Citibank, N.A., as administrative agent, Citibank Europe PLC, UK Branch, as swing line agent, JPMorgan Chase Bank, N.A., as syndication agent, Bank of America, N.A., Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Morgan Stanley MUFG Loan Partners, LLC, and Wells Fargo Bank, National Association, as documentation agents, and Citibank, N.A. and J.P. Morgan Chase Bank N.A., as joint lead arrangers and co-bookrunners (incorporated by reference to Exhibit 10.2 to Honeywell's Form 8-K filed April 26, 2019)
10.57*	Offer Letter dated July 9, 2018 between Honeywell International Inc. and Mark R. James (incorporated by reference to Exhibit 10.1 to Honeywell's Form 10-Q for the quarter ended March 31, 2019)
10.58	Indemnification and Reimbursement Agreement, dated September 12, 2018, by and among Honeywell ASASCO Inc., Honeywell ASASCO 2 Inc., and Honeywell International Inc. (incorporated by reference to Exhibit 2.1 to Honeywell's Form 8-K filed September 14, 2018)
10.59	Indemnification and Reimbursement Agreement dated October 14, 2018 by and among New HAPI Inc. and Honeywell International Inc. (incorporated by reference to Exhibit 2.1 to Honeywell's Form 8-K filed October 15, 2018)
10.60*	Retirement Agreement dated February 7, 2019 between Honeywell and Krishna Mikkilineni (incorporated by reference to Exhibit 10.72 to Honeywell's Form 10-K for the year ended December 31, 2018)
10.61*	Amendment to the 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc. (incorporated by reference to Exhibit 99.2 to Honeywell's Form 8-K filed October 8, 2019)
21	Subsidiaries of the Registrant (filed herewith)
23.1	Consent of Deloitte & Touche LLP (filed herewith)
24	Powers of Attorney (filed herewith)
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
95	Mine Safety Disclosures (filed herewith)

Exhibit No.	Description
101.INS	The following financial statements from the Company's Annual Report on Form 10-K for the year ended December 31, 2019, formatted in Inline XBRL: (i) Consolidated Statements of Cash Flows, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Balance Sheets, and (v) Notes to Consolidated Financial Statements, tagged as blocks of text and including detailed tags.
101.SCH	XBRL Taxonomy Extension Schema (filed herewith)
101.CAL	XBRL Taxonomy Extension Calculation Linkbase (filed herewith)
101.DEF	XBRL Taxonomy Extension Definition Linkbase (filed herewith)
101.LAB	XBRL Taxonomy Extension Label Linkbase (filed herewith)
101.PRE	XBRL Taxonomy Extension Presentation Linkbase (filed herewith)

The Exhibits identified above with an asterisk (*) are management contracts or compensatory plans or arrangements.

** Certain schedules and similar attachments have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant hereby undertakes to furnish copies of any of the omitted schedules and similar attachments upon request by the U.S. Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements 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.

HONEYWELL INTERNATIONAL INC.

Date: February 14, 2020 By: /s/ Robert D. Mailloux

Robert D. Mailloux
Vice President and Controller
(on behalf of the Registrant
and as the Registrant's
Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this annual report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated:

Name	Name
/s/ Darius Adamczyk	*
Darius Adamczyk Chairman and Chief Executive Officer (Principal Executive Officer)	Linnet F. Deily Director
*	*
Duncan B. Angove Director	Deborah Flint Director
*	*
William S. Ayer Director	Judd Gregg Director
*	*
Kevin Burke Director	Clive Hollick Director
*	*
Jaime Chico Pardo Director	Grace D. Lieblein Director
*	*
D. Scott Davis Director	George Paz Director
	*
	Robin L. Washington Director
/s/ Gregory P. Lewis	/s/ Robert D. Mailloux
Gregory P. Lewis Senior Vice President and Chief Financial Officer (Principal Financial Officer)	Robert D. Mailloux Vice President and Controller (Principal Accounting Officer)

*By: /s/ Gregory P. Lewis

(Gregory P. Lewis
Attorney-in-fact)

EXHIBIT 4.2

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

As of December 31, 2019, Honeywell International Inc. had four classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): (1) our Common Stock; (2) our 0.650% Notes due 2020; (3) our 1.300% Notes due 2023; and (4) our 2.250% Notes due 2028.

Description of Common Stock

General

As of the date of this filing, we are authorized to issue up to 2,000,000,000 shares of common stock. As of December 31, 2019, we had approximately 958 million shares of common stock issued (including approximately 247 million shares held in treasury). EQ Shareowner Services, a division of Equiniti Trust Company, is the transfer agent and registrar for our common stock. Shares of common stock are listed on the New York Stock Exchange and the London Stock Exchange under the symbol "HON."

The following summary is not complete. You should refer to the applicable provision of Honeywell's charter and by-laws, each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.2 is a part, and to Delaware corporate law for a complete statement of the terms and rights of our common stock.

Dividends

Holders of common stock are entitled to receive dividends when, as and if declared by the board of directors, out of funds legally available for their payment, subject to the rights of holders of any preferred stock outstanding.

Voting Rights

Each holder of common stock is entitled to one vote per share. Subject to any rights of the holders of any series of preferred stock pursuant to applicable law or the provision of the certificate of designations creating that series, all voting rights are vested in the holders of shares of common stock. Holders of shares of common stock have noncumulative voting rights, which means that the holders of more than 50% of the shares voting for the election of directors can elect 100% of the directors, and the holders of the remaining shares voting for the election of directors will not be able to elect any directors.

Rights Upon Liquidation

In the event of Honeywell's voluntary or involuntary liquidation, dissolution or winding up, the holders of common stock will be entitled to share equally in any of Honeywell's assets available for distribution after the payment in full of all debts and distributions and after the holders of any series of outstanding preferred stock have received their liquidation preferences in full.

Other Rights

Holders of shares of common stock are not entitled to preemptive rights. Shares of common stock are not convertible into shares of any other class of capital stock. If we merge or consolidate with or into another company and as a result our common stock is converted into or exchangeable for shares of stock, other securities or property (including cash), all holders of common stock will be entitled to receive the same kind and amount of consideration per share of common stock.

Possible Anti-Takeover Provisions

Honeywell's charter and by-laws provide:

- that the board of directors may establish the number of seats on the board, subject to the right of preferred stockholders to elect directors in certain circumstances and shareowners' rights to set the number of seats upon the vote of holders of a majority of the outstanding shares of common stock;
- that vacancies on the board of directors other than at the annual meeting are filled by a vote of the remaining directors;
- that special meetings of shareowners generally may be called only by the chief executive officer, by a majority of the authorized number of directors, or by the holders of not less than fifteen percent of the outstanding shares of Honeywell's common stock (excluding derivatives);
- that action may be taken by shareowners only at annual or special meetings and not by written consent;
- that advance notice must be given to Honeywell for a shareowner to nominate directors for election at a shareowner meeting; and
- that the board of directors may in limited circumstances, without stockholder approval, adopt a plan to provide for the distribution to stockholders of preferred stock or certain other securities upon the occurrence of certain triggering events (but any such plan adopted without stockholder approval must expire within one year of adoption unless ratified by the stockholders).

Any of these provisions could delay, deter or prevent a tender offer for or attempted takeover of Honeywell.

Our charter permits us to issue up to 40,000,000 shares of preferred stock with terms that may be set by our board of directors or a committee of the board. That preferred stock could have terms that could delay, deter or prevent a tender offer or takeover attempt of Honeywell.

Under Delaware law, an acquirer of 15% or more of our shares of stock must wait three years before a business combination with us unless one of the following exceptions is available:

- approval by our board of directors prior to the time the acquirer became a 15% shareowner of Honeywell;
- acquisition of at least 85% of our voting stock in the transaction in which the acquirer became a 15% shareowner of Honeywell; or
- approval of the business combination by our board of directors and two-thirds of our disinterested shareowners.

Honeywell's by-laws provide that, unless Honeywell consents in writing to the selection of an alternative forum, a state or federal court located within the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of Honeywell, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of Honeywell to Honeywell or Honeywell's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or (iv) any action asserting a claim governed by the internal affairs doctrine. Honeywell's by-laws also provide that any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of Honeywell will be deemed to have notice of and consented to the exclusive forum provisions described above.

Description of Debt Securities

The following description of certain material terms of our 0.650% Senior Notes due 2020, 1.300% Senior Notes due 2023, and 2.250% Senior Notes due 2028 (collectively referred to in this exhibit as the "debt securities") does not purport to be complete. The following description is subject to, and is qualified in its entirety by reference to the debt securities and the indenture between us and Deutsche Bank Trust Company Americas, as trustee, dated March 1, 2007 (as may be amended, supplemented or amended and restated from time to time) (the "indenture"). Terms used that are otherwise not defined have the meanings given to them in the indenture.

General

We have outstanding €1.0 billion aggregate principal amount of our 0.650% Senior Notes due 2020, €1.25 billion aggregate principal amount of our 1.300% Senior Notes due 2023 and €750 million aggregate principal amount of our 2.250% Senior Notes due 2028, which securities are listed on the New York Stock Exchange.

Each series of the debt securities was issued as separate series under an indenture dated March 1, 2007 (the "indenture") between us and Deutsche Bank Trust Company Americas, as trustee. The 2020 notes will mature on February 21, 2020, the 2023 notes will mature on February 22, 2023, and the 2028 notes will mature on February 22, 2028.

The debt securities are issued only in registered, book-entry form without interest coupons in minimum denominations of €100,000 and integral multiples of €1,000 in excess thereof.

The debt securities are not subject to a sinking fund.

The term “business day” means any day, other than a Saturday or Sunday, (1) which is not a day on which banking institutions in The City of New York or The City of London are authorized or required by law or executive order to close and (2) on which the Trans-European Automated Real-time Gross Settlement Express Transfer system (the TARGET2 system), or any successor thereto, operates.

Covenants

Except as described below with respect to any series of debt securities, we are not restricted by the indenture from incurring, assuming or becoming liable for any type of debt or other obligations, from paying dividends or making distributions on our capital stock or purchasing or redeeming our capital stock. The indenture does not require the maintenance of any financial ratios or specified levels of net worth or liquidity. In addition, with certain exceptions, the indenture does not contain any covenants or other provisions that would limit our right to incur additional indebtedness. The indenture does not contain any provisions that would require us to repurchase or redeem or otherwise modify the terms of any of the debt securities upon a change in control or other events that may adversely affect the creditworthiness of the debt securities, such as for example, a highly leveraged transaction.

Covenants contained in the indenture, which are summarized below, are applicable to each series of debt securities so long as any of the debt securities of that series are outstanding.

Limitation on Mortgages. In the indenture, we covenant not to issue, assume or guarantee any indebtedness for borrowed money secured by liens on:

- any property located in the United States which is in the opinion of our board of directors, a principal manufacturing property; or
- any shares of capital stock or indebtedness of any subsidiary owning such property, without equally and ratably securing the debt securities, subject to exceptions specified in the indenture. These exceptions include:
    - existing liens on our property or liens on property of corporations at the time those corporations become our subsidiaries or are merged with us;
    - liens existing on property when acquired, or incurred to finance the purchase price of that property;
    - certain liens on property to secure the cost of development of, or improvements on, that property;
    - certain liens in favor of or required by contracts with governmental entities; and
    - indebtedness secured by liens otherwise prohibited by the covenant not exceeding 10% of the consolidated net tangible assets of Honeywell and our consolidated subsidiaries.

Limitation on Sale and Lease-Back. We also covenant not to enter into any sale and lease-back transaction covering any property located in the United States which is in the opinion of our board of directors, a principal manufacturing property, or unless:

- we would be entitled under the provisions described under “-Limitation on Mortgages” to incur debt equal to the value of such sale and lease-back transaction, secured by liens on the property to be leased, without equally securing the outstanding debt securities; or
- we, during the four months following the effective date of such sale and lease-back transaction, apply an amount equal to the value of such sale and lease-back transaction to the voluntary retirement of long-term indebtedness of Honeywell or our subsidiaries.

Consolidation, Merger and Sale of Assets. The indenture provides that we may not consolidate with or merge into any other person or sell our assets substantially as an entirety, unless:

- the person formed by such consolidation or into which we are merged or the person which acquires our assets is a person organized in the United States of America and expressly assumes the due and punctual payment of the principal of and interest on all the debt securities and the performance of every covenant of the indenture on our part;
- immediately after giving effect to such transaction, no event of default, and no event which, after notice or lapse of time, or both, would become an event of default, shall have happened and be continuing; and
- we have delivered to the trustee an officers’ certificate and an opinion of counsel each stating that such consolidation or transfer and a supplemental indenture, if applicable, comply with the indenture and that all conditions precedent herein provided for relating to such transaction have been complied with.

Upon such consolidation, merger or sale, the successor corporation formed by such consolidation or into which we are merged or to which such sale is made will succeed to, and be substituted for, us under the indenture, and the predecessor corporation shall be released from all obligations and covenants under the indenture and the debt securities.

The indenture does not restrict, or require us to redeem or permit holders to cause redemption of debt securities in the event of:

- a consolidation, merger, sale of assets or other similar transaction that may adversely affect our creditworthiness or the successor or combined entity;
- a change in control of us; or
- a highly leveraged transaction involving us whether or not involving a change in control.

Accordingly, the holders of debt securities would not have protection in the event of a highly leveraged transaction, reorganization, restructuring, merger or similar transaction involving us that may adversely affect the holders. The existing protective covenants applicable to the debt securities would continue to apply to us in the event of a leveraged buyout initiated or supported by us, our management, or any of our affiliates or their management, but may not prevent such a transaction from taking place.

Events of Default, Notice and Waiver

The indenture provides that if an event of default shall have occurred and be continuing with respect to any series of debt securities, then either the trustee or the holders of not less than 25% in outstanding principal amount of the debt securities of that series may declare to be due and payable immediately the outstanding principal amount of the debt securities of the affected series, together with interest, if any, accrued thereon; *provided, however,* that if the event of default is any of certain events of bankruptcy, insolvency or reorganization, all the debt securities, together with interest, if any, accrued thereon, will become immediately due and payable without further action or notice on the part of the trustee or the holders.

Under the indenture, an event of default with respect to the debt securities of any series is any one of the following events:

(1) default for 30 days in payment when due of any interest due with respect to the debt securities of such series;

(2) default in payment when due of principal of or of premium, if any, on the debt securities of such series;

(3) default in the observance or performance of any other covenant or agreement contained in the indenture which default continues for a period of 90 days after we receive written notice specifying the default (and demanding that such default be remedied) from the trustee or the holders of at least 25% of the principal amount of securities of that series then outstanding (with a copy to the trustee if given by holders) (except in the case of a default with respect to certain consolidations, mergers, or sales of assets as set forth in Section 10.01 of the indenture, which will constitute an event of default with such notice requirement but without such passage of time requirement), *provided, however,* that the sole remedy of holders of the securities for an event of default relating to the failure to file any documents or reports that Honeywell is required to file with the SEC pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, and for any failure to comply with the requirements of Section 314(a)(1) of the Trust Indenture Act of 1939, as amended, which we refer to as the Trust Indenture Act, to provide such documents or reports, within 30 days after filing with the SEC, to the trustee pursuant to Section 14.04 of the indenture, will for the first 60 days after the occurrence of such an event of default, or such shorter period until such event of default has been cured or waived, consist exclusively of the right to receive additional interest on the securities at an annual rate equal to 0.25% of the outstanding principal amount of the securities, and that, on the 61st day after such event of default (if such event of default is not cured or waived prior to such 61st day), the securities will be subject to acceleration as provided in the indenture;

(4) certain events of bankruptcy, insolvency and reorganization; and

(5) any other event of default provided with respect to debt securities of that series.

The indenture provides that the trustee will, within 90 days after the occurrence of a default with respect to the debt securities of any series, give to the holders of debt securities of such series notice of such default known to it, unless cured or waived; *provided* that except in the case of default in the payment of principal, or interest or premium, if any, on any debt security of such series or in the payment of any sinking fund installment with respect to debt securities of such series, the trustee will be protected in withholding such notice if and so long as the board of directors, the executive committee or a trust committee of directors and/or specified officers of the trustee in good faith determine that the withholding of such notice is in the interests of the holders of debt securities of such series. The term “default” for the purpose of this provision means any event that is, or after notice or lapse of time, or both, would become, an event of default.

The indenture contains a provision entitling the trustee, subject to the duty of the trustee during the continuance of an event of default to act with the required standard of care, to be indemnified by the holders before proceeding to exercise any right or power under the indenture at the request of such holders. The indenture provides that the holders of a majority in outstanding principal amount of the debt securities of any series may, subject to certain exceptions, on behalf of the holders of debt securities of such series direct the time, method and place of conducting proceedings for remedies available to the trustee, or exercising any trust or power conferred on the trustee.

The indenture includes a covenant that we will file annually with the trustee a certificate of no default, or specifying any default that exists.

In certain cases, the holders of a majority in outstanding principal amount of the debt securities of any series may on behalf of the holders of debt securities of such series rescind a declaration of acceleration or waive any past default or event of default with respect to the debt securities of that series except a default not theretofore cured in payment of the principal of, or interest or premium, if any, on any debt security of such series or in respect of a provision which under the indenture cannot be modified or amended without the consent of the holder of each such debt security.

No holder of a debt security of any series has any right to institute any proceeding with respect to the indenture or the debt securities of any series or for any remedy thereunder unless:

- such holder shall have previously given to the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of such series have also made such a written request;
- such holder or holders have provided indemnity satisfactory to the trustee to institute such proceeding as trustee;
- the trustee has not received from the holders of a majority in outstanding principal amount of the debt securities of such series a direction inconsistent with such request; and
- the trustee has failed to institute such proceeding within 90 calendar days of such notice.

However, such limitations do not apply to a suit instituted by a holder of debt securities for enforcement of payment of the principal of, or premium or interest, if any, on such debt securities on or after the respective due dates expressed in such debt securities after any applicable grace periods have expired.

Modification and Waiver

The trustee and we may amend or supplement the indenture or the debt securities of any series without the consent of any holder, in order to:

- cure any ambiguity, defect or inconsistency;
- provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- evidence and provide for the acceptance of appointment by a successor trustee and to add to or change any of the provisions of the indenture as are necessary to provide for or facilitate the administration of the trusts by more than one trustee;
- make any change that would provide any additional rights or benefits to the holders of all or any series of debt securities and that does not adversely affect any such holder; or
- comply with SEC requirements in order to effect or maintain the qualification of the indenture under the Trust Indenture Act.

In addition, except as described below, modifications and amendments of the indenture or the debt securities of any series may be made by the trustee and us with the consent of the holders of a majority in outstanding principal amount of the debt securities affected by such modification or amendment. However, no such modification or amendment may, without the consent of each holder affected thereby:

- change the stated maturity of, or time for payment of interest on, any debt security;
- reduce the principal amount of, or the rate of interest or the premium, payable upon the redemption of, if any, on any debt security;
- change the place or currency of payment of principal of, or interest or premium, if any, on any debt security;
- impair the right to institute suit for the enforcement of any payment on or with respect to such debt securities on or after the stated maturity or prepayment date thereof; or
- reduce the percentage in principal amount of debt securities of any series where holders must consent to an amendment, supplement or waiver.

Defeasance

The indenture provides that we will be discharged from any and all obligations in respect of the debt securities of any series (except for certain obligations to register the transfer or exchange of the debt securities, to replace stolen, lost or mutilated debt securities, to maintain paying agencies and hold monies for payment in trust and to pay the principal of and interest, if any, on such debt securities), upon the irrevocable deposit with the trustee, in trust, of money and/or U.S. government securities, which through the payment of interest and principal thereof in accordance with their terms provides money in an amount sufficient to pay the principal of (and premium, if any) and interest, if any, in respect of the debt securities of such series on the stated maturity date of such principal and any installment of principal, or interest or premium, if any. Also, the establishment of such a trust will be conditioned on the delivery by us to the trustee of an opinion of counsel reasonably satisfactory to the trustee to the effect that, based upon applicable U.S. federal income tax law or a ruling published by the United States Internal Revenue Service, such a defeasance and discharge will not be deemed, or result in, a taxable event with respect to the holders. For the avoidance of doubt, such an opinion would require a change in current U.S. tax law.

We may also omit to comply with the restrictive covenants, if any, of any particular series of debt securities, other than our covenant to pay the amounts due and owing with respect to such series of debt securities. Thereafter, any such omission shall not be an event of default with respect to the debt securities of such series, upon the deposit with the trustee, in trust, of money and/or U.S. government securities which through the payment of interest and principal in respect thereof in accordance with their terms provides money in an amount sufficient to pay any installment of principal of (and premium, if any) and interest, if any, in respect of debt securities of such series on the stated maturity date of such principal or installment of principal, or interest or premium, if any. Our obligations under the indenture and the debt securities of such series other than with respect to such covenants shall remain in full force and effect. Also, the establishment of such a trust will be conditioned on the delivery by us to the trustee of an opinion of counsel to the effect that such a defeasance and discharge will not be deemed, or result in a taxable event with respect to the holders.

In the event we exercise our option to omit compliance with certain covenants as described in the preceding paragraph and the debt securities of such series are declared due and payable because of the occurrence of any event of default, then the amount of monies and U.S. government securities on deposit with the trustee will be sufficient to pay amounts due on the debt securities of such series at the time of the acceleration resulting from such event of default. We remain liable in any event for such payments as provided in the debt securities of such series.

Satisfaction and Discharge

At our option, we may satisfy and discharge the indenture with respect to the debt securities of any series (except for specified obligations of the trustee and ours, including, among others, the obligations to apply money held in trust) when:

- either (a) all debt securities of such series previously authenticated and delivered under the indenture have been delivered to the trustee for cancellation or (b) all debt securities of such series not theretofore delivered to the trustee for cancellation have become due and payable, will become due and payable at their stated maturity within one year, or are to be called for redemption within one year under arrangements satisfactory to the trustee for the giving of notice of redemption by the trustee, and we have deposited or caused to be deposited with the trustee as trust funds in trust for such purpose an amount sufficient to pay and discharge the entire indebtedness on debt securities of such series;
- we have paid or caused to be paid all other sums payable under the indenture with respect to the debt securities of such series by us; and
- we have delivered to the trustee an officers' certificate and an opinion of counsel, each to the effect that all conditions precedent relating to the satisfaction and discharge of the indenture as to such series have been satisfied.

Payment on the Debt Securities

All payments on the debt securities are payable in euros; provided that if the euro is unavailable to us due to the imposition of exchange controls or other circumstances beyond our control or if the euro is no longer being used by the then member states of the European Monetary Union that have adopted the euro as their currency or for the settlement of transactions by public institutions of or within the international banking community, then all payments in respect of the debt securities will be made in U.S. dollars until the euro is again available to us or so used. The amount payable on any date in euro will be converted into U.S. dollars at the rate mandated by the U.S. Federal Reserve Board as of the close of business on the second business day prior to the relevant payment date or, in the event the U.S. Federal Reserve Board has not mandated a rate of conversion, on the basis of the most recent U.S. dollar/euro exchange rate published in *The Wall Street Journal* on or prior to the second business day prior to the relevant payment date. Any payment in respect of the debt securities so made in U.S. dollars does not constitute an event of default under the debt securities or the indenture. Neither the trustee nor the paying agent will have any responsibility for any calculation or conversion in connection with the foregoing.

Ranking

The debt securities are our senior unsecured debt obligations and rank equally among themselves and with all of our other present and future senior unsecured indebtedness.

Interest

The debt securities began bearing interest as of February 22, 2016.

Fixed Rate Notes

The 2020 notes bear interest at a fixed rate of 0.650% per annum, the 2023 notes bear interest at a fixed rate of 1.300% per annum and the 2028 notes bear interest at a fixed rate of 2.250% per annum. Interest on the debt securities accrues from February 22, 2016, or from the most recent date to which interest has been paid or provided for, payable annually in arrears on February 21 of each year with respect to the 2020 notes and on February 22 of each year with respect to the 2023 notes and the 2028 notes (each a "debt securities interest payment date"), commencing February 21, 2017 with respect to the 2020 notes and February 22, 2017 with respect to the 2023 notes and the 2028 notes to holders of record at the close of business on the 15th calendar day (whether or not a business day) immediately preceding the interest payment date or, if the debt securities are represented by one or more global notes, the close of business on the business day (for this purpose a day on which Clearstream and Euroclear are open for business) immediately preceding the debt securities interest payment date; provided, however, that interest payable on the maturity date of the debt securities or any redemption date of the debt securities shall be payable to the person to whom the principal of such debt securities shall be payable.

Interest payable on the debt securities on any debt securities interest payment date, redemption date or maturity date is the amount of interest accrued from, and including, the next preceding debt securities interest payment date in respect of which interest has been paid or duly provided for to, but excluding, such debt securities interest payment date, redemption date or maturity date, as the case may be. This payment convention is referred to as ACTUAL/ACTUAL (ICMA) as defined in the rulebook of the International Capital Markets Association. If any debt securities interest payment date falls on a day that is not a business day, the interest payment will be made on the next succeeding day that is a business day, but no additional interest will accrue as a result of the delay in payment. If the maturity date of the debt securities falls on a day that is not a business day, the related payment of principal, premium, if any, and interest will be made on the next succeeding business day as if it were made on the date such payment was due, and no interest will accrue on the amounts so payable for the period from and after such date to the next succeeding business day. The rights of holders of beneficial interests of debt securities to receive the payments of interest on such notes are subject to the applicable procedures of Euroclear and Clearstream.

Optional Redemption of the Debt Securities

The fixed rate notes of any series are redeemable, in whole or in part, at any time and from time to time at our option, at a redemption price equal to the greater of (i) 100% of the principal amount of the fixed rate notes to be redeemed and (ii) the sum of the present values of the remaining scheduled payments of principal and interest on the fixed rate notes to be redeemed (exclusive of interest accrued to the date of redemption), discounted to the redemption date on an annual basis (ACTUAL/ACTUAL (ICMA)), at the applicable Comparable Government Bond Rate described below plus 20 basis points for the 2020 notes, plus 25 basis points for the 2023 notes and plus 30 basis points for the 2028 notes, plus, in each case, accrued and unpaid interest on the principal amount of the fixed rate notes to be redeemed to the date of redemption. We will calculate the redemption price.

"Comparable Government Bond Rate" means, with respect to any redemption date, the rate per annum equal to the yield to maturity, expressed as a percentage (rounded to three decimal places, with 0.0005 being rounded upwards), on the third business day prior to the date fixed for redemption, calculated in accordance with customary financial practice in pricing new issues of comparable corporate debt securities paying interest on an annual basis (ACTUAL/ACTUAL (ICMA)) of the Comparable Government Bond (as defined below), assuming a price for the Comparable Government Bond (expressed as a percentage of its principal amount) equal to the Comparable Government Bond Price for such redemption date.

"Comparable Government Bond" means, in relation to any Comparable Government Bond Rate calculation, the German government bond (Bundesanleihe) selected by an Independent Investment Banker as having an actual or interpolated maturity comparable to the remaining term of the fixed rate notes to be redeemed that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of euro-denominated corporate debt securities of a comparable maturity to the remaining term of such fixed rate notes.

"Independent Investment Banker" means one of the Reference Government Bond Dealers selected by us.

"Comparable Government Bond Price" means, with respect to any redemption date, (1) the arithmetic average of the Reference Government Bond Dealer Quotations for such redemption date, after excluding the highest and lowest such Reference Government Bond Dealer Quotations, or (2) if we obtain fewer than four such Reference Government Bond Dealer Quotations, the arithmetic average of all such quotations.

"Reference Government Bond Dealer" means each of (i) Barclays Bank PLC, Citigroup Global Markets Limited, Goldman, Sachs & Co. and Merrill Lynch International or any of their affiliates that are primary European government securities dealers, and their respective successors; provided that if any of the foregoing or any of their affiliates shall cease to be a primary European government securities dealer ("Primary Dealer"), we shall substitute therefor another Primary Dealer and (ii) three other Primary Dealers selected by us.

"Reference Government Bond Dealer Quotations" means, with respect to each Reference Government Bond Dealer and any redemption date, the arithmetic average, as determined by us, of the bid and asked prices for the Comparable Government Bond (expressed in each case as a percentage of its principal amount) quoted in writing to us by such Reference Government Bond Dealer at 11:00 a.m., Brussels time, on the third business day preceding such redemption date.

Notice of any redemption will be mailed at least 30 days but not more than 60 days before the redemption date to each holder of fixed rate notes of such series to be redeemed. If we elect to redeem fewer than all the fixed rate notes of such series, the trustee will select the particular fixed rate notes of such series to be redeemed by such method that the trustee deems fair and appropriate; provided that if the fixed rate notes of such series are represented by one or more global securities, beneficial interests therein will be selected for redemption by Clearstream and Euroclear in accordance with their respective applicable procedures therefor; and provided, further, that no fixed rate notes of a principal amount of €100,000 or less will be redeemed in part.

Unless we default in payment of the redemption price, on and after the redemption date interest will cease to accrue on the fixed rate notes or portions thereof called for redemption.

The debt securities are also subject to redemption prior to maturity if certain changes in U.S. tax law occur. If such changes occur, the debt securities may be redeemed at a redemption price of 100% of their principal amount plus accrued and unpaid interest to the date of redemption. See “Redemption for Tax Reasons.”

Payment of Additional Amounts

We will, subject to the exceptions and limitations set forth below, pay as additional interest on the debt securities such additional amounts as are necessary in order that the net payment by us or a paying agent of the principal, premium and interest with respect to the debt securities to a holder that is not a United States person (as defined below), after withholding or deduction for any present or future tax, assessment or other governmental charge imposed by the United States or a taxing authority in the United States, will not be less than the amount provided in the debt securities to be then due and payable; provided, however, that the foregoing obligation to pay additional amounts will not apply:

1. to any tax, assessment or other governmental charge that would not have been imposed but for the holder, a fiduciary, settlor, beneficiary, member or shareholder of the holder, or a person holding a power over an estate or trust administered by a fiduciary holder, being treated as:

    a. being or having been present in, or engaged in a trade or business in, the United States, being treated as having been present in, or engaged in a trade or business in, the United States, or having or having had a permanent establishment in the United States;
    b. having a current or former connection with the United States (other than a connection arising solely as a result of the ownership of the debt securities, the receipt of any payment in respect of the debt securities or the enforcement of any rights under the indenture), including being or having been a citizen or resident of the United States or treated as being or having been a resident thereof;
    c. being or having been a personal holding company, a passive foreign investment company or a controlled foreign corporation for U.S. federal income tax purposes, a foreign tax exempt organization, or a corporation that has accumulated earnings to avoid United States federal income tax;
    d. being or having been a “10-percent shareholder,” as defined in section 871(h)(3) of the United States Internal Revenue Code of 1986, as amended (the “Code”), or any successor provision, of us; or
    e. being a bank receiving payments on an extension of credit made pursuant to a loan agreement entered into in the ordinary course of its trade or business, within the meaning of section 881(c)(3) of the Code or any successor provision;

2. to any holder that is not the sole beneficial owner of the debt securities, or a portion of the debt securities, or that is a fiduciary, partnership or limited liability company, but only to the extent that a beneficiary or settlor with respect to the fiduciary, a beneficial owner or member of the partnership or limited liability company would not have been entitled to the payment of an additional amount had the beneficiary, settlor, beneficial owner or member received directly its beneficial or distributive share of the payment;
3. to any tax, assessment or other governmental charge that would not have been imposed but for the failure of the holder or any other person to comply with certification, identification or information reporting requirements concerning the nationality, residence, identity or connection with the United States of the holder or beneficial owner of the debt securities, if compliance is required by statute, by regulation of the United States or any taxing authority therein or by an applicable income tax treaty to which the United States is a party as a precondition to exemption from such tax, assessment or other governmental charge;
4. to any tax, assessment or other governmental charge that is imposed otherwise than by withholding by us or a paying agent from the payment;
5. to any estate, inheritance, gift, sales, excise, transfer, wealth, capital gains or personal property tax or similar tax, assessment or other governmental charge;
6. to any tax, assessment or other governmental charge that would not have been imposed but for the presentation by the holder of any debt securities, where presentation is required, for payment on a date more than 30 days after the date on which payment became due and payable or the date on which payment thereof is duly provided for, whichever occurs later;

7. to any tax, assessment or other governmental charge required to be withheld or deducted that is imposed on a payment pursuant to Sections 1471 through 1474 of the Code (or any amended or successor version of such Sections that is substantively comparable and not materially more onerous to comply with), any Treasury regulations promulgated thereunder, or any other official interpretations thereof (collectively, "FATCA"), any agreement (including any intergovernmental agreement) entered into in connection therewith, or any law, regulation or other official guidance enacted in any jurisdiction implementing FATCA or an intergovernmental agreement in respect of FATCA;
8. any tax, assessment or other governmental charge that is imposed or withheld solely by reason of a change in law, regulation, or administrative or judicial interpretation that becomes effective more than 15 days after the payment becomes due or is duly provided for, whichever occurs later;
9. any tax, assessment or other governmental charge imposed by reason of the failure of the beneficial owner to fulfill the statement requirements of Section 871(h) or Section 881(c) of the Code;
10. any tax imposed pursuant to Section 871(h)(6) or 881(c)(6) of the Code (or any amended or successor provisions); or
11. in the case of any combination of items (1) through (10).

Except as specifically provided under this heading "Payment of Additional Amounts," we are not required to pay additional amounts in respect of any tax, assessment or other governmental charge. References to any payment on the debt securities include the related payment of additional amounts, as applicable.

As used under this heading "Payment of Additional Amounts" and under the heading "Redemption for Tax Reasons," the term "United States" means the United States of America, any state thereof, and the District of Columbia, and the term "United States person" means (i) any individual who is a citizen or resident of the United States for U.S. federal income tax purposes, (ii) a corporation, partnership or other entity created or organized in or under the laws of the United States, any state thereof or the District of Columbia (other than a partnership that is not treated as a United States person for U.S. federal income tax purposes), (iii) any estate the income of which is subject to U.S. federal income taxation regardless of its source, or (iv) any trust if a U.S. court can exercise primary supervision over the administration of the trust and one or more United States persons can control all substantial trust decisions, or if a valid election is in place to treat the trust as a United States person.

Redemption for Tax Reasons

If, as a result of any change in, or amendment to, the laws of the United States or the official interpretation thereof that is announced or becomes effective on or after February 17, 2016, we become or, based upon a written opinion of independent counsel selected by us, will become obligated to pay additional amounts as described herein under the heading "Payment of Additional Amounts" with respect to the debt securities of any series, then we may at any time at our option redeem, in whole, but not in part, the debt securities of such series on not less than 30 nor more than 60 days' prior notice, at a redemption price equal to 100% of their principal amount, plus accrued and unpaid interest on the debt securities of such series to be redeemed to the date of redemption.

Further Issues

We may from time to time, without notice to or the consent of the registered holders of a series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of the corresponding series and having the same terms in all respects (other than the payment of interest accruing prior to the issue date of such further debt securities or except for the first payment of interest following the issue date of such further debt securities); provided that such additional debt securities of any series shall not be issued with the same ISIN or Common Code number for the debt securities of its corresponding series unless such additional debt securities are issued for U.S. federal income tax purposes in a "qualified reopening" or are otherwise treated as part of the same issue for U.S. federal income tax purposes. Such further debt securities will be consolidated and form a single series with the debt securities of the corresponding series.

Notices

Notices to holders of the debt securities will be sent by mail or email to the registered holders, or otherwise in accordance with the procedures of the applicable depositary.

Regarding the Trustee, Paying Agent, Calculation Agent, Transfer Agent and Security Registrar

Deutsche Bank Trust Company Americas is the paying agent, trustee, transfer agent and security registrar with respect to the debt securities and maintains various commercial and service relationships with us and with affiliates of ours in the ordinary course of business.

The indenture contains certain limitations on the right of the trustee, should it become a creditor of ours within three months of, or subsequent to, a default by us to make payment in full of principal of or interest on any series of debt securities issued pursuant to the indenture when and as the same becomes due and payable, to obtain payment of claims, or to realize for its own account on property received in respect of any such claim as security or otherwise, unless and until such default is cured. However, the trustee's rights as a creditor of ours will not be limited if the creditor relationship arises from, among other things:

- the ownership or acquisition of securities issued under any indenture or having a maturity of one year or more at the time of acquisition by the trustee;
- certain advances authorized by a receivership or bankruptcy court of competent jurisdiction or by the indenture;
- disbursements made in the ordinary course of business in its capacity as indenture trustee, transfer agent, registrar, custodian or paying agent or in any other similar capacity;
- indebtedness created as a result of goods or securities sold in a cash transaction or services rendered or premises rented; or
- the acquisition, ownership, acceptance or negotiation of certain drafts, bills of exchange, acceptances or other obligations.

The indenture does not prohibit the trustee from serving as trustee under any other indenture to which we may be a party from time to time or from engaging in other transactions with us. If the trustee acquires any conflicting interest within the meaning of the Trust Indenture Act and any debt securities issued pursuant to the indenture are in default, it must eliminate such conflict or resign.

An affiliate of the trustee is a participant in our $4.0 billion Amended and Restated Five Year Credit Agreement, maturing in April 2024, and our $1.5 billion 364-Day Credit Agreement, maturing in April 2020. Commitments under the Amended and Restated Five Year Credit Agreement can be increased pursuant to its terms to an aggregate amount not to exceed $4.5 billion.

Listing

We have listed each series of the debt securities on the NYSE. We have no obligation to maintain such listing and we may delist any series of the debt securities at any time.

Governing Law

The indenture and the debt securities for all purposes shall be governed by and construed in accordance with the laws of the State of New York.

Exhibit 10.5

HONEYWELL EXCESS BENEFIT PLAN
AND
HONEYWELL SUPPLEMENTAL SAVINGS PLAN
(amended and restated effective January 1, 2020)

1. History. Honeywell International Inc. (the "Corporation") initially established an excess benefit plan effective January 1, 2006 when the Supplemental Non-Qualified Savings Plan For Highly Compensated Employees Of Honeywell International Inc. And Its Subsidiaries (Career Band 5 and Below) was merged with and into the Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries (Career Band 6 and above) and the resulting plan from this merger became known as the Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries.

Effective July 1, 2015, the Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries was then separated into two separate plans for all legal purposes in order to ensure its qualification as an excess benefit plan within the meaning of Rule 16b-3 under the Securities Exchange Act of 1934, as amended. The following provisions constitute and govern the terms of those two plans as follows:

(a) The Excess Benefit Plan of Honeywell International Inc. and its Subsidiaries (the "Excess Benefit Plan") provides only for the benefits and contributions that would be provided under the Qualified Savings Plans but for any benefit or limitations set forth in the Code, including any amounts credited to each Participant's Account as of July 1, 2015, that would have been so characterized at the time such amounts were credited, and including (for purposes of clarity) all Employer Matching Contributions described in Subparagraph 5(b). The Excess Benefit Plan shall consist of, be governed by, and be subject to, the terms set forth below excluding Clause 5(a)(ii) and the other provisions of the Plan to the extent relating to Clause 5(a)(ii).

(b) The Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries (the "Supplemental Savings Plan") provides for all other benefits and contributions under the Plan. The Supplemental Savings Plan shall consist of, be governed by, and be subject to, the terms set forth below excluding Clause 5(a)(i) and Subparagraph 5(b) and the other provisions of the Plan to the extent relating to Clause 5(a)(i) and Subparagraph 5(b).

(c) Both the Excess Benefit Plan and the Supplemental Savings Plan are now part of a plan named the "Honeywell Excess Benefit Plan and the Honeywell Supplemental Savings Plan" and, unless the context specifically states otherwise, are collectively referred to herein as the "Plan."

(d) The Plan was amended and restated, effective as of January 1, 2009, to implement changes required pursuant to and consistent with Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), and the corresponding regulations. The Plan was last amended and restated, effective as of April 1, 2018, to implement changes required or desired to reflect a change in the amount of Employer Matching Contributions, a change in the Plan record keeper, and to change the collective Plan name.

The Plan is hereby amended and restated, effective as of January 1, 2020. This Plan document covers any Participant (as defined below) who was entitled to receive a benefit from the Plan as of December 31, 2019, but did not receive full payment of such benefit under the Plan as of such date, as well as any individual who becomes a Participant in the Plan on or after January 1, 2020. Plan benefit payments commencing before January 1, 2020 are governed by the terms of Plan as they existed before this amendment and restatement and are either grandfathered from the requirements of Section 409A of the Code or payable pursuant to a fixed schedule as required by, and in compliance with, Section 409A of the Code.

2. Eligibility. Any employee of the Corporation and its participating affiliates who is (i) the Chief Executive Officer of the Corporation or designated by the Corporation as an "officer" of the Corporation (an "Officer"), during the designated election period (the "Open Enrollment Period") that occurs before the beginning of the applicable Plan Year (as defined below), or (ii) (A) an Executive level employee but not an Officer at any time during the Open Enrollment Period that occurs before the beginning of the applicable Plan Year, and (B) whose year-to-date Base Annual Salary (as defined in Subparagraph 4(a)(i)) that is paid and posted to the Plan's electronic recordkeeping system as of the last paydate in September of the Plan Year immediately preceding the applicable Plan Year exceeds the dollar limit for a highly compensated employee for the Plan Year under Section 414(q) of the Code, shall be eligible (an "Eligible Employee") to participate in the Plan (subject to the limitations set forth in the following paragraph) and elect deferrals of Base Annual Salary for such Plan Year effective as of the first paydate of such Plan Year that follows the Open Enrollment Period.

Notwithstanding the foregoing, an Eligible Employee may only participate in the Plan for a Plan Year if such employee is eligible to participate in the Honeywell 401(k) Plan (formerly the Honeywell Savings and Ownership Plan) or any other savings plan designated as included by the Corporation from time to time (the "Qualified Savings Plans"), and has made an irrevocable election during the applicable Open Enrollment Period to defer Base Pay to the applicable Qualified Savings Plan. For purposes of this Plan, the "Plan Year" shall mean the calendar year.

3. Definitions. Capitalized terms not otherwise defined in the Plan have the respective meanings set forth in the applicable Qualified Savings Plans.

4. Participation.

(a) Time and Form of Election.

(i) Each Eligible Employee who wishes to participate in the Plan for a particular Plan Year (a "Participant"), must file a timely deferral election (the "Election") with the Plan Administrator during the applicable Open Enrollment Period. Such Eligible Employee shall designate in the Election that a portion (determined in accordance with Subparagraph 5(a)) of the Eligible Employee's Base Pay as defined in the Qualified Savings Plan without regard to any benefit or contribution limitations under the Code or the applicable Qualified Savings Plan and inclusive of salary deferred for the Plan Year under this Plan ("Base Annual Salary"), which would have been payable to such Eligible Employee during such Plan Year, in lieu of such payment, be credited to a deferred compensation account maintained under the Plan as an unfunded book entry account stated as a cash balance (the "Account"). On a Participant's Election, the Participant shall also indicate the form of payment for all deferrals credited to the Participant's Account, as described in Paragraph 7 below, and shall indicate if he wishes to change the default Change in Control election, as described in Paragraph 10 below.

(b) Election Changes. A Participant may not modify his deferral election for a particular Plan Year at any time during that Plan Year.

5. Contributions to Participants' Accounts.

(a) Participant Deferred Contributions. For a particular Plan Year, a Participant may elect to defer an aggregate amount equal to (i) the difference between the maximum percentage of Base Annual Salary that the Participant may contribute for the Plan Year as Pre-tax Contributions and/or Roth Contributions under the Qualified Savings Plans (8% for 2020), without regard to any other limitations that may apply under the Code or the Qualified Savings Plans, and the actual Pre-tax Contributions and/or Roth Contributions the Participant contributes to the Qualified Savings Plans for the Plan Year, and/or (ii) from 1% to 25% (in whole percentages) of such Participant's Base Annual Salary, without regard to any other limitations that may apply under the Code (collectively, "Participant Deferred Contributions"); provided, however, that a Participant who elects to defer any amount hereunder shall be required to make the maximum Pre-tax Contributions and/or Roth Contributions permissible under the Qualified Savings Plans for the applicable Plan Year (after giving effect to deferrals under the Plan or otherwise).

For the avoidance of doubt, all Participant Deferred Contributions to the Plan shall be deferred on a pre-tax basis. No after-tax contributions (such as Roth 401(k) contributions) shall be permitted. For purposes of any "spillover" of deferrals from the Qualified Savings Plans to the Excess Benefit Plan, any amounts that were contributed as Roth Contributions to the Qualified Savings Plans shall be contributed as pre-tax contributions to the Plan.

(b) Plan Employer Contributions. There shall be credited to the Participant's Account employer contributions under the Plan ("Plan Employer Contributions") in an aggregate amount equal to the difference between (i) the maximum Employer Matching Contributions that could be contributed for the Plan Year under the Qualified Savings Plans, without regard to any limitations that may apply under the Code or the Qualified Savings Plans, and (ii) the total amount of Employer Matching Contributions actually contributed to the Participant's account under the Qualified Savings Plans.

Notwithstanding the foregoing:

(A) beginning April 1, 2018, the Plan Employer Contributions described in this Paragraph shall be credited to a Participant's Account only if the Participant is actively employed by the Corporation or an affiliate on December 15th of the Plan Year, has died while actively employed by the Corporation or an affiliate during the Plan Year, or has incurred a Disability while actively employed by the Corporation or an affiliate during the Plan Year, and

(B) only Participant Deferred Contributions described in Clause 5(a)(i) shall be used in determining the amount of Plan Employer Contributions to be credited to an Account for a Plan Year.

(c) Vesting. Participant Deferred Contributions and Plan Employer Contributions (collectively "Total Contribution Amounts") and all amounts accrued with respect to Total Contribution Amounts in accordance with Paragraph 6, shall be vested at the time such amounts are credited to the Participant's Account.

(d) Timing of Contributions. Effective for Plan Years beginning on and after January 1, 2017, the Participant Deferred Contributions described in Clause 5(a)(i) shall be credited to a Participant's Account once the Participant has contributed the maximum Pre-tax Contributions and/

or Roth Contributions for the Plan Year to the Qualified Savings Plans. The Participant Deferred Contributions described in Clause 5(a)(ii) shall be credited to a Participant's Account each pay period during the Plan Year. The Plan Employer Contributions described in Section 5(b) shall be credited to a Participant's Account at the same time Employer Matching Contributions are credited to the Participant account under the applicable Qualified Savings Plans.

6. The Participant's Account.

(a) Types of Accounts. A Participant's Account shall consist of two sub-accounts, as applicable: (1) a sub-account which consists of Participant Deferred Contributions and Plan Employer Contributions, and interest and earnings thereon, for amounts that were earned and vested as of December 31, 2004 (the "Grandfathered Account"), and (2) a sub-account which consists of Participant Deferred Contributions and Plan Employer Contributions, and interest and earnings thereon, for amounts that are earned and vested on or after January 1, 2005 (the "Non-Grandfathered Account").

(b) Participant Deferred Contributions.

(i) Participant Deferred Contributions shall be credited to the Participant's Account under the Plan as unfunded book entries stated as cash balances.

(ii) Participant Deferred Contributions credited to the Participant's Account after December 31, 2004, and all Participant Deferred Contributions credited to a Participant's Account under the Supplemental Non-Qualified Savings Plan For Highly Compensated Employees Of Honeywell International Inc. And Its Subsidiaries (Career Band 5 and Below) before January 1, 2006, shall accrue amounts (to be posted on the Valuation Date) equivalent to interest, compounded daily, at a rate based upon the cost to the Corporation of borrowing at a fixed rate for a 15-year term; provided, however, that for 2005, Participant Deferred Contributions credited to the Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries (Career Band 6 and above) between January 1, 2005 and December 31, 2005 shall accrue amounts (to be posted each Valuation Date) equivalent to interest, compounded daily, at a rate equal to 8%. The interest rate described in this paragraph is subject to change from Plan Year to Plan Year and shall be determined annually by the Chief Financial Officer of the Corporation in consultation with the Treasurer of the Corporation before January 1 of each Plan Year.

(iii) Participant Deferred Contributions credited to the Participant's Account under the Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries (Career Band 6 and above) before January 1, 1994 or after the Participant has terminated employment shall accrue amounts (to be posted each Valuation Date) equivalent to interest, compounded daily, at a rate based upon the cost to the Corporation of borrowing at a fixed rate for a 15-year term. The interest rate described in this paragraph is subject to change from Plan Year to Plan Year and shall be determined annually by the Chief Financial Officer of the Corporation in consultation with the Treasurer of the Corporation before January 1 of each Plan Year.

(iv) Participant Deferred Contributions credited to the Participant's Account under the Supplemental Non-Qualified Savings Plan for Highly Compensated Employees of Honeywell International Inc. and its Subsidiaries (Career Band 6 and above) between January 1, 1994 and December 31, 2004, but before a Participant terminates employment, shall accrue amounts (to be posted each Valuation Date) equivalent to interest, compounded daily, at a rate that was determined annually by the Management Development and Compensation Committee (the "Committee") of the

Board of Directors of the Corporation (the "Board"). This rate, once established for a Plan Year, remains in effect with respect to all Participant Deferred Contributions credited to the Participant's Account during such Plan Year until such amounts are distributed.

(c) Plan Employer Contributions. Plan Employer Contributions shall be credited to the Participant's Account under the Plan as unfunded book entries stated as shares of Common Stock (including fractional shares). The number of shares of Common Stock credited to a Participant's Account shall be determined by dividing the equivalent cash amount (as determined under Subparagraph 5(b)) by the closing price of Common Stock on the day that such Plan Employer Contributions are credited to the Participant's Account. Amounts equivalent to the dividends that would have been payable in respect of the Common Stock shall be credited to the Participant's Account as if reinvested in Common Stock, with the number of shares credited determined by dividing the equivalent cash dividend amount by the closing price of Common Stock on the date the dividends would have been payable. Amounts credited to the Participant's Account shall accrue amounts equivalent to interest and dividends, as the case may be, until distributed in accordance with the Plan.

(d) Grandfathered and Non-Grandfathered Accounts. The aggregate amount of the Participant's Deferred Contributions, plus interest and earnings credited thereon pursuant to this Paragraph 6 (collectively, the "Participant Deferred Contribution Amounts"), and the aggregate number of shares of Common Stock representing the Plan Employer Contributions, plus dividends reinvested pursuant to this Paragraph 6 (collectively the "Plan Employer Contribution Amounts," and together with Participant Deferred Contribution Amounts, the "Total Contribution Amounts") credited to the Participant's Grandfathered Account pursuant to this Paragraph 6, will hereinafter be referred to as "Grandfathered Contribution Amounts." Total Contribution Amounts credited to a Participant's Non-Grandfathered Account will hereinafter be referred to as "Non-Grandfathered Contribution Amounts."

7. Distribution from Accounts.

(a) Form and Timing of Payment.

(i) Participant Deferred Contributions.

(A) 2006 Plan Year and Later. The aggregate amount of the Participant's Participant Deferred Contribution Amounts credited to the Participant's Non-Grandfathered Account for Plan Years beginning on or after January 1, 2006 shall be paid in one lump-sum in cash in the January of the Plan Year that follows the Plan Year in which the Participant has a Separation from Service (as defined in Section 409A(a)(2)(A)(i) of the Code and its corresponding regulations) with the Corporation and its affiliates, unless the Participant elects in his Election for any such Plan Year that his Participant Deferred Contribution Amounts for such Plan Year be paid in substantially equal annual installments over five, ten, or 15 years (or, for Plan Years beginning between January 1, 2006 and January 1, 2019, inclusive, not to exceed ten years) if his Separation from Service occurs on or after he attains age 55 and has completed ten (10) Years of Service (as defined below), in which case the first installment shall be paid in the January of the Plan Year that follows the Plan Year in which he has a Separation from Service and each remaining installment will be paid in each succeeding January.

Notwithstanding the foregoing, if the Participant is a "Specified Employee" (as defined below) at his Separation from Service, the payments provided in the immediately preceding paragraph shall be paid (or begin for installments) in (i) the January of the Plan Year that follows the Plan Year in which the Participant's

Separation from Service with the Corporation and its affiliates occurs, if the Participant's Separation from Service occurs before July 1 of such Plan Year, or (ii) the July of the Plan Year that follows the Plan Year in which the Participant's Separation from Service with the Corporation and its affiliates occurs, if the Participant's Separation from Service occurs after June 30 of such Plan Year. If the Participant elected to receive his distribution in installments, after the first payment is made, each subsequent installment will be paid in the January of each Plan Year that follows until all installments are paid to the Participant.

(B) For purposes of this Plan, the term (i) "Years of Service" shall be determined using the Participant's most-recent adjusted service date, as reflected at the Participant's Separation from Service in the Company's records, and (ii) "Specified Employee" shall mean any Participant who, at any time during the twelve (12) month period ending on the identification date, is a specified employee under Section 409A of the Code, which determination of "specified employees," including the number and identity of persons considered "specified employees" and the identification date, shall be made by the Vice President - HR, Compensation & Benefits (or his delegate) in accordance with the provisions of Sections 416(i) and 409A of the Code and the regulations issued thereunder.

(C) 2005 Plan Year. For the 2005 Plan Year only, the Participant Deferred Contribution Amounts credited to the Participant's Non-Grandfathered Account for such Plan Year shall be paid in one lump-sum in cash in January of the Plan Year immediately following the Plan Year in which the Participant has a Separation from Service with the Corporation and its affiliates.

Notwithstanding the foregoing, if the Participant is a Specified Employee at his Separation from Service, the payment provided in the immediately preceding paragraph shall be paid in (i) the January of the Plan Year that follows the Plan Year in which the Participant's Separation from Service with the Corporation and its affiliates occurs, if the Participant's Separation from Service occurs before July 1 of such Plan Year, or (ii) the July of the Plan Year that follows the Plan Year in which the Participant's Separation from Service with the Corporation and its affiliates occurs, if the Participant's Separation from Service occurs after June 30 of such Plan Year.

(D) Plan Years Before January 1, 2005. Each Participant made an election when he made a deferral election for Plan Years beginning before January 1, 2005, with respect to the distribution of the Participant Deferred Contribution Amounts credited to the Participant's Grandfathered Account pursuant to such election. A Participant elected to receive such amount in one lump-sum or in a number of annual installments (up to fifteen (15)). The lump-sum payment or the first installment shall be paid in cash as soon as practicable during the month of January of such future calendar year as the Participant may designate or, if the Participant so elects, as soon as practicable during the month of January of the calendar year immediately following the year in which the Participant last contributed to the Plan or the year in which the Participant terminates employment with the Corporation and its affiliates. Subsequent installments shall be paid in cash as soon as practicable during the month of January of each succeeding calendar year until the entire amount of the Participant Deferred Contribution Amounts credited to the Participant's Grandfathered Account has been paid.

(ii) Plan Employer Contributions. The distribution form and timing that apply to the Participant's Deferred Contribution Amounts for a Plan Year pursuant to Subparagraph 7(a)(i) above shall also apply to the form and timing of the distribution of the Plan Employer Contribution Amounts credited to the Participant's Account. Except to the extent otherwise provided with respect to fractional shares, all distributions of Plan Employer Contribution Amounts shall be made in Common Stock. Installments after the first installment payment, if applicable, shall be paid in the

January of each succeeding calendar year until the entire amount of the Plan Employer Contribution Amounts has been paid. Any fractional shares of Common Stock shall be paid in an equivalent cash amount.

(iii) Calculation of Installment Payments. If installment payments are to be made to a Participant for any Plan Year, the amount of each installment shall be determined by (A) multiplying the balance of the Participant Deferred Contribution Amounts credited to the Participant for such Plan Year by a fraction, the numerator of which is one and the denominator of which is (x) the number of installments elected, reduced by (y) one for each annual installment previously received, and (B) multiplying the balance of the Plan Employer Contribution Amount as of the day before installment payments are processed each Plan Year by a fraction, the numerator of which is one and the denominator of which is (x) the number of installments elected, reduced by (y) one for each annual installment previously received, and then rounding down to the next whole share of Common Stock; provided, however, the amount of the last installment shall consist of the amount remaining in the Participant's Account on the distribution date.

(b) Adjustment of Form of Distribution.

(i) 2005 Plan Year and Later. For Plan Years beginning on or after January 1, 2005, a Participant may not change the timing or payment form of distribution of the Non-Grandfathered Contribution Amounts credited to his Non-Grandfathered Account unless otherwise permitted by the Plan Administrator in its sole and absolute discretion in accordance with Code section 409A and its corresponding regulations.

(ii) 2004 Plan Year and Earlier. For Plan Years beginning before January 1, 2005, a Participant may change the timing and/or form of distribution of all or any portion of the Participant's Grandfathered Account only in accordance with Clause 7(c)(i).

(iii) Distribution Default for Amounts Credited to the Participant's Grandfathered Account.

(A) Distribution Default for Participant Deferred Contribution Amounts. Any Participant Deferred Contribution Amounts credited to a Participant's Grandfathered Account that are not covered by a timely distribution election shall be distributed to the Participant in one lump-sum in cash as soon as practicable during the month of January of the calendar year immediately following the later of the calendar year in which the Participant last contributed to the Plan or the year in which the Participant terminates his employment with the Corporation and its affiliates; provided, however, if the Participant has made an election pursuant to Subparagraphs 10(a), 10(b) or 10(c), the lump sum payment shall be made within the ninety (90) day period following a Change in Control, as defined in Subparagraph 10(e).

(B) Distribution Default for Plan Employer Contribution Amounts. Any Plan Employer Contribution Amounts credited to a Participant's Grandfathered Account that are not covered by a timely distribution election shall be distributed to the Participant in Common Stock as soon as practicable during the month of January of the calendar year immediately following the later of the calendar year in which the Participant last contributed to the Plan or the calendar year in which the Participant terminates his employment with the Corporation and its affiliates; provided, however, if the Participant has made an election pursuant to Subparagraphs 10(a), 10(b) or 10(c), the distribution shall be made within the ninety (90) day period following a Change in Control, as defined in Subparagraph 10(e). Any fractional shares of Common Stock shall be paid in an equivalent cash amount.

(c) Changing Distribution Elections for Plan Years Before January 1, 2005.

(i) For Total Contribution Amounts credited to the Participant's Grandfathered Account, the Plan Administrator may from time to time allow a Participant to request new elections (other than with respect to any such amounts for which distributions have already commenced). The Plan Administrator shall reserve the right to accept or reject any such request at any time and such election shall be subject to such restrictions and limitations as the Plan Administrator shall determine in its sole discretion, provided that any new election shall generally be required to be made at least twelve (12) months before any scheduled payment date.

(ii) For Total Contribution Amounts credited to the Participant's Grandfathered Account, the Plan Administrator may allow a Participant to request an immediate distribution of all or a portion of such Participant's Grandfathered Account (including any portion for which distributions have already commenced). Any such immediate distribution shall be subject to a penalty equal to six percent (6%) of the amount requested to be distributed and shall be subject to the approval of the Plan Administrator and such other restrictions or conditions as may be established by the Plan Administrator from time to time.

8. Distribution on Death.

(a) Participant Deferred Contribution Amounts. If a Participant dies before all Participant Deferred Contribution Amounts credited to the Participant's Non-Grandfathered Account have been paid, the balance of the Participant Deferred Contribution Amounts in the Non-Grandfathered Account shall be paid in cash within sixty (60) days following the date of the Participant's death to the beneficiary designated by the Participant and filed with the Plan Administrator in the form and manner prescribed by the Plan Administrator. If a Participant dies before all Participant Deferred Contribution Amounts credited to the Participant's Grandfathered Account have been paid, the balance of the Participant Deferred Contribution Amounts in the Grandfathered Account shall be paid in cash as soon as practicable following the Participant's death to the beneficiary designated by the Participant and filed with the Plan Administrator in the form and manner prescribed by the Plan Administrator; provided, however, if the Participant made an election pursuant to Subparagraphs 10(a), 10(b) or 10(c) for Participant Deferred Contribution Amounts credited to the Participant's Grandfathered Account, such amount shall be paid within the ninety (90) day period following a Change in Control, as defined in Subparagraph 10(e). If (i) no beneficiary designation has been made, or (ii) the designated beneficiary has predeceased the Participant and no further designation has been made, then such balance shall be paid to the Participant's estate. A Participant may change the designated beneficiary at any time during the Participant's lifetime by filing a subsequent designation with the Plan Administrator in the form and manner prescribed by the Plan Administrator.

(b) Plan Employer Contribution Amounts. If a Participant dies before all

(c) Plan Employer Contribution Amounts credited to the Participant's Non-Grandfathered Account have been paid, the balance of the Plan Employer Contribution Amounts in such Participant's Non-Grandfathered Account shall be paid in Common Stock within sixty (60) days following the date of the Participant's death to the beneficiary designated by the Participant and filed with the Plan Administrator in the form and manner prescribed by the Plan Administrator. If a Participant dies before all Plan Employer Contribution Amounts credited to the Participant's Grandfathered Account have been paid, the balance of the Plan Employer Contribution Amounts in such Participant's Grandfathered Account shall be paid in Common Stock as soon as practicable following the Participant's death to the beneficiary designated by the Participant and filed with the Plan Administrator in the form and manner prescribed by the Plan Administrator;

provided, however, if the Participant has made an election pursuant to Subparagraphs 10(a), 10(b) or 10(c) for Plan Employer Contribution Amounts credited to the Participant's Grandfathered Account, such amount shall be paid within the ninety (90) day period following a Change in Control, as defined in Subparagraph 10(e). If (i) no such beneficiary designation has been made, or (ii) the designated beneficiary has predeceased the Participant and no further designation has been made, then such balance shall be paid to the Participant's estate. A Participant may change the designated beneficiary at any time during the Participant's lifetime by filing a subsequent designation with the Plan Administrator in the form and manner prescribed by the Plan Administrator. Any fractional shares of Common Stock shall be paid in an equivalent cash amount.

9. Payment in the Event of Hardship.

(a) Non-Grandfathered Account. For Plan Years beginning on or after January 1, 2005, a Participant may not receive a distribution in the event of hardship or unforeseeable emergency from his Non-Grandfathered Account unless otherwise permitted by the Plan Administrator in its sole and absolute discretion in accordance with Code section 409A and its corresponding regulations.

(b) Grandfathered Account. Upon receipt of a request from a Participant delivered in writing to the Plan Administrator along with a Certificate of Unavailability of Resources form, the Plan Administrator or his designee may cause the Corporation to accelerate payment of all or any part of the amount credited to the Participant's Grandfathered Account if it finds in its sole discretion that payment of such amounts in accordance with the Participant's prior Election would result in severe financial hardship to the Participant, and such hardship is the result of an unforeseeable emergency caused by circumstances beyond the control of the Participant. Acceleration of payment may not be made to the extent that such hardship is or may be relieved (a) through reimbursement or compensation by insurance or otherwise, or (b) by liquidation of the Participant's assets, to the extent the liquidation of assets would not itself cause severe financial hardship. Any distribution of Participant Deferred Contribution Amounts pursuant to this Subparagraph shall be made in cash, while any distribution of Plan Employer Contribution Amounts pursuant to this Subparagraph shall be made in Common Stock. Any fractional shares of Common Stock shall be paid in an equivalent cash amount.

10. Change in Control.

(a) Initial Lump-Sum Payment Election.

(i) Non-Grandfathered Contribution Amounts. Notwithstanding any election made pursuant to Paragraph 4 hereof, for Participant Deferred Contributions attributable to each Plan Year beginning on or after January 1, 2007, a Participant may designate as part of his Election during the Open Enrollment Period for a Plan Year to have his Participant Deferred Contributions and corresponding Plan Employer Contributions for such Plan Year paid in a lump sum as soon as practicable following a Change in Control, but in no event later than ninety (90) days after such Change in Control (as defined below); provided however that if the event that constitutes a Change in Control does not qualify as a change in ownership or effective control of the Corporation, or in the ownership of a substantial portion of the assets of the Corporation, within the meaning of Section 409A(a)(2)(A)(v) of the Code and its corresponding regulations, a Change in Control shall not be deemed to have occurred for purposes of this clause (i).

(ii) Grandfathered Contribution Amounts. Notwithstanding any election made pursuant to Paragraph 4 for Grandfathered Contribution Amounts, each Participant filed a written election with the Plan Administrator as part of his Election to have his Grandfathered Contribution Amount paid in one lump-sum as soon as practicable following a Change in Control (as defined below), but in no event later than ninety (90) days after such Change in Control.

(iii) Form of Consideration. Any distribution of Participant Deferred Contribution Amounts pursuant to this Paragraph 10 shall be made in cash, while any distribution of Plan Employer Contribution Amounts pursuant to this Paragraph 10 shall be made in Common Stock (or the common stock of any successor corporation issued in exchange for, or with respect to, Common Stock incident to the Change in Control). Any fractional shares of Common Stock (or the common stock of any successor corporation issued in exchange for, or with respect to, Common Stock incident to the Change in Control) shall be paid in an equivalent cash amount.

(b) Subsequent Lump-Sum Payment Election. For Grandfathered Contribution Amounts only, a Participant who did not make an election pursuant to Subparagraph 10(a)(ii) or who has revoked, pursuant to Subparagraph 10(c), an election previously made under Subparagraph 10(a)(ii) or this Subparagraph 10(b) may, before the earlier of a Change in Control or the beginning of the calendar year in which the election is to take effect, elect to have the aggregate amount credited to the Participant's Grandfathered Account for all calendar years commencing with the first calendar year beginning after the date the election is made, paid in one lump-sum as soon as practicable following a Change in Control, but in no event later than ninety (90) days after such Change in Control.

(c) Revocation of Prior Change in Control Payment Elections. For Grandfathered Contribution Amounts only, a Participant may, before a Change in Control, revoke any election made pursuant to Subparagraphs 10(a)(ii) or 10(b) or file a new lump sum payment election under this Paragraph 10 with respect to amounts previously credited to the Participant's Grandfathered Account. Any such revocation or new election shall be made at the time specified by the Plan Administrator and shall be subject to such restrictions and limitations as the Plan Administrator shall determine from time to time.

(d) Interest Equivalents. Notwithstanding anything to the contrary in the Plan, after a Change in Control, the Plan may not provide, or be amended to provide, interest accruals with respect to Participant Deferred Contributions at rates lower than the rates in effect under Paragraph 6 immediately before the Change in Control.

(e) Definition of Change in Control. For Plan Years beginning after April 1, 2018 and for purposes of the Plan, "Change in Control" means (a) any one person, or more than one person acting as a group (as defined under U.S. Department of Treasury Regulation ("Treasury Regulation") § 1.409A-3(i)(5)(v)(B)) acquires ownership of stock of the Corporation that, together with stock held by such person or group, constitutes more than 50 percent of the total fair market value or total voting power of the stock of the Corporation; or (b) any one person, or more than one person acting as a group (as defined under Treasury Regulation § 1.409A-3(i)(5)(v)(B)) acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of the Corporation possessing 30 percent or more of the total voting power of the stock of the Corporation; or (c) a majority of members of the Board of Directors of the Corporation (the "Board") is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or (d) any one person, or more than one person acting as a group (as defined in Treasury Regulation § 1.409A-3(i)(5)(v)(B)) acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Corporation and its subsidiaries on a consolidated basis that have a total gross fair market value equal to or more than 40 percent of the total gross fair market value of all of the assets of the Corporation and its subsidiaries on a consolidated basis immediately before such acquisition or acquisitions. For purposes of clause (d), "gross fair market value" means the value of the assets of the Corporation and its subsidiaries on a consolidated basis, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. The foregoing clauses (a) through (d) shall be interpreted in a manner that is consistent with the Treasury Regulations promulgated pursuant to Section 409A of the Code so that all, and only, such transactions or events that could qualify as a "change in control event" within the meaning of Treasury Regulation § 1.409A-3(i)(5)(i) shall be deemed to be a Change in Control for purposes of this Plan.

11. Administration.

(a) Plan Administrator. The Plan Administrator and "named fiduciary" for purposes of the Employee Retirement Income Security Act of 1974, as amended ("ERISA") shall be the Vice President - HR, Compensation & Benefits of the Corporation (or the person acting in such capacity in the event such position is abolished, restructured or renamed). The Plan Administrator shall have the authority to appoint one (1) or more other named fiduciaries of the Plan and to designate persons, other than named fiduciaries, to carry out fiduciary responsibilities under the Plan, pursuant to Section 405(c)(1)(B) of ERISA. Any person acting on behalf of the Plan Administrator shall serve without additional compensation. The Plan Administrator shall keep or cause to be kept such records and shall prepare or cause to be prepared such returns or reports as may be required by law or necessary for the proper administration of the Plan.

(b) Powers and Duties of Plan Administrator. The Plan Administrator shall have the full discretionary power and authority to construe and interpret the Plan (including, without limitation, supplying omissions from, correcting deficiencies in, or resolving inconsistencies or ambiguities in, the language of the Plan); to determine all questions of fact arising under the Plan, including questions as to eligibility for and the amount of benefits; to establish such rules and regulations (consistent with the terms of the Plan) as it deems necessary or appropriate for administration of the Plan; to delegate responsibilities to others to assist it in administering the Plan; to retain attorneys, consultants, accountants or other persons (who may be employees of the Corporation and its affiliates) to render advice and assistance as it shall determine to be necessary to effect the proper discharge of any duty for which it is responsible; and to perform all other acts it believes reasonable and proper in connection with the administration of the Plan. The Plan Administrator shall be entitled to rely on the records of the Corporation and its subsidiaries in determining any Participant's entitlement to and the amount of benefits payable under the Plan. Any determination of the Plan Administrator, including interpretations of the Plan and determinations of questions of fact, shall be final and binding on all parties.

(c) Indemnification. To the extent permitted by law, the Corporation shall indemnify the Plan Administrator from all claims for liability, loss, or damage (including payment of expenses in connection with defense against such claims) arising from any act or failure to act in connection with the Plan.

12. Claims Procedures and Appeals.

(a) A written request for a Plan benefit is a claim and the person making such claim is a claimant. Any claim must be made in writing and shall be deemed to be filed by a claimant when a written request is made by the claimant or the claimant's authorized representative which is reasonably calculated to bring the claim to the attention of the Plan Administrator.

(b) The Plan Administrator shall provide notice in writing to any claimant when a claim for benefits under the Plan has been denied in whole or in part. Such notice shall be provided within ninety (90) days of the receipt by the Plan Administrator of the claimant's claim or, if special circumstances require, and the claimant is so notified in writing, within one hundred eight (180) days of the receipt by the Plan Administrator of the claimant's claim. The notice shall be written in a manner calculated to be understood by the claimant and shall:

(i) set forth the specific reasons for the denial of benefits;

(ii) contain specific references to Plan provisions relative to the denial;

(iii) describe any material and information, if any, necessary for the claim for benefits to be allowed, that had been requested, but not received by the Plan Administrator;

(iv) advise the claimant that any appeal of the Plan Administrator's adverse determination must be made in writing to the Plan Administrator within sixty (60) days after receipt of the initial denial notification, and must set forth the facts upon which the appeal is based; and

(v) advise the claimant of his right to bring a civil action under Section 502(a) of ERISA, following an adverse benefit determination on review.

(c) When a claimant receives notice of denial of a claim or does not receive notification of acceptance or denial within ninety (90) days after submitting a claim, the claimant, either in person or by duly authorized representative, may:

(i) request, in writing, a review of the claim by the Plan Administrator;

(ii) review pertinent documents relating to the denial;

(iii) submit issues and comments in writing; and

(iv) request, in writing, a hearing with the Plan Administrator; provided that the claimant takes appropriate action within sixty (60) days after receiving notice of denial.

(d) The Plan Administrator shall make its decision with respect to a claim review promptly, but not later than sixty (60) days after receipt of the request. Such sixty (60) day period may be extended for another period of sixty (60) days if the Plan Administrator reviewing the claim finds that special circumstances require an extension of time for processing.

(e) The final decision of the Plan Administrator shall be in writing, (i) give specific reason(s) for the adverse decision, (ii) make specific references to the pertinent Plan provisions on which the decision is based, (iii) include a statement that the claimant is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to the claimant's claim for benefits, and (iv) a statement describing any voluntary appeals procedures offered by the Plan and the claimant's right to obtain information about such procedures, and a statement of the claimant's right to bring an action under Section 502(a) of ERISA. All interpretations, determinations and decisions of the Plan Administrator in respect of any claim shall be made in its sole discretion based on the applicable Plan documents and shall be final, conclusive and binding on all parties.

(f) A claimant or potential claimant must file a claim with the Plan Administrator no later than one (1) year after the claimant or potential claimant knows, or should have known, the principal facts upon which their claim is based. Any legal action in connection with the Plan must be brought in the U.S. District Court for the Western District of North Carolina within the six (6) month period beginning on the date the claimant's claim and appeal rights are exhausted.

13. Miscellaneous.

(a) Anti-Alienation. The right of a Participant to receive any amount credited to the Participant's Account shall not be transferable or assignable by the Participant, except by will or by the laws of descent and distribution. To the extent that any person acquires a right to receive any amount credited to a Participant's Account hereunder, such right shall be no greater than that of an unsecured general creditor of the Corporation. Except as expressly provided herein, any person having an interest in any amount credited to a Participant's Account under the Plan shall not be entitled to payment until the date the amount is due and payable. No person shall be entitled to anticipate any payment by assignment, pledge or transfer in any form or manner before actual or constructive receipt thereof.

(b) Section 409A. The Plan is intended to comply with the applicable requirements of Section 409A of the Code and its corresponding regulations and related guidance with respect to Non-Grandfathered Contribution Amounts credited to the Participant's Account, and shall be administered in accordance with Section 409A of the Code with respect to such Non-Grandfathered Contribution Amounts. Notwithstanding anything in the Plan to the contrary, elections to defer Non-Grandfathered Contribution Amounts under the Plan, and distributions of Non-Grandfathered Contribution Amounts, may only be made in a manner and upon an event permitted by Section 409A of the Code. To the extent that any provision of the Plan would cause a conflict with the requirements of Section 409A of the Code, or would cause the administration of the Plan to fail to satisfy the requirements of Section 409A of the Code, such provision shall be deemed null and void to the extent permitted by applicable law. Other than a valid Election, in no event shall a Participant, directly or indirectly, designate the Plan Year of payment with respect to Non-Grandfathered Accounts. For the avoidance of doubt, deferrals under the Plan are maintained on a Plan Year basis.

(c) Unsecured General Creditor. Neither the Corporation nor any of its subsidiaries shall be required to reserve or otherwise set aside funds, Common Stock or other assets for the payment of its obligations hereunder. However, the Corporation or any subsidiary may, in its sole discretion, establish funds for payment of its obligations hereunder. Any such funds shall remain assets of the Corporation or such subsidiary, as the case may be, and subject to the claims of its general creditors. Such funds, if any, shall not be deemed to be assets of the Plan. The Plan is intended to be unfunded for tax purposes and for purposes of Title I of ERISA.

(d) Withholding. The Corporation shall withhold from any distribution made from Participant Deferred Contribution Amounts the amount necessary to satisfy applicable federal, state and local tax withholding requirements. With respect to distributions of Plan Employer Contribution Amounts, the delivery of the shares of Common Stock shall be delayed until the Participant makes arrangements, pursuant to procedures to be adopted by the Plan Administrator, to satisfy the applicable federal, state and local tax withholding requirements. Each Participant, however, shall be responsible for the payment of all individual tax liabilities relating to any such benefits.

(e) Offset. To the maximum extent permitted under Section 409A of the Code and its corresponding regulations, if a Participant becomes entitled to a distribution of benefits under the

Plan, and if at such time the Participant has outstanding any debt, obligation, or other liability representing an amount owing to the Corporation or any participating affiliate, then the Corporation may offset such amount owed to the Corporation or the participating affiliate against the amount of benefits otherwise distributable. Such determination shall be made by the Plan Administrator.

(f) Termination and Amendment. The Corporation may at any time amend or terminate the Plan, subject to the requirements of Section 409A of the Code with respect to the Non-Grandfathered Amounts. Notwithstanding the foregoing, and unless such amendment is required by Section 409A of the Code, the Plan may not, without the consent of an affected Participant, be amended in any manner which would adversely affect such Participant's rights and expectations with respect to deferral amounts credited to such Participant's Account immediately before such amendment (including, but not limited to, any amendment which would adversely affect the rights or features applicable to, or any of the components that are taken into account in determining, the deferral amounts of any Participant hereunder).

(g) Benefit Statements. Each Participant shall receive periodic statements (not less frequently than annually) regarding the Participant's Account. Each such statement shall indicate the amount of the balances credited to the Participant's Account as of the end of the period covered by such statement.

(h) Legal Interpretation. This Plan and its provisions shall be construed in accordance with the laws of North Carolina to the extent such North Carolina law is not inconsistent with the provisions of ERISA. The text of this Plan shall, to the extent permitted by law, govern the determination of the rights and obligations created or referred to herein. Headings to the Sections, Paragraphs and Subparagraphs are for reference purposes only and do not limit or extend the meaning of any of the Plan's provisions.

(i) Gender; Number. All pronouns and any variations thereof shall be deemed to refer to the masculine, feminine, or neuter, as the identity of the person or persons may require. As the context may require, the singular may read as the plural and the plural as the singular.

(j) Employment. The adoption and maintenance of this Plan shall not be deemed to constitute a contract between the Corporation or its subsidiaries and any employee or to be a consideration for or condition of employment of any person. No provision of the Plan shall be deemed to give any employee the right to continue in the employ of the Corporation or its subsidiaries or to interfere with the right of the Corporation or its subsidiaries to discharge any employee at any time without regard to the effect which such discharge might have upon the employee's participation in the Plan or benefits under it.

(k) Fiduciary Capacities. Any person or group of persons may serve in more than one fiduciary capacity with respect to the Plan. For purposes of this Subparagraph 13(k), the term "fiduciary" shall have the same meaning as in ERISA.

(l) Participants Subject to Section 16. Notwithstanding anything herein to the contrary, if any request and subject to Section 409A of the Code, election or other action under the Plan affecting a Participant subject to Section 16 of the Securities Exchange Act of 1934 should require the approval of the Committee to exempt such request, election or other action from potential liability under Section 16, then the approval of the Committee shall be obtained in lieu of the approval of the Plan Administrator.

Exhibit 10.7

HONEYWELL DEFERRED INCENTIVE COMPENSATION PLAN
(amended and restated effective January 1, 2020)

1. History. Honeywell International Inc. (the "Corporation") previously established this supplemental non-qualified Honeywell Deferred Incentive Compensation Plan (formerly the Salary and Incentive Award Deferral Plan for Selected Employees of Honeywell International Inc. and its Affiliates) (the "Plan") and has amended the Plan several times since its initial effective date, including an amendment and restatement effective January 1, 2009 to comply with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and corresponding rules and regulations under Section 409A of the Code. This Plan document covers any Participant (as defined below) who was entitled to receive a benefit from the Plan as of December 31, 2019, but who did not receive full payment of such benefit under the Plan as of such date, as well as any individual who becomes a Participant in the Plan on or after January 1, 2020. Plan benefit payments commencing before January 1, 2020 are governed by the terms of the Plan as they existed prior to this amendment and restatement and are either grandfathered from the requirements of Section 409A of the Code or payable pursuant to a fixed schedule as required by, and in compliance with, Section 409A of the Code.

2. Eligibility. Any employee of the Corporation and its participating affiliates who is designated by the Corporation as an Executive level employee during the designated election period (the "Open Enrollment Period") for the applicable Plan Year (as defined below) shall be eligible (an "Eligible Employee") to participate in the Plan and elect deferrals of compensation (as described in Paragraph 4 below) for such Plan Year effective as of the January 1 of the Plan Year that follows the Open Enrollment Period. The Management Development and Compensation Committee (or its designee) (the "Committee") shall designate the period prior to the applicable Plan Year that shall constitute the Open Enrollment Period, in its sole discretion; provided, however, in no event shall such Open Enrollment Period end later than the December 31 that precedes the Plan Year for which the election to participate in the Plan applies. For purposes of this Plan, the "Plan Year" shall mean the calendar year.

3. Participation. Each Eligible Employee who wishes to participate in the Plan for a particular Plan Year (a "Participant") must file a deferral election (the "Election") with the Committee during the Open Enrollment Period in the form and manner determined by the Committee, which election shall designate the portion of the compensation elements (as described in Paragraph 4 below) to be deferred for such Plan Year and the form in which such deferral amounts, and interest thereon, shall be distributed (as described in Paragraph 8 below). The compensation elements deferred for a particular Plan Year shall be credited to an unfunded deferred compensation account maintained for the Participant under the Plan (the "Participant Account" or "Account"). Except as otherwise may be permitted by Section 409A of the Code and the Committee, a Participant may not modify his or her deferral election for a Plan Year at any time during the Plan Year.

4. Contributions to Participant Accounts.

(a) Incentive Awards. During the Open Enrollment Period, an Eligible Employee may elect on his Election to defer up to 100% of the cash bonus payable (with such deferral in a whole percentage and 10% increment) to such Eligible Employee under the Honeywell International Inc. Incentive Compensation Plan for Executive Employees (or any successor plan), the Honeywell Capital

Management LLC Incentive Compensation Plan (or any successor plan), or any other similar annual incentive compensation plan covering Executive level employees that is designated by the Corporation as eligible for deferrals under this Plan (each an "Incentive Award"), for the performance period under the applicable incentive plan that begins in the Plan Year that commences after the Open Enrollment Period.

(b) Base Annual Salary. For Plan Years beginning before January 1, 2006, an Eligible Employee who was employed in Career Band 6 and above (or an Eligible Employee who occupied a position equivalent thereto) was permitted prior to the beginning of the applicable Plan Year (and with respect to a newly Eligible Employee, within 30 days after first becoming so eligible) to elect to defer an aggregate amount of base annual salary otherwise payable in such Plan Year (or with respect to a newly Eligible Employee, in the remainder of the Plan Year), exclusive of any bonus or any other compensation or allowance paid or payable by the Corporation or its affiliates (the "Base Annual Salary"). The amount deferred under this Paragraph 4(b) was not permitted to be greater than 50% of the Eligible Employee's Base Annual Salary for any pay period. Effective July 29, 2005, no new deferral elections were permitted under this Paragraph 4(b) for the remainder of the Plan Year beginning January 1, 2005. For Plan Years beginning on and after January 1, 2006, no Eligible Employee may elect to defer any portion of his Base Annual Salary under the Plan.

(c) Deferral Amounts. All amounts determined under this Paragraph 4 which are the subject of an Election (the "Deferral Amounts") shall, in accordance with the relevant Participant direction, be credited to the relevant Participant Account maintained under the Plan on the same day the Base Annual Salary or Incentive Award would otherwise have been payable.

(d) A Participant's Account shall consist of two sub-accounts, as applicable: (1) a sub-account which consists of (A) Base Annual Salary earned and vested as of December 31, 2001 and any earnings thereon, and (B) Incentive Awards earned as of December 31, 2001 and vested as of December 31, 2004 and any earnings thereon (with the total amounts described in (A) and (B) referred to as the "Grandfathered Account"), and (2) a sub-account which consists of (X) Base Annual Salary earned and vested on or after January 1, 2002 and any earnings thereon, and (Y) Incentive Awards earned on or after January 1, 2002 and vested on or after January 1, 2005 and any earnings thereon (with the amounts described in (X) and (Y) referred to as the "Non-Grandfathered Account"). Base Annual Salary, Incentive Awards and any earnings thereon that were earned in the Plan Years beginning January 1, 2002, January 1, 2003 and January 1, 2004 and that are credited to a Participant's Non-Grandfathered Account will be referred to herein as "2002-2004 Deferrals".

For the avoidance of doubt, the Grandfathered Account consists of deferrals and earnings attributable to Plan Years (also referred to as class years) beginning on or before January 1, 2001 and the Non-Grandfathered Account consists of deferrals and earnings attributable to Plan Years beginning on or after January 1, 2002.

5. Deferral Requirements.

(a) Plan Years Beginning On or After January 1, 2006. A Participant's Deferral Amounts under the Plan for Plan Years beginning on or after January 1, 2006 will be paid in one lump-sum payment to such Participant in the January of the Plan Year that follows the Plan Year in which the Participant has a Separation from Service (as defined in Section 409A(a)(2)(A)(i) of the Code and its corresponding regulations) with the Corporation and its affiliates, unless the Participant elects as part of his Election during the Open Enrollment Period that the Deferral Amounts for the Plan Year will instead be paid in substantially equal annual installments over five, ten, or 15 years (or, for Plan

Years beginning between January 1, 2006 and January 1, 2019, inclusive, not to exceed ten years) if he has a Separation from Service with the Corporation and its affiliates on or after he attains age 55 and has completed ten Years of Service (as defined below), in which case the first installment shall commence in the January of the Plan Year that follows the Plan Year in which the Participant has a Separation from Service and each remaining installment will be paid to the Participant in each succeeding January.

Notwithstanding the foregoing, if at the time of the Participant's Separation from Service, the Participant is a Specified Employee (as defined below) the payments provided in the preceding paragraph shall be paid (or commence in the case of installments) in (i) the January of the Plan Year that follows the Plan Year in which the Participant's Separation from Service with the Corporation and its affiliates occurs, if the Participant's Separation from Service with the Corporation and its affiliates occurs prior to July 1 of such Plan Year, or (ii) the July of the Plan Year that follows the Plan Year in which the Participant's Separation from Service with the Corporation and its affiliates occurs, if the Participant's Separation from Service with the Corporation and its affiliates occurs after June 30 of such Plan Year. If the Participant elected to receive his distribution in the form of installment payments, after the first payment is made pursuant to the immediately preceding sentence, each subsequent installment will be paid to the Participant in the January of each Plan Year that follows until all installments are paid to the Participant.

Notwithstanding the foregoing, if the Participant dies after the Separation from Service but before the end of the Plan Year in which the Separation from Service occurs, or if a Specified Employee dies before the payment date described in the preceding paragraph, the Participant's beneficiary will receive the payment or payments in a lump sum within 60 days of the date of the Participant's death.

For purposes of this Plan, the term (i) "Years of Service" shall be determined using the Participant's most-recent adjusted service date, as reflected at the Participant's Separation from Service in the Company's records, and (ii) "Specified Employee" shall mean any Participant who, at any time during the twelve (12) month period ending on the identification date, is a specified employee under Section 409A of the Code, which determination of "specified employees," including the number and identity of persons considered "specified employees" and the identification date, shall be made by the Vice President - HR, Compensation & Benefits (or his delegate) in accordance with the provisions of Sections 416(i) and 409A of the Code and the regulations issued thereunder.

(b) 2005 Plan Year. For the 2005 Plan Year, a Participant's Deferral Amounts under the Plan for such Plan Year will be paid in one lump-sum payment to such Participant in the January of the Plan Year that follows the Plan Year in which the Participant has a Separation from Service with the Corporation and its affiliates, unless the Participant elected on his Election during the Open Enrollment Period that the Deferral Amounts for such Plan Year will instead be paid to such Participant at a Specified Time (as such term is defined in Section 409A(a)(2)(A)(iv) of the Code and its corresponding regulations), provided that the Specified Time is no sooner than January of the 2009 Plan Year (unless the Committee approved at the time of such election a shorter period of deferral) and in up to 15 annual installments.

Notwithstanding the foregoing, if at the time of the Participant's Separation from Service the Participant is entitled to payment of the amounts deferred for the 2005 Plan Year because of his Separation from Service (and not because of the Specified Time designated, if any) and the Participant is a Specified Employee, the payments provided in the immediately preceding sentence on account of Separation from Service shall be paid (or commence payment in the case of installments) in (i) the January of the Plan Year that follows the Plan Year in which the Participant's Separation from Service with the Corporation and its affiliates occurs, if the Participant's Separation from Service with the Corporation and its affiliates occurs prior to July 1 of such Plan Year, or (ii) the July of the Plan Year that follows the Plan Year in which the Participant's Separation from Service with the Corporation and its affiliates occurs, if the Participant's Separation from Service with the Corporation and its affiliates occurs after June 30 of such Plan Year. Payment on account of a Specified Time shall be paid (or commence payment in the case of installments) to the Participant in January of the Plan Year elected by the Participant.

If the Participant elected to receive his distribution in the form of installment payments, after the first payment is made pursuant to the immediately preceding paragraph, each subsequent installment will be paid to the Participant in the January of each Plan Year that follows until all installments are paid to the Participant. Notwithstanding anything to the contrary in this Paragraph 5(b), if the Participant dies after the Separation from Service, but before the end of the Plan Year in which the Separation from Service occurs or if a Specified Employee dies before the payment date described in the preceding paragraph, the Participant's beneficiary will receive the payment or payments in a lump sum within 60 days of the date of the Participant's death.

(c) Plan Years Beginning Before January 1, 2005.

(i) Grandfathered Accounts. A Participant's Deferral Amounts credited to a Participant's Grandfathered Account under the Plan for Plan Years beginning before January 1, 2005 shall be paid as soon as practicable during the month of January following the calendar year in which the Participant terminates employment; provided, however, amounts deferred under the Plan may be paid at such other date permitted to be designated by the Participant that provides for a minimum period of deferral of at least three years or such shorter period as may be approved by the Committee, which election was made at the time the Participant made the deferral election for such Plan Years. The Participant also elected at such time to receive such distribution in one lump-sum payment or in a number of substantially equal annual installments (provided the payment period may not include more than 30 such installments).

The lump-sum or the first installment shall be paid as soon as practicable during the month of January of the calendar year following termination of employment or such other calendar year validly designated by the Participant. Except as otherwise provided in Paragraphs 9, 10, and 11, all installment payments following the initial installment payment shall be paid in cash as soon as practicable during the month of January of each succeeding calendar year until the entire amount in the Account shall have been paid.

Notwithstanding the foregoing, in the event a Participant's employment with the Corporation is terminated either voluntarily (other than on account of retirement as defined in the qualified pension plan in which the Participant participates or for "good reason" under any applicable severance plan of the Corporation) or for "gross cause" (as defined in the AlliedSignal Inc. Severance Plan for Senior Executives), the Participant's Deferral Amounts for performance years beginning after 1997 for amounts deferred under Paragraph 4(a) hereof or after 1998 for amounts deferred under Paragraph 4(b) hereof (including any notional interest credited thereto) shall be distributed in a lump sum as soon as practicable in January of the calendar year following such termination of employment. Except as otherwise provided in Paragraph 5(d) or Paragraphs 9 or 10 or as approved by the Committee, no amount shall be withdrawn from a Participant's Account prior to the last day of the calendar year in which the Deferral Amounts were earned; the date the Participant reaches normal retirement age and is eligible to receive a benefit under a pension plan of the Corporation or one of its affiliates; the date of the Participant's death; or the date the Participant ceases to be employed by the Corporation or any of its affiliates.

(ii) Non-Grandfathered Accounts. A Participant's 2002-2004 Deferrals shall be paid during the month of January following the calendar year in which the Participant has a Separation from Service; provided, however, a Participant's 2002-2004 Deferrals may be paid at a Specified Time designated by the Participant that provides for a minimum period of deferral of at least three years or such shorter period as may have been approved by the Committee, which election was made prior to January 1 for the applicable Plan Year. The Participant also elected at such time to receive such distribution in one lump-sum payment or in a number of substantially equal annual installments (not exceeding 15).

Notwithstanding the foregoing, if at the time of the Participant's Separation from Service the Participant is entitled to payment of the 2002-2004 Deferrals because of his Separation from Service (and not because of the Specified Time designated, if any) and the Participant is a Specified Employee, the payments provided in the immediately preceding sentence on account of Separation from Service shall be paid (or commence payment in the case of installments) in (i) the January of the Plan Year that follows the Plan Year in which the Participant's Separation from Service with the Corporation and its affiliates occurs, if the Participant's Separation from Service with the Corporation and its affiliates occurs prior to July 1 of such Plan Year, or (ii) the July of the Plan Year that follows the Plan Year in which the Participant's Separation from Service with the Corporation and its affiliates occurs, if the Participant's Separation from Service with the Corporation and its affiliates occurs after June 30 of such Plan Year. Payment on account of a Specified Time shall be paid (or commence payment in the case of installments) to the Participant in January of the Plan Year elected by the Participant.

If the Participant elected to receive his distribution in the form of installment payments, after the first payment is made pursuant to the immediately preceding paragraph, each subsequent installment will be paid to the Participant in the January of each Plan Year that follows until all installments are paid to the Participant. Notwithstanding anything to the contrary in this subparagraph 5(c)(ii), if the Participant dies after the Separation from Service, but before the end of the Plan Year in which the Separation from Service occurs or if a Specified Employee dies before the payment date described in the preceding paragraph, the Participant's beneficiary will receive the payment or payments in a lump sum within 60 days of the date of the Participant's death.

(d) In-Service Withdrawal. A Participant may request an immediate withdrawal of all or a portion of the Deferral Amounts credited to a Participant's Grandfathered Account prior to the date described in subparagraph 5(c)(i) or prior to the date such portion of the Grandfathered Account has been completely withdrawn, provided that such a request and withdrawal shall be subject to the approval of the Corporation and such penalties, restrictions or conditions as may be established by the Corporation from time to time. The penalty shall be a percentage of the amount requested to be withdrawn, calculated as the difference between (a) 6%, and (b) 50% of the amount, if any, by which 10% exceeds the interest rate on 10-year U.S. Treasury Bonds on the first business day of the calendar quarter during which the withdrawal request is made.

6. Interest Equivalents. Deferral Amounts shall accrue additional amounts equivalent to interest ("Interest Equivalents"), compounded daily, from the date the Deferral Amount is credited to the Account to the date of distribution as set forth in this Paragraph 6.

(a) Non-Grandfathered Deferral Amounts.

(i) Deferral Amounts Credited for Plan Years On and After January 1, 2006. Deferral Amounts credited to a Participant's Non-Grandfathered Account for Plan Years beginning on or after

January 1, 2006, and Deferral Amounts under Paragraph 4(a) credited to a Participant's Non-Grandfathered Account in 2006 for the Election filed by the Participant for the 2005 Plan Year, shall accrue Interest Equivalents at an annual rate based upon the cost to the Corporation of borrowing at a fixed rate for a 15-year term. Such rate is subject to change from Plan Year to Plan Year with respect to amounts credited to a Participant's Non-Grandfathered Account for a particular Plan Year and shall be determined annually by the Chief Financial Officer of the Corporation in consultation with the Treasurer of the Corporation prior to January 1 of each Plan Year. Interest Equivalents described in this clause (i) shall be vested at the time such amounts are credited to the Participant's Non-Grandfathered Account. All Interest Equivalents credited to the Participant's Non-Grandfathered Account pursuant to this clause (i) shall be paid at the same time and in the same form as the corresponding Deferral Amounts for which the Interest Equivalents relate. The rate of notional interest established hereunder is set forth on Schedule A attached hereto and made a part hereof.

(ii) Deferral Amounts Credited for the 2005 Plan Year. Deferral Amounts under Paragraph 4(b) credited to a Participant's Non-Grandfathered Account in the 2005 Plan Year for the Election filed by the Participant for the 2005 Plan Year shall accrue Interest Equivalents at a single rate established by the Committee, in its sole discretion. Such rate is subject to change from Plan Year to Plan Year with respect to amounts credited to a Participant's Non-Grandfathered Account for the 2005 Plan Year and shall be determined annually by the Chief Financial Officer of the Corporation in consultation with the Treasurer of the Corporation prior to January 1 of each Plan Year.

The rate of notional interest established hereunder is set forth on Schedule A attached hereto and made a part hereof. Any portion of such rate designated as the "Contingent Rate" became nonforfeitable only if the Participant was still employed by the Corporation or any affiliate at the end of the third full calendar year in which the Deferral Amount related; provided, however, if a Participant terminated employment with the Corporation or an affiliate prior to such date for reasons other than gross cause, the Committee treated such portion as nonforfeitable if the Participant's employment with the Corporation or an affiliate was involuntarily terminated (including a termination for "good reason" under any applicable severance plan of the Corporation or an affiliate) or terminated for such reasons as the Committee determined from time to time in its sole discretion. All Interest Equivalents credited to the Participant's Non-Grandfathered Account pursuant to this clause (ii) shall be paid at the same time and in the same form as the corresponding Deferral Amounts for which the Interest Equivalents relate.

(iii) 2002-2004 Deferrals. 2002-2004 Deferrals shall accrue Interest Equivalents at a single rate established by the Committee, in its sole discretion. The rate established by the Committee did not exceed the greater of (i) 10% or (ii) 200% of the 10-year U.S. Treasury Bond rate at the time of determination. Such Interest Equivalents, once established for a Plan Year, shall remain in effect with respect to Deferral Amounts credited to the Participant's Non-Grandfathered Account for each such Plan Year until the Deferral Amounts are distributed.

The rate of notional interest established hereunder is set forth on Schedule A attached hereto and made a part hereof. Any portion of such rate designated as the "Contingent Rate" became nonforfeitable only if the Participant was still employed by the Corporation or any affiliate at the end of the third full calendar year in which the Deferral Amount related, provided, however, if a Participant had a Separation from Service with the Corporation or an affiliate before such date for reasons other than gross cause, the Committee treated such portion as nonforfeitable if the Participant's employment with the Corporation or an affiliate was involuntarily terminated (including a termination for "good reason" under any applicable severance plan of the Corporation or an affiliate) or was terminated for such reasons as the Committee determined from time to time in its sole discretion.

Notwithstanding the preceding sentence, if a Participant withdrew any portion of the Deferral Amount before the end of the third full calendar year following the calendar year to which the Deferral Amount relates, the amount of Contingent Rate interest credited with respect to such Deferral Amount at the time of withdrawal remains credited to such Account subject to the provisions of the preceding sentence but shall not be credited with any Interest Equivalents after such date ("Frozen Contingent Interest"). Notwithstanding anything in the Plan to the contrary, from and after the occurrence of a Change in Control (as defined below), the rate at which Deferral Amounts accrue Interest Equivalents may not be decreased.

(b) Grandfathered Deferral Amounts. Deferral Amounts credited to a Participant's Grandfathered Account shall accrue Interest Equivalents at a single rate established by the Committee, in its sole discretion, for all Deferral Amounts credited to such Grandfathered Account in each calendar year. The rate established by the Committee did not exceed the greater of (i) 10% or (ii) 200% of the 10-year U.S. Treasury Bond rate at the time of determination. Such Interest Equivalents, once established for a Plan Year, shall remain in effect with respect to Deferral Amounts credited to the Participant's Grandfathered Account during such Plan Year until the Deferral Amounts are distributed.

The rate of notional interest established hereunder is set forth on Schedule A attached hereto and made a part hereof. Any portion of such rate designated as the "Contingent Rate" became nonforfeitable only if the Participant was still employed by the Corporation or any affiliate at the end of the third full calendar year in which the Deferral Amount relates, provided, however, if a Participant terminated employment with the Corporation or an affiliate before such date for reasons other than gross cause, the Committee treated such portion as nonforfeitable if the Participant's employment with the Corporation or an affiliate was involuntarily terminated (including a termination for "good reason" under any applicable severance plan of the Corporation or an affiliate) or was terminated for such reasons as the Committee determined from time to time in its sole discretion.

Notwithstanding the preceding paragraph, if a Participant withdrew any portion of the Deferral Amount before the end of the third full calendar year following the calendar year to which the Deferral Amount relates, the amount of Contingent Rate interest credited with respect to such Deferral Amount at the time of withdrawal became Frozen Contingent Interest. Notwithstanding anything in the Plan to the contrary, from and after the occurrence of a Change in Control, the rate at which Deferral Amounts accrue Interest Equivalents may not be decreased.

7. Participant Accounts. All amounts credited to a Participant's Account pursuant to Paragraphs 4 and 6 shall be unfunded general obligations of the Corporation, and no Participant shall have any claim to or security interest in any asset of the Corporation on account thereof.

8. Distribution from Accounts.

(a) Plan Years Beginning On and After January 1, 2006. Deferral Amounts and corresponding Interest Equivalents for Plan Years beginning on and after January 1, 2006 shall be paid to the Participant at the time and in the form as elected by the Participant on his Election for such Plan Year in accordance with the requirements of Paragraph 5(a).

(b) 2005 Plan Year. Deferral Amounts and corresponding Interest Equivalents for the Plan Year beginning on January 1, 2005 shall be paid to the Participant at the time and in the form as elected by the Participant on his Election for such Plan Year in accordance with the requirements of Paragraph 5(b).

(c) Plan Years Beginning Prior to January 1, 2005.

(i) Grandfathered Accounts. Deferral Amounts and corresponding Interest Equivalents credited to a Participant's Grandfathered Account shall be paid to a Participant at the time and in the form as elected by the Participant on his Election for such Plan Years in accordance with the requirements of subparagraph 5(c)(i).

(ii) Non-Grandfathered Accounts. 2002-2004 Deferrals shall be paid to a Participant at the time and in the form as elected by the Participant on his Election for such Plan Years in accordance with the requirements of subparagraph 5(c)(ii).

(iii) Special Election Change Applicable to Grandfathered Accounts. The Corporation may from time to time allow Participants to request new elections with respect to the distribution of Deferral Amounts and Interest Equivalents credited to their Grandfathered Accounts (other than any such amounts currently payable to a Participant). The Corporation shall reserve the right to accept or reject any such request at any time and such election shall be subject to such restrictions and limitations as the Corporation shall determine in its sole discretion, provided that any new election shall generally be required to be made at least 12 months prior to any scheduled payment date.

(d) Type of Distribution. All distributions from this Plan shall be paid in cash.

9. Distribution on Death. If a Participant dies after payments under this Plan have commenced but before all amounts credited to the Participant's Account have been distributed, the balance in the Account shall be paid as soon as practicable thereafter to the beneficiary designated in writing by the Participant, but not later than 60 days after the date of the Participant's death. Payment to a beneficiary pursuant to a designation by a Participant shall be made in one lump sum cash payment. Such beneficiary designations shall be effective when received by the Corporation, and shall remain in effect until rescinded or modified by the Participant by an appropriate written direction.

Separate beneficiary designations shall be made for Incentive Awards deferred under Paragraph 4(a) and Interest Equivalents credited on such amounts and for Base Annual Salary deferred under Paragraph 4(b) and Interest Equivalents credited on such amounts. If no beneficiary is properly designated by the Participant for one or both portions of the Account, or if the designated beneficiary has predeceased the Participant, such balance in the applicable portion of the Account shall be paid to the estate of the Participant.

10. Payment in the Event of Hardship. For Deferral Amounts and Interest Equivalents credited to a Participant's Grandfathered Account, upon receipt of a request from a Participant, delivered in writing to the Corporation along with a hardship distribution form and supporting documentation of the hardship, the Senior Vice President - Human Resources and Communications (or his designee), may cause the Corporation to accelerate (or require the subsidiary of the Corporation which employs or employed the Participant to accelerate) payment of all or any part of the Deferral Amount and Interest Equivalents credited to the Participant's Account, if it finds in its sole discretion that payment of such amounts in accordance with the Participant's prior election under Paragraph 4 hereof would result in severe financial hardship to the Participant and such hardship is the result of an unforeseeable emergency caused by circumstances beyond the control of the Participant. An "unforeseeable emergency" means a severe financial hardship to the Participant resulting from (1) an illness or accident that occurs to the Participant, the Participant's spouse or the Participant's dependent (as

defined in section 152(a) of the Code, (2) loss of the Participant's property due to casualty, or (3) other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the Participant's control. The amount withdrawn cannot exceed the amount necessary to satisfy the emergency and estimated taxes the Participant will incur as a result of such distribution. Acceleration of payment may not be made under this Paragraph 10 to the extent that such hardship is or may be relieved (i) through reimbursement or compensation by insurance or otherwise, or (ii) by liquidation of the Participant's assets, to the extent the liquidation of assets would not itself cause severe financial hardship.

11. Change in Control.

(a) Initial Lump Sum Election. Notwithstanding any election made pursuant to Paragraphs 4 and 5 hereof, a Participant (i) may file a written election with the Corporation to have the Deferral Amounts and Interest Equivalents credited to the Participant's Grandfathered Account paid in one lump-sum payment as soon as practicable following a Change in Control (as defined below), but in no event later than 90 days after such Change in Control, and (ii) may designate in his Election during the Open Enrollment Period for a particular Plan Year that Deferral Amounts and Interest Equivalents credited to the Participant's Non-Grandfathered Account for such Plan Year be paid in one lump-sum payment within 90 days after such Change in Control. The Interest Equivalents on any Deferral Amount payable pursuant to this Paragraph 11(a) shall include the "Contingent Rate" credited to such Deferral Amount without regard to whether such amount has become nonforfeitable as provided in Paragraph 6 at the time the applicable Change in Control occurs.

(b) Revocation of Lump-Sum Election. A Participant may revoke an election made pursuant to clause (i) of Paragraph 11(a) (including an election not to be paid in one lump sum upon a Change in Control), but only for amounts credited to a Participant's Grandfathered Account, by filing an appropriate written notice with the Corporation. A revocation notice filed pursuant to this Paragraph 11(b) shall be subject to such terms and conditions as the Corporation shall establish and shall be effective with respect to all of the Deferral Amounts and Interest Equivalents credited to a Participant's Grandfathered Account. Any such election shall be subject to such restrictions and limitations as the Corporation shall determine in its sole discretion.

(c) Limitations on Elections. For purposes of a Participant's election with respect to amounts covered by clause (i) of Paragraph 11(a) or a revocation of such election pursuant to Paragraph 11(b), such election shall not be effective unless filed with the Corporation at least 90 days prior to a Change in Control.

(d) Definition of Change in Control. For Plan Years beginning after April 1, 2018 and for purposes of the Plan, "Change in Control" means (a) any one person, or more than one person acting as a group (as defined under U.S. Department of Treasury Regulation ("Treasury Regulation") § 1.409A-3(i)(5)(v)(B)) acquires ownership of stock of the Corporation that, together with stock held by such person or group, constitutes more than 50 percent of the total fair market value or total voting power of the stock of the Corporation; or (b) any one person, or more than one person acting as a group (as defined under Treasury Regulation § 1.409A-3(i)(5)(v)(B)) acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of the Corporation possessing 30 percent or more of the total voting power of the stock of the Corporation; or (c) a majority of members of the Board of Directors of the Corporation (the "Board") is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or (d) any one person, or more than one person acting as a group (as defined in Treasury Regulation

§ 1.409A-3(i)(5)(v)(B)) acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Corporation and its subsidiaries on a consolidated basis that have a total gross fair market value equal to or more than 40 percent of the total gross fair market value of all of the assets of the Corporation and its subsidiaries on a consolidated basis immediately before such acquisition or acquisitions. For purposes of clause (d), "gross fair market value" means the value of the assets of the Corporation and its subsidiaries on a consolidated basis, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. The foregoing clauses (a) through (d) shall be interpreted in a manner that is consistent with the Treasury Regulations promulgated pursuant to Section 409A of the Code so that all, and only, such transactions or events that could qualify as a "change in control event" within the meaning of Treasury Regulation § 1.409A-3(i)(5)(i) shall be deemed to be a Change in Control for purposes of this Plan.

12. Administration.

(a) Plan Administrator. The Plan Administrator and "named fiduciary" for purposes of the Employee Income Retirement Security Act of 1974, as amended ("ERISA") shall be the Vice President - HR, Compensation & Benefits of the Corporation (or the person acting in such capacity in the event such position is abolished, restructured or renamed). The Plan Administrator shall have the authority to appoint one or more other named fiduciaries of the Plan and to designate persons, other than named fiduciaries, to carry out fiduciary responsibilities under the Plan, pursuant to Section 405(c)(1)(B) of ERISA. Any person acting on behalf of the Plan Administrator shall serve without additional compensation. The Plan Administrator shall keep or cause to be kept such records and shall prepare or cause to be prepared such returns or reports as may be required by law or necessary for the proper administration of the Plan.

(b) Powers and Duties of Plan Administrator. The Plan Administrator shall have the full discretionary power and authority to construe and interpret the Plan (including, without limitation, supplying omissions from, correcting deficiencies in, or resolving inconsistencies or ambiguities in, the language of the Plan); to determine all questions of fact arising under the Plan, including questions as to eligibility for and the amount of benefits; to establish such rules and regulations (consistent with the terms of the Plan) as it deems necessary or appropriate for administration of the Plan; to delegate responsibilities to others to assist it in administering the Plan; to retain attorneys, consultants, accountants or other persons (who may be employees of the Corporation or its subsidiaries) to render advice and assistance as it shall determine to be necessary to effect the proper discharge of any duty for which it is responsible; and to perform all other acts it believes reasonable and proper in connection with the administration of the Plan. The Plan Administrator shall be entitled to rely on the records of the Corporation and its subsidiaries in determining any Participant's entitlement to and the amount of benefits payable under the Plan. Any determination of the Plan Administrator, including interpretations of the Plan and determinations of questions of fact, shall be final and binding on all parties.

(c) Indemnification. To the extent permitted by law, the Corporation shall indemnify the Plan Administrator from all claims for liability, loss, or damage (including payment of expenses in connection with defense against such claims) arising from any act or failure to act in connection with the Plan.

13. Claims Procedures and Appeals.

(a) A written request for a Plan benefit is a claim and the person making such claim is a claimant. Any claim must be made in writing and shall be deemed to be filed by a claimant when a written request is made by the claimant or the claimant's authorized representative which is reasonably calculated to bring the claim to the attention of the Plan Administrator.

(b) The Plan Administrator shall provide notice in writing to any claimant when a claim for benefits under the Plan has been denied in whole or in part. Such notice shall be provided within 90 days of the receipt by the Plan Administrator of the claimant's claim or, if special circumstances require, and the claimant is so notified in writing, within 180 days of the receipt by the Plan Administrator of the claimant's claim. The notice shall be written in a manner calculated to be understood by the claimant and shall:

(i) set forth the specific reasons for the denial of benefits;

(ii) contain specific references to Plan provisions relative to the denial;

(iii) describe any material and information, if any, necessary for the claim for benefits to be allowed, that had been requested, but not received by the Plan Administrator;

(iv) advise the claimant that any appeal of the Plan Administrator's adverse determination must be made in writing to the Plan Administrator within 60 days after receipt of the initial denial notification, and must set forth the facts upon which the appeal is based; and

(v) advise the claimant of his right to bring a civil action under Section 502(a) of ERISA, following an adverse benefit determination on review.

(c) When a claimant receives notice of denial of a claim or does not receive notification of acceptance or denial within 90 days after submitting a claim, the claimant, either in person or by duly authorized representative, may:

(i) request, in writing, a review of the claim by the Plan Administrator;

(ii) review pertinent documents relating to the denial;

(iii) submit issues and comments in writing; and

(iv) request, in writing, a hearing with the Plan Administrator; provided that the claimant takes appropriate action within 60 days after receiving notice of denial.

(d) The Plan Administrator shall make its decision with respect to a claim review promptly, but not later than 60 days after receipt of the request. Such 60-day period may be extended for another period of 60 days if the Plan Administrator reviewing the claim finds that special circumstances require an extension of time for processing.

(e) The final decision of the Plan Administrator shall be in writing, (i) give specific reason(s) for the adverse decision, (ii) make specific references to the pertinent Plan provisions on which the decision is based, (iii) include a statement that the claimant is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to the claimant's claim for benefits, and (iv) a statement describing any voluntary appeals procedures offered by the Plan and the claimant's right to obtain information about such procedures, and a statement of the claimant's right to bring an action under Section 502(a) of ERISA.

All interpretations, determinations and decisions of the Plan Administrator in respect of any claim shall be made in its sole discretion based on the applicable Plan documents and shall be final, conclusive and binding on all parties.

(f) A claimant or potential claimant must file a claim with the Plan Administrator no later than one (1) year after the claimant or potential claimant knows, or should have known, the principal facts upon which their claim is based. Any legal action in connection with the Plan must be brought in the U.S. District Court for the Western District of North Carolina within the six (6) month period beginning on the date the claimant's claim and appeal rights are exhausted.

14. Miscellaneous.

(a) No Alienation of Benefits. Except insofar as may otherwise be required by law, no amount payable at any time under the Plan shall be subject in any manner to alienation by anticipation, sale, transfer, assignment, bankruptcy, pledge, attachment, charge, or encumbrance of any kind nor in any manner be subject to the debts or liabilities of any person and any attempt to so alienate or subject any such amount, whether presently or thereafter payable, shall be void. If any person shall attempt to, or shall alienate, sell, transfer, assign, pledge, attach, charge, or otherwise encumber any amount payable under the Plan, or any part thereof, or if by reason of such person's bankruptcy or other event happening at any such time such amount would be made subject to the person's debts or liabilities or would otherwise not be enjoyed by that person, then the Corporation, to the extent permitted under Section 409A of the Code, if it so elects, may direct that such amount be withheld and that same or any part thereof be paid or applied to or for the benefit of such person, the person's spouse, children or other dependents, or any of them, in such manner and proportion as the Corporation may deem proper.

(b) No Right or Interest in Corporation's Assets. Neither the Corporation nor any of its affiliates shall be required to reserve or otherwise set aside funds for the payment of obligations arising under this Plan. The Corporation may, in its sole discretion, establish funds, segregate assets or take such other action as it shall determine necessary or appropriate to secure the payment of its obligations arising under this Plan. This Plan is intended to be unfunded for tax purposes and for purposes of Title I of the ERISA. Nothing contained herein, and no action taken pursuant to the provisions of this Plan shall create or be construed to create a trust of any kind, or a fiduciary relationship between the Corporation and any Participant or any other person. To the extent that any person acquires a right to receive payments under this Plan, such right shall be no greater than the right of an unsecured creditor of the Corporation.

(c) Amendment. The Corporation may amend, modify or terminate the Plan at any time, or from time to time; provided, however, that no change to the Plan shall impair the right of any Participant with respect to amounts then credited to an Account; and further provided that during a Potential Change in Control Period (as defined in Paragraph 14(i) hereof) and from and after the occurrence of a Change in Control, the Plan may not, without the consent of the Participant, be amended in any manner which would adversely affect such Participant's rights and expectations with respect to Deferral Amounts credited to such Participant's Account immediately prior to such amendment, unless an amendment is required to comply with the requirements of Section 409A of the Code.

(d) Accounting. Each Participant shall receive periodic statements (not less frequently than annually) setting forth the cumulative Deferral Amounts and Interest Equivalents credited to, and any distributions from, the Participant's Account.

(e) Facility of Payments. If the Corporation shall find that any person to whom any amount is payable under the Plan is unable to care for his affairs because of illness or accident, or is a minor, or has died, then any payment due the person or the person's estate (unless a prior claim therefore has been made by a duly appointed legal representative), may, if the Corporation so elects in its sole discretion, be paid to the person's spouse, a child, a relative, an institution having custody of such person, or any other person deemed by the Corporation to be a proper recipient on behalf of such person otherwise entitled to payment. Any such payment shall be a complete discharge of the liability of the Corporation and the Plan therefore.

(f) Offset. To the maximum extent permitted under Section 409A of the Code and its corresponding regulations, if a Participant becomes entitled to a distribution of benefits under the Plan, and if at such time the Participant has outstanding any debt, obligation, or other liability representing an amount owing to the Corporation or any participating affiliate, then the Corporation may offset such amount owed to the Corporation or the participating affiliate against the amount of benefits otherwise distributable. Such determination shall be made by the Plan Administrator.

(g) Governing Law. The Plan is intended to constitute an unfunded deferred compensation arrangement for a select group of management or highly compensated personnel and all rights thereunder shall be governed by and construed in accordance with the laws of North Carolina.

(h) Withholding Taxes. The Corporation may make such provisions and take such action as it may deem necessary or appropriate for the withholding of any taxes which the Corporation or one if its affiliates is required by any law or regulation of any governmental authority, whether Federal, state, local or foreign, to withhold in connection with any benefits under the Plan, including, but not limited to, the withholding of appropriate sums from any amount otherwise payable to the Participant (or his beneficiary). Each Participant, however, shall be responsible for the payment of all individual tax liabilities relating to any such benefits.

(i) Potential Change in Control Period. A "Potential Change in Control Period" shall commence when: (i) the Corporation enters into an agreement, the consummation of which would result in the occurrence of a Change in Control; (ii) the Corporation or any person or group publicly announces an intention to take or to consider taking actions which, if consummated, would result in a Change in Control; (iii) any person or group (other than the Corporation, any subsidiary or any savings, pension or other benefit plan for the benefit of employees of the Corporation or its subsidiaries) becomes the beneficial owner, directly or indirectly, of securities of the Corporation representing 15% or more of either the then outstanding shares of common stock of the Corporation or the combined voting power of the Corporation's then outstanding securities (not including in the securities beneficially owned by such person or group any securities acquired directly from the Corporation or its affiliates); or (iv) the Board adopts a resolution to the effect that, for purposes of the Plan, a Potential Change in Control Period has commenced. The Potential Change in Control Period shall continue until the earlier of (A) a Change in Control, or (B) the adoption by the Board of a resolution stating that, for purposes of the Plan, the Potential Change in Control Period has expired.

(j) Section 409A. The Plan is intended to comply with the applicable requirements of Section 409A of the Code and its corresponding regulations and related guidance with respect to amounts credited to the Non-Grandfathered Accounts of Participants, and shall be administered in accordance with Section 409A of the Code with respect to such Accounts. Notwithstanding anything in the Plan to the contrary, elections to defer compensation into Non-Grandfathered Accounts under the Plan, and distributions of Non-Grandfathered Accounts, may only be made in a manner and upon an event permitted by Section 409A of the Code. To the extent that any provision of the Plan would cause a conflict with the requirements of Section 409A of the Code, or would cause the administration of the Plan to fail to satisfy the requirements of Section 409A of the Code, such provision shall be deemed null and void to the extent permitted by applicable law. Other than a valid Election, in no event shall a Participant, directly or indirectly, designate the calendar year of payment with respect to Non-Grandfathered Accounts. For avoidance of doubt, deferrals under the Plan are maintained on a Plan Year basis.

SCHEDULE A

NOTIONAL INTEREST RATES

Deferred Incentive Awards

Except as otherwise provided below, the following chart applies to awards earned and deferred under the Plan.

Year Award Earned	Vested Rate	Contingent Rate	Total Rate
1975 - 1992	Treasury bills +	N/A	Treasury bills +
	3%*	N/A	3%*
1993 - 1997	10%	N/A	10%
1998 - 2000	8%	3%	11%
2001- 2002	7%	3%	10%
2003	3%	5%	8%
2004 initial rate	3%	5%	8%
2005 initial rate **	8%**	N/A	8%**
2006 initial rate **	5.8%**	N/A	5.8%**
2007 initial rate **	5.8%**	N/A	5.8%**
2008 initial rate **	6.3%**	N/A	6.3%**
2009 initial rate **	7.2%**	N/A	7.2%**
2010 initial rate **	4.8%**	N/A	4.8%**
2011 initial rate **	3.84%**	N/A	3.84%**
2012 initial rate **	3.65%**	N/A	3.65%**
2013 initial rate **	2.90%**	N/A	2.90%**
2014 initial rate **	4.09%**	N/A	4.09%**
2015 initial rate **	3.66%**	N/A	3.66%**
2016 initial rate **	3.64%**	N/A	3.64%**
2017 initial rate **	2.69%**	N/A	2.69%**
2018 initial rate **	3.38%**	N/A	3.38%**
2019 initial rate **	4.06%	N/A	4.06%
2020 initial rate **	2.76%	N/A	2.76%

*/Three-month Treasury bill average rate for the immediately preceding calendar quarter as reported by the Federal Reserve Bank; rate changes each calendar quarter.

**/For periods on and after January 1, 2006, rate is based on the Corporation's 15-year borrowing rate and is subject to change annually.

Deferred Incentive Awards

The following chart applies to all employees other than Band 6 and above for awards earned and deferred before 2003.

Year Award Earned	Vested Rate	Contingent Rate	Total Rate
1975 - 1997	Treasury bills +	N/A	Treasury bills +
	3%*	N/A	3%*
1998 - 2002	6%	3%	9%

*/Three-month Treasury bill average rate for the immediately preceding calendar quarter as reported by the Federal Reserve Bank; rate changes each calendar quarter.

Deferred Salary (Band 6 and Above)

Year Salary Earned	Vested Rate	Contingent Rate	Total Rate
1994 - 1998	10%	N/A	10%
1999 - 2001	8%	3%	11%
2002 - 2002	7%	3%	10%
2003	3%	5%	8%
2004	3%	5%	8%
2005 initial rate**	3%	5%	8%

**/For periods on and after January 1, 2006, rate is subject to change.

SCHEDULE B
PROVISIONS RELATING TO
HONEYWELL INC. EXECUTIVE DEFERED COMPENSATION PLAN

15. History. Honeywell Inc., a predecessor of the Corporation, previously established a supplemental non-qualified plan named the Honeywell Executive Deferred Compensation Plan (the "Honeywell Plan"). The Honeywell Plan was created to establish rules for the deferral and payment of deferred compensation earned under the Honeywell Inc. bonus plans named the "Honeywell Corporate Executive Compensation Plan," the "Honeywell Senior Management Performance Incentive Plan," and the "Multi-Year Incentive Program."

The Honeywell Plan was last amended and restated effective June 1, 1999. This Schedule B covers any participant in the Honeywell Plan who has not received full payment of his benefit under the Honeywell Plan as of April 1, 2018. Benefit payments commencing before April 1, 2018 are governed by the terms of the Honeywell Plan as they existed prior to this amendment and restatement and are grandfathered from the requirements of Section 409A of the Code.

16. Definitions. For purposes of this Schedule B, the following definitions shall apply:

(a) Account shall mean an unfunded, bookkeeping account maintained for a participant including amounts originally deferred under the Honeywell Plan and interest credits made pursuant to Section 3 of this Schedule B (or comparable provisions of the Honeywell Plan).

17. Interest Credits. An interest credit shall be made to the participant's Account as of (a) each February 15, and (b) the date as of which any distribution is made from the participant's Account, for the year or portion thereof then ended based on the average daily balance of the Account for such year or portion thereof. The rate of interest shall be 120% of the long-term Applicable Federal Rate published under section 1274(d) of the Code for the month in which the interest credit is made to the Account.

18. Distributions. The following provisions shall apply to distributions under this Schedule B.

(a) Commencement. A participant's Account shall be paid or commenced as of March 31 of the year specified by the Participant and in effect as of December 31, 2004. Actual payment shall occur as soon as administratively feasible thereafter.

(b) Forms of Payment. Subject to the provisions herein, an Account shall be paid under this Schedule B in a series of ten (10) substantially equal annual installments. The participant may elect to receive any benefit payable under this Schedule B in an optional form of payment; provided, however, that such election will not be effective until the lapse of thirteen (13) months following the date on which the election is accepted by the Plan Administrator. The optional distribution forms under this Schedule B are a single lump sum or a series of substantially equal annual installments of any number from two (2) to nine (9). To be effective, the election of an optional distribution form must be made in the form and manner prescribed by the Plan Administrator and must be accepted by the Plan Administrator. Notwithstanding the foregoing, distribution shall be made in a single lump sum payment if the participant's termination of employment occurs before the date the participant has both reached age fifty-five (55) and has accrued ten (10) years of credited service for vesting as defined in the Honeywell Retirement Benefit Plan (Supplement T) portion of the Honeywell Retirement Earnings Plan or its applicable predecessor plan.

(c) Acceleration of Distribution with Forfeiture. A participant or beneficiary who is receiving distributions under this Schedule B may at any time elect to receive the remaining Account balance in a lump sum payment less ten percent (10%) which shall be forfeited. Lump sum payments under this Section 4(c) shall be made within sixty (60) days after the election to accelerate distribution is received by the Plan Administrator.

(d) Financial Hardships. If a participant incurs an unforeseeable emergency, the participant may make a written request to the Plan Administrator for a hardship withdrawal from the participant's Account. An unforeseeable emergency is a severe financial hardship to the participant resulting from a sudden and unexpected illness or accident of the participant or a dependent (as defined in section 152(a) of the Code) of the participant, loss of the participant's property due to casualty, or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the participant and which cannot be relieved through reimbursement or compensation by insurance or otherwise or by liquidation of the participant's assets, to the extent that the liquidation of such assets would itself cause severe financial hardship. Withdrawals of amounts because of an unforeseeable emergency are only permitted to the extent reasonably needed to satisfy the emergency need. The existence of severe financial hardship shall be determined consistent with sections 1.457-2(h)(4) and (5) of the Treasury Regulations.

19. Survivor Benefits.

(a) Survivor Benefits. If a participant dies after termination of employment but before distribution commences under this Schedule B, the Account shall be paid to the participant's designated beneficiary or beneficiaries at the time and in the form the Account would have been payable to the participant if the participant had survived until the date distribution would have commenced. If a participant dies after distribution commences under this Schedule B (or the terms of the prior Honeywell Plan), the participant's designated beneficiary shall be paid the unpaid installments, if any, under the form of distribution elected by the participant.

(b) Designation of Beneficiary. A participant or surviving beneficiary may designate, in the manner required by the Plan Administrator, a beneficiary or beneficiaries to receive the Account under this Schedule B in the event of the participant's (or surviving beneficiary's) death. The participant (or surviving beneficiary) may change or revoke any such designation from time to time. No designation or revocation shall be effective unless executed by the participant (or surviving beneficiary) and actually received by the Plan Administrator before the participant's (or surviving beneficiary's) death. If the participant or surviving beneficiary dies without an effective beneficiary designation for the Account under this Schedule B, payment shall be made to the beneficiary or beneficiaries determined under the rules in the Honeywell 401(k) Plan governing failure of beneficiary designation. The Plan Administrator shall be the sole judge of the content, interpretation and validity of a purported beneficiary designation.

EXHIBIT 21

HONEYWELL INTERNATIONAL INC.
SUBSIDIARIES OF THE REGISTRANT

Name	Country or State of Incorporation	Percent Ownership
AlliedSignal Aerospace Service LLC	Delaware	100%
BW Technologies Partnership	Canada	100%
COM DEV Ltd.	Canada	100%
Elster American Meter Company, LLC	Delaware	100%
Elster GmbH	Germany	100%
Elster s.r.o.	Slovakia	100%
EMS Technologies Canada, Ltd.	Canada	100%
Grimes Aerospace Company	Delaware	100%
Hand Held Products, Inc.	Delaware	100%
Honeywell (China) Co., Ltd.	China	100%
Honeywell Aerospace Avionics Malaysia Sdn Bhd	Malaysia	100%
Honeywell Aerospace de México, S. de R.L. de C.V.	Mexico	100%
Honeywell Aerospace De Puerto Rico, Inc.	Puerto Rico	100%
Honeywell Aerospace UK	United Kingdom	100%
Honeywell Automation India Limited	India	75%
Honeywell Co., Ltd.	Korea	100%
Honeywell Control Systems Limited	United Kingdom	100%
Honeywell Deutschland Holding GmbH	Germany	100%
Honeywell Electronic Materials (Thailand) Co., Ltd.	Thailand	100%
Honeywell Electronic Materials Manufacturing, LLC	Washington	100%
Honeywell Energy Services Inc.	Delaware	100%
Honeywell Europe NV	Belgium	100%
Honeywell Federal Manufacturing & Technologies, LLC	Delaware	100%
Honeywell Finance LP	Delaware	100%
Honeywell Fluorine Products Europe B.V.	Netherlands	100%
Honeywell Holdings International Inc.	Delaware	100%
Honeywell International (India) Private Limited	India	100%
Honeywell International Sàrl	Switzerland	100%
Honeywell International Sdn. Bhd.	Malaysia	100%
Honeywell Limited / Honeywell Limitée	Canada	100%
Honeywell Limited	Australia	100%
Honeywell Performance Materials and Technologies (China) Co Ltd	China	100%
Honeywell Safety Products USA, Inc.	Delaware	100%
Honeywell Specialty Chemicals Seelze GmbH	Germany	100%
Honeywell Technology Solutions Lab Pvt. Ltd.	India	100%
Honeywell UK Limited	United Kingdom	100%
Intelligrated Headquarters, LLC	Delaware	100%
Intelligrated Systems, Inc.	Delaware	100%
Intelligrated Systems, LLC	Delaware	100%
Intermec Technologies (S) Pte Ltd	Singapore	100%
International Turbine Engine Company LLC	Delaware	51%
Life Safety Distribution GmbH	Switzerland	100%

Morning Pride Manufacturing L.L.C.	Delaware	100%
Novar ED&S Limited	United Kingdom	100%
Novar GmbH	Germany	100%
Salisbury Electrical Safety L.L.C.	Delaware	100%
Transnorm System Inc.	Delaware	100%
Tridium, Inc.	Delaware	100%
UOP CH Sàrl	Switzerland	100%
UOP Limited	United Kingdom	100%
UOP LLC	Delaware	100%
UOP Products LLC	Delaware	100%
UOP Russell LLC	Delaware	100%
Vocollect, Inc.	Pennsylvania	100%

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statements on Form S-3 (No. 033-55425, 333-22355, 333-101455 and 333-228729) and Form S-8 (No. 033-58347, 333-49280, 333-136083, 333-136086, 333-146932, 333-148995, 333-175260, 333-195331, 333-210889, 333-210899 and 333-228733) of our report dated February 14, 2020, relating to the consolidated financial statements of Honeywell International Inc. and subsidiaries and the effectiveness of the Honeywell International Inc.'s and subsidiaries internal control over financial reporting, appearing in this Annual Report on Form 10-K of Honeywell International Inc. for the year ended December 31, 2019.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 14, 2020

Exhibit 24

POWER OF ATTORNEY

Each of the undersigned, as a director of Honeywell International Inc. (the "Company"), a Delaware corporation, hereby appoints Darius Adamczyk, Gregory P. Lewis, Anne T. Madden, and Robert D. Mailloux, each with power to act without the other and with power of substitution and resubstitution, as my attorney-in-fact and agent for me and in my name, place and stead in any and all capacities,

(i) to sign the Company's Annual Report on Form 10-K under the Securities Exchange Act of 1934 for the year ended December 31, 2019,

(ii) to sign any amendment to the Annual Report referred to in (i) above, or to any previously filed Annual Report on Form 10-K for any prior fiscal year, and

(iii) to file the documents described in (i) and (ii) above and all exhibits thereto and any and all other documents in connection therewith,

granting unto each said attorney-in-fact and agent full power and authority to do and perform every act and thing requisite, necessary or desirable to be done in connection therewith, as fully to all intents and purposes as I 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 or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

This Power of Attorney may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

December 9, 2019

/s/ Duncan Angove

Duncan Angove

/s/ William Ayer

William Ayer

/s/ Kevin Burke

Kevin Burke

/s/ D. Scott Davis

D. Scott Davis

/s/ Linnet Deily

Linnet Deily

/s/ Deborah Flint

Deborah Flint

/s/ Judd Gregg

Judd Gregg

/s/ Clive Hollick

Clive Hollick

/s/ Grace Lieblein

Grace Lieblein

/s/ Jaime Chico Pardo

Jaime Chico Pardo

/s/ George Paz

George Paz

/s/ Robin Washington

Robin Washington

POWER OF ATTORNEY

Each of the undersigned, as a director of Honeywell International Inc. (the “Company”), a Delaware corporation, hereby appoints Darius Adamczyk, Gregory P. Lewis, Anne T. Madden, and Robert D. Mailloux, each with power to act without the other and with power of substitution and resubstitution, as my attorney-in-fact to sign on my behalf in my capacity as a director of the Company one or more registration statements on Form S-8 or any other appropriate form during fiscal year 2020 and to file the same together with all exhibits thereto, under the Securities Act of 1933, including any amendment or supplement thereto or to any registration statement heretofore filed by the Company on Form S-8 or any other appropriate form for the registration of shares of the Company's Common Stock (or participations where appropriate) to be offered pursuant to the Honeywell Savings and Ownership Plan, the Honeywell Puerto Rico Savings and Ownership Plan, the Honeywell Supplemental Savings Plan, the 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., the 2007 Honeywell Global Employee Stock Plan (including any and all sub-plans), the 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates, the 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc., and the 2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates and any plan which is a successor to such plans or is a validly authorized new plan pursuant to which securities of the Company are issued to employees or non-employee directors.

I hereby grant to each such attorney-in-fact full power and authority to perform every act necessary to be done in connection with the foregoing as fully as I might do in person, hereby ratifying and confirming all that said attorneys-in-fact, or any of them or their substitutes, may lawfully do or cause to be done.

I hereby revoke any or all prior appointments of attorneys-in-fact to sign the above-described documents.

This Power of Attorney may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

December 9, 2019

/s/ Duncan Angove

Duncan Angove

/s/ William Ayer

William Ayer

/s/ Kevin Burke

Kevin Burke

/s/ D. Scott Davis

D. Scott Davis

/s/ Linnet Deily

Linnet Deily

/s/ Deborah Flint

Deborah Flint

/s/ Judd Gregg

Judd Gregg

/s/ Clive Hollick

Clive Hollick

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Grace Lieblein

/s/ Jaime Chico Pardo

Jaime Chico Pardo

/s/ George Paz

George Paz

/s/ Robin Washington

Robin Washington

POWER OF ATTORNEY

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(i) shares of the Company’s common stock, par value, $1.00 per share, including shares of common stock to be offered under the Dividend Reinvestment and Share Purchase Plan of the Company and any successor or new plan for such purposes;

(ii) shares of the Company’s preferred stock, without par value;

(iii) debt securities of the Company, with such terms as may be from time to time specified in such registration statement or any amendment, post-effective amendment or supplement thereto; and

(iv) such other securities of the Company, its subsidiaries, joint ventures or affiliates or any other person or entity, as may be specified in any such registration statement, amendment or supplement thereto, all in accordance with the Securities Act of 1933 and the rules and regulations thereunder.

I hereby grant to each such attorney-in-fact full power and authority to perform every act necessary to be done in connection with the foregoing as fully as I might do in person, hereby ratifying and confirming all that said attorneys-in-fact, or any of them or their substitutes, may lawfully do or cause to be done.

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December 9, 2019

/s/ Duncan Angove

Duncan Angove

/s/ William Ayer

William Ayer

/s/ Kevin Burke

Kevin Burke

/s/ D. Scott Davis

D. Scott Davis

/s/ Linnet Deily

Linnet Deily

/s/ Deborah Flint

Deborah Flint

/s/ Judd Gregg

Judd Gregg

/s/ Clive Hollick

Clive Hollick

/s/ Grace Lieblein

Grace Lieblein

/s/ Jaime Chico Pardo

Jaime Chico Pardo

/s/ George Paz

George Paz

/s/ Robin Washington

Robin Washington

POWER OF ATTORNEY

I, Darius Adamczyk, a director and the principal executive officer of Honeywell International Inc. (the “Company”), a Delaware corporation, hereby appoint Gregory P. Lewis, Anne T. Madden, and Robert D. Mailloux, each with power to act without the other and with power of substitution and resubstitution, as my attorney-in-fact and agent for me and in my name, place and stead in any and all capacities,

(i) to sign the Company’s Annual Report on Form 10-K under the Securities Exchange Act of 1934 for the year ended December 31, 2019,

(ii) to sign any amendment to the Annual Report referred to in (i) above or to any previously filed Annual Report on Form 10-K for any prior fiscal year, and

(iii) to file the documents described in (i) and (ii) above and all exhibits thereto and any and all other documents in connection therewith,

granting unto each said attorney-in-fact and agent full power and authority to do and perform every act and thing requisite, necessary or desirable to be done in connection therewith, as fully to all intents and purposes as I 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 or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

/s/ Darius Adamczyk

Darius Adamczyk

Dated: December 9, 2019

POWER OF ATTORNEY

I, Darius Adamczyk, a director and the principal executive officer of Honeywell International Inc. (the "Company"), a Delaware corporation, hereby appoint Gregory P. Lewis, Anne T. Madden, and Robert D. Mailloux, each with power to act without the other and with power of substitution and resubstitution, as my attorney-in-fact to sign on my behalf in my capacity as a director or as the principal executive officer of the Company one or more registration statements on Form S-8 or any other appropriate form during fiscal year 2020, and to file the same together with all exhibits thereto, under the Securities Act of 1933, including any amendment or supplement thereto or to any registration statement heretofore filed by the Company on Form S-8 or any other appropriate form for the registration of shares of the Company's Common Stock (or participations where appropriate) to be offered pursuant to the Honeywell Savings and Ownership Plan, the Honeywell Puerto Rico Savings and Ownership Plan, the Honeywell Supplemental Savings Plan, the 2006 Stock Plan for Non-Employee Directors of Honeywell International Inc., the 2007 Honeywell Global Employee Stock Plan (including any and all sub-plans), the 2011 Stock Incentive Plan of Honeywell International Inc. and its Affiliates, the 2016 Stock Plan for Non-Employee Directors of Honeywell International Inc., and the 2016 Stock Incentive Plan of Honeywell International Inc. and its Affiliates and any plan which is a successor to such plans or is a validly authorized new plan pursuant to which securities of the Company are issued to employees or non-employee directors.

I hereby grant to each such attorney-in-fact full power and authority to perform every act necessary to be done in connection with the foregoing as fully as I might do in person, hereby ratifying and confirming all that said attorneys-in-fact, or any of them or their substitutes, may lawfully do or cause to be done.

I hereby revoke any or all prior appointments of attorneys-in-fact to sign the above-described documents.

/s/ Darius Adamczyk

Darius Adamczyk

Dated: December 9, 2019

POWER OF ATTORNEY

I, Darius Adamczyk, a director and the principal executive officer of Honeywell International Inc. (the “Company”), a Delaware corporation, hereby appoint Gregory P. Lewis, Anne T. Madden, and Robert D. Mailloux, each with power to act without the other and with power of substitution and resubstitution, as my attorney-in-fact to sign on my behalf in my capacity as a director or as the principal executive officer of the Company one or more registration statements on Form S-3 or S-4 or any other appropriate form during fiscal year 2020, and to file the same together with all exhibits thereto, under the Securities Act of 1933, including any amendment or supplement thereto or to any registration statement heretofore filed by the Company for the registration of sales or resales of:

(i) shares of the Company’s common stock, par value, $1.00 per share, including shares of common stock to be offered under the Dividend Reinvestment and Share Purchase Plan of the Company and any successor or new plan for such purposes;

(ii) shares of the Company’s preferred stock, without par value;

(iii) debt securities of the Company, with such terms as may be from time to time specified in such registration statement or any amendment, post-effective amendment or supplement thereto; and

(iv) such other securities of the Company, its subsidiaries, joint ventures or affiliates or any other person or entity, as may be specified in any such registration statement, amendment or supplement thereto, all in accordance with the Securities Act of 1933 and the rules and regulations thereunder.

I hereby grant to each such attorney-in-fact full power and authority to perform every act necessary to be done in connection with the foregoing as fully as I might do in person, hereby ratifying and confirming all that said attorneys-in-fact, or any of them or their substitutes, may lawfully do or cause to be done.

I hereby revoke any or all prior appointments of attorneys-in-fact to the extent that they confer authority to sign the above-described documents.

/s/ Darius Adamczyk

Darius Adamczyk

Dated: December 9, 2019

EXHIBIT 31.1

CERTIFICATION PURSUANT TO
SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Darius Adamczyk, certify that:

1 I have reviewed this Annual Report on Form 10-K of Honeywell International Inc.;

2 Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3 Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4 The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;

5 The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 14, 2020	By:	/s/ Darius Adamczyk
		Darius Adamczyk
		Chairman and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION PURSUANT TO
SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Gregory P. Lewis, certify that:

1 I have reviewed this Annual Report on Form 10-K of Honeywell International Inc.;

2 Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3 Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4 The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;

5 The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 14, 2020 By: /s/ Gregory P. Lewis

Gregory P. Lewis
Senior Vice President and Chief Financial Officer

EXHIBIT 32.1

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

In connection with the Annual Report of Honeywell International Inc. (the Company) on Form 10-K for the period ending December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Darius Adamczyk, Chairman and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: February 14, 2020 By: /s/ Darius Adamczyk

Darius Adamczyk
Chairman and Chief Executive Officer

EXHIBIT 32.2

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

In connection with the Annual Report of Honeywell International Inc. (the Company) on Form 10-K for the period ending December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Gregory P. Lewis, Senior Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 14, 2020	By:	/s/ Gregory P. Lewis
		Gregory P. Lewis Senior Vice President and Chief Financial Officer

Mine Safety Disclosures

The following disclosures are provided pursuant to Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K, which require certain disclosures by companies required to file periodic reports under the Securities Exchange Act of 1934, as amended, that operate mines regulated under the Federal Mine Safety and Health Act of 1977 (the "Mine Safety Act"). One of the subsidiaries of Honeywell International Inc. (the "Company") has placer claims for and operates a surface mine for chabazite ore in Arizona.

During the year ended December 31, 2019, the Company did not receive any of the following: (a) a citation from the U.S. Mine Safety and Health Administration (“MSHA”) for a violation of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of a coal or other mine safety or health hazard under section 104 of the Mine Safety Act; (b) an order issued under section 104(b) of the Mine Safety Act; (c) a citation or order for unwarrantable failure of the mine operator to comply with mandatory health or safety standards under section 104(d) of the Mine Safety Act; (d) a flagrant violation under section 110(b)(2) of the Mine Safety Act; (e) an imminent danger order under section 107(a) of the Mine Safety Act; or (f) a proposed assessment from the MSHA.

In addition, during the year ended December 31, 2019, the Company had no mining-related fatalities, had no pending legal actions before the Federal Mine Safety and Health Review Commission involving a coal or other mine, and did not receive any written notice from the MSHA involving a pattern of violations, or the potential to have such a pattern, of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of coal or other mine health or safety hazards under section 104(e) of the Mine Safety Act.